Australian
Competition &
Consumer
Commission

Public inquiry into final access determinations for fixed line services – primary price terms

Draft Decision

March 2015

Australian Competition and Consumer Commission

Contents

List of abbreviations and acronyms

ACCC	Australian Competition and Consumer Commission
ADSL	asymmetric digital subscriber line
AER	Australian Energy Regulator
AGVC	aggregating virtual circuit
BBM	Building Block Model
BBM RKR	Building Block Model Record Keeping Rule
CAN	customer access network
CCA	*Competition and Consumer Act 2010*
c-i-c	commercial in confidence
CPI	consumer price index
CSP	carriage service provider
DSL	digital subscriber line
DSLAM	digital subscriber line access multiplexer
DTCS	domestic transmission capacity service
ESAs	exchange service areas
FAC	fully allocated cost
FAD	final access determination
FLSM	Fixed Line Services Model
FOAS	fixed originating access service
FTAS	fixed terminating access service
FTTN	fibre-to-the-node
FTTP	fibre-to-the-premises
FSAM	fibre serving area module
HFC	hybrid fibre coaxial
IAD	interim access determination
IIC	internal interconnect cable
IMC	investment management committee
LCS	local carriage service
LSS	line sharing service
LTIE	long term interests of end-users

MDF	main distribution frame
MOU	minutes of use
MTAS	mobile terminating access service
MTM	multi-technology-mix
NBN	National Broadband Network
PAC	partially allocated cost
PoI	Points of interconnect
POTS	traditional voice-only services supplied over Telstra's PSTN
PSTN	public switched telephone network
PSTN OA	public switched telephone network originating access service
PSTN TA	public switched telephone network terminating access service
RAB	regulatory asset base
RAF	regulatory accounting framework
RKR	record keeping rule
SIOs	services in operation
TEBA	Telstra Equipment Building Access
ULLS	unconditioned local loop service
VLAN	virtual local area network
WACC	weighted average cost of capital
WLR	wholesale line rental

Glossary

Access determination	Written determinations made by the ACCC relating to access to a declared service after conducting a public inquiry; specifying any or all of the terms and conditions for compliance with any or all of the standard access obligations.
access seeker	Telecommunications companies that seek access to a declared service (that is, the right to use the declared service).
access provider	Telecommunications companies that provide access to a declared service.
ADSL	Asymmetric Digital Subscriber Line. A technology for transmitting digital information at high data rates on existing copper phone lines. It is called asymmetric because the download and upload speeds are not symmetrical (that is, download is faster than upload).
AGVC	Aggregating Virtual Circuits (AGVC) are used to provide connectivity between one or more ADSL end-users and a centrally-located point of interconnect between the Telstra DSL network and an ISP network. AGVCs are used in conjunction with ATM protocol DSLAMs. Customers on newer Ethernet protocol DSLAMS require an Ethernet AGVC equivalent – a Virtual Local Area Network (VLAN).
avoidable cost	For a multi-product or multi-service firm, the avoidable cost of any service or combination of services is the long run cost avoided if a firm were to no longer offer that service or combination of services.
Building Block Model Record Keeping Rule	The Building Block Model Record Keeping Rule (BBM RKR) requests information on forecast and actual data from Telstra relating to operating expenditure, capital expenditure, depreciation and demand that is required to effectively implement the Fixed Line Services Model (FLSM). The FLSM is used as part of the ACCC's building block model-approach to determine prices for the declared fixed line services and wholesale ADSL.
capital expenditure	Capital expenditure refers to the amount spent by Telstra to acquire or upgrade any asset or part of an asset included in the FLSM Asset Classes. Capital expenditure forecasts are an input into calculating prices for the declared fixed line services. Forecast annual capital expenditure is rolled into the RAB each year and forms a component of the revenue requirement through the return on and of capital.
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.
Customer Access Network	Customer Access Network (CAN) is the portion of Telstra's fixed network of copper wires that connects each telephone end-user to the network switch at their local exchange. The CAN is used to supply customers with

	a range of fixed line services, including the declared fixed line services.
Comparison Statement	The Comparison Statement refers to the document Telstra submitted under the BBM RKR that compares forecasts of the previous regulatory period with actual figures for that period.
Core network	Telstra's Core network is used to transmit calls and data between major exchanges in the capital cities using the transmission network.
declaration inquiry	The process by which the ACCC holds a public inquiry to determine whether a service should be declared.
declared service	A service that the ACCC regulates under Part XIC of the CCA. Once declared, a service provider must supply the service to other parties in accordance with the standard access obligations and the terms and conditions set in the final access determination.
Definitive Agreements	Agreements made between Telstra and NBN Co on 23 June 2011 to migrate customers from Telstra's fixed line network to the NBN and for NBN Co to lease and acquire certain infrastructure from Telstra.
DSLAM	Digital Subscriber Line Access Multiplexer. A device which makes use of the copper access lines to provide high data rate services, enabling broadband services to be provided over copper lines. It is located in a telephone exchange that links many customer DSL connections (copper wires) to a core IP network via a backhaul system.
DTCS	Domestic Transmission Capacity Service. The regulated transmission service.
end-user	Retail residential and business consumers of telecommunication services.
exchange	Place where various numbers and types of communication lines are switched so as to establish a connection between two telephones. The exchange also houses DSLAMs, allowing end-users to connect to the internet.
Explanatory Statement	The Explanatory Statement refers to the document Telstra submitted under the BBM RKR that describes the methodology for the forecast estimates, assumptions used, cost drivers and any other observations from Telstra.
FAD	Final Access Determination. The FAD is made by the ACCC and sets the terms and conditions (including prices) on which a service provider must supply a declared service.
FOAS	Fixed Originating Access Service. The declared service replacing the previously declared PSTN OA service. Enables a telephone call to be connected from the caller to a point of interconnection with another network.
FTAS	Fixed Terminating Access Service. The declared service replacing the previously declared PSTN TA service. Enables a telephone call to be

	carried from the point of interconnection to the party being called on another network.
fixed line services	Telecommunications services provided over fixed networks, such as Telstra's copper network and HFC networks. The 'declared fixed line services' comprise seven services: the six fixed line services declared in 2014—the ULLS, LSS, WLR, LCS, FOAS and FTAS and the wholesale ADSL service declared in 2012.
fixed principles provision	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. Such a provision would allow the ACCC to 'lock-in' a term so that it would be consistent across multiple FADs.
FLSM	The Fixed Line Services Model (FLSM) is used as part of the ACCC's building block model-approach to determine prices for the declared fixed line services and wholesale ADSL.
IMC	The investment management committee is referred in Telstra's submissions to the BBM RKR in relation to Telstra's expenditures on various projects.
LCS	The declared Local Carriage Service. Enables access seekers to resell local calls to end-users without having to invest in their own network and switching equipment. The LCS is purchased in conjunction with the WLR service.
LSS	The declared Line Sharing Service. Enables access seekers to share the use of the copper line connecting consumers to the telephone exchange, allowing them to provide fixed internet services using their own equipment.
Main Distribution Frame	The main distribution frame (MDF) is a set of terminal points providing a means of interconnection between pairs. An MDF is used in many multi-dwelling residential and large commercial premises as a means of interconnection between Telstra's copper wire customer access network and the internal telephone wiring of the premises. There is also an MDF at the local telephone exchange which provides a point of interconnection between the main feeder network cables and the equipment inside the exchange.
MTAS	The declared Mobile Terminating Access Service. A wholesale service provided by a mobile network operator (MNO) to fixed line operators and other MNOs to connect – or 'terminate' – a call on its mobile network. It enables calls to be made to consumers on mobile phone networks.
operating expenditure	Operating expenditure refers to all ongoing direct and indirect operating expenditure relating to Fixed Line Services and the Wholesale ADSL service provided by Telstra. Forecast operating expenditure forms a cost block in the building block approach and therefore contributes directly to Telstra's total revenue requirement.

propex	Project-based operating expenditure (propex) is a term Telstra uses to distinguish operating expenditure associated with capital outlay from other direct and indirect operating expenditure types.
PSTN	Public Switched Telephone Network. The telephone network that allows the public to make and receive telephone calls via switching and transmission facilities and utilising analogue and digital technologies.
PSTN OA	The declared PSTN Originating Access service. The name of this service has been changed to Fixed Originating Access Service (FOAS). PSTN OA is still used to remain consistent with Telstra documentation where applicable.
PSTN TA	The declared PSTN terminating access service. The name of this service has been changed to Fixed Terminating Access Service (FTAS). PSTN TA is still used to remain consistent with Telstra documentation where applicable.
retail service provider	Companies that offer telecommunications services to end-users.
revenue requirement	The revenue requirement refers to the aggregate revenue requirement calculated by the FLSM that allows Telstra to recover its cost of supplying regulated services.
special access undertaking	A document given by the access provider proposing the terms and conditions on which it will offer access to its services (if approved by the ACCC, access seekers can obtain supply on these terms).
Stand alone cost	For a multi-product or multi-service firm, the stand alone cost of any service or combination of services of a firm is the cost of providing that service or combination of services in isolation.
TEBA	This commonly refers to space designated for access seeker use in Telstra's exchanges. It encompasses access to floor space, equipment racks or rack space and services such as power, security and air-conditioning. TEBA also includes access to cable trays and the internal interconnection cables contained in them.
transmission	The carriage of voice, data or other communications.
ULLS	The declared Unconditioned Local Loop Service. Allows access seekers to use the copper line connecting end-users to the local telephone exchange, allowing them provide both fixed internet (broadband) and voice services using their own DSLAMs and other exchange equipment.
VLAN	Virtual Local Area Networks are used to provide connectivity between one or more ADSL end-users and a centrally-located point of interconnect between the Telstra DSL network and an ISP point of presence. VLANs are used in conjunction with Ethernet based DSLAMs.
wholesale ADSL	The declared Wholesale ADSL service. Allows access seekers to

	purchase a Wholesale ADSL product from Telstra and resell internet services to end-users.
WLR	The declared Wholesale Line Rental service. For a monthly 'per-user' charge, it allows access seekers to purchase a line rental service from Telstra, which includes access to the copper line and associated services (including a dial tone and telephone number) supplied using Telstra's equipment.

Executive Summary

The ACCC has reached its draft decision on the primary price terms to be included in the final access determinations (FADs) for the seven declared fixed line services supplied by Telstra on its copper PSTN and DSL networks.[1] The seven declared fixed line services are the:

- unconditioned local loop service (ULLS)
- line sharing service (LSS)
- wholesale line rental service (WLR)
- local carriage service (LCS)
- fixed originating access service (FOAS)
- fixed terminating access service (FTAS)
- wholesale ADSL

The ACCC's draft decision is for a one off 0.7 per cent decrease in the primary prices of the declared fixed line services, for the four year period commencing on 1 July 2015 and finishing on 30 June 2019, as set out in the table below. This decision is based on information received from Telstra over a long period and up to 30 January 2015. Since then Telstra has submitted additional information, including revised forecasts. Moreover, the ACCC is making its draft decision without some information it needs to form a view on the prudent and efficient costs of supplying the declared fixed line services.

The ACCC has dealt with this situation by making adjustments where information has been adequate to do so and by otherwise by basing its draft decision on Telstra's expenditure forecasts submitted as at 30 January 2015 and assuming that Telstra will be able to satisfy the ACCC as to the prudency and efficiency of its expenditure proposals. The ACCC has requested further information from Telstra and is assessing information provided in February 2015 as well. If the ACCC cannot be satisfied as to the prudency and efficiency of Telstra's expenditure proposals based on the further revisions Telstra submitted on 6 February 2015 and any subsequent information provided by Telstra, it will make further adjustments to the expenditure forecasts in making the final access determinations. The ACCC is doing this in order to meet its timetable to make the FADs by 30 June 2015.

The ACCC is also still considering two further aspects of its decision on the primary price terms to be included in the fixed line services FAD. These are whether:

- cost allocations proposed by Telstra in its cost allocation approach are appropriate (discussed under cost allocation below)
- regulated charges should rise as a result of higher unit operating costs caused by declining demand as services are disconnected from Telstra's fixed line network as the National Broadband Network (NBN) rollout proceeds (discussed under NBN impacts below).

[1] The ACCC made its declaration decision on the ULLS, LSS, WLR, LCS, FOAS, and FTAS services on 17 April 2014. The ACCC declared the wholesale ADSL service in February 2012

Current and proposed charges for regulated fixed line services

Service	Unit	Current charges	Draft decision
ULLS Bands 1 to 3	$ per line per month	16.21	16.10
ULLS Band 4	$ per line per month	48.19	47.87
WLR	$ per line per month	22.84	22.69
LSS	$ per line per month	1.80	1.79
LCS	¢ per call	8.90	8.84
FOAS & FTAS	¢ per minute	0.95	0.94
Wholesale ADSL Zone 1	$ per port per month	24.44	24.28
Wholesale ADSL Zone 2/3	$ per port per month	29.66	29.46
Wholesale AGVC/VLAN	$ per Mbps per month	32.31	32.09

The ACCC is releasing in this report its draft decision on the supplementary price terms for the Internal Interconnection Cable (IIC) charge and its decision to not include geographic exemptions in the fixed line services FADs.

In reaching its draft decision the ACCC has dealt with a number of complex pricing issues at a time of transition and continuing uncertainty for the telecommunications industry.

In particular, the building of the National Broadband Network (NBN) to replace Telstra's legacy network as the infrastructure over which Australians receive voice and broadband services is an important consideration in determining the costs of supplying the declared services. Since the ACCC began the fixed services review in July 2013 the NBN architecture has changed to a multi technology mix (MTM) architecture from the previous fibre to the premises (FTTP) architecture, and the Definitive Agreements between Telstra and NBN Co have been renegotiated.

The ACCC uses its fixed line services model (FLSM) to estimate the revenue requirements for the declared fixed line services. The ACCC developed the FLSM to implement the move to a building block pricing methodology in 2011 and released an updated version for the wholesale ADSL FAD in 2013. The ACCC is further updating the FLSM to implement its decision on the primary price terms for this coming regulatory period and the ACCC is releasing a draft version of the updated FLSM with this draft decision.

As part of its inquiry into making the fixed line service FADs, the ACCC released a discussion paper on key pricing issues in July 2014 and a position statement on the treatment of Telstra-NBN Co arrangements in October 2014. Ten stakeholders have made a total of 34 submissions to the public inquiry process to date. The ACCC has had regard to the views provided by stakeholders in reaching this draft decision .

The major elements of the ACCC's draft decision on primary price terms are outlined below.

Cost Allocation

The ACCC's draft decision is to adopt a fully allocated cost approach—based on the cost allocation framework proposed by Telstra—to estimate the costs of supplying the declared

services in the next regulatory period. The ACCC considers that a fully allocated cost framework:

- will provide the opportunity for Telstra to recover the efficient costs of providing declared services and provides incentives for efficient investment in the network.
- is most likely to reflect relative use of Telstra's fixed line network and in turn determine an appropriate share of costs to allocate to declared services
- is an appropriate basis for explicitly accounting for the use of Telstra's infrastructure by NBN Co and other NBN related impacts
- is consistent with the fixed principles provisions on cost allocation.

There are some aspects of the Telstra cost allocation model where the ACCC requires further information to verify that the allocation factors accurately reflect the use of fixed line assets by different users. The ACCC will obtain expert advice on the allocation factors used to determine the costs of supplying the regulated services prior to making the final determinations.

Declining demand

Demand for Telstra's fixed line services—both connections and usage—has been declining for a number of years because customers are substituting mobile services for fixed line services and reducing their use of services that require or benefit from premises having multiple fixed lines (such as dial up DSL and facsimile machines). Declines in usage of Telstra's copper network will accelerate sharply as the migration of services to the NBN picks up. The ACCC considers that it is appropriate for all users of the fixed line network to bear the impacts of the declining fixed line market due to non NBN migration causes. The ACCC's draft decision on the impacts of declining demand due to the migration of services from Telstra's network to the NBN is addressed separately below.

Telstra also faces declining demand for some of its equipment as a result of access seekers using the ULLS and LSS services with their own equipment to provide services to end-users.

The choice of cost allocation framework has important implications for how the impacts of declining demand are shared between access seekers, Telstra and other users of the fixed line network. Under the cost allocation approach the ACCC used in 2011, prices paid by access seekers remained invariant to changes in demand and Telstra bore the full impacts of declining demand from changes in technology and consumer preference and also from loss of market share to access seekers. Under a fully allocated cost approach, relevant costs are spread over a declining customer base and all users of the network bear a share of the impacts of declining demand on unit costs.

The ACCC's draft decision is not to make adjustments to the fully allocated cost framework for reasons of loss of market share by Telstra to access seekers. The ACCC considers that, under a full cost allocation framework, the impact of loss of market share on the prices access seekers pay is minor and is unlikely to create adverse competitive outcomes in downstream markets.

NBN impacts

The ACCC's draft decision implements its Position Statement on the treatment of the arrangements between Telstra and NBN Co. That is, NBN impacts on fixed line assets are accounted for using the values established for those assets in the FLSM (which the ACCC refers to as a regulatory values approach). Transactions under the Telstra-NBN Co arrangements are accounted for in the following ways:

- Leasing arrangements are reflected in the cost allocation framework of the FLSM by including NBN Co as an explicit user of Telstra's fixed line assets—that is, ducts, exchange space and dark fibre links.

- Assets sold to NBN Co are treated as asset disposals and removed from the RAB, based on their regulatory values—to reflect assets sold to NBN Co (that is, copper cables in FTTN areas) a proportion of the regulatory value of the copper cables asset class is treated as an asset disposal in each year, with that proportion being based on the expected rate of the FTTN rollout.

- Assets that are decommissioned, and an appropriate share of assets utilised to a lesser extent, as a result of NBN migration are removed from the cost base. This is done in the following ways:

    - Decommissioned assets: For copper cables in non-FTTN areas, a proportion of the regulatory value of the copper cables asset class is treated as an asset disposal in each year, with that proportion being based on the expected rate of the FTTP and HFC rollout.
    - For assets used to a lesser extent:
        - Local switching equipment will become progressively under-utilised over the next regulatory period. The RAB value of this asset class will fall at a much slower pace than the decline in usage due to the migration of services to the NBN. The ACCC considers that users of the fixed line network should not bear higher unit costs of this asset class which arise solely because of the Telstra-NBN Co arrangements. To account for this under-utilisation, a proportion of the regulatory value of local switching equipment is treated as an asset disposal in each year, with that proportion being based on the expected rate of the overall NBN rollout.
        - Data equipment will also be used to a lesser extent but does not require an adjustment because the RAB value for this asset class is forecast to decline in line with demand due to declining capital expenditure and the short asset lives of these assets

A further impact of the NBN is the increase in unit operating costs that will occur over the next regulatory period as services are migrated off the Telstra network and onto the NBN. This rise in unit operating costs results from a loss of economies of scale and density in the operation of Telstra's network as services are disconnected. The ACCC considers that the loss of economies of scale and density is incremental to the NBN and is still considering its approach on this issue. The ACCC would particularly welcome stakeholder views on this issue.

Expenditure and demand forecasts

Forecast operating expenditure and capital expenditure are major inputs to determining the costs of supplying services on Telstra's fixed line network. The ACCC has received information from Telstra on its operating expenditure, capital expenditure and demand forecasts throughout the FAD inquiry to date, including:

- Response to the ACCC building block model record keeping rule (BBM RKR) (in November 2013 and February 2014)

- Revised forecasts, including a forecasting model to enable changes in the NBN rollout to be reflected in Telstra's demand and expenditure forecasts (October 2014)

- Responses to ACCC requests for information (December 2014, January 2015, February 2015).

The ACCC notes that this FAD inquiry is the first occasion on which Telstra has provided operating expenditure and capital expenditure forecasts under the BBM RKR. The ACCC recognises that this was a significant task for Telstra and that Telstra has made considerable efforts to meet subsequent requests for further explanations of its forecasts.

However, at the time the ACCC was reaching its draft decision, it was still waiting to receive further information requested from Telstra. The information so far provided by Telstra has not been sufficient to enable a view to be formed as to the overall prudency and efficiency of operating expenditure and capital expenditure proposals. The ACCC has asked Telstra to provide an explanation of the attribution of costs from its accounts to the asset classes used in the ACCC pricing model (FLSM) to allow the ACCC to identify the cost causation underpinning Telstra's expenditure forecasts. Telstra has undertaken to provide further information on this.

The ACCC's draft decision on the primary price FAD terms is thus based on incomplete information. Moreover, Telstra's most recent submission (of 6 February 2015) makes significant changes to previous forecasts which the ACCC has not yet assessed. In light of these circumstances the ACCC's draft decision relates to the forecasts and other information as submitted by Telstra up to 30 January 2015.

The ACCC has been able to assess some aspects of the expenditure forecasts and this has resulted in certain adjustments to the expenditure forecasts proposed by Telstra (discussed below). The expenditure forecasts used to determine the draft primary price FAD terms are these adjusted operating and capital expenditures on the assumption that Telstra's forecasts are otherwise prudent and efficient.

Expert report: Assessment on the prudency and efficiency of Telstra's expenditure forecasts

The ACCC commissioned an expert report from WIK-Consult on the prudency and efficiency of Telstra's expenditure forecasts. The ACCC has used the report to inform its considerations and to assist it in reaching its draft decision. The WIK report is based on information available to the ACCC up to 30 January 2015 and further work on prudency and efficiency will be done before the final decision. Access seekers can obtain a copy of the consultant's report under confidentiality arrangements.

Capital expenditure

The ACCC has assessed Telstra's capital expenditure forecasts to the extent it is able and considers that capital expenditure that is incremental to the NBN should be excluded from the cost base for the fixed line services. The ACCC considers that this expenditure is undertaken to make ready for the NBN and that access seekers for the declared fixed line services should not bear this cost. The ACCC's draft decision is to disallow all capital expenditure incremental to the NBN from Telstra's total forecast capital expenditure for the period 2014–15 to 2018–19.

However, as noted, the ACCC is not able to form a view regarding the overall prudency and efficiency of the capital expenditure forecasts submitted by Telstra. In particular, the ACCC does not have the information it needs to form a view on some demand related capital expenditure and investment projects. To estimate primary price terms for its draft decision, and in the absence of better information, the ACCC has used the capital expenditure forecasts available to it as at 30 January 2015 pending further information from Telstra prior to making the FADs. Advice from WIK confirms the ACCC's concerns with these issues.

The ACCC's draft decision on capital expenditure is in chapter 4.

Operating expenditure

In its October submission, Telstra revised its base-year (2013–14) operating expenditure forecast to reflect its actual operating expenditure for that year and substantially revised its operating expenditure forecasts. While Telstra has undertaken a substantial downwards revision of both its base year operating expenditure and operating expenditure forecasts the ACCC considers that certain forecast operating expenditures do not appear to reflect the forecast decline in demand. The ACCC has made two adjustments to Telstra's operating expenditure forecasts based on information provided by Telstra up to 30 January 2015. These adjustments are to:

- disallow operating expenditure associated with the disallowed NBN-related capital expenditure (what Telstra calls propex) for the same reasons that the capital expenditure is disallowed—namely that it is incremental to the NBN and should not be recovered through charges .

- Disallow the increase in the percentage mark-up for Business Unit Support included in Telstra's January 2015 submission The reason the ACCC does not accept this mark-up adjustment is because the insufficient justification was provided at the time for the change.

Further, the ACCC is concerned that operating expenditure costs that are caused by the NBN or incurred on behalf of NBN Co (in addition to the propex associated with NBN related capital expenditure noted above) may be included in Telstra's operating expenditure forecasts. Since Telstra has not provided sufficient detail on its costs the ACCC is unable to establish whether forecasts of operating expenditure include NBN-related activities.

The ACCC draft decision is to remove Telstra's upward adjustment to its Business Unit Support mark-up and NBN-related propex from the forecast fixed line operating expenditure.

The Commission's draft decision on operating expenditure is in chapter 3.

Demand forecasts

Telstra's approach to forecasting the demand for its fixed line services over the next regulatory period is to develop demand forecasts on a hypothetical 'no-NBN' basis and then superimpose assumptions about the impact of the NBN rollout and migration. Telstra has developed a forecast model (discussed below) that allows these 'post NBN' forecasts to be updated for future changes in the NBN rollout plan.

The ACCC considers that Telstra's demand forecasts are reasonable and the draft decision is to use Telstra's revised demand forecasts for the purposes of setting primary price terms.

However, the ACCC notes that the risks of these demand forecasts not being met are made greater by continuing uncertainty about the pace of migration. The ACCC's approach to dealing with this risk is set out in Chapter 11 on the term of the FADs.

The ACCC's draft decision on demand forecasts is in chapter 7.

Telstra's forecast model

Telstra has submitted a forecast model which forms part of its methodology for preparing demand and expenditure forecasts. The model enables the user to input NBN rollout scenarios and the model will provide Telstra's demand, operating expenditure and capital expenditure forecasts for that scenario. In reaching its draft decision the ACCC has formed a view on the reasonableness of Telstra's forecasts, to the extent it is able given the limitations of the available information, as noted above. The ACCC has considered the assumptions Telstra has

made regarding the NBN rollout and the demand and expenditure forecasts submitted to it by Telstra using its base case NBN rollout assumption.

However, the ACCC has not assessed the performance of Telstra's model under alternative rollout assumptions. If necessary, the ACCC will review the model in light of new information in the future.

Weighted average cost of capital (WACC)

The ACCC's draft decision is to maintain its existing WACC estimation methodology. This results in a real vanilla weighted average cost of capital (WACC) of 2.9 per cent (5.4 per cent in nominal terms). In estimating the WACC, the ACCC has taken into account submissions from Telstra and access seekers, and up-to-date information on the WACC parameters. The ACCC's draft decision on key WACC parameters is: 6.0 per cent for the market risk premium; 0.94 per cent for the debt risk premium; 0.7 for equity beta; and 0.45 for gamma.

The ACCC's reasoning and detailed calculations of the WACC parameters are in chapter 5.

Primary prices and price structures

The draft decision to decrease the primary prices for the declared fixed line services by a uniform 0.7 per cent means that the price structures for the declared fixed line services that apply in the current FADs will continue.

The ACCC recognises that applying the price change uniformly across all declared services represents a deviation from the approach to individual price setting adopted in the 2011 FADs. In 2011, prices for each declared service were based directly on the revenue requirement allocated to that service. This change in approach means that relative movements in costs of supplying and demand for the declared services are not fully reflected in the draft primary price terms.

However, the ACCC considers that, maintaining existing price relativities avoids some undesirable consequences of setting prices for individual services based on the estimated revenue requirement for that service. Maintaining the approach adopted in 2011 is likely to result in significant price increases for some declared services and significant price decreases for others.

ACCC considers that a significant change in price relativities could give access seekers incentives to change the way they supply services to end-users over Telstra's fixed line network. The ACCC considers that significant changes of this kind would not represent efficient use of or investment in infrastructure, particularly in the transition to the NBN. The ACCC considers that maintaining price relativities will promote a degree of stability for industry, which will assist in the transition to the NBN and be in the interests of end users.

Term of the FAD

The ACCC draft decision is to set a four year period for the FADs. The draft decision also sets out the approach that the ACCC intends to take to deal with significant risks attached to the demand forecasts as a result of the NBN rollout.

To ensure a reasonable balance between pricing certainty and flexibility, the ACCC intends to initiate a 'trigger and review' process at the mid-point of the FAD term, under which the ACCC will review the FAD price terms if the rate of the NBN rollout differs significantly from that expected at the time of making the FADs.

The ACCC will review the FAD price terms if, at the mid-point of the FAD term, the actual rate of the NBN rollout up to that point, or the expected rate of the rollout up to the expiry of the FAD

term, is at least 20 per cent different from the forecasts used as inputs in setting the FAD price terms.

The ACCC's draft decision on the term of the FADs is at chapter 11.

Scope of the application of SAOs (exemptions)

The ACCC was asked to consider the inclusion of exemptions in a number of the FADs to:

- 'carve out' CBD areas so that the SAOs and FADs did not apply to the supply of the WLR service and the LCS (in these areas).
- include carrier-specific exemptions so that the SAOs and all the fixed line services FADs only applied to access providers with significant market power in relevant markets.

The ACCC's draft decision, having considered its recent April 2014 Fixed Services Review Final Declaration Decision and more recent information submitted as part of this FAD inquiry, is to:

- not make terms and conditions that give effect to geographic exemptions in CBD areas in the WLR and LCS FADs, having decided in April 2014 to expand the declarations for the these services to include CBD areas (from 1 August 2014)
- include a term giving effect to carrier-specific exemptions in the wholesale ADSL FAD only. This draft term will continue to exempt non-Telstra providers from wholesale ADSL FAD terms and the SAOs in relation to the supply of the wholesale ADSL service (as is currently the case).
- not include terms in the remaining fixed line services FADs to give effect to carrier-specific exemptions.

Supplementary prices

The fixed line service FADs also include supplementary price terms for:

- connection and disconnection of the ULLS and LSS services
- the internal interconnect cable (IIC)

The ACCC's draft decision on the IIC charge is included with this draft decision on the primary price terms.

The ACCC's draft decision on connection and disconnection charges will be included with its draft decision on non-price terms and conditions to be released shortly

Consultation on the draft decision and next steps

Submissions on this draft decision are due by **30 April 2015**. The ACCC will decide whether further targeted consultation is required before it makes its final decision after considering the submissions it receives.

The ACCC is inviting submissions from stakeholders on all aspects of the draft decision. It will take into account the information provided in submissions in making its final decision.

The ACCC intends to release its final decision in late June 2015.

1 Introduction

The Australian Competition and Consumer Commission (ACCC) is conducting a public inquiry under Part 25 of the *Telecommunications Act 1997* into making final access determinations (FADs) under section 152BC of the *Competition and Consumer Act 2010* (CCA) for the seven declared fixed line services (FAD inquiry). The seven declared fixed line services are the:

- unconditioned local loop service (ULLS)
- line sharing service (LSS)
- wholesale line rental service (WLR)
- local carriage service (LCS)
- fixed originating access service (FOAS)
- fixed terminating access service (FTAS)
- wholesale ADSL.

A description of the declared fixed line services is at appendix E to this draft decision.

This report sets out the Commission's draft decision on the FAD terms for:

- the primary prices for the declared fixed line services[2]
- the supplementary price for the Internal Interconnection Cable (IIC)[3]
- CBD exemptions.

The Commission is considering non-price terms and conditions (NPTC) separately in the NPTC FAD inquiries for a number of declared services; including fixed line, mobile and domestic transmission capacity services.[4] The Commission will publish its draft decision on NPTC shortly and will include in that report its draft decision on supplementary prices for the fixed line services connection and disconnection charges.

In reaching its draft decision the Commission has considered early submissions to the inquiry, submissions to the July 2014 discussion paper on primary price terms for the fixed line services and submissions to the October 2014 position statement on the Telstra-NBN Co arrangements. The discussion paper, position statement and submissions received are published on the ACCC web site. This report sets out the Commission's reasons for its draft decision. The legislative framework for FADs is at appendix A to the report.

The commission intends to publish its final decision on the FAD terms for the declared fixed line services in June 2015.

1.1 Background

The ACCC made FADs for six declared fixed line services in July 2011and made a FAD for wholesale ADSL service in May 2013. All seven FADs had expiry dates in July 2014. The

---

2 The primary prices for the declared services are charges for direct use of the services.

3 The supplementary prices refer to additional charges incurred in using the services, for example, IIC charges and connection and disconnection charges. The Commissions draft decision on connection and disconnection charges will be released with the draft decision on non-price terms and conditions.

4 The non-price terms and conditions part of the FAD inquiries can be found at https://www.accc.gov.au/regulated-infrastructure/communications/fixed-line-services/fad-inquiries-non-price-terms-conditions-supplementary-prices

Commission commenced the FAD inquiry in July 2013 when it issued Telstra with a request for information under the Building Block Model Record Keeping Rule (BBM RKR). A number of factors meant that the Commission has not been able to complete the FAD inquiry before the expiry of the previous FADs:

- Changes to the NBN architecture mean that there has been a significant change in Telstra's operating environment. This necessitated a revision to Telstra's response to the BBM RKR and caused delays in the Commission having available to it the information on demand and costs for Telstra's fixed line network it required for it to make its decision on the primary price terms for the FADs.
- The need to provide adequate opportunity for consultation with stakeholders on a range of complex pricing issues the Commission is considering during its inquiry. These pricing issues include the approach on the Telstra-NBN Co arrangements and cost allocation and declining demand in addition to assessment of the demand and expenditure forecasts Telstra has submitted.

The Commission has extended the initial six month inquiry period for making the FADs to 11 July 2015 and the expiry date of the current FADs in consequence of these circumstances. The Commission published, under section 152BCK(3) of the CCA, notices of extension to the decision making period on 11 December 2013, 3 July 2014 and 12 December 2014, On 18 June 2014 the Commission extended, under section 152BCF(10) of the CCA, the expiry date of the 2011 and 2013 FADs to be the day immediately before the day on which the access determination for the next regulatory period come into force .

On 18 June 2014, the Commission also varied the fixed line services FADs following a variation inquiry that commenced on 17 April 2014, The variations to the FADs specified price and non-price terms for the supply of the LCS and WLR service in CBD areas and specified a regulated price for the internal interconnection cable (IIC) service, a supplementary service required for the supply of the ULLS and LSS.

1.2 Public inquiry process to date

On 11 June 2014, the Commission gave a disclosure notice to Telstra for the disclosure of information that has been provided under the Building Block Model Record keeping and reporting Rules (BBM RKR). The ACCC also published a statement of reasons to accompany the notice.

On 24 July 2014, the ACCC published its primary price terms discussion paper for the FAD inquiry. The ACCC also published a supplementary report providing additional information on Telstra's cost allocation proposal which compared Telstra's proposed cost allocation approach to the approach taken in the previous fixed line FADs.

The ACCC conducted a technical workshop on 28 August 2014 which provided access seekers the opportunity to seek further information regarding the FLSM, Telstra's cost allocation proposal and its BBM RKR response.

On 22 October 2014, the ACCC released its position statement on how it intends to account for the arrangements between Telstra and NBN Co in determining primary prices in the FAD inquiry, in advance of a more comprehensive draft decision. The Telstra-NBN Co arrangements are set out in the Definitive Agreements concluded in June 2011 and renegotiated in December 2014. Matters covered in the Definitive Agreements include the migration of customers to the NBN and NBN Co's use of Telstra's infrastructure.

The ACCC engaged WIK-Consultant to report on the prudency and efficiency of Telstra's operating expenditure and capital expenditure forecasts submitted on 3 October 2014. A public version of the consultant's report will be published on the ACCC web site with this draft decision.

1.3 Consultation process

The ACCC encourages industry participants and other interested parties to make submissions on this draft decision.

To foster an informed and consultative process, all submissions will be considered as public submissions and will be posted on the ACCC's website. Interested parties wishing to submit commercial-in-confidence material to the ACCC 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 bookending the confidential material with an appropriate symbol or 'c-i-c'.

The ACCC expects that claims for commercial-in-confidence status of information by parties will be limited in order to promote transparency and broad participation in the public inquiry.

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 on the collection, use and disclosure of information. A copy of the guideline can be downloaded from the ACCC's website.

The ACCC prefers to receive submissions in electronic form, either in PDF or Microsoft Word format which allows the submission text to be searched. Please contact Jane Goldwater regarding any questions you have concerning the consultation process on (03) 9290 1493.

Submissions on this draft decision are due by 30 April 2015.

When it has considered the submissions received on the draft decision, the Commission will decide whether further consultation is required before it makes its final decision. The Commission intends that, if further consultation is warranted, it will be targeted on specific issues and will not delay release of the Commission's decision in June 2015.

1.4 Structure of report

The report on the draft decision on primary price terms for the declared fixed line services is set out as follows:

Part A (Chapters 2-13) sets out the draft decision on the primary price terms for the declared fixed line services and the Commission's reasons for reaching its decision.

Part B (Chapter 14) sets out the draft decision on the supplementary price terms for IIC charges.

Part C (Chapter 15-16) sets out the draft decision on the scope of the application of the SAOs.

Appendix A sets out the relevant legislative framework for making FADs

Appendix B lists the submissions received by the ACCC to date to this inquiry on primary price terms.

Appendix C provides an assessment of the expenditure forecast.

Appendix D sets out the fixed principles provision in the FADs.

Appendix E sets out the service descriptions of the declared fixed line services.

Part A: Pricing approach: primary price terms

2 Pricing methodology

Key Points

- The ACCC uses a building block approach to determine prices for Telstra's declared fixed line services.
- The ACCC developed the fixed line services model (the FLSM) during the 2011 FAD inquiry to calculate prices for the declared fixed line services. The ACCC will again use the FLSM to determine prices for the next regulatory period.
- Prices are calculated in the FLSM in three key steps: determining annual revenue requirements for each asset class; allocating costs to declared services; and determining prices from allocated costs.
- The ACCC obtained information on Telstra's expenditure and demand forecasts under the building block model record-keeping rule in late 2013. Telstra has since provided revised forecasts that reflect more recent information regarding the NBN rollout.
- The 2011 and 2013 FADs contain a set of fixed principles that specify how certain pricing elements must be determined until 30 June 2021. The ACCC does not propose to include any additional fixed principles in the FADs for the next regulatory period.

2.1 Introduction

The ACCC uses a building block model (BBM) pricing methodology to determine prices for Telstra's declared fixed line services. This approach was adopted by the ACCC in the 2011 fixed line services FAD inquiry following an extensive consultation process.[5] The ACCC had previously used a combination of total service long run incremental cost (TSLRIC) and retail-minus-retail-cost (RMRC) methodologies for setting indicative prices under the negotiate-arbitrate regulatory framework. The ACCC implemented the BBM approach to setting prices through the fixed line services model (the FLSM), which was developed during the 2011 FAD inquiry. The ACCC also included a set of fixed principles in the 2011 FADs that specify how certain pricing inputs within the BBM framework are to be determined until 30 June 2021.

The ACCC will use the FLSM to determine primary prices for Telstra's declared fixed line services to be included in the FADs for next regulatory period. This chapter provides an overview of the FLSM, its key inputs, the role of information provided by Telstra under the BBM record-keeping rule (RKR) and the process by which prices for declared services are determined (detailed analysis and the ACCC's draft decisions on the various pricing matters are discussed in the following chapters). Key changes to several elements of the FLSM are also briefly discussed.

This chapter also provides an overview of the fixed principles and sets out the ACCC's draft decision on whether new fixed principles should be included in the FADs for the next regulatory period. It also provides the ACCC's views on the factors that should be considered when deciding to make a fixed principle.

2.2 The fixed line services model

The FLSM calculates a price for each declared service based on a range of key inputs. The three main steps followed in the FLSM to calculate prices are described below.

[5] Further information on the 2011 fixed line services FAD inquiry can be found on the ACCC website: http://www.accc.gov.au/regulated-infrastructure/communications/fixed-line-services/fixed-line-services-final-access-determination-fad-2011.

Annual revenue requirements are determined for each asset class

The FLSM contains 22 asset classes, which reflect the assets used to supply declared fixed line services.

Each asset class is assigned a regulatory asset base (RAB), which is rolled forward on an annual basis. Capital expenditure on asset classes is added to the RAB each year while depreciation (which is based on the RAB value and asset lives for that asset class) and asset disposals are subtracted.

A revenue requirement for each asset class is then determined for each year. The four components of the revenue requirement for each year are:

- Operating expenditure (see chapter 3).
- Return on capital – this is determined by multiplying the opening RAB of an asset class for that year by the cost of capital (see chapter 5 for discussion of the cost of capital).
- Depreciation.
- An allowance for taxation payments (see chapter 6, and chapter 5 for discussion of the treatment of imputation credits).

The revenue requirement for each asset class represents the annualised costs of investing in and operating the assets in that asset class. The revenue requirements represent the amount that needs to be recovered over time to allow recovery of all ongoing costs and capital investments for each asset class.

Costs are allocated to declared services

Each asset class revenue requirement represents the total annualised cost of providing those assets. However, most assets are used to provide a range of different services, both declared and non-declared. To determine the costs associated with providing declared services, the revenue requirements for each asset class are allocated to declared services using cost allocation factors.

Each asset class has a set of cost allocation factors. Each cost allocation factor specifies the percentage of that asset class's revenue requirement that is to be allocated to a particular declared service.

The cost allocation factors adopted in the 2011 FADs were based on a cost model developed for the ACCC by Analysys Mason, and were adjusted annually in line with changes in demand for declared services. Telstra has proposed an alternative set of cost allocation factors based on a fully allocated approach (cost allocation and the related issue of declining demand is discussed in chapter 10).

Prices are determined from allocated costs

The asset class costs allocated to each declared service for each year are then added together to derive a service specific revenue requirement for those services.

For most declared services, a price is calculated for each year by dividing the service specific revenue requirement for the service by its forecast demand (see chapter 7 for discussion of demand forecasts). For ULLS services, a separate price is determined for ULLS bands 1-3 and for ULLS band 4, while separate prices are determined for wholesale ADSL port charges (which are charged on a per SIO basis, with separate prices for zone 1 and zones 2 and 3) and capacity charges (which are charged on a per Mbps basis).

For each declared service, prices calculated for each year are then averaged over the regulatory period to determine the FAD price.

This method was used to determine prices for individual declared services in the 2011 and 2013 FADs. In the current FAD inquiry, Telstra has proposed an alternative approach to individual price setting for the next regulatory period. Telstra proposes that the price for all declared services be changed once, on a uniform basis across all services, at the start of the regulatory period by an amount that is expected to allow Telstra to recover the total revenue requirement for all declared services over the regulatory period. This differs from the current approach, where the price for each declared service is based directly on its service specific revenue requirement.

The approach to setting prices for individual services, based on the costs allocated to these services, is discussed in chapter 13.

2.3 Building block model record-keeping rule

The ACCC has the ability to make RKRs that require carriers or carriage service providers to keep or retain relevant records. The RKR may also require the carrier or carriage service provider to prepare reports based on these records, and to provide those reports to the ACCC.

In August 2012, the ACCC made the building block model record-keeping rule (BBM RKR), which requires Telstra to provide the ACCC with historical and forecast information on operating expenditure and capital expenditure for all asset classes, forecast asset lives for all asset classes and historical and forecast information on demand for declared services.[6] The BBM RKR provides a formal mechanism for the ACCC to obtain key information from Telstra, when requested, that will allow it to effectively implement the FLSM. The ACCC previously had to rely on other means to collect the required data, such as collecting data from Telstra on an ad hoc basis or from the regulatory accounting framework.[7]

On 13 September 2013 the ACCC made a request to Telstra under the BBM RKR to provide the required information up to and including the 2018-19 financial year. Telstra provided this information, including supporting material, on 25 November 2013. Telstra provided additional material on 10 February 2014 in response to a further ACCC information request. Following a consultation process on the disclosure of Telstra's BBM RKR response, the public response was published on the ACCC website on 24 July 2014. Confidential versions have been made available to access seekers under confidentiality arrangements.

Telstra has revised its data on several occasions since its submission under the BBM RKR. Telstra's revisions and response to information requests include:

- 3 October 2014 — revised expenditure and demand forecasts. Telstra stated that these forecasts were based on more up-to-date assumptions about the NBN rollout and reflected actual data for 2013-14.

- 7 October 2014 — Telstra provided its forecast model and forecast model documentation alongside a revised and a public version of the 3 October 2014 material. Telstra also provided two consultant reports which were referred to as the Balchin report and the Smart report.

- 15 December 2014 — proposed amended FLSM and documentation, including amendments to allow for determination of new FAD prices. This included: adjustments

6 The ACCC subsequently varied the RKR in June 2013 to include information for the wholesale ADSL service.

7 More information for the Regulatory Accounting Framework is available at the ACCC's website at: https://www.accc.gov.au/regulated-infrastructure/communications/monitoring-reporting/regulatory-accounting-framework

to incorporate Telstra's new forecasts of expenditure; updates to economic parameters used; adjustments to incorporate Telstra's proposed cost allocation framework; and additional sheets to allow the FLSM to accommodate alternative NBN rollout scenarios.

- 19 January 2015 — updated proposed FLSM incorporating the Internal Interconnect Cable (IIC) and Telstra Equipment Building Access (TEBA).

- 6 February 2015 — revised amended FLSM.

Telstra's operating and capital expenditure forecasts are discussed in chapter 3 and chapter 4 respectively, while its demand forecasts are discussed in chapter 7.

2.4 Fixed principles

An access determination may contain 'fixed principles' provisions that lock in certain matters until a nominal termination date.[8] Both price and non-price terms and conditions can be designated as fixed principles provisions. They are intended to give the ACCC the ability to provide regulatory certainty in certain circumstances.[9]

Fixed principles for the declared fixed line services (apart from wholesale ADSL) were made in the 2011 FADs. Identical fixed principles were subsequently included in the 2013 wholesale ADSL FAD. The fixed principles provisions for all declared fixed line services apply until 30 June 2021, and will therefore provide industry with certainty over time about how the ACCC will estimate prices for these services. The fixed principles provisions specify:

- an initial value of the regulatory asset base

- a RAB roll forward mechanism

- the components of the revenue requirement

- factors the ACCC will take into account in determining the prudency and efficiency of capital and operating expenditure forecasts

- a process for assessing demand forecasts

- that a vanilla WACC is to be used to calculate the return on capital, with the cost of equity estimated using the CAPM

- that tax liabilities will be calculated using the statutory corporate tax rate, and

- principles that apply in the determination of cost allocation factors.[10]

The 2015 FADs for the declared fixed line services will come into force before the nominal termination date specified in the fixed principles. Therefore, the ACCC must include the same fixed principles provisions in the new FADs.[11] The ACCC does not intend to vary or remove any of the fixed principles carried over from the previous FADs, and does not intend to make any new fixed principles.

---

8 Section 152BCD(1) of the CCA

9 Explanatory Memorandum to the *Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2010* (Cth), p. 144.

10 ACCC, *Inquiry to make final access determinations for the declared fixed line services – Final Report (public version)*, July 2011, Appendix C, clause 6.

11 Section 152BCD(3) of the CCA

In response to the ACCC's July 2014 discussion paper, the Department of Communications submitted that it would be desirable for the ACCC to provide long term certainty in relation to how it intends to account for arrangements between Telstra and NBN Co under the Definitive Agreements in determining prices for the fixed line services.[12] The Department suggested that the ACCC could do this by making a fixed principle in relation to the treatment of NBN Co's payments to Telstra under these arrangements.

As noted in the October 2014 position statement in relation to this issue, the ACCC does not intend to make such a fixed principle. The purpose of indicating the ACCC's position on this issue in advance of a draft decision was to provide greater regulatory certainty in the particular circumstances of the renegotiation of the July 2011 Definitive Agreements. The ACCC considered that this certainty was achieved by stating its position on the issue, and that a fixed principle was neither appropriate nor required. The ACCC notes that those renegotiations are now concluded with the signing of revised Definitive Agreements in December 2014.

In general, the ACCC considers that a decision on whether to make a fixed principle should carefully balance considerations of providing regulatory certainty with retaining regulatory flexibility and discretion. A lack of certainty about a regulator's approach can potentially result in underinvestment, particularly when firms consider there is a risk that they may not be able to recover sunk costs. Conversely, a lack of flexibility in regulation can also be detrimental, particularly where the regulatory approach cannot adapt to changing circumstances or where regulatory error is locked in.

The ACCC considers that it is important to identify the risks and benefits that may arise from making a fixed principle in order to determine an appropriate balance between certainty and flexibility. Accordingly, the ACCC considers that there are a range of factors that should be considered when deciding to make a fixed principle. A fixed principle may be appropriate where, for example, it would create or strengthen incentives for efficient investment and expenditure. On the other hand, a fixed principle may not be appropriate where, for example, there is a lack of certainty during the term of the fixed principle. This may involve uncertain industry developments, changing technology, and potential changes in the policy environment.

The ACCC considers that the fixed principles that currently apply are supported by these considerations. Appendix D reproduces the fixed principles provisions from the 2011 and 2013 FADs.

[12] Department of Communications, *Final access determinations for fixed line services—primary price terms: Submission to the ACCC*, October 2014, p. 2.

3 Operating expenditure forecasts

Key Points

- In response to the ACCC discussion paper, stakeholders highlighted the lack of responsiveness of Telstra's original forecast operating expenditure to the projected fall in demand arising from the NBN rollout.
- Telstra has since revised its base-year 2013–14 operating expenditure forecast to reflect its actual operating expenditure for that year and substantially revised its operating expenditure forecasts.
- While Telstra has undertaken a substantial downwards revision of both its base year operating expenditure and operating expenditure forecasts the ACCC considers that certain forecast operating expenditures do not appear to prudently and efficiently reflect the forecast change in demand.
- The ACCC is also concerned that Telstra has presented insufficient evidence in support of the relevance, efficiency and prudency of its forecast propex.
- Further concerns relate to operating expenditure costs that are caused by NBN Co or incurred on behalf of NBN Co and are included in Telstra's operating expenditure forecasts. Since Telstra has not so far provided sufficient granularity on costs the ACCC is concerned that forecasts of operating expenditure may include NBN-related activities.
- The ACCC and stakeholders have also identified several issues regarding Telstra's choice and application of input price indices. In particular, the ACCC is concerned that Telstra may have inconsistently applied input price and productivity indices to its cost centres.
- The ACCC considers that operating expenditures incremental to NBN, such as NBN-related propex, should be removed from Telstra's operating expenditure forecasts.
- Telstra's January 2015 submission made further changes to its forecast operating expenditure. [c-i-c starts] [redacted] [c-i-c ends] and NBN-related propex from the forecast fixed line operating expenditure. This results in a reduction of Telstra's forecast real operating expenditure of [redacted] over the regulatory period 2014–15 to 2018–19. The reduction also includes the ACCC's adjustment to Telstra's forecast CPI which is discussed in chapter 8.
- The adjustment to operating expenditure is based on Telstra's January 2015 proposed operating expenditure forecasts. Telstra's proposed adjustments to operating expenditure forecasts submitted in February 2015 were not incorporated since the ACCC has further concerns about the prudency and efficiency of these proposed adjustments.
- For the purposes of this draft decision, the ACCC's decision is to not make further adjustments to Telstra's forecast operating expenditure. The exception to this is the removal of Telstra's upward adjustment to its Business Unit Support mark-up, the removal of NBN-related propex and an adjustment to Telstra's forecast CPI. In the absence of further information from Telstra that demonstrates an improvement in the transparency of its proposed operating expenditures, the ACCC may make further adjustments in the final decision.

3.1 Introduction

This chapter examines the submissions of stakeholders and Telstra in response to the ACCC July 2014 discussion paper (discussion paper)[13] and the ACCC's draft decision is formed. Section 3.2 summarises the operating expenditure issues identified in the discussion paper. Section 3.3 presents Telstra's response to the discussion paper including its revised operating expenditure forecasts. Section 3.4 summarises submissions by stakeholders. Section 3.5 presents the ACCC's draft decision on Telstra's proposed operating expenditure forecasts.

3.2 July 2014 discussion paper

The discussion paper outlined Telstra's operating expenditure forecasts submitted in response to the ACCC request under the building block model record keeping rule (BBM RKR)[14].

Telstra's BBM RKR operating expenditure forecasts represented a different approach to the previous methodology adopted by the ACCC for the previous FADs. The main area of difference relates to how the base year operating expenditure forecast was estimated.

In the previous FADs, the ACCC estimated base year operating expenditure forecasts (both direct and indirect) based on historical cost information reported for the relevant asset classes in Telstra's regulatory accounting framework (RAF) reports.[15] In contrast, Telstra's bottom-up approach in its BBM RKR forecasts is based on Telstra's budget figures. In the discussion paper the ACCC noted that the significant difference between the 2011 FAD and Telstra's BBM RKR approach to forecasting operating expenditure made it difficult to meaningfully compare operating expenditures under the two approaches.[16]

The discussion paper identified several issues relating to Telstra's forecast operating expenditure and invited comment from stakeholders on these issues.[17] Specifically, the ACCC sought views on:

- whether Telstra's forecasting methodology for operating expenditure was reasonable having regarding to the LTIE
- whether Telstra's operating expenditure forecasts for 2014–15 to 2018–19 are prudent and efficient
- what factors should be considered when assessing the prudency and efficiency of Telstra's operating expenditure forecasts
- whether Telstra's 2013–14 operating expenditure forecasts represent a reasonable baseline for its forecast of operating expenditure over the regulatory period.

Views were also sought on Telstra's forecasting assumptions, its forecast fault rate, the variability of its costs and the projected productivity of its inputs.

The ACCC also sought views on the likely impact of the NBN rollout on Telstra's operating expenditure forecasts and how the NBN rollout should be taken into consideration in Telstra's operating expenditure forecasts.

---

[13] ACCC, *Public Inquiry into final access determinations for fixed line services – primary price terms, Discussion Paper, July 2014*

[14] Telstra (2013), Final Access Determinations (FADs) Inquiry – response to information request under BBM RKR, Commercial in Confidence, November 2013.

[15] ACCC (2011), *Public inquiry to make final access determinations for the declared fixed line services*, Discussion Paper, April 2011, p. 107.

[16] ACCC (2014) *Public Inquiry into final access determinations for fixed line services – primary price terms, Discussion Paper,* July 2014, pp. 24-25.

[17] ACCC (2014) *Public Inquiry into final access determinations for fixed line services – primary price terms, Discussion Paper,* July 2014, pp. 17-26.

The discussion paper and stakeholder views outlined below relate to Telstra's original forecasts. However, in response to the discussion paper and stakeholder and ACCC concerns relating to its forecasts at the ACCC Workshop on the 2014 Fixed Services Final Access Determination (August 2014)[18], Telstra submitted revised base year operating expenditures (based on actual operating expenditure for 2013–14) and revised operating expenditure forecasts for 2014–15 to 2018–19 (submitted in October 2014, further minor revisions to forecast operating expenditure were made in January 2015). This information was placed on the ACCC's website and confidential versions of this information were provided to stakeholders. Telstra submitted that the revised forecast operating expenditures responded to the decline in demand for fixed line services arising principally from the NBN rollout (outlined in section 3.3 below).

Telstra's base year and forecast operating expenditures for fixed line services consist of a number of expenditure categories: Unattributable costs (corporate overheads allocated to fixed line services); Propex; Telstra Wholesale Group; Line Sharing Service (LSS); and Telstra Operations Business Unit. The Telstra Operations Business Unit includes the lines of business: Customer Service Delivery (CSD); Networks; Information Technology Services (ITS); Telstra Service Operations (TSO); and Service Operations Business Unit Support (BU Support). For simplicity, the ACCC identifies all the above operating expenditure categories as 'cost centres'.

3.2.1 Submissions

Telstra and stakeholder submissions largely responded to the ACCC (2014) discussion paper on operating expenditure. Telstra's submissions and stakeholder concerns and issues relating to Telstra's revised operating expenditure forecasts are summarised into five areas of inquiry that also reflect the structure of the ACCC draft decision:[19]

- Whether Telstra's rebased operating expenditures, including the allocation of operating expenditure from its general ledger to its fixed line services and asset classes, reflects costs that are relevant to fixed line services and whether these costs are prudently and efficiently incurred
- Whether Telstra's forecast operating expenditures are responsive to changes in demand over the regulatory period
- Whether Telstra's choice and application of input price indices for its operating expenditure cost centres appropriately reflect input cost pressures for those cost centres and whether Telstra's forecast productivity gains reasonably reflect feasible productivity achievements
- Whether Telstra's expenditure category, 'propex', is a prudently and efficiently incurred expenditure and, if so, whether it is appropriately classified as an operating expenditure rather than a capital expenditure
- Whether any operating expenditures caused by the NBN, including NBN-related propex, are included Telstra's forecast operating expenditures and, if such costs are included in Telstra's forecast operating expenditure, whether they are appropriately captured in the allocation of costs to NBN.

3.3 Telstra submission: revised operating expenditure

In response to stakeholder concerns raised during the ACCC Workshop in August 2014 and the discussion paper, Telstra has provided revised operating expenditure forecasts. Telstra

[18] ACCC Workshop on the 2014 Fixed Services Final Access Determination to discuss Telstra's proposed Cost Allocation Framework and rebased and forecast expenditures, 28 August 2014

[19] Wik-Consult was engaged by the ACCC to undertake a formal assessment of the prudency and efficiency of Telstra's forecast operating expenditure while having regard to any relevant regulatory obligations or requirements applicable to providing the declared fixed line services.

also updated its base year (2013–14) operating expenditure. Telstra states that the updated base year reflects its actual fixed line operating expenditure incurred for that year.

Telstra further engaged a consultant, Sapere Research Group, to assess the reasonableness of its revised forecasts. Sapere reported that Telstra's revised operating expenditure forecasts and the forecast responsiveness of its cost centres' operating expenditure to demand were reasonable.[20]

In January 2015, Telstra submitted further revisions to its operating expenditure forecasts on the basis of adjustments to its [c-i-c starts] [redacted] [c-i-c ends]

Table 3.1 Telstra's original, revised (October 2014) and further revised (January 2015) forecasts of operating expenditure ($2009 million)

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19
Original Forecasts (BBM RKR response)	[c-i-c starts] [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Actual (2013–14) Revised Forecasts (October 2014)*	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Actual (2013–14) Further Revised Forecasts (January 2015)**	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted] [c-i-c ends]

* Net of TUSMA payments and several minor adjustments to its cost centres
** Removal of Wholesale Group cost centre from opex forecasts and several minor adjustments to its cost centres

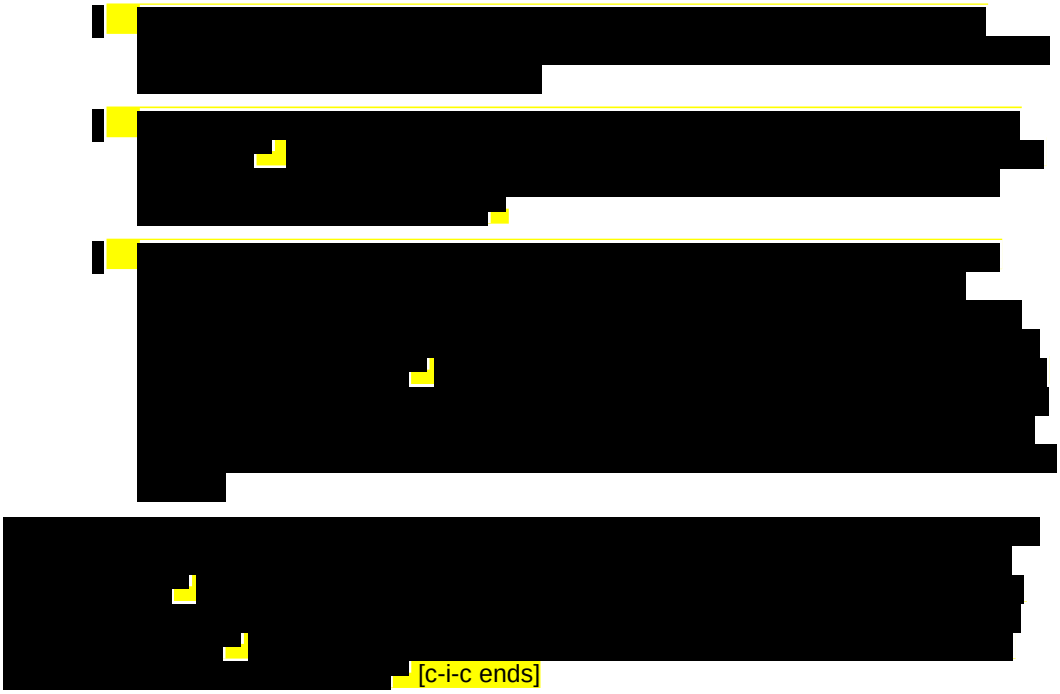
Source: Telstra (2014) Proposed updated FLSM July 2014; Telstra (2014) FLSM FY2015 to FY2019 v1.05; Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)

3.3.1 Telstra submission: revised base-year operating expenditure (2013–14 actual, January 2015)

Information on actual expenditures and demand for 2013–14 has resulted in Telstra updating its base-year expenditure levels and revising its forecasts of expenditure trends where the latter reflects recent changes to Telstra's external operating environment including the changes in the NBN rollout and timeframes. Telstra submitted that this more explicitly accounts for the likely impacts of declines in demand on network expenditure requirements.[21]

[c-i-c starts] [redacted]

[20] Sapere Research Group (2014), *Review of Telstra's fixed services forecasting model – FINAL Report*, Mike Smart, 7 October 2014.
[21] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Public Version, p. 54.
[22] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 55.



Telstra submitted that it has employed the same bottom up methodology used in preparation of the 2013 BBM RKR response in preparation of the 2013–14 actual expenditure data. However, some refinements were made to address omissions of relevant operating expenditures and to remove expenditures not relevant to fixed line asset classes from the 2013 BBM RKR figures.[29]

When aggregating Telstra's cost centres and a proportion of common/unattributable costs relevant for the fixed line network, Telstra's 2013 BBM RKR submission forecast a total fixed line operating expenditure of $[c-i-c starts] [c-i-c ends] billion in 2013–14 or [c-i-c starts] [c-i-c ends] billion in real terms ($2009). In its submission to the discussion paper, Telstra stated its actual operating expenditure for 2013–14 was $[c-i-c starts] [c-i-c ends] billion ($2009).[30] (Note that the $[c-i-c starts] c-i-c ends] billion ($2009) 2013–14 base year operating expenditure is not identified in Table 3.1 since further adjustments were undertaken before a base year cost was established, see below.) Telstra's estimate of actual operating expenditure excluded operating expenditure relevant for LSS of [c-i-c starts] [c-i-c ends] million and $[c-i-c starts] [c-i-c ends] million real ($2009).

In Telstra's October submission, the actual operating expenditures incurred by Telstra's cost centres for 2013–14 differed slightly from Telstra's corresponding forecasts for these cost

[23] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 55.
[24] For 2014–15 there will no longer be any carbon tax liability for Telstra. Telstra has accounted for the removal of the carbon tax from its electricity price forecasts. See: *Clean Energy Legislation (Carbon Tax Repeal) Act 2014*, Registered 22 July 2014, Date of Asset 17 July 2014. Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 37.
[25] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 55.
[26] Telstra's forecast model sets out an NBN Rollout Base Case. The Base Case is obtained from information in NBN Co's Strategic Review (December 2013). Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 8.
[27] Although there is an increase in unit operating expenditure costs for fixed line services.
[28] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 55.
[29] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Public Version, p. 55.
[30] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 56.

centres for 2013–14 made in the BBM RKR response. This resulted in a net aggregate reduction of operating expenditure of $[c-i-c starts] [redacted] [c-i-c ends] million real $2009 for 2013–14.[31]

The main difference between actual and forecast operating expenditure for 2013–14 is the removal of the net Telecommunications Universal Service Management Agency (TUSMA)[32] subsidies for the provision of the Standard Telephone Service under Telstra's obligations as the provider of the Universal Service Obligation (USO) services. This adjustment was not included in the BBM RKR forecasts.[33] Telstra has estimated the net financial contribution it receives for the provision of standard telephone services (STS) of $[c-i-c starts] [redacted] [c-i-c ends] million per annum.[34] Telstra submitted that under the TUSMA Agreement, the funding allocation for STS is fixed until 2021.Telstra has therefore not forecast any change in the current net subsidy received from Government and other industry participants over the period 2014–15 to 2018–19.

Removal of the TUSMA payments from Telstra's indirect fixed line operating expenditure reduces Telstra's nominal base year operating expenditure to $[c-i-c starts] [redacted] [c-i-c ends] billion and $[c-i-c starts] [redacted] [c-i-c ends] billion real operating expenditure ($2009, October 2014 submission).[35]

Telstra made further revisions to its base year operating expenditure in January 2015 on the basis of adjustments to its [c-i-c starts] [redacted] [c-i-c ends]

3.3.2 Telstra submission: step and trend operating expenditure

Telstra submitted that since its previous forecasts of operating expenditure as part of the BBM RKR response in 2013 there have been material changes to the external operating environment which have necessitated a review of the forecasting methodology including a revision of the timeframes for the NBN rollout and the timeframes for migration of customers to the NBN. Telstra also submitted that it also has actual base-year expenditure and demand information for 2013–14 on which forecasts are generated.[36]

Telstra submitted that it has undertaken the following steps in preparing operating expenditure forecasts:

---

[31] Telstra (2014) MODIFIED – Proposed updated FLSM July 2014; Telstra (2014) FLSM FY2015 to FY2019 c-i-c, October 2014.

[32] TUSMA payments correspond to the sum that is reimbursed by an annual TUSMA net payment to Telstra to subsidise the additional cost of providing government-mandated services to uneconomic areas. Telstra has estimated the net financial contribution it receives for the provision of standard telephone services (STS) is [c-i-c starts] [redacted] [c-i-c ends] million per annum.
Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, pp. 56-57.

[33] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Public Version, p. 56.

[34] For 2013–14, the total fixed funding requirement for STS is $[c-i-c starts] [redacted] [c-i-c ends] million. Based on the TUSMA Agreement, allocation of the industry levy is equi-proportional to the share of eligible revenue for each respective telecommunication carrier. Telstra's share is set at [c-i-c starts] [redacted] [c-i-c ends], and therefore Telstra is required to self-fund [c-i-c starts] [redacted] [c-i-c ends] of the industry funding contribution. Taking into account Telstra's contribution, the net subsidy received by Telstra for the provision of the STS contributed by Government and other industry participants is estimated at $[c-i-c starts] [redacted] [c-i-c ends] million for 2013–14.
Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, pp. 56-57.

[35] 'Opex Forecasts', Telstra FLSM FY2015 to FY2019 v1.05

[36] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 54.

- for each category of base year expenditure, the key activities and cost drivers were identified
- the best available information on NBN rollout, input costs and other relevant aspects of the operating environment were obtained
- the likely impact of those operating environment factors on the key activities and cost drivers underpinning base year expenditure was determined
- appropriate step changes and trend adjustments were undertaken to adjust for those impacts.[37]

Telstra has submitted one step adjustment to electricity expenditure for 2014–15 which reflects the repeal of the carbon tax. Telstra engaged M&C Energy to forecast unit rates for electricity to 2022. M&C Energy estimated that the carbon tax repeal will reduce prices between [c-i-c starts] [redacted] [c-i-c ends] per kWh from 1 July 2014.[38] Table 3.2 below identifies the adjustment to 2014–15 electricity unit rates as a result of the carbon tax repeal. Telstra did not isolate the impact of the [c-i-c starts] [redacted] [c-i-c ends] step reduction from the trend forecast of unit rates and electricity expenditures (unit rates fall by [c-i-c starts] [redacted] [c-i-c ends] kWh in 2014–15 rather than by [c-i-c starts] [redacted] [c-i-c ends] kWh).

Table 3.2 Telstra's adjustment to electricity prices and expenditures in 2014–15 as a result of the carbon tax repeal ($ nominal, January 2015 forecasts)

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19
Energy price ($ per kWh)	[c-i-c starts] [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Change*		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Percentage change		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total electricity expenditure ($)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Change		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Percentage change		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[c-i-c ends]

* Subject to rounding error.
Source: Telstra (2015) Fixed Services Forecast Model v1.1 Jan(2015).

Telstra has also submitted a summary of the trend adjustments that were applied to each category of nominal operating expenditure in Table 3.3 below.[39]

[37] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Public Version, p. 57.
[38] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, pp. 37-38.
[39] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, pp. 57-58; Telstra (2015) Fixed Services Forecast Model v1.1 Jan(2015).

.

Table 3.3 Telstra's forecast trend adjustments to operating expenditure ($ nominal and before TUSMA payments are deducted, January 2015)

Business Unit/LOB	Activity	2013–14 Cost ($ million)	Expected cost trend
CSD LOB	Fault repair	[c-i-c starts] [redacted]	Fault repair cost varies with forecast fault volumes (dependent on SIO volume and fault rate) and unit rates for repair
	Pro-active routine maintenance	[redacted]	Routine maintenance costs vary with the number of SIOs and trends in input costs
	Other activities	[redacted]	As for routine maintenance activities
	CSD indirect costs	[redacted]	Indirect proportion to remain constant
Networks LOB	Power Consumption	[redacted]	Electricity charges expected to follow the electricity price index. There will be some reduction in power usage associated with the efficiency initiatives and reduced load from network equipment.
	Rents/land tax/rates/other building outgoings	[redacted]	No change in the rental accommodation or land portfolio is expected over the next five years. Rent and tax/rate costs are expected to increase in line with the rental cost index (for rents)/CPI (for taxes and rates)
	Other (includes maintenance contracts and equipment licences)	[redacted]	It is assumed that there will be a reduction in maintenance contract costs. Network equipment licensing costs assumed to increase in line with CPI.
	Networks indirect cost	[redacted]	Indirect cost proportion assumed to remain constant
ITS LOB	Software, hardware and development of IT systems	[redacted]	It is assumed that there will be some reduction in the cost of IT systems, due to efficiency gains. This will be offset to some extent by cost inflation.
TSO LOB	Monitoring, assurance, major incident management	[redacted]	Cost of individual TSO functions expected to decline due to efficiency gains, offset

	and labour to operate IT systems		to some extent by cost inflation
Ops Business Support	Common/overhead costs for Telstra Operations business unit	[redacted]	Share of these common costs attributable to fixed line services calculated as a fixed mark-up on total cost attributable to these services for individual lines of business
Propex	Related to demand driven capital projects	[redacted]	Directly related to project capital expenditure requirements
Telstra Wholesale Business Unit	Sales and management functions for wholesale services	[redacted]	Expected to decline as a demand for wholesale services decline
Corporate Overhead	HR, Legal, Finance and Corporate administration	[redacted] [c-i-c ends]	Share of these overhead costs attributable to fixed line services calculated as a fixed mark-up on total operating expenditure

Source: Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, pp. 57-58, with revised base year costs from Telstra's operating expenditure forecasts January 2015. Telstra (2015) Fixed Services Forecast Model v1.1 Jan(2015).

Telstra forecasts that its operating expenditure associated with its fixed line network is now expected to decline around [c-i-c starts][redacted] [c-i-c ends] per cent ([c-i-c starts][redacted] [c-i-c ends] million) in real terms ($2009) between 2013–14 and 2018–19.[40]

Telstra submitted that the overall reduction in the operating expenditure forecast requirement is driven by the expected decline in demand for fixed line services, where expenditures relating to fault repair and proactive maintenance are expected to decline significantly.

However, the fall in real operating expenditure is not proportional to the fall in demand since Telstra submitted that many of its operating expenditure components are largely fixed and relatively unresponsive to changes demand, such as network power and IT systems, which Telstra considered are independent of the number of services being supplied over the network. Telstra also anticipates that there will be increases in input costs due to the rising cost of maintaining its aged fixed line network and these costs will partly offset the effect of declining demand. Telstra did not quantify the expected increase in its input costs. [41]

Telstra noted that the fixed principles provisions identify certain matters which are relevant to whether forecast operating expenditure reflects prudent and efficient costs, including the level of operating expenditure in the previous regulatory period. Telstra submitted that its forecast of operating expenditure is prudent and efficient: when compared to both actual and forecast expenditure in the previous regulatory period; given the efficiency incentives faced by the business; and given its universal service and network maintenance obligations.[42]

[40] Telstra (2015) Fixed Services Forecast Model v1.1 Jan(2015)
[41] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Public Version, p. 59.
[42] Telstra submitted that it incurs several fixed operating expenditure requirements for the provision of fixed line services:

Telstra considered that unlike most regulated businesses, the vast majority of its revenues are from unregulated services. Fixed line products account for less than [c-i-c starts] [redacted] [c-i-c ends] per cent of total product sales revenue for Telstra in 2013–14. And of this portion of total revenue attributable to fixed line products, the majority is attributable to retail and unregulated wholesale products.[43]

Telstra submitted that its modified approach to determining operating expenditure is a more robust, forward-looking view of relevant expenditure. It is also preferable to the ACCC's 2011 approach which drew on aggregate expenditures based on the Regulatory Accounting Framework (RAF) reports. Therefore, Telstra submitted that it is difficult to compare Telstra's modified actual and forecast operating expenditures against the 2011 forecasts.[44]

[c-i-c starts] [redacted] [c-i-c ends] Telstra submitted that these estimates are likely to overstate the responsiveness of network maintenance costs to a decline in SIOs given the lag in cost adjustments and loss of scale efficiencies.[45] In particular, Telstra expects a lag in the adjustment of its costs associated with internal labour.[46]

[c-i-c starts] [redacted]

- The universal services obligation (USO) – which requires Telstra to provide new copper connections at certain greenfield and brownfield premises
- The customer service guarantee (CSG) framework – which requires Telstra to meet performance standards and provide customers with compensation when these standards are not met
- The National Reliability Framework (NRF) – which requires faults to be repaired within a reasonable timeframe.

Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 60.

[43] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 61.

[44] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Public Version, p. 62.

[45] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 64.

[46] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Public Version, p. 35.

[47] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 32.

[48] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 64.

[c-i-c ends] Telstra also assumed that certain switching equipment can be depowered as demand for services using that equipment declines.[50]

[c-i-c starts] [c-i-c ends]

Telstra submitted that the forecast of overhead and support costs assumes that these costs will remain relatively steady as a proportion of total operating costs. This means that as total operating costs decline, overhead and support costs will decline at the same rate.[52]

3.3.2.1 Telstra submission: further revised forecasts (January and February 2015)

Telstra has submitted further revisions to its forecast operating expenditure in January and February 2015 in response to the ACCC's request for information.[53]

January 2015 submission

Telstra submitted certain refinements to the attribution of network power costs to Telstra Exchange Building Access (TEBA) and third party users is required so that these costs are appropriately allocated to fixed line services.

[c-i-c starts] In reviewing the allocation of costs for TEBA services (for Network Buildings and Support), Telstra has identified that certain power costs are directly attributed to TEBA, while other power costs are directly attributable to third parties and asset classes not used by TEBA services. As a result, Telstra considers that not all network power costs should be attributed to Network Buildings and Support, but that a share be attributed to third parties and other asset classes that cause these costs to be incurred.[54] Telstra has identified that:

- Approximately [c-i-c starts] [c-i-c ends] per cent of total power consumption by network equipment is attributable to TEBA power usage
- Approximately [c-i-c starts] [c-i-c ends] per cent of total power consumption by network equipment is attributable to other third party access
- Approximately[c-i-c starts] [c-i-c ends] per cent of total power consumption by network equipment is attributable to FLSM asset classes not used by TEBA services
- Only [c-i-c starts] [c-i-c ends] per cent of total power consumption by network equipment is attributable to the Network Buildings and Support Asset Class.[55]

Given these changes, it would not be appropriate for all network power costs to be attributed to the Network Buildings and Support asset class. Power costs are now attributed to asset

[49] [c-i-c starts] [c-i-c ends] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 40.
[50] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Public Version, p. 65.
[51] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 65.
[52] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Public Version, p. 65.
[53] Telstra (2015), Telstra Response to IICTEBA information request – 19 January 2015; Telstra (2015) Fixed Services Model v1.1 (Jan2015)
[54] Telstra (2015), Telstra Response to IICTEBA information request – 19 January 2015, p. 3.
[55] Telstra (2015), Telstra Response to IICTEBA information request – 19 January 2015, p. 3.

classes and to services which causes these power costs to be incurred.[56] Power costs attributed to third parties are no longer assigned to FLSM asset classes, rather these costs are attributed to separate categories, either: Third Party Access – TEBA or Third Party Access – Other.

A share of network power costs is now attributed to third parties, and as a result the Networks line of business has been reduced for the 2013–14 base year from [c-i-c starts] [redacted] [c-i-c ends] million to [c-i-c starts] [redacted] [c-i-c ends] million ($2009).[57] This has also resulted in a similar annual quantum of adjustment to its forecast of the Networks line of business for 2014–15 to 2018–19.

Rent and building outgoings for the Network Buildings and Support had also excluded costs attributed third party users. However, this is realised by the allocator for CO09 asset classes which provides for an allocation of these costs to third party usage. The amounts for rent and building outgoings for 2013–14 have been updated to include the share of these costs attributable to third party usage of network buildings.

Telstra also submitted that in its October 2014 forecast model, the Wholesale Group costs are classified as indirect operating expenditure. This means that Wholesale Group costs are applied to all asset classes and allocated among all services using the fixed-line network. However, Telstra noted that in its forecast model documentation[58] the Wholesale Group costs are only related to the provision of declared services. This means that it is inappropriate for Telstra Wholesale Group costs to be allocated to asset classes since there would be a corresponding allocation to both declared and Telstra retail services.[59] Telstra has modified the calculation of indirect operating expenditure to remove Telstra Wholesale Groups costs from the operating expenditure forecasts (which are mapped to asset classes) and has allocated this expenditure directly to declared services.[60]

Telstra has also submitted updated LSS operating expenditure in the Forecast model – slight downward revisions were made to LSS operating expenditure for 2013–14 and over the forecast period.[61]

[c-i-c starts] [redacted]

[56] Telstra (2015), Telstra Response to IICTEBA information request – 19 January 2015, p. 3.
[57] Telstra (2014) Fixed Line Service Model v1.05 (October 2014); Telstra (2015) Fixed Services Model v1.1 (Jan2015).
[58] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Public Version, pp. 51-53.
[59] [c-i-c starts] [redacted] [c-i-c ends]
[60] Wholesale Group costs are now allocated directly to declared services in '7. Service Costs' worksheet of the FLSM. Telstra (2015), Telstra Response to IICTEBA information request – 19 January 2015, p. 5.
[61] The forecasts provided to the ACCC were based on data up to and including the RAF reported as at December 2013. Since the RAF data for June 2014 is now available forecast operating expenditure for LSS has now been updated. Telstra (2015), Telstra Response to IICTEBA information request – 19 January 2015, p. 6.

[redacted]

[redacted]

[redacted]

[redacted] [c-i-c ends]

The ACCC had further inquired about the potential for double counting of the labour-intermediate inputs required for capital projects if both propex and capital expenditure were mapped to asset classes. Telstra provided evidence that there was no potential for double counting of operating expenditures when propex and operating expenditures are mapped to asset classes. [c-i-c starts] [redacted]

[redacted] [c-i-c ends]

In response to an ACCC information request outlining reasons why propex is caused by only certain asset classes, Telstra submitted that it had inadvertently excluded historical propex from FLSM Asset Classes CA07, CA09, CA10, CO07, CO09 and CO10. In its 30 January 2015 submission, Telstra did not indicate that it would include propex for these asset classes.[69]

[c-i-c starts] [redacted]

[62] Telstra (2015), *Fixed Line Services final access determination inquiry: ACCC request for information*, 33236882_5_FAD response to 14 January information request 300115 FINAL VERSION, 30 January 2015, p. 4.
[63] Telstra (2015), *Fixed Line Services final access determination inquiry: ACCC request for information*, 33236882_5_FAD response to 14 January information request 300115 FINAL VERSION, 30 January 2015, p. 4.
[64] Telstra (2015), *Fixed Line Services final access determination inquiry: ACCC request for information*, 33236882_5_FAD response to 14 January information request 300115 FINAL VERSION, 30 January 2015, p. 9.
[65] Telstra (2015), *Fixed Line Services final access determination inquiry: ACCC request for information*, 33236882_5_FAD response to 14 January information request 300115 FINAL VERSION, 30 January 2015, p. 9.
[66] Telstra (2015), *Fixed Line Services final access determination inquiry: ACCC request for information*, 33236882_5_FAD response to 14 January information request 300115 FINAL VERSION, 30 January 2015, p. 11.
[67] Telstra (2015), Corporate Accounting Policy (CAP) 012.2, Property, Plant and Equipment – Asset Expenditure Recognition Rules, pp. 1-13.
[68] Telstra (2015), *Fixed Line Services final access determination inquiry: ACCC request for information*, 33236882_5_FAD response to 14 January information request 300115 FINAL VERSION, 30 January 2015, p. 9.
[69] Telstra (2015), *Fixed Line Services final access determination inquiry: ACCC request for information*, 33236882_5_FAD response to 14 January information request 300115 FINAL VERSION, 30 January 2015, p. 9.

[redacted]

[redacted] [c-i-c ends]

February 2015 submission

[c-i-c starts] [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[70] Telstra (2015), *Fixed Line Services final access determination inquiry: ACCC request for information*, 33236882_5_FAD response to 14 January information request 300115 FINAL VERSION, 30 January 2015, p. 11.
[71] Telstra (2015), *Fixed Line Services final access determination inquiry: ACCC request for information*, 33236882_5_FAD response to 14 January information request 300115 FINAL VERSION, 30 January 2015, pp. 11-12.
[72] Telstra (2015), *Fixed Line Services final access determination inquiry: ACCC request for information*, 33236882_5_FAD response to 14 January information request 300115 FINAL VERSION, 30 January 2015, p. 12.
[73] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 33.
[74] This submission is available on the ACCC's website.
[75] This submission is available on the ACCC's website.
[76] Telstra (2015), Amendments to the Fixed Line Services Model, 6 February 2015, p. 14.
[77] [c-i-c starts] [redacted] [c-i-c ends]

[redacted]

[redacted]

[redacted]

[redacted] [c-i-c ends]

3.3.3 Telstra's adopted cost and productivity indices

[c-i-c starts] [redacted]

[redacted]

[redacted] [c-i-c ends]

[78] Telstra (2015), Amendments to the Fixed Line Services Model, 6 February 2015, p. 8.
[79] Comparison of Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015) and Telstra (2015) FLSM FY2015 to FY2019, v1.1, C-I-C.
[80] Telstra (2015), Amendments to the Fixed Line Services Model, 6 February 2015, p. 27.
[81] Telstra (2015), Amendments to the Fixed Line Services Model, 6 February 2015, p. 27.
[82] Telstra (2015), Amendments to the Fixed Line Services Model, 6 February 2015, p. 7.
[83] Telstra (2015), Amendments to the Fixed Line Services Model, 6 February 2015, p. 7.
[84] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 63.
[85] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 63.
[86] That is, Telstra's forecast of annual energy efficiency gains is more likely to be an overestimate than an underestimate. Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, pp. 64-65.
[87] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, pp. 64-65.

3.4 Stakeholder submissions

3.4.1 The efficiency and prudency of Telstra's rebased operating expenditure

Optus

Based on the forecasts and supporting reports provided, Optus submitted that it remains unclear how Telstra's forecasts and re-estimated bottom up operating expenditure will flow to access pricing for the suite of declared services in the FLSM.[88]

Frontier

Frontier, on behalf of the Competitive Carriers Coalition, submitted that it is critically important that Telstra's forecasts are determined from the right baseline level of costs so that operating expenditure reflects efficient costs for the current year.[89]

Frontier submitted that the material produced by Telstra on operating expenditure for the base year operating expenditure (2013–14) is based on actual expenditure. There is therefore a presumption that this represents an efficient level of expenditure. Frontier considered that the ACCC will need to assess the efficiency of Telstra's base-year operating expenditure.[90]

Frontier submitted that Telstra's adoption of an approach that identifies operating expenditure costs on a more granular level must be considered with some care so that only relevant costs are recovered.[91] Frontier submitted that economic benchmarking and category analysis[92] employed by the AER may be appropriate in the assessment of Telstra's base level input costs. This way, it can be determined that Telstra should incur only those costs that are considered benchmark efficient.[93]

3.4.2 The responsiveness of Telstra's operating expenditure to changes in demand

Department of Communications

The Department of Communications noted that the expenditure forecasts will remain subject to two opposing trends. Firstly, as assets are transferred to NBN Co the demand for Telstra's fixed line services will decline. The decline in demand reflects the migration of customers to the NBN and also the slight decline in the number of people using the fixed-line network. Secondly, the Department of Communications notes that many of the costs of supplying services remain

[88] Optus (2014) *Submission in response to ACCC Discussion Paper, Fixed Line Services Final Access Determination – Primary Prices*, Public Version, October 2014, p. 23.
[89] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 17.
[90] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 18.
[91] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 23.
[92] Category analysis involves the assignment/allocation of capital and operating expenditures to standardised cost categories. This way standardised datasets of the costs incurred by regulated entities can be created. The datasets allow the regulator to conduct 'benchmarking, trend and driver based assessments at the disaggregated activity or expenditure category level'. AER (2014), *Better Regulation, Explanatory statement, Final regulatory information notices to collect information for category analysis*, March 2014, p. 1.
[93] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 18.

relatively stable because they are fixed regardless of the number of users, with the result that there is pressure on unit costs of the assets to increase.[94]

Optus

Optus submitted that Telstra's forecast of its bottom-up estimated expenditure possesses a serious anomaly.[95] [c-i-c starts] [redacted] [c-i-c ends]

Optus noted that Telstra's forecast operating expenditure remains fairly constant in real terms across the forecast period ($2009); despite an overall reduction in total fixed line demand by [c-i-c starts] [redacted] [c-i-c ends] per cent over the same period.[96]

[c-i-c starts] [redacted] [c-i-c ends]

Frontier

Frontier submitted that Telstra has demonstrated an ability to reduce its input volumes by more than its output volumes, resulting in TFP increases from 2003–04 to 2008–09.[99] Frontier submitted that Telstra has maintained its EBITDA margins for its fixed network, even with falling demand for lines and calls over the past few years. EBITDA margins have been stable-to-increasing from 2008 to 2013. This indicates that Telstra's costs can readily respond to a fall in demand.[100]

Frontier submitted that Telstra's forecast of demand is likely to require significant reductions in the costs than have occurred previously if large price increases are to be avoided.[101] If Telstra's demand forecasts are accurate, with material declines in fixed call volumes, then there must be a serious attempt to reduce costs to avoid a 'death spiral'.[102]

For Telstra's [original] operating expenditure forecast, Frontier submitted that there does not appear to be a significant relationship between costs and the volume of services provided. Frontier submitted that despite the uncertainty about the format of the rollout of the NBN and

---

[94] Department of Communications (2014), *Final access determinations for fixed line services – primary price terms*, *Department of Communications submission to the Australian Competition and Consumer Commission*, 3 October 2014, p. 9.
[95] Optus (2014) *Submission in response to ACCC Discussion Paper, Fixed Line Services Final Access Determination – Primary Prices*, Confidential Version, October 2014, p. 26.
[96] Optus (2014) *Submission in response to ACCC Discussion Paper, Fixed Line Services Final Access Determination – Primary Prices*, Confidential Version, October 2014, p. 29.
[97] [c-i-c starts] [redacted] [c-i-c ends] Fixed Services Model v1.1(Jan2015).
[98] Optus (2014) *Submission in response to ACCC Discussion Paper, Fixed Line Services Final Access Determination – Primary Prices*, Confidential Version, October 2014, p. 29.
[99] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 22.
[100] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 23.
[101] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 20.
[102] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 24.

Telstra's role in it, the fixed line network will reduce in size over time and the subsequent cost reduction should be included in Telstra's forecasts.[103]

[c-i-c starts] [redacted] [c-i-c ends]

TPG Telecom

[c-i-c starts] [redacted] [c-i-c ends] TPG submitted that, as a result, Telstra's forecasts of operating expenditure are unreliable and requires further consideration or a near term accuracy check. TPG proposed that the coming FADs should be shorter in timeframes or that the ACCC could consider setting an automated adjustment model based on the differentials between the forecast demand from which the pricing is determined and the actual demand.[109]

TPG did not accept the rates of decline forecast by Telstra for take up of declared fixed line services over the 5 year period. TPG considered that it is difficult to forecast the rate of the NBN rollout. [c-i-c starts] [redacted] [c-i-c ends] TPG noted a

[103] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 24.
[104] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 24.
[105] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 25.
[106] Frontier Economics (2014), *Assessment of Telstra's revised forecasts – a report prepared for the Competitive Carriers Coalition*, December 2014, p. 8.
[107] Frontier Economics (2014), *Assessment of Telstra's revised forecasts – a report prepared for the Competitive Carriers Coalition*, December 2014, pp. 11-12.
[108] Frontier Economics (2014), *Assessment of Telstra's revised forecasts – a report prepared for the Competitive Carriers Coalition*, December 2014, p. 12.
[109] TPG Telecom (2014), *Submission by TPG Telecom Limited (October 2014) to the Australian Competition and Consumer Commission (ACCC), Telecommunications Final Access Determination Inquiries – FLSM, Confidential Version*, p. 2.

concern that Telstra's forecasts of operating expenditure are almost certainly 'instantly inaccurate' even at the time that the forecasts are given.[110]

3.4.3 The efficiency and prudency of the choice and application of input cost indices and forecast productivity gains

Frontier

Frontier submitted that Telstra's forecast of operating expenditure had several features that may be understating the scope for efficiency gains. Frontier considered that it is incumbent on the ACCC to investigate the key sources of efficiency gains which could result in the reduction of operating expenditure over time.[111]

Frontier considered that labour input costs in particular may be benchmarked. Appropriate approaches to benchmarking labour input costs may be: (a) whether Telstra employs or contracts an efficient amount of labour; (b) whether the unit rates paid by Telstra represent efficient expenditure.[112]

[c-i-c starts] [redacted] [c-i-c ends]

TPG Telecom

TPG submitted that it does not understand why Telstra's budget is used for some cost centres but actual expenditure uplifted by CPI was used for other cost centres.[114]

3.4.4 The efficiency and prudency of propex

In the 2013 BBM RKR response, Telstra introduced a third category of expenditure: propex. Propex is defined as 'estimated direct and indirect operating expenditure related to capital projects'.[115] Propex is allocated to certain asset classes in the FLSM for 2013–14 and over the forecast period 2014–15 to 2018–19.

Since propex is the operating expenditure component of capex, certain issues raised by Optus in relation to capex are also relevant to propex.

[110] TPG Telecom (2014), *Submission by TPG Telecom Limited (October 2014) to the Australian Competition and Consumer Commission (ACCC), Telecommunications Final Access Determination Inquiries – FLSM, Public Version*, p. 2.
[111] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 20.
[112] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 18.
[113] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 21.
[114] TPG Telecom (2014), *Submission by TPG Telecom Limited (October 2014) to the Australian Competition and Consumer Commission (ACCC), Telecommunications Final Access Determination Inquiries – FLSM, Public Version*, p. 2.
[115] Propex is based on analysis of RKR capital expenditure forecasts. Propex is 'operating expenditure related to and driven by capital expenditure projects.' Telstra (2013), Final Access Determinations (FADs) Inquiry – response to information request under BBM RKR, November 2013, p. 10.

Optus

[c-i-c starts] [redacted] [c-i-c ends]

3.5 ACCC's draft decision

Under a BBM approach, forecast operating expenditures should reflect prudent and efficient costs. The ACCC draft decision follows the fixed principles provisions which 'specify that in assessing the reasonableness of Telstra's operating expenditure forecasts, 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
- any relevant regulatory obligations or requirements applicable to providing the declared fixed line services
- any other matters relevant to whether forecasting operating expenditures reflect prudent and efficient costs.'[118]

The ACCC is concerned that Telstra's proposed total forecast operating expenditure for the 2014–15 to 2018–19 period does not satisfy the second and fourth criteria.

The ACCC is concerned that for its base-year and forecasts of operating expenditure, Telstra has not demonstrated a transparent and verifiable cost allocation approach that permits sufficient scrutiny of:

- the traceability of costs from asset class to general ledger
- whether costs incurred in Telstra's fixed line cost centres are relevant to the provision of fixed services and
- how forecast operating expenditures respond to changes in forecast demand.

Telstra has therefore not provided sufficient reasons and evidence supporting changes to actual and forecast operating expenditure that would be considered prudent and efficient.

Since Telstra's October 2014 submission to the discussion paper, Telstra has made several submissions/responses which include material adjustments to its forecast operating expenditures. The ACCC's assessment of Telstra's forecast operating expenditure is based on responses made by Telstra up until January 2015. The ACCC's draft decision is to not incorporate Telstra's latest 6 February 2015 response since the proposed adjustments have prompted further concerns regarding the lack of transparency of these adjusted operating expenditures and the lack of time to fully consider responses to these proposals.

---

[116] [c-i-c starts] [redacted] [c-i-c ends] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 56.

[117] The issues raised by Optus in relation to IMC codes are relevant to both capital expenditure and propex, where the latter is part of forecast operating expenditure. Optus (2014) *Submission in response to ACCC Discussion Paper, Fixed Line Services Final Access Determination – Primary Prices*, Confidential Version, October 2014, p. 26.

[118] ACCC (2014) *Public Inquiry into final access determinations for fixed line services – primary price terms, Discussion Paper,* July 2014, p. 131.

For the purposes of this draft decision, the ACCC's decision is to not make adjustments to Telstra's forecast operating expenditure with the exception of adjustments to Telstra's forecast operating expenditure arising from the ACCC's draft decision on the forecast change of the CPI (see chapter 8 other pricing issues), the removal of Telstra's proposed adjustment to its Business Unit Support mark-up (section 3.5.2.3) and the removal of NBN-related propex (section 3.5.5.2).

The ACCC's draft decision is to adjust the operating expenditure forecasts to reflect the efficient and prudent costs of fixed line services as set out in Table 3.4 [redacted]. Reasons for the ACCC draft decision on operating expenditure are set out in this section.

Table 3.4 ACCC draft decision on Telstra's total forecast operating expenditure ($2009, million)

	2014–15	2015–16	2016–17	2017–18	2018–19
Telstra Proposed Fixed Line Opex (January 2015)	[c-i-c starts] [redacted]	[redacted]	[redacted]	[redacted]	[redacted]
ACCC Draft Decision*	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Difference**	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Percentage Difference	[redacted]	[redacted]	[redacted]	[redacted]	[redacted] [c-i-c ends]

* The adjustment includes the ACCC's draft decision that the annual forecast change of the CPI should be 2.4 per cent for the financial years 2014–15 to 2018–19, see chapter 8 other pricing issues.
** Subject to rounding error.
Source: Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)

3.5.1 The efficiency and prudency of Telstra's base-year operating expenditure

Telstra has made a considerable downward adjustment of its 2013–14 base year operating expenditure (compared to the FAD 2011/2013 forecast). Telstra has also undertaken a considerable downwards adjustment of its forecast operating expenditure from 2014–15 to 2018–19 (compared to its original forecasts).

Comparing Telstra's rebased, bottom-up estimates of real fixed line operating expenditure for 2013–14 (actual) to the FAD 2011/2013 forecast for 2013–14 (Figure 3.1), there is a [c-i-c starts] [redacted] [c-i-c ends]per cent reduction in fixed line operating expenditure from [c-i-c starts] [redacted] [c-i-c ends] billion to [c-i-c starts] [redacted] [c-i-c ends]billion ($2009).[119] Between 2013–14 and 2018–19 there is a [c-i-c starts] [redacted] [c-i-c ends] per cent reduction in Telstra's forecast real operating expenditure, from [c-i-c starts] [redacted] [c-i-c ends] million to [c-i-c starts] [redacted] [c-i-c ends] million ($2009). This revised forecast is a significant downward adjustment compared to its previous BBM RKR 2013 forecasts where operating expenditure was forecast to be relatively stable (less than a [c-i-c starts] [redacted] [c-i-c ends] per cent decline in real terms between 2013–14 and 2018–19). In 2018–19, Telstra's revised operating expenditure forecast (January

[119] Based on Telstra's January 2015 proposed operating expenditures. Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)

2015) is [c-i-c starts]■■ [c-i-c ends] per cent lower than its original BBM RKR forecast for 2018–19.

Figure 3.1 Telstra's Rebased Actual Operating Expenditure and its Revised Forecasts [c-i-c starts]

[c-i-c ends]

Source: 2011/2013 FAD FLSM; Telstra Proposed Updated FLSM July 2014; Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)

Telstra's allocation of its operating expenditures from its cost centres to fixed line asset classes is both complex and opaque. This may be partly explained by the complexity of its operations, but it may also be explained by the limitations of Telstra's systems. Most of the estimated fixed line cost centres appear not to be automatically generated from a single, transparent cost allocation system. Telstra's attribution of cost from the general ledger-cost centres to fixed line asset classes is based on a composite of discussions with internal staff from relevant cost centres, surveys, and different allocation systems and multiple databases. (Note that most of the cost attribution issues discussed here relate only to *inputs* — in this case, Telstra's operating expenditure. The allocation of the inputs is the attribution from general ledger and IMC expenditure category to asset class. The cost allocation from asset class to fixed line services, that is the allocation of *required revenue*, is discussed in Chapter 12.)

In the *Review of the 1997 telecommunications access pricing principles* and in the 2011 FAD draft decision, the ACCC noted that in the absence of information from Telstra, it would allocate operating expenditure to asset classes on the basis of the relative undepreciated costs of each asset class.[120] In the *Review of Principles* the ACCC also recognised that such allocations did not necessarily reflect cost causation because of insufficient available information.[121]

[120] ACCC (2011), *Public Inquiry to make final access determinations for the declared fixed line services*, April 2011, p. 116; ACCC (2010) *Review of the 1997 telecommunications access pricing principles for fixed line services*, pp. 81-83.
[121] ACCC (2010) *Review of the 1997 telecommunications access pricing principles for fixed line services*, p. 82.

However, it is unclear whether Telstra's revised approach is a considerable improvement in cost causal attribution compared to the allocation of operating expenditure to asset classes in the 2011 FAD.

The difficulty in determining whether Telstra's rebased operating expenditures is an improvement in cost causal attribution from general ledger to asset class is also reflected in [c-i-c starts] [redacted] [c-i-c ends] However, Telstra has not submitted a costing system to the ACCC that permits traceability of cost causality from its cost centres and asset classes to its general ledger. Therefore, the ACCC cannot determine whether Telstra's proposed change in the attribution of operating expenditure to asset classes is prudent and efficient.

The ACCC also notes that given the opacity of Telstra's construction of cost from general ledger to asset classes, there is the possibility that the model may allocate:

- non-fixed line costs to fixed line cost centres
- more cost centre operating expenditures to asset classes that do not have a growing allocation to NBN
- operating expenditures to asset classes where rollout projects are undertaken on behalf of NBN so these costs are borne by access seekers and
- more business unit/cost centre operating expenditures to asset classes that have either a growing allocation to declared services or a slower decline in the allocation to declared services.

The lack of transparency in cost traceability presents difficulties in addressing the issue of whether Telstra's base year actual operating expenditures are prudently and efficiently incurred. However, undertaking a benchmarking or category analysis approach to Telstra's base year *level* of operating expenditures – as proposed by Frontier[123] – is more appropriate for energy businesses because of the ready availability of similar businesses against which to benchmark.[124] Moreover, the submission of a transparent costing system by Telstra that rigorously follows the principle of cost causality may be sufficient for the determination of prudent and efficient costs, assuming the *level* of costs caused by the services provided are prudently and efficiently incurred.[125]

The lack of transparency of Telstra's cost allocation has implications for the ACCC's assessment of Telstra's operating expenditure forecasts as well as for the base year expenditure levels. The base year resources for Telstra's fixed line cost centres are extracted from the general accounts. However, there is little visibility on how resources are allocated to fixed line operations in the general ledger accounts, and therefore it is difficult to verify that the allocation of general ledger resources to fixed line asset classes is appropriate.

---

[122] Optus (2014) *Submission in response to ACCC Discussion Paper, Fixed Line Services Final Access Determination – Primary Prices*, Confidential Version, October 2014, p. 23.
[123] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 18; p. 23.
[124] Since only suitable benchmarks to Telstra's fixed line operations are overseas telecommunications operators there are obvious comparability issues such as the scale of operations, definition of operating expenditures, density, industrial relations regulations, technology etc,
[125] Which was a further issue raised by Frontier. Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 23.

Since it is difficult to verify the allocation of costs from the general ledger to fixed line asset classes, there are problems in identifying how a change in Telstra's outputs (as a result of changes in forecast demand) will influence the consumption of shared resources in the general ledger that is attributable to fixed line asset classes. Since Telstra has submitted that it has identified key activities and cost drivers underpinning both base year and forecast operating expenditures,[126] information on cost traceability from asset class to the general ledger should be available.

Verifying the cost allocation is also difficult at lower levels of the cost hierarchy and even for Telstra's more responsive cost centres (with respect to changes in demand).[127] [c-i-c starts]

[c-i-c ends]

Advice from Wik-Consult

Wik-Consult considered a regulated firm has an incentive to overstate base year expenditures insofar as the forecasting methodology derives forecast values from base year values since base year values will inflate expenditure forecasts.[131] Wik-Consult also noted that because the ACCC has not structured the way and methods in which Telstra has to present its expenditure forecasts, there may be a significant degree of discretion for Telstra on how to conduct and present its forecasts. The ACCC should consider such incentives when assessing Telstra's expenditure forecasts.[132]

[c-i-c starts]

[126] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 57.
[127] Texts on activity based costing identify direct activities at lower levels of the cost hierarchy while facility-level activities or corporate overhead activities reside at higher levels of the cost hierarchy. Wik-Consult, however, place direct activities at the top of the cost hierarchy and place facility-level activities or corporate overhead activities at the bottom of the cost hierarchy. While the approach to the hierarchical ordering is different, the difference is not meaningful. The point of the hierarchical ordering is to recognise supply/cost-causal relationships between the activities at each level of the cost hierarchy. Edward Blocher, David Stout and Gary Cokins (2010), *Cost Management: A Strategic Emphasis* (5th Edition), McGraw-Hill Irwin, New York, p. 664; Robert Kaplan and Robin Cooper (1998), *Cost and Effect Using Integrated Cost Systems to Drive Profitability and Performance,* Harvard Business School Press, Boston, pp. 89-91.
[128] Which include installation, disaster remediation, customer conversion and network retirement
[129] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 35; 'Opex Forecasts', Telstra FLSM FY2015 to FY2019 C-I-C.
[130] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 35; Telstra FLSM FY2015 to FY2019 C-I-C.
[131] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, p. 31.
[132] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, p. 31.

[redacted]

[redacted]

[redacted] [c-i-c ends]

ACCC's draft decision

The 'ACCC's draft decision on Telstra's forecast operating expenditure is based on information provided and submissions made by Telstra up to January 2015. The ACCC's draft decision is that Telstra has not provided sufficiently transparent and verifiable cost allocation information that would permit scrutiny of:

- the traceability of costs from asset class to general ledger
- whether costs incurred in Telstra's fixed line cost centres are relevant to the provision of fixed services.

As a result, the ACCC cannot form a view on whether or not Telstra's base-year 2013–14 operating expenditures are prudently and efficiently incurred. For the purposes of this draft decision, the ACCC has not made any adjustments to Telstra's base year operating expenditure for reasons of prudency and efficiency. However, the ACCC will consider this issue again after receiving further information from Telstra and submissions from stakeholders prior to making its final decision.

3.5.2 The responsiveness of Telstra's operating expenditure to changes in demand

The ACCC 2014 discussion paper outlined concerns regarding Telstra's 2013 BBM RKR forecast of operating expenditure and lack of responsiveness to changes in demand for fixed line services (largely arising from the NBN rollout but also caused by other changes to demand). The discussion paper contrasted Telstra's 2013 BBM RKR forecast of operating expenditure with Telstra's (2010; 2012) earlier claim that several of its cost building blocks are partially, largely or entirely responsive to changes in demand[136].

The issue of the lack of responsiveness of Telstra's forecast operating expenditure to changes in demand was raised by stakeholders and the ACCC during the ACCC Workshop on the 2014 Fixed Services Final Access Determination (August 2014). As outlined in section 3.4, Frontier, Optus and TPG noted their concerns about the responsiveness of operating expenditure to forecast changes in fixed services demand in submissions to the discussion paper.[137] [138] [139]

[133] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, p. 61.
[134] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 36-57.
[135] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 77-81.
[136] ACCC (2014) *Public Inquiry into final access determinations for fixed line services – primary price terms Discussion Paper*, p. 40.
[137] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 25.
[138] Optus (2014) *Submission in response to ACCC Discussion Paper, Fixed Line Services Final Access Determination – Primary Prices*, Confidential Version, October 2014, p. 27; 29.

As outlined in section 3.3, Telstra's revised forecasts of its operating expenditure results in a [c-i-c starts] [c-i-c ends] per cent fall in fixed line operating expenditure between 2013–14 and 2018–19 (from [c-i-c starts] [c-i-c ends] billion to [c-i-c starts] [c-i-c ends] million in 2009 dollars) as a result of Telstra's forecast decline in demand of [c-i-c starts] [c-i-c ends] per cent (which represents a cumulative percentage loss of total fixed line SIOs[140] from 2013–14 to 2018–19). Telstra's demand forecasts are considered in Chapter 8.

Before consideration of the responsiveness of operating expenditure to the decline in demand (based on SIOs), the ACCC acknowledges that Telstra incurs many overhead costs in operating its fixed line network (such as universal service and service reliability obligations[141]) and that these overhead costs limit, to some degree, the responsiveness of Telstra's operating expenditure costs to changes in demand.

3.5.2.1 Base-step-trend framework

While Telstra adopted the base-step-trend framework to generate forecasts of its operating expenditures, it has only partly implemented the framework:

- Base year actual operating expenditure: Telstra has estimated the 2013–14 base-year actual operating expenditure.
- [c-i-c starts]

[139] TPG Telecom (2014), *Submission by TPG Telecom Limited (October 2014) to the Australian Competition and Consumer Commission (ACCC), Telecommunications Final Access Determination Inquiries – FLSM, Confidential Version*, p. 2.

[140] Note that total SIOs is defined as follows total SIOs = PSTN retail basic access SIOs + WLR SIOs + ULLS SIOs + WADSL SIOs + ADSL retail SIOS + ISDN BRI SIOs + ISDN PRI SIOs + Other DSL SIOs. Since each of these SIOs based services is a cause of operating expenditure cost for the CAN and/or Core, the total SIOs is chosen as a proxy in which to measure unit costs for each cost centre. [c-i-c starts] [c-i-c ends] However, for cost centres that are considered incremental to declared services such as LSS, LSS SIOs is only the appropriate denominator for calculating the rate of change in unit LSS operating expenditure (as is declared SIOs for the Telstra's Wholesale Group).

[141] Telstra submitted that it incurs several fixed operating expenditure requirements for the provision of fixed line services: the universal services obligation (USO); the customer service guarantee (CSG) framework and the National Reliability Framework (NRF). Service standard obligations such as CSG and NRF may cause overhead costs for Telstra since it must set have sufficient resource capacity to effectively monitor the network and respond to faults within reasonable timeframes.
Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Public Version, p. 60.

[142] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 40.

[redacted] [c-i-c ends]

As a result of Telstra's incomplete implementation of the base-step-trend framework, it is not possible to verify Telstra's forecast operating expenditures on the basis of this framework. However, Telstra's incomplete implementation of the framework does reveal where the information gaps exist. For example, more information on how network size changes the scale of operations for the fixed line cost centres of Networks, ITS, TSO and propex (and certain activities for CSD) will improve the transparency and verifiability of how Telstra's forecast operating expenditures respond to changes in forecast demand.

3.5.2.2 Cost-volume elasticities

In its submission Frontier compared zero cost-volume elasticities for Telstra's (original) forecast operating expenditure to the cost volume elasticities of British Telecom of 0.86 (average).[144] Telstra's revised forecasts of operating expenditure result in a considerable improvement in the responsiveness of its costs to changing volumes compared to its original forecasts. However, the magnitude of the change in demand for Telstra's fixed line network over the forecast period may make it difficult to compare cost-volume elasticities since elasticities for British Telecom are estimated over relatively small changes in volumes.

While there are obvious comparability issues arising from Telstra and BT possessing potentially very different cost functions (for a host of reasons such as the definition of operating expenditures, density, regulations, scale, technology etc), one of the potentially most profound differences between BT and Telstra relates to the forecast change in volumes. The cost-volume elasticities estimated for BT relate to a forecast modest percentage increase in volumes of between 0.9 per cent to approximately 2.5 per cent (ranging from around 24 million lines to around 25 million lines).[145] For Telstra, the cost-volume elasticities would be estimated over a period where Telstra's fixed line network is expected to shrink by [c-i-c starts] [redacted] [c-i-c ends] per cent.

Over small changes in volumes in the longer term it may be easier to scale inputs almost proportionally to such volume changes since the firm need only engage in relatively minor adjustments to costs. However, if there are significant changes in volumes that result in a material reduction in scale:

- Lower cost volume elasticities may arise since adjustment costs and lag effects may influence the responsiveness of costs to changes in volumes since the required magnitude of the input adjustment is significant.
- When the scale effect is large, unit overhead operating expenditure is much smaller relative to unit direct operating expenditure. As a result, at a large scale, cost-volume elasticities may be relatively large since direct operating expenditures make up a large proportion of unit costs, and it is direct operating expenditures that are potentially more

[143] In contrast, the Australian Energy Regulator's (AER) base-step-trend framework is comprehensive – the framework determines the entire operating expenditure forecast of the electricity network service provider. The base-step-trend framework is applied such that once an efficient base year is determined, the combined changes resulting from:

- scale escalation of operating expenditure due to changes in the size of the network
- real cost escalation plus
- any step changes,

provides an estimate of the forecast operating expenditure. AER (2010), *Victorian electricity distribution network service providers, Distribution determination 2011-15*, June 2010, p. 224.

[144] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 25.

[145] Annex 9 – volume forecasting model; Annex 12 – Cost Model, Ofcom, *Fixed access market reviews: Approach to setting LLU and WLR Charge Controls*.

responsive to changes in volumes. The estimated cost-volume elasticities for British Telecom are based on a large scale and proportionally modest changes in volumes. For Telstra, however, not only is there a significant change in volumes, but this change in volumes will result in a large reduction in scale, raising unit overhead operating expenditure relative to direct operating expenditures. It may therefore be expected that the cost-volume elasticities for Telstra are lower than for British Telecom.

3.5.2.3 Responsiveness of cost centre and asset class operating expenditure to changes in demand

The assessment of the prudency and efficiency of Telstra's forecast operating expenditure to changing demand is across both asset classes and Telstra's cost centres. The causes of Telstra's operating expenditure costs are identified at the cost centre level, and therefore an assessment of the responsiveness of these cost centres to Telstra's shrinking network is necessary.

Table 3.5 presents the unit costs for fixed line operating expenditure by cost centre which is generated from Telstra's revised forecasts.

Table 3.5 Change in Real Operating Expenditure ($2009) Per SIO For Fixed Line Operating Expenditure and Fixed Line Cost Centres – 2014–15 to 2018–19[146]

Change in real unit operating expenditure 2014–15 to 2018–19						
	2014–15	2015–16	2016–17	2017–18	2018–19	Average
Fixed Line net of Wholesale Group and LSS	[c-i-c starts]					
CSD						
Networks						
ITS						
TSO						
BU Support						
Propex						
Unattributable						
LSS*						

[c-i-c ends]

Source: Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)

[c-i-c starts]

[146] Real unit operating expenditures are calculated by dividing the real unit operating expenditure for each cost centre and total operating expenditure by total SIOs.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

147 [c-i-c starts] [redacted] [c-i-c ends]

148 In terms of a change in total SIOs over the forecast period.

149 At the top of the cost hierarchy are common overhead or facility-based costs which are related to the capacity and ability to produce. Networks and ITS cost centres appear to be at higher levels of the cost hierarchy since these costs may be considered network overhead or indirect costs. The incurrence of some of these costs may be relatively unresponsive to modest changes in network size. The bottom of the cost hierarchy relates to the unit cost of producing an item from a batch of a specific product. A cost centre closer to the bottom of the cost hierarchy may be CSD, where costs are directly caused by the number of SIOs. Cost hierarchies are explained in: Edward Blocher, David Stout and Gary Cokins (2010), *Cost Management: A Strategic Emphasis* (5th Edition), McGraw-Hill Irwin, New York, p. 664; Robert Kaplan and Robin Cooper (1998), *Cost and Effect Using Integrated Cost Systems to Drive Profitability and Performance,* Harvard Business School Press, Boston, pp. 89-91.

150 Since a business and its product profitability are constantly evolving, the direct activities and their demand for services of indirect activities will also evolve. And over time, if direct activities reduce their demand for the services provided by the indirect support activity, the organisation should shrink the size of its indirect support activities by reducing the resources supplied (or reallocate to direct activities that have growth potential and will require more support services). This process is explained using a Time Driven Activity Based Costing Model: Robert Kaplan and Stephen Anderson (2006), *Time Driven Activity Based Costing,* Harvard Business School Press, Cambridge, pp. 46-48. This process is also explained in an Activity Based Costing model: Robert Kaplan and Robin Cooper (1998), *Cost and Effect Using Integrated Cost Systems to Drive Profitability and Performance,* Harvard Business School Press, Boston, pp. 131-132; pp. 263-264.

151 Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 40.

152 'Opex forecasts', Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015).

153 Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 65.

[redacted]

[redacted] [c-i-c ends]

The ACCC is concerned that Telstra has not been able to provide sufficient information on why many of its cost centre's costs fail to change in response to the decline in the operations for FLSM asset classes, both absolutely and relative to its other operations. As a result, it is difficult to determine whether the responsiveness of Telstra's cost centres to changing demand is reasonable and therefore whether operating expenditure is prudent and efficient.

---

[154] [c-i-c starts] [redacted] [c-i-c ends] 'Opex forecasts', Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015).

[155] In its forecast model documentation (p. 42) Telstra has stated that these costs are unlikely to vary with demand, but there is insufficient information as to why these costs are unlikely to vary.

[156] [c-i-c starts] [redacted] [c-i-c ends] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 43; p. 49; Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015).

[157] Robert Kaplan and Stephen Anderson (2006), *Time Driven Activity Based Costing,* Harvard Business School Press, Cambridge, pp. 46-48; Robert Kaplan and Robin Cooper (1998), *Cost and Effect Using Integrated Cost Systems to Drive Profitability and Performance,* Harvard Business School Press, Boston, pp. 131-132; pp. 263-264.

[158] [c-i-c starts] [redacted] [c-i-c ends] Telstra (2015), Fixed Services Model v1.1 (Jan2015); Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 47.

The ACCC has considered the Sapere Research Group's submission on the appropriateness of the algorithms employed by Telstra for its forecast model given the assumed cost trends and cost-forecast demand relationships.[159] Sapere appears to have had visibility of Telstra's cost-demand algorithms that possibly include functional forms of the relationship between Telstra's cost centres and demand. The ACCC is concerned that neither it nor stakeholders have been provided with the same visibility of Telstra's cost-volume algorithms as that granted to Sapere.

While the assessment of the origination of cost, which occurs at the cost centres, is of primary importance, it is also necessary to assess the attribution of cost centres' operating expenditure to asset classes. This is because Telstra may have an incentive to allocate more operating expenditure to asset classes where:

- Declared service shares are increasing or decreasing relatively modestly
- There is no allocation to NBN CO or where NBN Co's share is increasing modestly.

[c-i-c starts] [redacted] [c-i-c ends] Issues relating to NBN-related propex and capex are discussed in section 3.5.5 and chapter 4. Issues relating to Telstra's proposed cost allocation framework are discussed in chapter 10.

[c-i-c starts] [redacted]

[redacted] [c-i-c ends] Given the increasing allocation to declared services for this asset class, and given that Telstra's cost allocation framework assigns no costs to NBN activities for this asset class, transparently identifying the causes of cost for the cost centres related to this asset class is necessary so that the ACCC has assurance that no NBN-related activities are contained within this asset class (see section 3.5.5).

[c-i-c starts] [redacted] [c-i-c ends]

While operating expenditure costs incurred for all but three asset classes are falling between 2013–14 and 2018–19, Telstra has not demonstrated how changes in demand causes a change in the operating expenditure for each of these asset classes. The ACCC has concerns about the opacity of the cause of operating expenditure cost at the asset class level for certain activities, particularly when consideration of Telstra's proposed cost allocation framework is

[159] Sapere Research Group (2014), *Review of Telstra's fixed services forecasting model – FINAL Report*, Mike Smart, 7 October 2014, p. 4.
[160] Based on NBN's usage of ducts and pipes. Telstra (2015), Fixed Services Forecast Model v1.1 (Jan2015).
[161] Telstra (2015), Fixed Services Forecast Model v1.1 (Jan2015).
[162] Telstra (2015), Cost Allocation Framework v1.1, January 2015.
[163] Telstra (2015), Fixed Services Forecast Model v1.1 (Jan2015).
[164] Telstra (2015), Fixed Services Forecast Model v1.1 (Jan2015).

combined with potential incentives for over-attributing cost centre operating expenditures to certain asset classes. [c-i-c ends]

Telstra January 2015 revisions to its proposed operating expenditure forecasts (LSS, Business Unit Support, Networks and Telstra Wholesale Group)

Telstra's (downward) adjustments to actual (2013–14) and forecast operating expenditure for LSS are relatively minor (Table 3.6).

Table 3.6 Telstra's actual and forecast operating expenditure for LSS: October 2014 and January 2015 submission ($2009, million)

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19
LSS operating expenditure (October 2014)	[c-i-c starts] [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
LSS operating expenditure (January 2015)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted] [c-i-c ends]

Source: Telstra (2014) FLSM FY2015 to FY2019 v1.05; Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)

[c-i-c starts] [redacted] [c-i-c ends]

Table 3.7 Telstra's actual and forecast operating expenditure for Business Unit Support: October 2014 and January 2015 submission ($2009, million)

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19
BU support operating expenditure (October 2014)	[c-i-c starts] [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
BU support operating expenditure (January 2015)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted] [c-i-c ends]

Source: Telstra (2014) FLSM FY2015 to FY2019 v1.05; Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)

[165] Telstra (2015), Amendments to the Fixed Line Services Model, 6 February 2015, p. 27.

For its further revised forecasts in January 2015, Telstra has changed the size and cost attribution of the Networks cost centre.

[c-i-c starts]

[c-i-c ends].

Table 3.8 Telstra's actual and forecast operating expenditure for Networks: October 2014 and January 2015 submission ($2009, million)

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19
Networks (October 2014)	[c-i-c starts]					
Networks (January 2015)						[c-i-c ends]

Source: Telstra (2014) FLSM FY2015 to FY2019 v1.05; Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)

For the January 2015 submission, Telstra's most significant change to its forecast operating expenditure is the removal of the Wholesale Group cost centre from its operating expenditure forecasts worksheet.

[c-i-c starts]

[c-i-c ends]

As a result of Telstra attributing the costs of the Wholesale Group cost centre entirely to declared services, the appropriate calculation of the change in real unit costs for the Telstra Wholesale Group is achieved by dividing the forecast Wholesale Group costs ($2009) by the number of declared SIOs rather than total SIOs (Table 3.9).

[166] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, pp. 51-53.
[167] Telstra (2011), *Structural Separation Undertaking given by Telstra Corporation Limited to the Australian Competition and Consumer Commission under section 577A of the Telecommunications Act 1997 dated 9 December 2011,* 9 Overarching equivalence commitment, pp. 15-17.

Table 3.9 Change in real unit operating expenditure for the Telstra Wholesale Group when changing the denominator from total SIOs to declared SIOs

Change in real unit operating expenditure						
	2014–15	2015–16	2016–17	2017–18	2018–19	Average
[c-i-c starts] [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[c-i-c ends]

Source: Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)

[c-i-c starts] [redacted] [c-i-c ends]

Compared to its October 2014 submission on forecast operating expenditure, Telstra's January 2015 adjustments result in a slightly lower (cumulative) percentage decline in forecast operating expenditure between 2013–14 and 2018–19 (Table 3.10).

Table 3.10 Telstra's actual and forecast operating expenditure for fixed line services (including its adjustments to BU support, LSS, Networks and the deduction of the Wholesale Group): October 2014 and January 2015 submission ($2009, million)

Telstra's actual and forecast operating expenditure for fixed line services							
	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19	% change 2013–14 to 2018–19
Fixed Line Opex (October 2014)	[c-i-c starts] [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Fixed Line Opex (January 2015)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted] [c-i-c ends]

Source: Telstra (2014) FLSM FY2015 to FY2019 v1.05; Telstra (2015) Fixed Services Forecast Model v1.1 (Jan 2015)

[168] LSS operating expenditure is based on the RAF accounts, which already include the Telstra Wholesale Group costs. Since Telstra has removed the allowance for the Telstra Wholesale Group for LSS has been removed. Therefore, Wholesale Group unit costs are divided by the number of declared SIOs net of LSS SIOs. Telstra (2015), Telstra Response to IICTEBA information request – 19 January 2015; Telstra (2015) Fixed Services Model v1.1 (Jan2015), p. 6.

The ACCC considers that the adjustments to operating expenditure as a result of updated data on LSS and Networks is appropriate. The ACCC also considers that the direct allocation of Wholesale Group costs to declared services is appropriate.

[c-i-c starts] [redacted] [c-i-c ends]

Table 3.11 ACCC draft decision adjustment to Business Unit operating expenditure ($2009, $ million)

Adjustment to Business Unit Support costs impact on forecast operating expenditure					
	2014–15	2015–16	2016–17	2017–18	2018–19
[c-i-c starts] [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[c-i-c ends]

Source: Telstra (2014) FLSM FY2015 to FY2019 v1.05; Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)

Telstra 6 February 2015 revisions to its proposed operating expenditure forecasts

Telstra has proposed considerable adjustments to forecast propex which is discussed in section 3.5.4.

[c-i-c starts] [redacted] [c-i-c ends]

As a result of Telstra's February 2015 adjustments to its forecast operating expenditure, the percentage decline in its forecast real operating expenditure is [c-i-c starts] [redacted] [c-i-c ends] per cent between 2013–14 and 2018–19 ($2009). This forecast decline is considerably less than Telstra's January 2015 submission, where operating expenditure is forecast to decline by [c-i-c starts] [redacted] [c-i-c ends] per cent over the same period.

The ACCC's considers that Telstra has not demonstrated a transparent and verifiable relationship between forecast demand and forecast operating expenditure that would permit sufficient scrutiny of how Telstra's costs respond to changes in fixed line service demand. As a result, the ACCC cannot form a view on whether or not Telstra's forecast operating expenditures are prudently and efficiently incurred.

Advice from Wik-Consult

Wik-Consult considered a regulated firm has a general incentive to inflate expenditure forecasts and an incentive not to be 'too' transparent with respect to these forecasts. A lack of transparency in the definition of costs encourages overlapping expenditures and the double counting of costs.[169] Wik-Consult also considered that there is an incentive to ignore cost volume relationships and to treat costs as fixed and not responsive to a decline in volumes.[170] If more assets and expenditures are treated as non-attributable to services, there is potential scope for distortion through arbitrarily chosen allocation keys.[171]

Wik-Consult is concerned that Telstra's forecast model does not provide cost volume relationships that would allow operating expenditures to be derived from demand forecasts. Even base-year values appear not to be linked to demand. While expenditure indices are derived from quantity indices (such as number of personnel and labour cost) and price indices, the quantity indices are a hardcoded input. As a result, the forecast model does not link quantity indices to demand forecasts for many costs.[172] There should be clear documentation of the allocation of cost from all direct and indirect cost centres to the demand forecasts that cause these costs to occur.[173]

The lack of identified cost volume relationships raises concerns about how cost centres respond to the decline in demand. [c-i-c starts] [redacted] [c-i-c ends]

ACCC's draft decision

The ACCC's draft decision is to not incorporate Telstra's 6 February 2015 response into this draft decision. The ACCC's assessment is based on Telstra's submissions and responses up until January 2015. In forming this draft decision, the ACCC has balanced the risk of double counting the cost arising from the potential inclusion of connection/disconnection costs in CSD against the largely unexplained uplift in Telstra's propex (see section 3.5.4.1) that is proposed in the 6 February 2015 response. This information will be considered further prior to the final decision.

For the purposes of this draft decision, the ACCC's decision is to not make adjustments to Telstra's forecast operating expenditure for reasons of prudency and efficiency. The exception to this is the removal of Telstra's upward adjustment to its Business Unit Support mark-up, the removal of NBN-related propex and an adjustment to Telstra's forecast CPI (see chapter 8 other pricing issues). However, the ACCC will consider this issue again after receiving further information from Telstra and submissions from stakeholders prior to making its final decision.

[169] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 31-32.
[170] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 31-32.
[171] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 31-32.
[172] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 77-81.
[173] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 77-81.
[174] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, p. 58-61.
[175] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 58-61.

3.5.3 Telstra's proposed cost and productivity indices

In addition to the Consumer Price Index, Telstra has employed a number of indices to forecast trend changes in its operating expenditure over the regulatory period. Table 3.12 provides an outline of the various indices employed by Telstra across its operating expenditure cost centres:

Table 3.12 Telstra's indices applied to its cost centres [c-i-c starts]

[redacted]

[176] Telstra (2014), *Final Access Determinations (FADs) Inquiry – additional information in response to information request under BBM RKR, February 2014*, Confidential, p. 4; Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 35.
[177] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 29.
[178] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 42.
[179] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 42.
[180] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 45.
[181] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 45 and Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)
[182] Telstra has applied the CPI to various activities within Telstra Service Operations that could not be captured by indices more specific to inputs. That is, 'other' and 'special project categories' within the activities specific to Telstra Service Operations were uplifted by the CPI. See: Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015).
[183] [c-i-c starts] [redacted] [c-i-c ends] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 42.
[184] [c-i-c starts] [redacted] [c-i-c ends] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 29 and p. 41.

[185] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 37 and Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)
[186] Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)
[187] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 45 and Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)
[188] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 45 and Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)
[189] Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)
[190] [c-i-c starts] [redacted] [c-i-c ends] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 45; Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 63.
[191] Telstra (2014), *Final Access Determinations (FADs) Inquiry – additional information in response to information request under BBM RKR, February 2014*, Confidential, p. 4.
[192] [c-i-c starts] [redacted] [c-i-c ends] *See:* Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 35.
[193] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 45.
[194] Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)
[195] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 35 and Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015).
[196] [c-i-c starts] [redacted] [c-i-c ends] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 45 and Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015).
[197] Telstra has labelled IT Professional Services Index as an index, although this is a rate of change rather than an index.
[198] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 45 and Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015).
[199] Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015).

[c-i-c ends]

Source: Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 45 and Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)

The ACCC has several concerns relating to Telstra's choice and application of its indices. The ACCC does not accept Telstra's forecast change of the CPI of [c-i-c starts] [redacted] [c-i-c ends] per cent per annum (average) from 2014–15 to 2018–19. The ACCC's draft decision is that the forecast annual change of the CPI is 2.4 per cent from 2014–15 to 2018–19. The ACCC's draft decision on the Telstra's forecast change of the CPI is discussed in chapter 8 other pricing issues.

The ACCC notes that Telstra has not provided sufficient explanation why it has not applied efficiency indices to all its cost centre activities. For example, Telstra has applied the CPI to 'building outgoings' (gardening, cleaning, building maintenance and outgoings) for the Networks cost centre, yet unlike other activities in the Network cost centre (such as maintenance of equipment), Telstra has not applied an efficiency gain index to the relevant labour inputs for these activities.[206]

The ACCC has a concern that Telstra has not applied any cost and productivity indices to its propex cost centre. The absence of input price and efficiency indices for the propex cost centre

[200] Telstra has identified these 'Efficiency Gain Indexes' as indices, although these are rates of change rather than indices.
[201] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 29, p. 45 and Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)..
[202] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 29, p. 50 and Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015).
[203] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 42 and Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015).
[204] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 42 and Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015).
[205] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 41 and Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015).
[206] 'Opex forecasts', Fixed Services Forecast Model v1.1 (Jan2015).

relates to the ACCC's broader concern about the insufficient detail provided by Telstra on propex.

The ACCC notes Frontier's observation that historically wages in the telecommunications sector (ABS wage index for 'Information, media and telecommunications') have not grown faster than the CPI.[207] However, the ACCC also notes that Telstra had submitted that its forecast average annual labour cost growth of [c-i-c start] [redacted] [c-i-c ends] per cent per annum is based on a weighted grouping of construction, information media and communication and retail industries.[208] Telstra claims that this grouping reflects its workforce make-up, although it did not provide the percentage breakdown of its workforce make-up.

[c-i-c starts] [redacted] [c-i-c ends]

Since historical series of wage indices have informed both Telstra's forecast methodology[210] and Frontier's assessment of Telstra's labour cost projections, the ACCC has observed the following:

- the annual change in the wage price indices for information, media and telecommunications exceeded the annual change in the CPI by an average of over 0.35 per cent from September 1997 to September 2014[211] [212]
- the annual change in the wage price indices for construction exceeded the annual change in the CPI by an average of over 1 per cent from September 1997 to September 2014[213] and
- the annual change in the wage price indices for retail exceeded the annual change in the CPI by an average of over 0.19 per cent from September 1997 to September 2014.[214]

The reasonableness of Telstra's proposed labour price index, at least with respect to the comparison with the forecast annual change in the CPI, depends on the construction, telecommunications and retail workforce make-up. Even if construction personnel make up a minority of Telstra's workforce, Telstra's labour costs may have exceeded inflation by a

[207] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 21.
[208] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, pp. 63-64.
[209] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 64.
[210] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 63.
[211] ABS Cat. No. 6401.0 – Consumer Price Index, Australia, A2325846C, Index Numbers; All groups CPI; Australia. ABS Cat. 6345.0 – Wage Price Index, Australia, December 2013ABS Cat. 6401.0 – Consumer Price Index, Australia, December 2014. A2603519C (Quarterly Index; Total hourly rates of pay excluding bonuses; Australia; Private and Public; Information media and telecommunications); A2602949K (Quarterly Index; Total hourly rates of pay excluding bonuses; Australia; Private; Information media and telecommunications); A2638859X (Quarterly Index; Ordinary time hourly rates of pay excluding bonuses; Australia; Private; Information media and telecommunications).
[212] The time period September 1997 to September 2014 is chosen because the relevant wage price indices provided by the ABS start in September 1997. The last index observation provided by the ABS is in the September quarter of 2014.
[213] ABS Cat. No. 6401.0 – Consumer Price Index, Australia, A2325846C, Index Numbers; All groups CPI; Australia, ABS Cat. No. 6345.0 – Wage Price Index, Australia, December 2013, A2638929V (Quarterly Index; Ordinary time hourly rates of pay excluding bonuses; Australia; Private; Construction), A2603019J (Quarterly Index; Total hourly rates of pay excluding bonuses; Australia; Private; Construction), A2603589K (Quarterly Index; Total hourly rates of pay excluding bonuses; Australia; Private and Public; Construction).
[214] ABS Cat. No. 6401.0 – Consumer Price Index, Australia, A2325846C, Index Numbers; All groups CPI; Australia, ABS Cat. No. 6345.0 – Wage Price Index, Australia, December 2013, A2638899T (Quarterly Index; Ordinary time hourly rates of pay excluding bonuses; Australia; Private; Retail trade); A2602989C (Quarterly Index; Total hourly rates of pay excluding bonuses; Australia; Private; Retail trade); A2603559W (Quarterly Index; Total hourly rates of pay excluding bonuses; Australia; Private and Public; Retail trade).

moderate margin (which historically it has[215]). And given the historically strong growth in construction wages, Telstra's forecasts appear reasonable on a historical labour price-CPI comparison basis, even when considering the ACCC's draft decision on the annual forecast change in CPI of 2.4 per cent (see chapter 8).

However, considerations of prudency and efficiency of Telstra's proposed labour price index should be made with reference to expected improvements in labour productivity, not necessarily to changes in the CPI. And in this respect, the ACCC considers that Telstra's proposed labour price index is reasonable. [c-i-c starts] [redacted] [c-i-c ends]

Advice from Wik-Consult

Wik-Consult considered that a regulated firm has an incentive to not reveal all possible productivity gains in its forecast expenditures since profits in the regulatory period are larger if a higher level of productivity is achieved than what is disclosed.[216]

[c-i-c starts] [redacted] [c-i-c ends]

ACCC's draft decision

With the exception of Telstra's forecast change in the CPI, which is discussed in chapter 8, ACCC's draft decision is that Telstra's proposed cost and productivity indices are prudent and efficient.

Table 3.13 shows the ACCC adjustment to Telstra's forecast operating expenditure as a result of the ACCC's draft decision on the forecast annual change of the CPI of 2.4 per cent [c-i-c starts] [redacted] [c-i-c ends] That is, Telstra's total real operating expenditure ($2009) is larger as a result of the ACCC draft decision adjustment. This is because real operating expenditure is now deflated by a lower rate of change of the CPI.

Table 3.13 ACCC draft decision adjustment to Telstra's forecast annual change of the CPI: impact on Telstra's forecast operating expenditure (million, $2009)

	2014–15	2015–16	2016–17	2017–18	2018–19
Forecast operating expenditure based on Telstra's forecast of an	[c-i-c starts]	[redacted]	[redacted]	[redacted]	[redacted]

[215] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 64.
[216] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, p. 32.
[217] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, p. 50.
[218] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 55-57.

average annual change of the CPI of [c-i-c starts] [redacted] [c-i-c ends]	[redacted]				
Forecast operating expenditure based on ACCC draft decision of an annual change of the CPI of 2.4%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Difference*	[redacted]	[redacted]	[redacted]	[redacted]	[redacted] [c-i-c ends]

* Subject to rounding error.
Source: Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)

3.5.4 The efficiency and prudency of propex

In the BBM RKR and revised forecasts, Telstra has introduced a category of expenditure which is operating expenditure related to capital projects or propex.[219] [c-i-c starts] [redacted] [c-i-c ends]

The ACCC is concerned that Telstra has also not sufficiently demonstrated how propex incurred for an asset class related to AROS, demand driven, discretionary and NBN-related capital expenditures. In the absence of this information, the ACCC is concerned that the addition of separate propex to capital expenditure forecasts for some asset classes may risk double counting the labour and intermediate input component that is already capitalised in capital expenditure forecasts.

In its 30 January submission, Telstra has provided information to demonstrate that there is no double counting of propex and operating expenditures. However, the ACCC's concern also relates to the risk of double counting total expenditure when propex and capital expenditures are allocated to the same asset class since:

- Propex is operating expenditure related to capital projects. The ACCC is concerned that there may be a risk of double counting expenditures if propex is part of a larger capital project, where the latter already contains labour and intermediate inputs required for the commissioning of plant and equipment.

[219] Prior to the 2013 BBM RKR submission this category of expenditure was not included in Telstra's forecast expenditures. Telstra's RAPM-RAF and comparison statements do not identify propex as a separate item of operating expenditure.
[220] Telstra (2014), *Final Access Determinations (FADs) Inquiry – additional information in response to information request under BBM RKR*, February 2014, Confidential, p. 12.
[221] Telstra (2014), *Final Access Determinations (FADs) Inquiry – additional information in response to information request under BBM RKR*, February 2014, Confidential, pp. 11-13; Telstra (2015), Fixed Services Forecast Model, v1.1 (Jan2015).
[222] Optus (2014) *Submission in response to ACCC Discussion Paper, Fixed Line Services Final Access Determination – Primary Prices*, Confidential Version, October 2014, p. 26; 28.

- [c-i-c starts] [redacted] [c-i-c ends]

The ACCC also has concerns about Telstra's propex forecasting methodology. [c-i-c starts] [redacted] [c-i-c ends]

Telstra's 6 February 2015 response

[c-i-c starts] [redacted] [c-i-c ends]

Telstra has also provided information which identifies the breakdown of propex for the relevant cost centres for 2013–14. However, there is no explanation why propex is attributable to these cost centres. [c-i-c starts] [redacted] [c-i-c ends]

[223] IMC 986 Meet retail orders; IMC 985 Meet wholesale orders; IMC143 ADSL augmentation plan, Telstra (2014), *Final Access Determinations (FADs) Inquiry – additional information in response to information request under BBM RKR*, February 2014, Confidential, p. 13 and p. 22.
[224] Telstra (2014), *Final Access Determinations (FADs) Inquiry – additional information in response to information request under the BBM RKR*, February 2014, Confidential, pp. 12-13.
[225] 'Opex forecasts', Fixed Services Forecast Model v1.1 (Jan2015)
[226] Telstra (2015), *Fixed Line Services final access determination inquiry: ACCC request for information*, 33236882_5_FAD response to 14 January information request 300115 FINAL VERSION, 30 January 2015, p. 9.
[227] Telstra (2014), *Final Access Determinations (FADs) Inquiry – additional information in response to information request under the BBM RKR*, February 2014, Confidential, pp. 12-13.
[228] Telstra (2015), Amendments to the Fixed Line Services Model, 6 February 2015, p. 8.

Telstra's latest (6 February 2015) response has not fully addressed the ACCC's concerns regarding the prudency, efficiency and relevance of propex for fixed line asset classes. Rather, this has raised further concerns about the lack of transparency in the attribution of propex to asset classes. Given these further concerns, the ACCC's draft decision is to not incorporate Telstra's 6 February response in this draft decision. The ACCC's assessment is based on Telstra's submissions and responses up until January 2015.

The ACCC is concerned that there is considerable difficulty in identifying whether the propex is caused by the relevant asset classes and, ultimately, whether propex is relevant to the provision of fixed line services. The ACCC's draft decision is that it currently cannot form a view on the prudency and efficiency of Telstra's proposed propex since there is insufficient information and transparency on what is causing these costs to be incurred.

Advice from Wik-Consult

Wik-Consult considered that a regulated firm may have an incentive to expense more expenditures than would be justified.[229]

In its economic assessment of the forecast model, Wik-Consult considered that Telstra's expensing of propex is inappropriate – propex should be capital expenditure rather than operating expenditure. [230] The activities associated with propex are either the commissioning of new assets or an extension of asset lifetimes and this expenditure should be capitalised.[231]

Wik-Consult also considered that the double counting of costs should be avoided. For example, Telstra should ensure that expenses on asset remediation are not counted twice, once as operating expenditure and once as capital expenditure.[232] [c-i-c starts] [redacted] [c-i-c ends]

ACCC's draft decision

For the purposes of this draft decision, the ACCC's decision is to not make adjustments to Telstra's forecast propex. The exception to this is the removal of NBN-related propex. However, the ACCC will consider this issue again after receiving further information from Telstra and submissions from stakeholders prior to making its final decision.

3.5.5 Further issues: NBN-related fixed line expenditures

The ACCC is concerned that NBN-related expenditures may be attributed to asset classes where, in Telstra's proposed cost allocation framework, there is either insufficient or zero allocation of cost to NBN. Two forecast operating expenditures are identified in which these issues may arise:

- [c-i-c starts] [redacted] [c-i-c ends] and

[229] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 31-32.
[230] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, p. 3; p. 36.
[231] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, p. 69.
[232] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, p. 36.
[233] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 71-77.

- NBN-related propex for certain CAN assets. [c-i-c starts]

3.5.5.1 Telstra's forecast fault rate

[redacted]

[c-i-c ends]

ACCC's draft decision

[c-i-c starts] [redacted]

[234] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 30.
[235] 'Opex Forecasts', Telstra (2015), Fixed Services Forecast Model, v1.1 (Jan2015).
[236] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 31.
[237] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 33.
[238] 'Opex Forecasts', Telstra (2015), Fixed Services Forecast Model, v1.1 (Jan2015).
[239] Telstra (2015), *Fixed Line Services final access determination inquiry: ACCC request for information*, 33236882_5_FAD response to 14 January information request 300115 FINAL VERSION, 30 January 2015, p. 11.

[redacted] [c-i-c ends]

3.5.5.2 NBN-related propex

Telstra has included NBN-related capital expenditures in its capital expenditure forecasts for the CAN (see Chapter 4). [c-i-c starts] [redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]

[redacted] [c-i-c ends]

The ACCC considers that NBN-related propex is incremental to NBN, and incremental costs should not be assigned to asset classes where costs are shared between different services. [c-i-c starts] [redacted]

- [redacted]
- [redacted]

[redacted]

- [redacted]
- [redacted] [c-i-c ends]

Advice from Wik-Consult

WIk-Consult considered that access seekers should not be charged for any expenditure or cost that is caused by the migration of customers to the NBN. Those expenditures and cost should be regarded as incremental to the NBN.[242] This implies that fixed line access seekers should

[240] Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)

[241] [c-i-c starts] [redacted] [c-i-c ends] Telstra (2015), Fixed Services Forecast Model, v1.1 (Jan2015); Telstra (2014), *Cost Allocation Framework for the ACCC Fixed Line Services Model, Framework and Model Guide,* Version 1, July 2014, Commercial in Confidence, pp. 17-21.

[242] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 93-95.

not be charged for any increase of operating expenditure associated with the maintenance of ducts or copper cable that is caused by the NBN rollout. Fixed line access seekers should also not be charged for the commissioning of assets and asset life extension (identified as propex by Telstra) of NBN-related equipment.[243] The exclusion of NBN-related capital expenditure should also result in the removal of NBN-related propex from fixed line asset classes.[244]

ACCC's draft decision

The ACCC's draft decision is that all NBN-related propex should be removed from Telstra's forecast operating expenditure when capital expenditure related to NBN is removed (see also chapter 4 capital expenditure). The removal of NBN-related propex results in a reduction of Telstra's forecast operating expenditure over the regulatory period (2014–15 to 2018–19) of [c-i-c starts] [redacted] [c-i-c ends] million ($2009) (see Table 3.14). The reduction also includes an estimation of NBN-related propex for 2014–15.

Table 3.14 Removal of NBN-related propex from Telstra's forecast operating expenditure (million, $2009)

	2014–15	2015–16	2016–17	2017–18	2018–19
Forecast operating expenditure based on inclusion of NBN-related propex – Telstra January 2015 submission	[c-i-c starts] [redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Forecast operating expenditure based on removal of NBN-related propex – ACCC draft decision*	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Difference	[redacted]	[redacted]	[redacted]	[redacted]	[redacted] [c-i-c ends]

* Subject to rounding error
Source: Telstra (2015) Fixed Services Forecast Model v1.1 (Jan2015)

3.5.6 Further issues: capex-opex trade-off

The ACCC is also concerned that Telstra has not adjusted its forecast expenditures given that a trade-off exists between Telstra's forecast capital and operating expenditures.

A trade-off between capital and operating expenditure exists because new capital plant and equipment requires less routine, proactive and reactive operating expenditure to remain operational compared to when capital is nearing the end of its expected useful life. In other words, there is a trade-off between operating the aged asset and continuing to incur the higher operating expenditure or undertake new capital expenditure and incur lower operating expenditure. New capital expenditure may also embody new materials and technology that require less operating expenditure compared to the replaced asset at a similar age of operation.[245] In which case, the trade-off between capital and operating expenditure may be more acute.

[243] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 93-95.
[244] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 93-95.
[245] In assessing the net present value of total expenditure, the benchmark efficient firm should take into account labour/material-saving technological progress that is expected to be embodied in new capital expenditure.

Telstra has adopted the base-step-trend approach (and refers to the AER *Better Regulation* document in its adoption of the approach[246]) to its operating expenditure forecasts, and therefore there should also be a consideration of potential trade-offs between its capital and operating expenditures. However, it has not included any explicit recognition of the potential trade-offs between proposed operating and capital expenditures as envisaged by the AER's base-step-trend approach. [247]

[c-i-c starts]

[redacted]

[redacted]

[c-i-c ends]

The ACCC considers that Telstra has had insufficient regard to the trade-off between capital and operating expenditure across its asset classes. This is likely to result in an over-estimate of Telstra's expenditure forecasts for the next regulatory period.

Advice from Wik-Consult

Wik-Consult considered that a trade-off exists between forecast capital expenditure and operating expenditure. When investment is undertaken, a new asset might be associated with less operating expenditure than a legacy asset. However, in turn the legacy asset should be associated with a lower sum of economic depreciation and economic cost of capital. Therefore, a trade-off exists between capital expenditure and operating expenditure. The overall economic costs associated with the new asset and the legacy asset have to be identical otherwise the legacy asset would not have been attributed the value at which the firm would be indifferent between keeping the legacy asset and substituting it for the Modern Engineering Equivalent Asset.[251]

ACCC's draft decision

For the purposes of this draft decision, the ACCC's decision is to not make adjustments to Telstra's forecast operating expenditure on the basis of the trade-off between capital

[246] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 55; AER (2013), Better Regulation, Explanatory Statement – Expenditure Forecast Assessment Guideline, November 2013.
[247] See for example: AER (2013), *Final Decision, ElectraNet Transmission determination, 2013-14 to 2017-18*, April 2013; Jacobs SKM (2014), *Attachment B17.1 Regulatory Submission Support – Phase 3, ACTEWAGL, Capex/Opex Trade-off Issues, QH10545RP0004|B*, 26 May 2014; AER (2013), *Final Decision Electranet Transmission Determination 2013-14 to 2017-18*, April 2013, p. 27, pp. 35-37.
[248] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 32.
[249] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 33.
[250] Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 32.
[251] Wik-Consult (2015), *Assessment on the efficiency and prudency of Telstra's expenditure forecasts*, Bad Honnef, March 2015, pp. 27-28; p. 118.

expenditure and operating expenditure. However, the ACCC will consider this issue again after receiving further information from Telstra and submissions from stakeholders prior to making its final decision.

4 Capital expenditure forecasts

Key Points

- In response to the ACCC's July 2014 Discussion Paper (discussion paper) stakeholders raised a number of issues relating to the prudency and efficiency of Telstra's capital expenditure forecasts in its BBM RKR response.
- Stakeholders were principally concerned that Telstra's forecast of capital expenditure was not responsive to a substantial fall in demand arising from the NBN rollout.
- Telstra submitted revised capital expenditure forecasts with its submission on the discussion paper.
- The ACCC has identified four main issues with Telstra's revised forecasts for capital expenditure:
    - Methodology for forecasting capital expenditure
    - NBN-specific capital expenditure
    - Demand-related expenditure
    - Capital projects not relevant to fixed line services.
- The ACCC considers that capital expenditure that is incremental to the NBN should not be included in the cost base for the fixed line services. The ACCC's draft decision is to disallow [c-i-c starts] [redacted] (2009 dollar) [c-i-c ends] of NBN-related capital expenditure, which accounts for [c-i-c starts] [redacted] [c-i-c ends] per cent of Telstra's total forecast capital expenditure for 2014–15 to 2018–19.
- The ACCC is not able to form a view on the prudency and efficiency of including in capital expenditure forecasts for certain demand-related capital expenditure and investment management committee (IMC) related projects. This is due to insufficient evidence or detail on the methodology for forecasting capital expenditure.
- The ACCC is making one adjustment to Telstra's capital expenditure forecasts and will consider the prudency and efficiency of the capital expenditure forecast before making a final decision.

4.1 Introduction

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 incorporate forecast capital expenditure, depreciation and asset disposals for that year. Forecast capital expenditure is rolled into the RAB each year and forms a component of the revenue requirement through the return on and return of capital.

This chapter sets out the ACCC's draft decision on Telstra's proposed capital expenditure forecasts. All figures, tables and charts in this chapter are set out in real terms (2009 terms). Refer to Appendix C for the nominal value of Telstra's proposed capital expenditure forecasts (table 4.1) and the ACCC's draft decision on these forecasts (table 4.2).

4.2 July 2014 Discussion paper

The ACCC published a discussion paper on primary price terms as part of its fixed line services FAD inquiry in July 2014 (discussion paper). In the discussion paper, the ACCC noted that Telstra's forecasting methodology for BBM RKR capital expenditure forecasts is quite different to the methodology the ACCC used for the 2011 final access determinations (FADs). Given the

differences in the two methodologies, the ACCC considered that it may be difficult to reconcile the actual and forecast capital expenditure for the current and next regulatory period.[252]

The ACCC also noted that Telstra's approach for taking into account the impact of the NBN rollout with respect to capital expenditure forecasts appeared to differ from its approach in relation to demand forecasts.[253]

The ACCC considered assumptions regarding the impact of the National Broadband Network (NBN) rollout on the fixed line network are important factors impacting expenditure and demand forecasts provided in Telstra's BBM RKR response. The discussion paper sought stakeholder views on options the ACCC could consider to address the consequences of uncertainty about the NBN roll-out for determining price terms for the FADs.

The ACCC also sought stakeholder comments on Telstra's BBM RKR response on capital expenditure in regard to the following issues:[254]

- whether Telstra's capital expenditure forecasts and the methodologies and assumptions used to prepare them are reasonable having regard to the long term interests of end-users (LTIE) and the prudency and efficiency criteria,
- what is the likely impact of the NBN roll-out on Telstra's capital expenditure and how this should be taken into account in forecasting capital expenditure,
- whether the information on the top 10 investment programs (IMC programs)[255] provides adequate quantitative support for the capital expenditure forecasts.

4.3 Telstra capital expenditure forecasts

In its submission on the discussion paper, Telstra revised its approach to forecasting capital expenditure for the 2014–15–2018–19 period, citing material changes to the external operating environment since it submitted its forecasts in response to the BBM RKR Notice.[256]

Telstra's 2014 revised capital expenditure forecast

In the revised forecast, Telstra forecast [c-i-c starts] [redacted] [c-i-c ends] of capital expenditure for the 2014–15 to 2018–19 period with annual expenditure first [c-i-c starts] [redacted] [c-i-c ends] and then [c-i-c starts] [redacted] [c-i-c ends]per annum over the remaining regulatory period as indicated in the table below.

Table 4.1 Telstra's forecast capital expenditure (million, $2009) [c-i-c starts]

[redacted]

[redacted] [c-i-c ends]

252 ACCC, *Public Inquiry into final access determinations for fixed line services – primary price terms, Discussion Paper, July 2014*, pp. 15 –16.

253 ACCC, *2014 Discussion paper*, July 2014, p. 16.

254 ibid., pp. 10 -17.

255 Telstra groups capital projects into programs using program-specific Investment Management Committee codes (IMC Codes).

256 Telstra, *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, pp. 66 – 67.

Telstra's revised capital expenditure forecasts were prepared using a 'bottom up' or 'project level' forecasting methodology, similar to that used to prepare the BBM RKR forecasts.[257] However, Telstra undertook the following steps to update its methodology:[258]

- Relevant capital expenditure is determined at the IMC level by including expenditure attributable to the fixed line asset classes for ongoing IMC programs.
- [c-i-c starts] [redacted] [c-i-c ends]
- 2015–16 to 2018–19 forecasts were largely estimated on the basis of historic and forecast trend,[260] as well as anticipated future requirements and the assumed impact of the NBN rollout.
- In undertaking trend analysis, IMC-level capital expenditure was aggregated from different funding types (demand-driven, asset replacement and operational expenditure (AROS), discretionary and NBN-specific).

257 Capital expenditure projects are grouped in Telstra's Investment Management Business Planning Database under program-specific codes known as IMC codes. Within each IMC Code, capital expenditure is further broken down into individual asset codes which can be mapped to the asset categories used in the FLSM. IMC-level information on capital expenditure is used to determine the relevant capital expenditure programs with respect to the fixed line services asset classes.
[c-i-c starts] [redacted] [c-i-c ends]
Forecasts of capital expenditure are based on historic actual expenditure in the relevant project categories. Trend adjustments are applied to historic expenditure to reflect expected trends in network augmentation and renewal requirements over the next four years 2014-15 to 2018-19.

258 Telstra, Main submission, October 2014, pp. 66–70.

259 Telstra*, Forecast model v 1.05–Framework and Guide to Forecast Assumptions (confidential version)*, October 2014, pp. 56–58 .

260 [c-i-c starts] [redacted] [c-i-c ends]

The ACCC's observations on Telstra's 2014 revised forecast

The ACCC notes that Telstra's revised capital expenditure forecasts is [c-i-c starts] [redacted] [c-i-c ends] compared to its BBM RKR capital expenditure forecasts, as indicated in the figure below.

Figure 4.1 Telstra's revised capital expenditure forecast [c-i-c starts]

[redacted] [c-i-c ends]

The ACCC notes that the differences between the two sets of forecasts are driven by Telstra's update to its forecasting methodology:

- The forecast has been rebased using actual expenditure for 2013–14.
- NBN-specific capital expenditure has been included for relevant CAN asset classes [c-i-c starts] [redacted] [c-i-c ends].
- The item 'capitalised interest' has been removed from the forecast [c-i-c starts] [redacted] [c-i-c ends].
- For the majority of expenditure, a historic trend factor was applied by Telstra. Telstra claimed that it reflects 'observed historic trends in expenditure in relevant asset classes'. [c-i-c starts] [redacted] [c-i-c ends] In undertaking trend analysis, IMC-level capital expenditure was aggregated by different drivers (demand-driven, AROS, discretionary and NBN-specific).
- Demand-driven, AROS and discretionary capital expenditure forecasts for all CAN asset classes and one Core asset class ('Data equipment') were adjusted downward (in 2015–16 and onwards) to reflect assumed impact associated with the rollout of the NBN.[262]
- 'Dynamic' capital expenditure forecasts (through a forecast model) that adjusts to assumptions about the NBN rollout.

---

261 [c-i-c starts] [redacted] [c-i-c ends]

262 Telstra, *Fixed line services access pricing model FY2015-19*, 9 December 2014 available at: https://www.accc.gov.au/regulated-infrastructure/communications/fixed-line-services/fixed-line-services-fad-inquiry-2013/consultation-on-primary-prices

The ACCC makes the following observations on the revised capital expenditure forecasts (based on the base case NBN rollout in Telstra's forecast model):

[c-i-c starts]

[redacted]

[redacted] [c-i-c ends]

Figure 4.2 Telstra's actual and capital expenditure forecast [c-i-c starts]

[redacted]

[redacted] [c-i-c ends]

- Telstra provided information on the four main drivers of capital expenditure: 'demand', 'NBN remediation', AROS and 'discretionary'. Demand is [c-i-c starts] [redacted] [c-i-c ends] per cent of total expenditure.

Figure 4.3 Telstra's capital expenditure forecast by cost drivers [c-i-c starts]

Source: ACCC analysis [c-i-c ends]

- [c-i-c starts] [c-i-c ends]

The ACCC has identified four main issues with Telstra's revised forecasts:

- methodology for forecasting baseline capital expenditure
- NBN-specific capital expenditure
- demand-related expenditure
- inclusion of capital expenditure projects not relevant to fixed line services.

Each is discussed in more detail in section 4.5.

4.4 Submissions

In responding to the discussion paper, stakeholders raised concerns about the prudency and efficiency of capital expenditure (as provided by Telstra in its BBM RKR response).

Capital expenditure forecast methodology

Frontier Economics (on behalf of the Competitive Carriers' Coalition) (Frontier) submitted that Telstra's capital expenditure forecast methodology should be consistent with its approaches to cost allocation, and demand forecasting. In particular, Frontier noted that services[263] that are driving higher capital expenditure on shared assets should be allocated a higher share of the relevant costs to reflect the expected increase in asset usage by those services. The current assumption of falling demand for the declared fixed line services and forecast growth in capital expenditure only seem credible if there are other sources of demand which will recover a higher share of the capital expenditure.[264]

Optus questioned whether cost causation principles were applied when using a bottom up approach to allocate the forecast capital expenditure according to the FLSM asset classes. [c-i-

[263] For example, mobile and data services.

[264] Frontier Economics, *Submission to the discussion paper*, October 2014, p.10.

c start] [redacted] [c-i-c ends]

TPG stated that the ACCC should further investigate Telstra's BBM RKR capital expenditure forecasts. TPG noted that the amount set out in the BBM RKR for capital expenditure for fixed line services indicates a 'remarkably' high percentage for the FLSM asset class. TPG noted that the BBM RKR forecast, [c-i-c starts] [redacted] [c-i-c ends] of capital expenditure reported in Telstra's 2013–14 annual report of $3.6 billion.[266]

NBN-related capital expenditure

Frontier submitted that 'NBN capital expenditure' should be separated from the BBM RKR forecasts. Frontier noted that it would be inefficient for fixed line access seekers and their customers to pay for network modifications (for example, the remediation of ducts) which would not be required in the absence of the NBN rollout. In principle, this 'cost' (attributable to NBN Co) should be separately identified and recovered solely from NBN Co rather than from Telstra's legacy network users.

Frontier also questioned the extent of NBN-specific costs excluded from the capital expenditure forecasts. Frontier stated that it is not clear the extent to which Telstra has excluded expenditure on assets (shared between the fixed line network and the NBN) that would otherwise be avoidable in the absence of the NBN.[267]

Optus submitted that expenditure that is incurred to meet Customer Service Guarantee (CSG)/ Universal Service Obligation (USO) or NBN obligations must not be allocated to fixed-line service as there is no causal relationship.[268]

NBN rollout impact on capital expenditure forecast

TPG stated that Telstra does not capture the reduction TPG expects will occur for capital expenditure on declared services as a result of the NBN rollout.[269]

Estimating capital expenditure forecasts using IMC codes

Optus submitted that several potential problems arise from estimating expenditures for fixed line services that are based on IMC codes in general:[270]

- Some IMC expenditure may not pertain to fixed line services or there may be some services that do not benefit at all from the IMC items of expenditure yet are allocated a proportion of the IMC expenditure costs.[271]
- For example, a significant proportion of the capital expenditure may be driven by business improvement programs. Optus noted that Telstra's top ten IMC programs 'highlight' that a 'significant proportion of forecast operating expenditure is driven by [c-

265 Optus, *Submission in response to ACCC Discussion Paper, Fixed Line Services Final Access Determination – Primary Prices*, Confidential Version, October 2014, pp. 25 –26.
266 TPG, *Submission to the discussion paper, confidential version*, October 2014, p. 1.
267 Frontier Economics, *Submission to the discussion paper*, October 2014, pp. 8 –9.
268 Optus, *Submission to the discussion paper, confidential version*, October 2014, p. 24.
269 TPG, *Submission to the discussion paper, confidential version*, October 2014, p. 2.
270 Optus, *Submission to the discussion paper, confidential version*, October 2014, pp. 26 –28.
271 ibid., p. 26.

[i-c starts] [redacted] [c-i-c ends] and that 'similar observations' can be made for capital expenditure.[272]

- It is unclear why the expenditure variations are by IMC code, and why asset classes cannot be taken into account for the purposes of direct allocation.[273]
- There is potential for the top 10 IMC programs to determine the cost causation relationship between the IMC descriptions, the FLSM asset classes, as well as identification of the relevant services for direct cost allocation.[274]

Telstra's 2014 revised forecast

Frontier submitted that regarding Telstra's 2014 revised capital expenditure forecast, the ACCC should not accept Telstra's revised forecasts because there are two significant deficiencies leading to the forecasts being contrary to the LTIE:[275]

- The first deficiency is that NBN-specific expenditure is allocated to all users of the fixed network assets, rather than recovered from NBN Co directly. Frontier stated that it would be inappropriate for any user other than NBN Co to be charged for capex that is clearly incremental to NBN Co's usage of the network.[276] Frontier noted that incremental expenditure does not need to be allocated among different uses or users and that it should be excluded from the FLSM. Frontier noted that this would be consistent with the ACCC's approach to connection charges and the Tribunal's view that access charges should allow recovery of costs necessary to provide the declared services and;
- The second deficiency is that the revised forecasts allow Telstra to be compensated by access seekers for a loss of economies of scale caused by the NBN.[277] Frontier noted that this effect can be observed from higher per-SIO costs that will not sufficiently offset the increasing allocation of key costs to NBN Co. Frontier noted that access seekers should pay no more than they would have paid without the NBN arrangements as they do not directly benefit and therefore should not bear the costs.
- Frontier submitted that, to ensure Telstra only recover the costs of supplying the declared fixed line services, capital expenditure incremental to NBN Co's demand for fixed line assets and loss of economies of scale from the NBN should be removed.[278]

4.5 ACCC draft decision

Under the BBM regulatory approach and the fixed principles provisions, forecast capital expenditures should reflect prudent and efficient costs. The fixed principles provisions specify that the following matters are relevant to whether capital expenditure forecasts reflect prudent and efficient costs:

- The access provider's level of capital expenditure in the previous regulatory period
- The reasons for proposed changes to capital expenditure from one regulatory period to the next regulatory period
- Whether the access provider's asset management and planning framework reflects best practice
- Any relevant regulatory obligations, or changes to such obligations, requirements applicable to providing the declared fixed line services,

---

272 Optus, *Submission to the discussion paper, confidential version*, October 2014, p. 28.
273 ibid., p. 26.
274 ibid.
275 Frontier, *Assessment of Telstra's revised forecasts*, December 2014, p. 12.
276 ibid., p. 13.
277 Frontier, *Assessment of Telstra's revised forecasts*, December 2014, pp. 13–14.
278 ibid., p. 14.

- Any other matters relevant to whether forecast capital expenditures reflect prudent and efficient costs.

Having regard to those matters, the ACCC considers, on the basis of the information before it, that Telstra's proposed total forecast capital expenditure of [c-i-c starts] [c-i-c ends] for the 2014–15 to 2018–19 period does not reflect efficient and prudent costs. The ACCC's draft decision is to downward adjust the capital expenditure forecasts to reflect the efficient and prudent costs of fixed line services as set out in table 4.2 below.

This downward adjustment only reflects removal of [c-i-c starts] [c-i-c ends] Telstra's NBN-specific capital expenditure. The ACCC has requested further information from Telstra on the remaining issues relevant to determining prudent and efficient capital expenditure for the final decision. Reasons for the ACCC draft decision on capital expenditure are set out in this section.

Table 4.2 ACCC draft decision on Telstra's forecast capital expenditure ($m 2009)

[c-i-c starts]

[c-i-c ends]

4.5.1 Methodology for forecasting capital expenditure

Telstra stated that forecasts of the baseline of non-NBN capital expenditure for 2015–16 to 2018–19 are established using the following methodology:[279]

- Demand-driven and AROS capital expenditure – [c-i-c starts] [c-i-c ends]
- Discretionary capital expenditure – [c-i-c starts] [c-i-c ends]
- NBN-related capital expenditure – [c-i-c starts] [c-i-c ends]

[c-i-c starts]

279 Telstra, *Main submission, Appendix 5: Review of Telstra's fixed services forecast model – Final report*, October 2014, p. 22.

280 ibid., p. 22.

[redacted]

[redacted]

[redacted] [c-i-c ends]

The ACCC is concerned with Telstra's use of [c-i-c starts] [redacted]

[redacted] [c-i-c ends]

An appropriate forecast of capital expenditure would be based on a forecast of cost driver volumes (i.e. demand for fixed line services and asset quantities) and a functional relationship between the cost driver volume and the amount of capital expenditure.

There are also issues with Telstra's use of [c-i-c starts] [redacted]

[redacted]

[c-i-c ends]

Further, the ACCC notes that, for the capital expenditure forecasts, Telstra has adopted [c-i-c starts] [redacted] [c-i-c ends]

The ACCC has noted above that it would be appropriate to forecast capital expenditure on the basis of cost driver volumes. The ACCC has requested further clarification on network assets quantities from Telstra as part of assessing Telstra's capital expenditure forecasts. In response,

[281] Telstra, *Main submission, Appendix 5: Review of Telstra's fixed services forecast model – Final report*, October 2014, p. 22.

[282] [c-i-c starts] [redacted] [c-i-c ends]

Telstra stated that [c-i-c starts] [redacted] [c-i-c ends]

Advice from WIK to ACCC

WIK has provided the following advice on Telstra's methodology for forecasting capital expenditure:

- WIK has confirmed the ACCC's findings with regard to Telstra's forecast methodology:
  - Forecasts of capital expenditure 'should be based on underlying asset types and asset quantities [c-i-c starts] [redacted] [c-i-c ends].[284]
  - Capital expenditure spent on various asset classes is [c-i-c starts] [redacted]

[c-i-c ends]

ACCC draft decision

The ACCC considers that Telstra's proposed capital expenditure forecast methodology does not provide sufficient evidence on the linkage between cost drivers and the forecasts. Thus, the ACCC is unable to form a view on the reasonableness of Telstra's capital expenditure forecast methodology based on the information currently available to it. For the purpose of this draft decision, the ACCC's decision is to accept Telstra's capital expenditure forecast methodology.

283 Telstra, *Fixed line services final access determination inquiry: ACCC request for information*, 30 January 2015, p. 2.
284 WIK-Consult, *Assessment on the efficiency and prudency of Telstra's expenditure forecasts (confidential version)*, March 2015, p. 4.
285 ibid., p. 64 .
286 ibid.
287 ibid., pp. 62–71.
288 ibid., p. 37.
289 ibid., pp. 29 & 36.

In the absence of further information from Telstra that demonstrates the reasonableness of its capital expenditure forecast methodology, the ACCC may make further adjustments in the final decision.

4.5.2 NBN-specific capital expenditure

Telstra's revised capital expenditure forecasts [c-i-c starts] [redacted] [c-i-c ends] Forecast NBN-specific capital expenditure, reflecting a NBN Rollout Base Case migration assumption, is set out in the figure below.

Figure 4.4 Telstra proposed NBN-related capital expenditure [c-i-c starts]

[redacted] [c-i-c ends]

Telstra stated that NBN-specific capital expenditure for 2014–15 [c-i-c starts] [redacted]

[redacted] [c-i-c ends]

The inclusion of NBN-specific capital expenditure in the revised forecasts differs from Telstra's position in the BBM RKR capital expenditure forecasts. In the BBM RKR forecasts for 2014–15 to 2018–19 provided in 2013, Telstra has excluded capital expenditure that is due to the NBN

290 Telstra, Appendix 4: *Forecast model v1.05 - Framework and guide to forecast assumptions*, October 2014, p. 61.
291 Telstra, Appendix 4: *Forecast model v1.05 - Framework and guide to forecast assumptions*, October 2014, p. 61.
292 ibid.
293 ibid.
294 ibid.

or NBN products and services.[295] Telstra has now included [c-i-c starts] [redacted] [c-i-c ends] NBN-related capital expenditure in its forecast model.

The ACCC considers it would be inappropriate to recover from fixed line access seekers or other users of the fixed line network costs of network investments which would not be required in the absence of the NBN roll out. If these investments are for the specific purpose of the NBN rollout and would not be required in the absence of the NBN, these costs should be recovered from NBN Co and not from other users of the fixed line network.

The ACCC does not accept Telstra's view that, because these expenditures relate to assets in the FLSM, NBN-specific expenditure should be included in the RAB in the FLSM. Costs attributable to the NBN should be separated from FLSM costs and separately recovered from NBN Co (and NBN users) rather than other users of Telstra's fixed line network. The ACCC notes that Telstra has not provided sufficient or consistent evidence that NBN will make use of the FLSM asset classes.[296] The ACCC notes comments by Frontier for the exclusion of capital expenditure incremental to NBN Co[297] and support for removing this capital expenditure from the FLSM as they are 'clearly incremental to NBN Co's usage of the network'. [298]

Therefore, the ACCC considers that it is necessary to determine to what extent capital expenditure is directed at facilitating the use of assets by NBN Co. The ACCC has sought advice from WIK on this issue.

In addition, [c-i-c starts] [redacted] [c-i-c. ends]

The NBN-related capital expenditure is [redacted] [c-i-c. starts] [redacted]

295 Telstra, *BBM RKR response*, 25 November 2013, p. 5.

296 [c-i-c starts] [redacted] [c-i-c ends]

297 Frontier, Submission to the Discussion Paper, October 2014, pp. 7-9.

298 Frontier, Assessment of Telstra's revised forecasts, December 2014, pp. 13-14.

299 Telstra, Fixed Line Services Access Pricing Model FY2015-19, sheet "Capex Forecasts", 09 December 2014.

300 Commercial Terms between Commonwealth, NBN Co and Telstra, 25 June 2014, p. 44.

301 Telstra, *Fixed Line Services Access Pricing Model FY2015-19*, sheet "Capex Forecasts", 09 December 2014.

302 Telstra, *Cost Allocation Framework for the ACCC Fixed Line Services Model, Framework and Model Guide, Versions 1*, July 2014, pp. 19 -20.

303 ibid., pp. 25 -29.

[c-i-c starts] [redacted] [c-i-c ends]

In the response together with its revised FLSM on 6 February 2015, [c-i-c starts] [redacted] [c-i-c ends] Telstra has not provided sufficient information to address the ACCC's queries on NBN-related capital expenditure as discussed above.

The ACCC notes Frontier's submission that Telstra's forecasts 'allow it to be compensated' for a loss of economies of scale caused by the NBN and the supporting argument of rising per-SIO capital expenditure (post NBN forecasts).

However, the ACCC considers that it is more appropriate to consider the per-SIO capital expenditure in terms of CAN capital expenditure and CAN access SIOs.[306] [c-i-c starts] [redacted] [c-i-c ends] By removing NBN-specific capital expenditure, the ACCC notes that the per-SIO capital expenditure for the CAN (in $2009) [c-i-c. starts] [redacted] [c-i-c. ends] over 2014–15 to 2018–19.

Advice from WIK to ACCC

WIK has provided the following advice on NBN-specific capital expenditure:

[c-i-c starts]

[redacted]

---

304 ACCC, *ACCC's fixed line services final access determination inquiry: request for further information*, 14 January 2015, pp. 3-4.

305 Telstra, *Fixed line services final access determination inquiry: ACCC request for information*, 6 February 2015, p. 21.

306 From Telstra's cost allocation framework WLR, ULLS, PSTN retail, Other DSL and ISDN SIOs are allocated costs from the CAN.

307 [c-i-c. starts] [redacted] [c-i-c ends]

308 WIK-Consult, *Assessment on Telstra's expenditure (confidential version)*, March 2015, p. 93.

309 WIK-Consult, *Assessment on Telstra's expenditure (confidential version)*, March 2015, pp. 5 & 94.

[redacted] [c-i-c starts] [redacted] [c-i-c ends]

ACCC draft decision

For the purpose of this draft decision, the ACCC's decision is to exclude NBN-specific capital expenditure of [c-i-c starts] [redacted] [c-i-c ends] from the FLSM, on the basis that this expenditure is incremental for the NBN roll out and should be recovered from the users of NBN Co (and not other users of the fixed line network).

4.5.3 Demand-related capital expenditure

Demand-related capital expenditure is the [c-i-c starts] [redacted] [c-i-c ends] of capital expenditure over the forecast period. The ACCC has separately analysed demand related capital expenditure for the CAN and for the Core.

Forecast demand-driven capital expenditure for the CAN [c-i-c starts] [redacted] [c-i-c ends] over the forecast period, [c-i-c starts] [redacted] [c-i-c ends]. CAN demand-driven capital expenditure [c-i-c starts] [redacted] [c-i-c ends].

Figure 4.5 Telstra proposed demand-related capital expenditure for CAN assets
[c-i-c starts]

[redacted]

[redacted] [c-i-c ends]

Forecast demand-related capital expenditure for Core is declining [c-i-c starts] [redacted]

[310] ibid., pp. 5 & 94–95.

[c-i-c ends]

Figure 4.6 Telstra proposed demand-related capital expenditure for CORE assets

[c-i-c starts]

[c-i-c ends]

The ACCC notes capital expenditure forecast for transmission equipment when taken with Telstra's CAF would allocate [c-i-c starts]

[c-i-c ends]

311 [c-i-c starts] [c-i-c ends]

Figure 4.7 Telstra proposed cost allocation of the transmission asset class for declared services and other services [c-i-c starts]

[c-i-c ends]

In its revised version of the FLSM submitted on 6 February 2015, Telstra updated the cost allocation of the transmission asset class for declared services and other services. For the purposes of this draft decision, the ACCC is considering information received up to 30 January 2015 and not undertaking detailed analysis on the revised cost allocation for the draft decision.

[c-i-c starts] [c-i-c ends]

The ACCC considers that, for transmission equipment, [c-i-c starts]

[c-i-c ends]

The ACCC has asked Telstra to provide justification for its increased capital expenditure on transmission equipment during the NBN roll-out.

Advice from WIK to ACCC

[c-i-c starts]

[redacted]

[c-i-c ends]

ACCC draft decision

The ACCC is concerned with Telstra's proposed [c-i-c starts] [redacted] [c-i-c ends] capital expenditure for the transmission equipment asset class for 2014–15 to 2018–19 and its allocation to the regulated fixed line services.

For transmission equipment, the ACCC considers that Telstra's methodology for forecasting capital expenditure does not provide evidence on the linkage between demand-related capital expenditure forecasts and the [c-i-c starts] [redacted] [c-i-c ends] allocation to the declared fixed line services. As a result, the ACCC cannot form a view that Telstra's capital expenditure forecasts represent prudent and efficient expenditure. For the purpose of this draft decision, the ACCC's decision is to not adjust forecast capital expenditure for transmission equipment. In the absence of further information from Telstra that demonstrates the prudency and efficiency of its forecasts, the ACCC may make further adjustments in the final decision.

4.5.4 Capital projects not relevant to fixed line services

Capital expenditure projects are grouped in Telstra's database under program-specific codes known as IMC codes (IMC codes are codes identifying capital expenses in the general ledger).[315] Within each IMC Code, capital expenditure is further broken down into individual asset codes which can be mapped to the asset categories used in the FLSM.

Telstra's additional response to the BBM RKR response in February 2014 indicates that a [c-i-c starts] [redacted] [c-i-c ends] Telstra's BBM RKR capital expenditure forecasts relates to projects that predominantly relate to [c-i-c starts] [redacted] [c-i-c ends] Based on Telstra's BBM RKR response, these [c-i-c starts] [redacted] [c-i-c ends]

312 WIK-Consult, *Assessment on Telstra's expenditure (confidential version)*, March 2015, pp. 108–110.

313 ibid., p. 5 & 110–113.

314 ibid., p. 111.

315 'Capital expenditure projects are grouped in Telstra's Investment Management Business Planning Database under program-specific codes known as IMC codes. Within each IMC Code, capital expenditure is further broken down into individual asset codes which can be mapped to the asset categories used in the FLSM.' Telstra (2014), *Forecast Model v 1.05 Framework and Guide to Forecast Assumptions*, October 2014, Commercial in Confidence, p. 56.

316 [c-i-c starts] [redacted] [c-i-c ends]

317 Telstra, Additional information in response to information request under the BBM RKR, February 2014, p. 23.

As the revised forecasts follow a similar methodology, there is a need to identify the major IMC projects (similar to Telstra's additional BBM RKR response in February 2014) and establish whether the capital expenditure forecast for certain IMC codes [c-i-c starts] [c-i-c ends] are incremental to fixed line services and should be included in the costs to be recovered through charges for the declared fixed line services.

Advice from WIK to ACCC

[c-i-c starts]

[c-i-c ends]

ACCC draft decision

The ACCC notes the top 10 IMC–level projects in Telstra's BBM RKR capital expenditure forecasts constitute a [c-i-c starts] [c-i-c ends] proportion of the forecasts and that certain projects from the BBM RKR forecasts do not appear to be incremental to the fixed line services.

The ACCC considers that the methodology used by Telstra to forecast capital expenditure does not provide sufficient justification on the inclusion of certain IMC projects [c-i-c starts] [c-i-c ends]. Thus, the ACCC cannot form a view that Telstra's capital expenditure forecasts represent prudent and efficient expenditure at this stage.

The ACCC has asked Telstra to provide revised forecasts in terms of IMC-level projects in its expenditure forecast model for 2013–14 to 2018–19. [c-i-c starts]

[c-i-c ends]

The top 10 IMC projects comprise [c-i-c starts] [c-i-c ends] per cent of the revised 2014–15 capital expenditure forecast. The ACCC notes that the top 10 IMC projects for 2014–15 appear [c-i-c starts]

318 WIK-Consult, *Assessment on Telstra's expenditure (confidential version)*, March 2015, p. 89.
319 ibid., pp. 5 & 87–89.
320 ibid., pp. 89–92.
321 ibid., pp. 5, 87 & 90.
322 ibid., pp. 5, 88 & 89.
323 ibid., pp. 5 & 89.
324 [c-i-c starts] [c-i-c ends]
325 [c-i-c starts] [c-i-c ends]

[redacted] [c-i-c ends]

In considering the top 10 IMC projects, the ACCC's decision is that expenditure not incremental to the fixed line services should be excluded from the FLSM. As noted in section 4.5.2, the ACCC's draft decision is to exclude NBN-specific capital expenditure from the FLSM. [c-i-c starts] [redacted] [c-i-c ends]

For the purpose of this draft decision, the ACCC's decision is to not make further adjustment to capital expenditure forecasts for other IMC projects. In the absence of further information from Telstra that demonstrates the prudency and efficiency of the inclusion of certain IMC projects, the ACCC may make further adjustments in the final decision.

5 Cost of capital

Key Points

The ACCC's draft decision is to maintain the existing weighted average cost of capital (WACC) framework and adopt a real vanilla WACC of 2.9 per cent (5.4 per cent nominal), based on the following parameters:

Parameter	ACCC proposed approach
Risk-free rate	Based on the 10 year Commonwealth Government Securities (CGS) yields, using an averaging period of 20 business days. The nominal risk-free rate for the draft decision is set at 2.5 per cent.
Expected inflation	Based on a geometric average of ten years of forecast inflation. Expected inflation used in estimating FAD prices is 2.42 per cent.
Market risk premium (MRP)	Set at the historical level of 6 per cent.
Equity beta	Set at 0.7 consistent with the approach adopted in previous ACCC decisions and current evidence.
Equity issuance costs	The ACCC proposes to exclude equity issuance costs from the WACC.
Debt risk premium (DRP)	Based on the difference in yield between a Telstra 10 year Bloomberg Valuation Service (TBVAL) curve nominal rate and the 10 year CGS rate. The DRP used for the draft decision is 0.94 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 for the draft decision is 0.07 per cent.
Debt beta	The ACCC proposes to set the debt beta at zero per cent.
Gamma (value of imputation credits)	Set at 0.45 for consistency with the approach adopted in previous ACCC decisions.

5.1 Introduction

A firm's weighted average cost of capital (WACC) is the risk-adjusted rate of return on capital required by debt and equity capital providers to the firm. The WACC is an important part of the FLSM because the 'return on capital' component of the building block model is calculated as the product of the WACC and the value of the regulatory asset base (RAB). The WACC is discussed in this chapter.

The ACCC used a real vanilla WACC (which was derived from a nominal WACC) for the declared telecommunications services in the FLSM for the 2011 final access determinations (FADs) and the 2013 Wholesale ADSL FAD.

The vanilla WACC is calculated as the weighted average of the cost of debt and cost of equity according to the following formula:

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

where

D = the value of debt

E = the market value of equity

V = the value of debt and the market value of equity

E[Kd]=the required/expected cost of debt

E[Ke]=the required/expected cost of equity

For consistency with the vanilla WACC, the cash flows modelled in the FLSM are post-tax and include the benefits from imputation credits as well as the interest tax shield (that is, the tax deductable interest payments).

The previous FADs included fixed principle provisions for estimating the WACC: [326]

- A vanilla WACC is used to estimate the cost of capital
- The cost of equity is estimated using the capital asset pricing model (CAPM).

5.2 Submissions

In its submission to the ACCC's July 2014 discussion paper, Telstra proposed a nominal vanilla WACC of 7.4 per cent based on the Sharpe-Lintner CAPM for cost of equity component.[327]

Table 51 shows Telstra's proposed WACC parameters. This methodology is consistent with the previous approach outlined in the 2011 FADs and 2013 Wholesale ADSL FAD in the following respects:

- estimating the cost of debt over an averaging period that is relatively close to the commencement of the regulatory period
- A-rated debt with a term-to-maturity of 10 years.

However, Telstra proposed a new method for the following parameters:

- using third party—Reserve Bank of Australia (RBA)—benchmark data to estimate the corporate yield for the DRP calculation
- an MRP of 6.5 per cent which is adopted in the Australian Energy Regulator (AER's) 2013 WACC guideline[328]
- an equity beta of 0.8. Telstra supports its proposal with certain recent empirical evidence and benchmarking against other regulated businesses

---

326 ACCC, *Public inquiry to make final access determinations for the declared fixed line services – final report*, July 2011, p.132.

327 Telstra, *Public inquiry into final access determinations for fixed line services – primary prices: Response to Discussion Paper*, 3 October 2014, p. 81.

328 An MRP of 6.5 per cent was adopted in the AER's 2013 WACC guideline with reference to a specific date which was December 2013, with a possibility that it would be different later on.

- a gamma of 0.25 based on a payout ratio of 0.7 and utilisation rate, that is the theta, of 0.35.

Frontier Economics (Frontier), on behalf of the Competitive Carriers Coalition (CCC), submitted that there are two major problems with an equity beta of 0.7 for Telstra, which indicates 0.7 is an overestimate:[329]

- The ACCC's benchmarking study is likely to over-estimate Telstra's fixed line beta, given that this study estimated overall (firm-wide) betas for Telstra, which supplies a combination of declared fixed line, other fixed line and non-fixed line services.
- In setting an equity beta of 0.7, gearing should be taken account when considering evidence on betas from the AER.[330] Frontier submitted that if the different gearing assumptions between the AER (60 per cent) and ACCC (40 per cent) were accounted for, the re-levered equity beta would be 0.47.

5.3 ACCC draft decision

The ACCC proposes to maintain the use of a vanilla WACC to estimate the return on capital in the FLSM for the following reasons:

- It is specified in the fixed principles provisions (FPPs).
- Submissions to the previous FADs generally supported the use of a vanilla WACC and no issue has been raised with this approach in these submissions.[331]

In determining the WACC estimates for the draft decision, the ACCC has also had regard to:

- previous ACCC decisions on the Telstra WACC
- the most recent evidence and analysis from recent AER WACC draft decisions for various energy businesses (2014 AER draft decisions)[332]
- Telstra's WACC proposals made in its submission to the discussion paper on primary price terms, and
- access seeker submissions.

The ACCC's draft decision on the individual WACC parameters is set out in table 5.1. The ACCC will update some of these parameters (e.g. the risk-free rate) for the final decision. In determining the WACC estimates for the draft decision, the ACCC has also considered options for updating each WACC parameter and they are discussed in the sections below.

329 Frontier, *Submission of the final access determinations for fixed line services–a report prepared for the Competitive Carriers' Coalition (public)*, October 2014, pp. 53 – 54.

330 AER, *Rate of Return Guideline (Appendices)*, December 2013, p. 13, http://www.aer.gov.au/node/18859.

331 ACCC, *2011 FADs final report*, July 2011, p. 59.

332 AER, *Draft decision, TransGrid transmission determination, 2015–16 to 2017–18*, November 2014, http://www.aer.gov.au/node/23137.

Table 5.1 ACCC's draft decision on Telstra's WACC parameters

WACC parameter	2011 FADs	2013 Wholesale ADSL FAD	Telstra's proposal	ACCC draft decision
Nominal risk-free rate	5.16%	3.19%	3.66%	2.50%
Expected inflation	2.55%	2.47%	2.5%	2.42%
Real risk-free rate	2.55%	0.70%	1.13%	0.07%
Nominal debt risk premium	2.06%	1.47%	1.4%	0.94%
Debt issuance cost	0.081%	0.074%	0.07%	0.07%
Market risk premium	6%	6%	6.5%	6%
Equity beta	0.7	0.7	0.8	0.7
Debt gearing	40%	40%	40%	40%
Gamma	0.45	0.45	0.25	0.45
Equity issuance costs	0%	0%	0%	0%
Nominal vanilla WACC	8.54%	6.33%	7.37%	5.43%
Real vanilla WACC	5.84%	3.76%	4.75%	2.93%

Source: ACCC analysis.

The ACCC seeks stakeholder views on whether the approach used by the ACCC to estimate the cost of capital for the 2011 and 2013 FADs remains appropriate.

5.3.1 Cost of equity

5.3.1.1 Risk-free rate

The risk-free rate refers to the return to an investor 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 CGS are used as a proxy for the risk-free asset.

Previous ACCC approach

The ACCC estimated the nominal risk-free rate using the 10 year Australian CGS yields in the 2011 FADs and the 2013 Wholesale ADSL FAD. A 20 business-day averaging period was adopted for the CGS yields to reduce the impact of day-to-day market volatility.

In the FLSM, the ACCC uses a real risk-free rate, which is estimated by deflating the nominal risk-free rate by expected inflation using the Fisher equation:

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

where

i = nominal interest rate

π = expected inflation rate

r = real interest rate

The ACCC estimated expected inflation using a 10 year geometric average of RBA inflation forecasts (where available) and the mid-point of the RBA's inflation target (i.e. 2.5 per cent).

Submissions

Telstra submitted that the risk-free rate should be estimated using the previous ACCC approach: 20 business-day average of the yields on 10 year CGS.[333] Telstra estimated the nominal risk-free rate, based on a 20 business-day averaging period ending 30 June 2014, as 3.66 per cent. Telstra assumed an expected inflation rate of 2.5 per cent.

ACCC draft decision

The ACCC's draft decision is to maintain the previous approach for estimating the risk-free rate. This is also consistent with Telstra's proposal.

The ACCC also proposes to maintain the previous ACCC approach for estimating the real risk-free rate and forecast inflation. The ACCC notes that previous submissions have not raised issues with the ACCC's approach.[334]

Based on the ACCC's proposed approach, the real risk-free rate (for the 20 business-day averaging period ending 13 February 2015) is estimated to be 0.07 per cent (based on nominal risk-free rate of 2.5 per cent and forecast inflation of 2.42 per cent).

5.3.1.2 Market risk premium

The market risk premium (MRP) is the risk premium investors require over the risk-free return to be willing to invest in a well-diversified risky market portfolio. The MRP is not directly observable.

Previous ACCC approach

The ACCC set an MRP of 6 per cent in the 2011 FADs and the 2013 Wholesale ADSL FAD. This approach was based on the following considerations:[335]

- Surveys suggesting firms and market practitioners adopt an MRP of 6 per cent or lower. The ACCC noted a favourable outlook for economic and financial markets following the global financial crisis (GFC) which was likely to be factored into investors' expectations of the MRP.

[333] Telstra, *Main submissions (confidential),* 3 October 2014, p. 81.

[334] ACCC, *2011 FADs discussion paper,* April 2011, p. 86; ACCC, *2011 FADs final report*, July 2011, pp. 74–75.

[335] ACCC, *2011 FADs final report*, July 2011, pp. 63–64.

- 6 per cent was in the upper end of the range of average historical excess returns (4.3–6.6 per cent) estimated by Professor John Handley in 2012 based on conservative assumptions about the value of imputation credits (ranging from 0 to 1).[336] The range of MRP estimates was estimated as an average of historical series of excess market returns.

Submissions

Telstra submitted that a reasonable (but conservative) estimate of the MRP is currently 6.5 per cent.[337] In supporting its MRP proposal, Telstra noted the following:[338]

- AER's review of relevant evidence[339] supports an estimate of 6.5 per cent. Telstra noted that the historical average excess returns, dividend growth model (DGM) and survey evidence supported an MRP of 6.5 per cent.
- It is likely to be a conservative (relatively low) estimate of the MRP because the AER's analysis is based on 'conservative' data and other evidence of the MRP (that the AER has not taken into account) produced higher MRP estimates. Telstra noted that the AER's historical average excess returns does not include National Economic Research Associates' (NERA) adjustments that would lead to a 6.6 per cent MRP estimate for the longest data period. The Fernandez et al June 2013 study indicates an average MRP that is significantly above 6 per cent. The Wright approach for estimating MRP implies a range between 5.8–8.6 per cent. Telstra also noted that alternative versions of the DGM yields higher estimates of the MRP compared to the AER's 6.7–7.5 per cent.
- Current estimates of the MRP from DGM analysis are around 7 per cent based on the AER's analysis, and around 8 per cent based on the alternative version from the Strategic Finance Group (SFG).[340] Telstra noted that the AER has stated DGM-based estimates of the MRP are 'more likely to reflect prevailing market conditions, compared to other approaches'.[341]

ACCC draft decision

It is well recognised that the MRP cannot be directly observed. The ACCC notes that available evidence on the MRP is relatively imprecise and subject to varied interpretation. The ACCC considers that it is reasonable to assess a range of evidence to inform the best estimate of the MRP. In this assessment the ACCC must apply its judgement to interpret the information before it. The ACCC's draft decision is to adopt an MRP of 6 per cent as the majority of evidence below indicates that 6 per cent is appropriate:

- Historical excess returns[342] – this is the most robust source of evidence for estimating the MRP.[343] Therefore the ACCC has placed the most reliance on this source of information in estimating the MRP. The ACCC considers it is important to consider both the arithmetic and geometric averages when estimating a MRP using historical annual excess returns. This view was supported by the Australian Competition

336 Handley, *Historical equity risk premium to 2011*, April 2012, p. 6.
337 Telstra, *Main submissions (confidential)*, 3 October 2014, p. 84.
338 Telstra, *Main submissions (confidential)*, 3 October 2014, pp. 85–86.
339 Historic excess returns, historic market returns, forward looking estimates of MRP and market returns based on the Dividend Growth Model (DGM) and evidence of market expectations (surveys).
340 Telstra, *Main submissions (confidential)*, 3 October 2014, p. 86.
341 AER, *Explanatory statement rate of return guideline (appendices)*, 17 December 2013, p. 85.
342 Historical excess returns have been used to estimate a forward looking MRP on the view that investors base their forward looking expectations on past experience,
343 AER, *Explanatory statement rate of return guideline (appendices)*, 17 December 2013, p. 78.

Tribunal.[344] The estimates from the AER's most recent study provide a range of 5.9-6.5 per cent if calculated on an arithmetic mean basis and a range of 4.0-4.9 per cent if calculated on a geometric mean basis (Table 5.2). Under current market conditions, the historical returns produce a MRP estimate of 6.0 per cent from within the range.[345]

Table 5.2 MRP estimates based on historical excess returns

Sampling period	Arithmetic mean	Geometric mean
1883–2013	6.3	4.9
1937–2013	6.0	4.1
1958–2013	6.5	4.0
1980–2013	6.4	4.0
1988–2013	5.9	4.1

Source: AER, *TransGrid draft decision, Attachment 3: Rate of return*, November 2014, p. 3 - 288.

- Survey evidence - surveys of market practitioners consistently supported 6 per cent as the most commonly adopted value for the MRP. During the development of the AER's 2013 WACC guideline, the evidence from a review of relevant surveys supported an MRP of 6 per cent.[346] The AER has updated its surveys in the 2014 draft decisions which still supported an MRP of 6 per cent. The mean and median MRP across a number of surveys is more supportive of an MRP of 6 per cent as opposed to 6.5 per cent as indicated in the table below (Table 5.3).[347]

Table 5.3 Key findings of MRP survey

Survey	Numbers of responses	Mean (%)	Median (%)	Mode (%)
Fernandez et al (Jan 2013)	73	5.9	6.0	N/A
KPMG (2013)[b]	19	N/A	6.0	6.0
Fernandez et al (June 2013)	17	6.8	5.8	N/A
Asher and Hickling (2013)	46	4.8	5.0	6.0
Fernandez et al (2014)	93[a]	5.9	6.0	N/A

Sources: Fernandez, Arguirreamalloa and Corres, *Market Risk Premium used in 82 Countries in 2012*, IESE Business School, January 2013; KPMG, *Valuation Practices Survey 2013*, February 2013; Fernandez, Arguirreamalloa and Linares, *Market Risk Premium and Risk Free Rate used for 51 countries in 2013*, IESE Business School, June 2013; Asher and Hickling, *Equity Risk Premium Survey*, Actuary Australia, December 2013; Fernandez, Linares, Acín, *Market Risk Premium used in 88 countries in 2014*, IESE Business School, June 2014.

344 Australian Competition Tribunal, *Application by Envestra Ltd (No 2) [2012] ACompT 3*, 11 January 2012, paragraphs 152–155.

345 AER, *TransGrid transmission determination 2015–16 to 2017–18 draft decision – Attachment 3: Rate of return*, November 2014, p. 3 - 288; AER, *Better Regulation Explanatory Statement – Rate of Return Guideline*, December 2013, p. 95.

346 AER, *Rate of Return Guideline (Appendices)*, December 2013, p. 92.

347 AER, *TransGrid draft decision – Attachment 3: Rate of return*, November 2014, p. 3 - 298.

Notes: a) The 2014 survey did not report the response rate. AER staff obtained this information from Professor Fernandez via email correspondence on 22 July 2014.
b) While this survey had 23 market participants, 19 specified what MRP they used.

- Conditioning variables – the AER considered three types of conditioning variables as they may provide useful insights into market conditions: dividend yields, credit spreads and implied volatility. Most recent evidence suggests market conditions are relatively stable which supported an MRP of no greater than 6 per cent. [348]
- Recent Australian Competition Tribunal decisions - in a series of recent decisions, the Australian Competition Tribunal has not found error in a MRP estimate of 6.0 per cent. These include, the APA GasNet appeal, the Dampier to Bunbury Natural Gas Pipeline (DBNGP) appeal, the WA Gas Networks (WAGN) appeal and the Queensland/South Australia gas appeal.[349] Similarly, the Australian Competition Tribunal found no error in the Economic Regulation Authority's (ERA) decisions for ATCO Gas Australia's (formerly WAGN) and DBNGP's access arrangements.[350] In both these decisions, the ERA considered the available information and exercised its judgement to determine the appropriate MRP. The Australian Competition Tribunal subsequently found no error in the ERA's determination of a 6 per cent MRP.
- An MRP of 6 per cent is consistent with previous ACCC decisions for the regulated fixed line telecommunications services.[351]
- An MRP of 6 per cent gives less weight to the DGM, given the concerns discussed below. [352]

The ACCC notes that Telstra's proposal of a 6.5 per cent MRP relied largely on certain evidence (i.e. DGM) from the AER December 2013 WACC guideline.

However, the ACCC notes that the AER has not used DGM estimates of the MRP to determine the return on equity in any regulatory decision prior to its 2013 WACC guideline.[353] In addition, previous decisions considered that dividend growth model estimates were highly contentious and could not be estimated with precision for Australian markets.[354]

Further, the ACCC notes that the AER gave weight to the DGM in determining the MRP for the 2013 WACC guideline due to changes in its regulatory framework:

- In November 2012, the Australian Energy Market Commission (AEMC) made significant changes to the WACC framework under the National Electricity Rules and National Gas Rules. This change has resulted in the AER developing a new WACC approach and accompanying guideline, which was published in December 2013. For the purpose of estimating the return on equity including MRP, this involves the consideration of a number of alternative models and information sources.[355]

---

348 AER, *TransGrid draft decision – Attachment 3: Rate of return*, November 2014, p. 3-117.

349 Australian Competition Tribunal, *Application by APA GasNet Australia (Operations) Pty Limited (No 2) [2013] ACompT 8, 18 September 2013, paragraphs 227-308*; Australian Competition Tribunal, *Application by WA Gas Networks Pty Ltd (No 3) ACompT 12*, 8 June 2012, paragraphs 105–8; Australian Competition Tribunal, *Application by DBNGP (WA) Transmission Pty Ltd (No 3) [2012] ACompT 14*, 26 July 2012, paragraphs 161–3; Australian Competition Tribunal, *Application by Envestra Limited (No 2) [2012] ACompT 4*, 11 January 2012, paragraphs 145 and 148.

350 Australian Competition Tribunal, *Application by WA Gas Networks Pty Ltd (No 3) ACompT 12*, 8 June 2012, paragraphs 105–8; Australian Competition Tribunal, *Application by DBNGP (WA) Transmission Pty Ltd (No 3) [2012] ACompT 14*, 26 July 2012, paragraphs 161–3.

351 For example, ACCC, *Unconditioned local loop services – pricing principles and indicative prices,* June 2008, p. 17; ACCC, *2011 FADs final report*, July 2011.

352 The DGM method examines the forecast future dividends of businesses and derives the return on equity that makes these dividends consistent with the market valuation of the equity of those businesses

353 AER, *Rate of Return Guideline – Consultation Paper*, May 2013, p. 139.

354 See, for example: AER, *Draft decision, SPI Networks (Gas) Pty Ltd, Access arrangement final decision, 2013–17, Part 3,* September 2012.

355 AER, R*ate of Return Guideline*, December 2013, pp. 14 & 72.

- Subsequently, the 2013 WACC guideline determines that input parameter estimates for the foundation model under the AER's approach — the Sharpe–Lintner CAPM will be informed by the Black CAPM and dividend growth model estimates. These parameter estimates will also have regard to other theoretical and empirical evidence.[356]
- In determining an MRP of 6.5 per cent in the 2013 WACC guideline, the AER gave greatest consideration to historical estimates. DGM estimates were also given consideration.[357] In determining the MRP of 6.5 per cent in its recent TransGrid draft decision, consistent with its guideline, the AER considered its DGM estimate of the MRP along with a range of theoretical and empirical evidence (historical excess returns, survey evidence and conditioning variables).[358]

The ACCC also notes the following concerns identified with the DGM in AER's 2013 WACC guideline and its TransGrid draft decision:

- There are practical limitations with using DGM estimation method for the MRP. In particular, DGM estimates are highly sensitive to the assumptions used. The AER has noted that its primary concern with using DGM estimates is the sensitivity of the estimates to assumptions about the long term growth rate and the time it takes to reach the long term growth rate.[359]
- In essence, DGMs use assumptions about one unobservable variable (expected growth in future dividends) to derive values for another unobservable variable (expected return on equity). Therefore, the outcome of any DGM will depend crucially on the assumptions the analyst implementing the model uses. If these do not hold, a DGM may generate erroneous results.[360]
- The DGM requires strong assumptions (for example, the term-structure of the discount rate, the trajectory of expected future dividends, the assumption that at each point of time the price of equity equals its fair value) about unobservable input variables (for example, the expected long-term growth rate of future dividends) when estimating the MRP.[361] There is considerable uncertainty about the appropriate estimate of these input variables.[362] The results (estimated from the DGM) are also highly sensitive to the estimate of these variables compared to MRP estimated from historical excess returns which may result in significantly different end results from small changes in input variables (Table 5.4 below).[363]

356 AER, *Rate of Return Guideline*, December 2013, pp. 14 & 75.
357 AER, *Explanatory Statement – Rate of Return Guideline*, December 2013, p. 14, pp. 137–138.
358 AER, *TransGrid draft decision – Attachment 3: Rate of return*, November 2014, p. 3- 287.
359 AER, *Explanatory Statement – Rate of Return Guideline (Appendices)*, December 2013, p. 128.
360 ibid., p. 172.
361 AER, *Explanatory Statement – Rate of Return Guideline (Appendices)*, December 2013, p. 115; AER, *TransGrid draft decision – Attachment 3: Rate of return*, November 2014, pp. 3- 57–61.
362 AER, *Explanatory Statement – Rate of Return Guideline*, December 2013, p. 90; AER, *TransGrid draft decision – Attachment 3: Rate of return*, November 2014, pp. 3- 57–61.
363 ibid., p. 3- 326.

Table 5.4 Range of MRP estimates for excess returns and DGM

Estimation methods	Range of estimates in December 2013 WACC guideline	AER 2014 draft decisions values
Arithmetic mean of historical average excess returns	5.7–6.3	5.9–6.5
Geometric mean of historical average excess returns	3.6–4.8	4.0–4.9
DGM	5.9–9.6	6.6–7.8

- The DGM generates a market cost of equity that tends to be excessively 'sticky'. This is because (i) dividends follow slowly with changes in profits, and are particularly 'sticky' downwards[364] and (ii) the DGM makes strong assumptions about the term-structure of the cost of equity. Consequently, the DGM tends to over-estimate the MRP in low interest rate environments and under-estimate the MRP in high interest rate environments.[365]
- The DGM tends to over-estimate the cost of equity and thus the MRP as analysts tend to over-predict dividends.[366] As noted above, future dividends are key input to DGM.
- The ACCC is not persuaded by Telstra's argument that the MRP (of 6.0 per cent) from the AER's historical average excess returns is 'conservative' because the AER uses 'conservative' data. The AER has noted that the NERA adjustments are not 'warranted, nor does it lead to a material improvement in the quality' of the data.[367] The ACCC also notes that the AER has a number of concerns with the NERA adjustments, which include:[368]
- It appears that NERA has used different data to the Lamberton's data used by the AER in forming the adjustment (and finding).[369] Therefore, any adjustment to the AER's data based on NERA's finding is 'unlikely to be appropriate'.
- NERA has used annual data whereas Lamberton's data is quarterly.
- NERA chose seven data points out of the 300 quarters available during the Lamberton's data period to support its finding and adjustments. The AER considered such 'fine detail about accuracy…unachievable'.

5.3.1.3 Equity beta

The equity beta (a measure of systematic risk) is measured by the standardised correlation between the returns of a firm with the returns of the overall market. Systematic risks are those that investors cannot diversify away from. A firm's exposure to these risks depends on its business activities and its level of financial leverage.

Regulators adopt a value for the equity beta that is expected to best represent the systematic risk profile of an efficient business operating in the same industry. This provides the regulated

364 McKenzie, Partington, *Report to the AER, Part A: Return on equity*, October 2014, pp. 29–30.
365 AER, *TransGrid draft decision – Attachment 3: Rate of return*, November 2014, pp. 3 - 343–344.
366 ibid., pp. 3- 343 –346.
367 ibid., pp. 3-292.
368 ibid., pp. 3-293.
369 The AER's historical average excess return considered a range of data which includes data constructed by Don Lamberton for stock prices (covering the period up to December 1957) and yield (covering the period 1882-1955).

business with the necessary incentives to undertake only those capital investments that are expected to earn an appropriate return.

Previous ACCC approach

The ACCC adopted an equity beta of 0.7 in the 2011 FADs and the 2013 Wholesale ADSL FAD based on the following considerations:[370]

- A value of 0.7 is consistent with benchmark estimates of long-term (5 year weekly and monthly) equity and asset betas[371] for comparable telecommunication firms from the selected OECD countries. The average benchmark equity beta estimate ranged from 0.596 to 0.664.
- The benchmark asset and equity betas (and the estimated betas for Telstra) from Bloomberg are whole of business measures, not just for fixed-line services. The ACCC considered that the systematic risk associated with fixed line services would likely be significantly less than other business lines such as mobile communications and international services. In addition, since firms in the benchmark sample provide services using both fixed and mobile networks, the benchmark asset beta is likely to be higher than the asset beta for Telstra's fixed line network alone.
- Empirical evidence for the equity beta of Australian regulated energy network service providers indicated a range between 0.41 and 0.68.[372]
- An equity beta of 0.7 was substantially higher than the ACCC's estimate of Telstra's 5 year monthly equity beta of 0.301, which was undertaken in June 2011.
- The ACCC's previous estimate of Telstra's equity beta (prior to the 2011 FADs) of 0.8 was conservative.

Submissions

Telstra submitted that the ACCC should adopt an equity beta estimate of at least 0.8 based on the following considerations:[373]

- It would be unreasonable to maintain the equity beta at 0.7 which is towards the lower end of the current range of equity beta values (0.7 to 1.29) for regulated infrastructure business in Australia. Telstra noted that 0.7 is 'below or in line with current equity betas for regulate energy and water businesses' but 'lower than the equity beta' for Aurizon Network (0.8), ARTC Interstate (1.29) and DBCT (1.0).
- Telstra is more exposed to systematic risk than most regulated infrastructure businesses for the following reasons: [374]
    - Differences in the nature of services, in particular higher income elasticity of demand for telecommunications services. Telstra noted that the 'average income elasticity across fixed line services is close to 1 while the 'income elasticity of demand for energy of around 0.3 in most parts of Australia'.[375]
    - The regulatory framework for Telstra's fixed line services leads to more risk compared to those in other regulated industries. Telstra noted that price cap regulation results in Telstra 'bearing significant risks of any difference between actual and forecast demand'. Telstra stated that many regulated energy businesses are 'subject to a revenue cap form of regulation, under which the

370 ACCC, *2011 FADs final report*, pp. 64–66.

371 Asset betas are converted from observed equity beta to remove the effect of leverage. This is an estimate of what the beta of the firm would be if it had no debts.

372 AER, *Electricity transmission and distribution network service providers–Reviews of the weighted average cost of capital (WACC) parameters: Final decision*, May 2009, p. iv.

373 Telstra, *Main submissions (confidential)*, 3 October 2014, pp. 86–90.

374 ibid., pp. 87.

375 Telstra, *ULLS Undertaking: Weighted Average Cost of Capital Submission*, 4 April 2008, pp. 37–38; AEMO, *2013 Forecasting Methodology Information Paper: National Electricity Forecasting*, Table 2–3.

business is protected from demand risk through a revenue true-up mechanism'. Telstra added that, relative to other regulated businesses, the absence of unders/overs adjustment for expenditures and cost pass-throughs increases expenditure risk and the risk of unforeseen events.

- Its empirical evidence supports an asset beta of at least 0.5 based on a 5–year average measure, which implies an equity beta of at least 0.8, at Telstra's assumed gearing level of 0.45.[376]
- Telstra claims that its risk exposure has increased since 2011 because its asset beta estimate at June 2014 has increased to 0.67.[377]
- Telstra noted that the Sharpe-Lintner CAPM is likely to under-estimate the required return on equity for low-beta stocks due to bias and may not take into account all factors affecting stock return. Telstra submitted that the AER's approach for equity beta should be adopted to address this limitation.[378]

Telstra has also provided a spreadsheet containing calculations for its updated benchmarking of asset and equity betas in its response to the ACCC's information request.[379]

Frontier submitted that an equity beta of 0.7 is an overestimate for Telstra's declared fixed line services, for the following reasons: [380]

- The ACCC's benchmarking study is likely to over-estimate Telstra's fixed line beta, given that this study estimated overall (firm-wide) betas for Telstra, which supplies a combination of fixed line and non-fixed line services.
- In setting an equity beta of 0.7, gearing should be taken account when considering evidence on betas from the AER. Frontier submitted that if the different gearing assumptions between the AER (60 per cent) and ACCC (40 per cent) were accounted for, the re-levered equity beta would be 0.47.

ACCC draft decision

The ACCC's proposes to maintain the equity beta at 0.7 based on the following available empirical evidence:

- International benchmarking evidence.
- Updated asset and equity betas for Telstra.

Each source of evidence and the ACCC's consideration are discussed below.

International benchmarking

The ACCC notes that international benchmarking of beta estimates for comparable telecommunications firms supports an equity beta of 0.7. An update of the international benchmarking estimates from the 2011 FADs (using the same methodology) indicates that the average 5 year monthly equity beta is 0.67 and the equivalent weekly beta is 0.71 (table below) which yields an average of 0.71.

376 Telstra, *Main submissions (confidential)*, 3 October 2014, pp. 88–90.
377 ibid., p. 90.
378 ibid.
379 Telstra, *Fixed line services final access determination inquiry: ACCC request for information – Annexure 2*, 30 January 2015.
380 Frontier, *Submission of the final access determinations for fixed line services–a report prepared for the Competitive Carriers' Coalition (public)*, October 2014, pp. 53–54.

Table 5.5 Updated benchmark estimates of equity and asset betas across OECD countries[381]

	5 Year monthly equity beta	5 year weekly equity beta	5 year monthly asset beta	5 year weekly asset beta
AT&T Inc	0.41	0.59	0.29	0.42
CenturyLink Inc	0.58	0.63	0.32	0.34
Verizon Communications Inc	0.40	0.54	0.26	0.35
Cincinnati Bell Inc	1.24	1.23	0.28	0.28
BCE Inc	0.20	0.29	0.14	0.19
BT Group PLC	0.79	0.93	0.48	0.56
Telekom Austria AG	0.42	0.60	0.19	0.28
Telecom Italia SpA	0.91	0.88	0.26	0.25
Hellenic Telecommunications Organization SA	1.11	0.94	0.41	0.35
TDC A/S	0.31	0.44	0.18	0.26
Portugal Telecom SGPS SA	1.31	1.18	0.44	0.39
TeliaSonera AB	0.45	0.73	0.32	0.52
Telefonica SA	1.03	0.86	0.51	0.43
Deutsche Telekom AG	0.68	0.68	0.32	0.32
Orange SA	0.67	0.81	0.30	0.36
Koninklijke KPN NV	0.23	0.70	0.10	0.30
Swisscom AG	0.47	0.55	0.33	0.39
Nippon Telegraph & Telephone Corp	0.44	0.65	0.24	0.35
Singapore Telecommunications Ltd	0.63	0.70	0.55	0.61
PCCW Ltd	0.38	0.39	0.15	0.16
Bezeq The Israeli Telecommunication Corp Ltd	1.19	0.85	0.82	0.58
Spark New Zealand Ltd	1.24	1.43	0.93	1.07
Telstra Corp Ltd	0.34	0.45	0.26	0.34
Average	**0.67**	**0.74**	**0.35**	**0.40**

Source: ACCC analysis.

The ACCC notes Telstra's submission for an equity beta of 0.8 due to increased systematic risk exposure (based on a higher asset beta of 0.5) for telecommunications firms since the 2011 FADs. However, the ACCC has updated asset betas for comparable telecommunications firms (table below) and note that they are relatively similar to those from the 2011 FADs. This

[381] The equity beta of a firm is observed from market data and reflects the effect of that firm's leverage (debt). The asset beta of a firm adjusts that firm's equity beta to remove the effect of leverage. The ACCC's benchmarking approach requires the equity beta estimates sourced from Bloomberg to be de-levered and re-levered using the Monkhouse formula in order to compute comparable estimates of the equity beta.

indicates that risk exposure for comparable firms has remained stable since 2011 and supports an equity beta of 0.7.

Table 5.6 Updated international benchmarking of telecommunications firms by Telstra and the ACCC

Average estimates	2011 FADs	Telstra estimate (June 2014)	ACCC update (February 2015)
5 year monthly asset beta	0.34	0.54	0.35
5 year weekly asset beta	0.39	0.55	0.40

Source: ACCC analysis.

Telstra's equity and asset betas

The ACCC notes that Telstra has proposed an equity beta of 0.8 by noting that its systematic risk exposure has increased since the 2011 FADs.

The ACCC obtained Telstra's equity and asset betas at February 2015 using information from Bloomberg (Telstra's actual debt and equity ratio and equity beta over the same period) and the application of the Monkhouse formula (table below).[382] **Error! Reference source not found.**

Table 5.7 Comparison of Telstra's actual equity and asset betas

Telstra equity and asset betas	2011 FADs	ACCC update (February 2015)
5 year weekly equity beta	0.43	0.45
5 year weekly asset beta	0.32	0.34

Source: ACCC analysis.

Based on this analysis, the ACCC notes that Telstra's risk exposure is unlikely to have increased materially since 2011 because the ACCC's updated equity and asset beta estimates for Telstra are relatively stable compared to those from the 2011 FADs. The ACCC is therefore not persuaded at this stage that systematic risk exposure has increased materially for Telstra since the 2011 FADs.

The ACCC also notes that the updated equity and asset betas for Telstra lie at the lower end of the international benchmark range which suggest that Telstra's risk exposure is likely to be lower than for comparable international telecommunications firms.

ACCC draft decision

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

The ACCC's draft decision is to maintain a value of 0.7 for Telstra's equity beta. The ACCC notes that 0.7 appears to fall within a reasonable range for Telstra's equity beta for the following reasons:

- An update of Telstra's equity and asset betas indicates that sensitivity to systematic risk for Telstra has declined since 2011**Error! Reference source not found.**.
- Updated international benchmarking of comparable telecommunications firms supports an equity beta of 0.7.
- Asset betas for comparable firms internationally appear to have remained stable since the 2011 FADs.
- The ACCC continues to consider that the equity beta for fixed line services would be lower than that of business lines such as mobile communications. Since Telstra and international comparable firms provide services using both fixed and mobile networks, the benchmark asset and equity betas are likely to be higher than those for Telstra's fixed-line network alone.

The ACCC has considered Telstra's submission for an equity beta of 0.8. However, the ACCC is unable to have confidence in this submission at this stage for the following reasons:

- In considering Telstra's equity and asset betas, the ACCC has accounted for Telstra operating within a dividend imputation tax system through applying the Monkhouse formula to convert Telstra's equity betas to asset betas. The same formula is used in the ACCC's international benchmarking to draw closer comparison with comparable international telecommunications firms.

  [c-i-c starts] [redacted] [c-i-c ends]

- One Telstra argument for an equity beta of 0.8 is based on asset betas increasing from 0.39 (in the 2011 FAD inquiry) to at least 0.5 in June 2014 and provided supporting calculation in its January 2015 response to the information request.[385] [c-i-c starts]

[383] Telstra, *Fixed line services final access determination inquiry: ACCC request for information–Annexure 2,* 30 January 2015. Based on the Monkhouse formula, the amount of imputation tax credits offered by a firm operating within a dividend imputation system has a positive relationship with that's firm equity beta.

[384] AER, *TransGrid draft decision – Attachment 3: Rate of return*, November 2014, p. 3-84.

[385] Telstra, *Main submissions (confidential)*, 3 October 2014, p. 88.

[c-i-c ends]

On Telstra's risk exposure for fixed line services compared to other regulated infrastructure businesses (particularly, the regulated energy businesses), the ACCC considers that it would not be appropriate to conclude that Telstra necessarily faces materially higher risk exposure due to its regulatory framework for the following reasons:

- The AER applies revenue-cap and price–cap regulation for its regulated energy businesses while the ACCC has generally applied price-cap regulation for the declared fixed line services.[388] However, previous AER studies suggest that a regulated firm's systematic risk exposure is not necessarily affected by the decision between revenue-cap and price-cap regulation.[389]
- Under a price-cap regulation, the revenue impact as a result of the difference between the actual and forecast demand would be symmetrical for Telstra in the long run. Telstra keeps the benefit if actual demand is more than forecast demand and bears any losses if actual demand is less than forecast demand.
- Not implementing unders/overs may incentivise efficient and prudent expenditure.[390]
- The risk (and cost) of unforeseen events should be reflected in the prudent and efficient costs in Telstra's expenditures allowance and would be most likely industry and firm-specific.

Telstra submitted that the ACCC should consider differences in the nature of services supplied by Telstra and other regulated businesses in considering systematic risk exposure and noted that the income elasticity for fixed-line services is higher than those for energy. However, the ACCC does not find Telstra's argument persuasive for the following reasons:

- The study on income elasticity noted by Telstra is unlikely to be relevant to the FSR FAD process because it is outdated (the study is from 1994). Telstra has not explained why it would remain accurate or relevant given significant changes in the telecommunications market since 1994.

---

386 Bloomberg provided the following explanation: 'the adjusted beta is an estimate of a security's future beta. It uses the historical data of the stock, but assumes that a security's beta moves toward the market average over time.' The formula is as follows:
Adjusted beta = (.67) * Raw beta + (.33) * 1.0
http://guides.lib.byu.edu/content.php?pid=53518&sid=401576

387 Telstra, *Fixed line services final access determination inquiry: ACCC request for information – Annexure 2*, 30 January 2015.

388 ibid.

389 AER, *2009 WACC guideline*, p. 341.

390 That is, no adjustments will be made for 'unders or overs' in actual expenditure, compared to forecast expenditure, during the regulatory period.

- The ACCC considers that the assessment of systematic risk exposure, as measured by the beta, should be considered in the context of the regulated business and industry. Therefore, a one-off study into income elasticities not specifically on the underlying regulated network is unlikely to produce sufficient evidence to form a view on a point estimate for the equity beta for the regulated network.

The ACCC has considered Frontier's submission and notes the following:

- The ACCC noted in the 2011 FADs decision that the ACCC's benchmarking estimates are based on firm-wide betas.[391] In forming a view on the equity beta, the ACCC has considered and recognised the difference in systematic risk exposure between fixed line and non-fixed line operations. In addition, the ACCC had regard to a range of factors (empirical evidence and information provided in submissions) in determining an equity beta of 0.7.
- Consistent with the 2011 FADs, the ACCC has adopted Telstra's five year average gearing ratio (from Bloomberg) to estimate equity beta for Telstra. The ACCC has not used the AER's gearing assumption (60:40) or the AER's beta estimates to estimate Telstra's equity beta.

5.3.1.4 Equity issuance costs

Equity issuance costs are the fees associated with issuing new equity capital.

Previous ACCC approach

The ACCC previously determined that Telstra should not be compensated for equity issuance costs in the WACC.

Equity issuance costs are only incurred when a business raises equity capacity and that Telstra should not be compensated for costs it has not incurred. Equity issuance costs should therefore be recovered as a cash flow (operating expenditure) allowance when a business raises equity capital.[392]

ACCC draft decision

The ACCC's draft decision is to maintain the previous ACCC approach for equity issuance costs. The ACCC also notes that submissions to the previous FADs did not oppose this approach.

5.3.2 Cost of debt

5.3.2.1 Debt risk premium

The debt risk premium (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, term of the debt and other factors.

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 YTM on the chosen risk-free proxy (for example, the 10 year CGS bond yields). The ACCC has previously used YTM from a benchmark bond index (Bloomberg's A-rated cost of debt benchmark–the fair yield curve) to estimate Telstra's DRP.[393]

---

391 ACCC, *2011 FADs final report*, July 2011, p. 64.
392 ibid., p. 67.
393 ACCC*, 2011 FADs discussion paper*, April 2011, p. 96.

Bloomberg ceased publishing A-rated fair value curves beyond seven years as of August 2009. However, Bloomberg has started publishing another source of benchmark cost of debt – the Bloomberg Valuation Service (BVAL) curve – in November 2013, with seven years as the longest term.

In considering the DRP, the ACCC does not propose to change the 10-year term-to-maturity and A-rated requirement for the chosen debt proxy. The ACCC will also continue to estimate the DRP as the difference between the YTM on the 10-year A-rated AUD bond yields and the YTM on the 10 year CGS bond yields.

Previous ACCC approach

The 2011 FADs used a single long-term A-rated AUD Telstra bond as the debt proxy due to the absence of a benchmark A-rated bond debt proxy.[394] The 2013 Wholesale ADSL FAD used an average of three long-term A-rated AUD Telstra bonds (including the one used in the 2011 FADs) as the debt proxy because Telstra has issued more bonds since the 2011 FADs.

The DRP was estimated as the difference between the 20 business day average of the yield on the debt proxy and the corresponding average yield on the 10 year CGS.

Submissions

Telstra has proposed to use the RBA non-financial 10 year A-rated corporate bond yield as the debt proxy/corporate bond yield for estimating the DRP.[395] Telstra estimated a yield of 5.05 per cent (and consequently, a DRP of 1.4 per cent) based on a 20 business-day averaging period ending 30 June 2014.

Telstra stated a number of reasons for using the RBA estimate, including: [396]

- The RBA estimate is consistent with previous ACCC decisions. It reflects the yield on corporate bonds with credit rating (A-rated) reflective of risks faced by Telstra (also A-rated) and remaining term-to-maturity (TTM) reflective of efficient financing practice for infrastructure business.
- It is a more transparent and verifiable source of data compared to alternative third party data (Bloomberg BVAL) and does not require extrapolation.

Telstra submitted that the previous ACCC approach for estimating the DRP is not appropriate for the following reasons:

- The RBA estimate provides a reputable financial market data source for estimates of the yield on the chosen debt proxy which was not available during the 2011 FADs.
- There are no longer any domestically issued Telstra bonds with remaining TTM relatively close to 10 years.
- Telstra submitted that it is more appropriate to use a benchmark index where available to estimate yield on benchmark debt proxy. Telstra noted that individual bonds can be affected by various factors and that an index is a more complete picture of prevailing market conditions.[397]
- Telstra also noted that the Australian Competition Tribunal has rejected methodologies which give greater weight to particular bonds issued by individual businesses on the basis that the return on debt should be a benchmark measure, reflecting the costs of a benchmark efficient service provider.

ACCC draft decision

394 ACCC, *2011 FADs final report*, July 2011, p. 68.
395 Telstra, *Main submissions (confidential)*, 3 October 2014, p. 82.
396 ibid.
397 ibid., p. 83.

The ACCC's draft decision is to adopt a Telstra-specific nominal bond rate to estimate the cost of debt for the following reasons:

- The FLSM is intended to estimate the cost of supplying the fixed line services over Telstra's fixed line network and Telstra is the only supplier of these services. The use of a Telstra-specific approach is likely to give a more accurate estimate of Telstra's efficient cost of debt. Telstra is incentivised to minimise costs due to the majority of its revenue and costs being un-regulated, as Telstra has noted in its submission on its capital expenditure forecasts.[398] Further, Telstra's ability to inflate the secondary market yield of its bonds is also limited. There are also no close comparators or benchmark to Telstra as it is the sole operator of the only ubiquitous fixed line network in Australia and the only supplier of the declared fixed line services. As Telstra would have no incentive to operate inefficiently with respect to debt issuance, Telstra could be considered the benchmark firm. In addition, Telstra has incentives to be efficient in order to compete for investor funding on the market.
- A range of factors can affect the yield on firms' bonds (e.g. expected loss in case of default, embedded options, etc.) in addition to their credit rating, as recognised by Telstra.[399] The bonds included in the benchmark (RBA and BVAL) indices[400] are unlikely to be good comparators for Telstra bonds despite similar credit ratings due to differences in those factors.
- The use of Telstra's bond yield would be consistent with the approach in the 2011 FADs and the 2013 Wholesale ADSL FAD.[401]
- The AER's approach of using an independent third party was driven by the implementation of automatic updating of a trailing average of the cost on debt as required by the National Electricity Rules (NER)/ National Gas Rules (NGR)[402]. The ACCC notes that Telstra has not proposed to depart from the current approach (average of 20 business days) and has in fact opposed a trailing average and annual updates.

The ACCC notes the AER's approach in its 2014 draft decisions of estimating DRP using a third party benchmark measure of the cost of debt.[403] However, the ACCC considers that it may not be relevant for Telstra for the following reasons:

- In the context of the regulated fixed line services, Telstra may be considered 'the benchmark efficient service operator' with respect to debt issuance. This is because the combination of Telstra being incentivised to minimise costs (see dot point above) and using secondary market data on Telstra bonds is more likely to reflect Telstra's efficient cost of debt.
- Even if the secondary market return on Telstra's debt is used, Telstra is incentivised to minimise costs (including cost of debt) [c-i-c starts] [redacted] [c-i-c ends] unlike the regulated energy

398 Telstra, *Main submissions (confidential)*, 3 October 2014, pp. 49–50.

399 ibid., p. 83.

400 RBA does not provide publicly available information on the exact underlying bonds used for its A-rated corporate bond index construction. Instead it publishes criteria for bonds to be included in its index (which amongst other criteria, includes foreign currency bonds): http://www.rba.gov.au/publications/bulletin/2013/dec/3.html
Bloomberg also publishes its bond selection criteria and provides on-the-day information on the underlying bonds used to construct its BVAL curves but does not keep historical records of these bonds.
As a Bloomberg search showed there is only one A-rated, AUD telecommunications bond (a Telstra bond maturing on 19 December 2023 with Bloomberg ID EI9022241) with a term-to-maturity close to 10 years at 17 February 2015, neither RBA nor BVAL curves appear to be good comparators for Telstra's cost of debt.

401 ACCC, *2011 FADs final report*, July 2011, p. 68; ACCC, *2013 Wholesale ADSL FAD final report*, May 2013, p. 38.

402 AER, *Explanatory Statement–Rate of return guideline*, December 2013, p. 47.

403 AER, *TransGrid draft decision – Attachment 3: Rate of return*, November 2014, pp. 3 – 152–153.

404 Telstra, *Final Access Determinations inquiry – confidential response to information request under the BBM RKR*, 25 November 2013, p. 35.

businesses where the bulk of a firm's revenue is regulated. This would also apply to the primary market return.

- The AER has noted that using third-party data to estimate the benchmark cost of debt would likely involve adjustments such as extrapolation (to the 10-year term-to-maturity) and interpolation (to daily estimates) to match the debt proxy.[405] This will be less likely to reflect Telstra's cost of debt because the adjustments may not necessarily fully reflect Telstra's gearing level, its credit rating, term of the debt and other factors.

In implementing the previous approach to estimating the DRP, the ACCC proposes to consider a range of sources for yield on Telstra bond:

- Telstra BVAL (TBVAL)[406]
- Telstra bond with TTM closest to 10 years[407]

The ACCC has obtained information from Bloomberg on the methodology and data used to derive yields for TBVAL and the Telstra bond. Bloomberg has explained that due to lack of market data, a methodology (similar to that used to construct TBVAL but with a few small adjustments) is used to derive yield for the Telstra bond with TTM closest to 10 years. The ACCC therefore proposes to use TBVAL over the same averaging period as the risk free rate, to estimate the yield on the debt proxy because TBVAL has data to match the 10 year TTM requirement for the debt proxy.

The ACCC notes that Telstra's credit rating and bond yield take into account the overall characteristics of Telstra, not just the regulated fixed line services. Therefore, to the extent that the regulated services are less risky than the rest of Telstra – and to the extent that it has an effect on bond yield/credit rating, the proposed approach would be likely to over-compensate Telstra by giving them the market return on Telstra's bond.

Based on the ACCC's proposed approach, the DRP (for the 20 business-day averaging period ending 13 February 2015) is estimated to be 0.94 per cent.

The ACCC notes Telstra's proposal for using the RBA information to estimate the DRP. However, the ACCC considers that there are limitations with Telstra's proposal and it would not be appropriate for the following reasons:

- The FLSM is intended to estimate the cost of supplying the declared fixed line over Telstra's fixed line network. As noted above, a benchmark measure (such as the RBA 10-year A-rated yield) is unlikely to be representative of Telstra's efficient cost of debt due to:
    - A lack of close comparators to Telstra.
    - Telstra's incentive to minimise debt costs and a range of factors impacting a firm's bond yield (despite similar credit ratings).
- The AER has noted that extrapolation and interpolation are required to implement the RBA information.[408] As noted above, this will be less likely to reflect Telstra's cost of debt because the adjustments may not necessarily fully reflect Telstra's gearing level, its credit rating, term of the debt and other factors.
- Telstra can be considered the benchmark efficient service provider with respect to debt issuance as discussed above. However, these conditions do not exist for the regulated energy service providers. Therefore, the AER needs to consider benchmark third party measures of the cost of debt for a conceptual efficient benchmark service provider.

---

405 AER, *TransGrid draft decision – Attachment 3: Rate of return*, November 2014, pp. 3-223–229.

406 Bloomberg has made a Telstra specific BVAL (TBVAL) curve available for public access on 16 October 2014 so information is available for 20 business days ending 13 February 2015. This yield curve was previously used internally by Bloomberg.

407 A Bloomberg search showed there is only one A-rated, AUD Telstra bond (Bloomberg ID EI9022241) with a term-to-maturity close to 10 years (maturing on19 December 2023 with 8.84 years) at 17 February 2015.

408 AER, *TransGrid draft decision – Attachment 3: Rate of return*, November 2014, pp. 3-223–229.

5.3.2.2 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 in the WACC.[409] This approach was adopted following recommendations by the ACG in a report for the ACCC in the context of decisions made regarding regulated gas and electricity businesses.

Previous ACCC approach

The ACCC estimated debt issuance costs in previous FADs using a methodology devised by the ACG and the following considerations:[410]

- Debt issuance costs should vary depending on the amount of debts on issue. Increasing the amount of debt on issue would result in lower debt issuance costs due to economies of scale. Telstra's costs were expected to be at the lower range of estimates because it would issue a greater amount of debt as it is larger than a typical gas and electricity company.[411]
- Debt issuance costs should be set assuming six debt issues of $500 million.[412]

Submissions

Telstra submitted that the previous ACCC approach should be retained to estimate the debt issuance costs.[413] No other submissions were received on debt issuance costs.

ACCC draft decision

The ACCC's draft decision is to maintain the previous ACCC approach for estimating debt issuance costs and note that submissions did not oppose this ratio in previous FADs.[414] The ACCC also notes that Telstra supported the previous ACCC approach for estimating debt issuance costs.

5.3.3 Imputation factor (gamma)

The gamma parameter represents the value of tax credits, otherwise referred to as imputation credits, generated by the regulated business that could be distributed in the form of franked dividends to shareholders.

Gamma has generally been defined for regulatory purposes as the utilisation rate multiplied by the imputation payout ratio:[415]

$$\gamma = \theta * F$$

where γ = gamma

θ = (theta) the utilisation rate of imputation credits represents the per dollar value of a distributed imputation credit

409 ACCC, *2011 FADs final report*, July 2011, p. 70.
410 ACCC, *2011 FADs final report*, July 2011, p. 70.
411 ACCC, *2011 FADs discussion paper*, April 2011, p. 99.
412 ibid.
413 Telstra, *Main submissions (confidential),* 3 October 2014, p. 84.
414 ACCC, *2011 FADs final report*, July 2011, p. 70.
415 John Handley, *Report prepared for the AER – Advice on the value of imputation credits*, 29 September 2014, p. 3.

F = the imputation payout ratio is the proportion of imputation credits distributed to shareholders

In determining the WACC, the regulated business' capacity to pay imputation credits with dividends must be taken into account to avoid over-compensation.[416] There are two methods of taking into account the reduction in the revenue requirement to the regulated business that results from shareholders' receipt of imputation credits:

- reduce the WACC provided to the regulated business, or
- account for the impact by adjusting the estimated corporate tax liabilities.

As the ACCC uses a vanilla WACC in the FLSM, the gamma is then used to capture all tax effects, including imputation benefits, in the cash flows and tax liabilities estimated by the FLSM.

Previous ACCC approach

The ACCC had regard to a range of considerations in the 2011 FADs, including:[417]

- Section 8BG (a) of *Telstra Corporation Act 1991* restricts foreign ownership of Telstra to a maximum of 35 per cent. Since imputation credits are redeemable only to Australian shareholders, this means that the theta for Telstra (at least a value of 0.65) is likely to be higher than the market-wide estimate (0.35) determined by Australian Competition Tribunal in 2011 for the AER's electricity distribution determinations for South Australia and Queensland.
- The ACCC's analysis of Telstra's payout ratio indicated an estimate of 0.99. In combination with the legislative constraints on Telstra's foreign ownership, this supported a Telstra gamma that is likely to be significantly higher than Telstra's proposed gamma of 0.25 for the 2011 FAD.
- The ACCC had regard to the Australian Competition Tribunal's decision on the value of the payout ratio, for the market as a whole, of 0.7.
- A dividend drop-off study was used by the Australian Competition Tribunal to set a gamma of 0.25 in 2011. The ACCC noted that there would be uncertainties with relying on a single market-based study. In addition, relying solely on market evidence may have implications for WACC parameters that are not based on market evidence.

Given the above uncertainties, without further long-term in-depth analysis of all factors affecting the gamma estimate, the ACCC was unable to determine a single point estimate. Consequently, the ACCC chose a gamma of 0.45 which is within the possible range of gamma estimates and had regard to the range of possible estimates, the ACCC's previous views, and the principles of regulatory certainty and predictability.

Submissions

Telstra has proposed a gamma of 0.25 based on a payout ratio of 0.7 and theta of 0.35.[418] Telstra submitted that 0.7 is the 'best estimate' of the payout ratio for the following reasons:

---

[416] Eligible shareholders are able to redeem imputation credits to reduce their personal tax liabilities means that part of the business' corporate tax payments represents pre-payment of personal tax on behalf of its shareholders. It is this pre-payment of personal tax that reduces the shareholders' personal tax liabilities or generates a tax refund. The personal tax benefits obtained from imputation credits effectively increase the rate of return received by shareholders from holding shares in the regulated business.
The total return to the shareholder will be the dividend plus the personal tax benefits from imputation credits. Shareholders will therefore be willing to accept a lower rate of return received in the form of dividends when they receive imputation credits with those dividends, compared to the rate of return required on shares that do not pay franked dividends.

[417] ACCC, *2011 FADs final report*, July 2011, pp. 75–76.

[418] Telstra, *Main submissions (confidential)*, 3 October 2014, p. 93.

- Consistency with a recent NERA study (and earlier studies) that the long term (cumulative) payout ratio is approximately 0.7.
- It is consistent with recent decisions by other regulators (e.g. the AER and the New South Wales Independent Pricing and Regulatory Tribunal (IPART)) and the Australian Competition Tribunal.

Telstra submitted that 0.35 is the 'best estimate' of the theta based on the 2011 and 2013 dividend drop-off studies from SFG. [419]

Telstra noted redemption rates and equity ownership rates have been used to estimate theta by the AER. It submitted that these measures are not relevant for estimating theta for the following reasons:

- Redemption rates and equity ownership rates 'indicate the upper bound for [theta]'. Telstra submitted that 'the value of [imputation credits]', 'as indicated by market evidence (particularly dividend drop-off studies)', is the 'most relevant' evidence for estimating theta.
- The Australian Competition Tribunal has previously observed that the AER's evidence (such as that provided by tax statistics) indicated an upper bound for theta.
- There is 'strong evidence that the value of imputation credits is significantly less than the face value of imputation credits or the rate of utilisation' due to reasons such as transaction costs, tax rules and empirical evidence.
- There are issues with the taxation statistics and other forms of evidence relied on by the AER.

Frontier Economics on behalf of the CCC submitted that, as gamma 'is not a sector-specific' parameter, it is 'unclear' why a different gamma was used for regulating telecommunications networks (0.45) compared to the AER's proposed value of 0.5 in its 2013 WACC guideline.[420]

ACCC draft decision

The ACCC's draft decision is to maintain the gamma at 0.45. The ACCC has had regard to Telstra-specific considerations related to its foreign ownership restriction and higher payout ratio. The ACCC has also had regard to the AER's 2013 WACC guideline and draft decisions for NSW, ACT, and TAS energy networks revenue determination in maintaining the gamma at 0.45:

- Due to legislative constraints, foreign ownership of Telstra is still restricted to a maximum of 35 per cent. This means that the utilisation rate across Telstra's shareholders is likely to be in the range of 0.65–1.
- Telstra's own payout ratio may be considered in estimating gamma. The ACCC's 2014 update of Telstra's payout ratio indicated an estimate of 0.98 (10 year average to 2013-14 of 0.98). In combination with the legislative constraint on Telstra's foreign ownership, this would support a Telstra gamma that is likely to be significantly higher than Telstra's proposed 0.25.
- The gamma of 0.5 noted in the 2013 WACC guideline is 'non-binding' on the AER because the guideline's aim was to 'provide sufficient detail' on the AER's approach and consideration for its 'rate of return objective'.[421] Following the guideline, the evidence considered by the AER's TransGrid draft decision[422] suggested a reasonable range of 0.3 to 0.5 and a value of 0.4.

---

419 Telstra, *Main submissions (confidential)*, 3 October 2014, p. 92.

420 Frontier, *Submission of the final access determinations for fixed line services–a report prepared for the Competitive Carriers' Coalition (confidential)*, October 2014, p. 56

421 AER, *Explanatory Statement-Rate of return guideline*, December 2013, p. 17.

422 AER, *TransGrid draft decision – Attachment 4: value of imputation credits*, November 2014, p. 4-21.

- Given Telstra's relatively high payout ratio, 0.45 is likely to be a conservative estimate as it is towards the upper end of the AER's range and higher than the adopted value of 0.4.
- In setting a gamma of 0.25, the Australian Competition Tribunal considered SFG's study but also indicated that further work was required on the gamma, that it would be open to consider a range of estimates for gamma and review its approach in the future.[423] The AER has considered and incorporated the Australian Competition Tribunal's comments and considered a range of approaches (tax statistics, equity ownership, implied market value approach) in reaching a range of 0.3–0.5. The ACCC's value of 0.45 is within the AER's range.

The ACCC has considered Telstra's proposal for a gamma of 0.25 and supporting evidence from SFG's dividend drop off study. However, the ACCC notes that evidence considered by the AER suggests that gamma is likely to be materially higher than 0.25:[424]

- The balance of evidence from the equity ownership approach suggested a range of 0.4–0.5 for gamma.
- The evidence from tax statistics suggests gamma could be lower than 0.4.
- The implied market values studies suggested a range of 0–0.8.
- To '[properly] use' SFG's estimate of the utilisation rate requires adjustments that result in the gamma increasing to 0.32.

The ACCC also notes that SFG's study may not provide the most accurate and appropriate estimate of theta. This is because, as the AER has noted, it is not 'reasonable to rely exclusively on the results of a single study from within the class of implied market value studies (that is, SFG's dividend drop off study)'.[425]

Consequently, a range of studies (e.g. implied market value studies, tax statistics and equity ownership) should be considered when estimating theta. The ACCC is therefore not persuaded by Telstra's argument that weight should not be given to other studies.

5.3.4 Gearing ratio

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.

Previous ACCC approach

The ACCC previously adopted a debt/equity ratio of 40:60 in the 2011 FADs and the 2013 Wholesale ADL FAD. This approach was consistent with the gearing ratio used in earlier fixed line services pricing decisions which noted that Telstra's debt ratio at the time of privatisation (when it more closely resembled a pure fixed line service operator) was 41.3 per cent.

ACCC draft decision

The ACCC's draft decision is to maintain the debt/equity ratio at 40:60 and note that submissions did not oppose this ratio in previous FADs. The ACCC's update of Telstra five year average gearing ratio (using Bloomberg data for 2009–10 to 2013–14 period) indicates a

[423] Australian Competition Tribunal, *Application by Energex Limited (Gamma) (No 5) [2011] ACompT 9*, May 2011; Australian Competition Tribunal, *Application by WA Gas Networks Pty Ltd (No 3) [2012] ACompT 12*, June 2012.
[424] AER, *TransGrid draft decision – Attachment 4: value of imputation credits*, November 2014, pp. 4-20–21.
[425] ibid., p. 4-22.

value of 0.34 which is similar to the ratio (0.32) in the 2011 FADs. The ACCC considers that this approach is consistent with the approach from previous FADs.

6 Taxation payments

Key Points

The ACCC's draft decision is to maintain the current approach to the calculation of tax in the FLSM.

The FLSM currently bases the initial tax value for the assets included in the RAB on the written-down tax value in Telstra's tax accounts.

Straight line depreciation is used as a proxy for the actual profile of Telstra's tax depreciation.

The prices and charges in the FADs are exclusive of the Australian Capital Territory Utilities Tax and the Goods and Services Tax (GST)

6.1 Introduction

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.

As a result, the tax calculations in the FLSM are performed in nominal terms, then converted into the base year terms and added to the real pre-tax revenue requirement to calculate the real revenue requirement including tax.

Initial tax asset value

The ACCC's current approach to setting the initial tax asset base is consistent with the AER's approach to setting the initial tax asset value based on the 'actual tax position of assets that constitute the RAB' where possible.

The opening tax asset value at 1 July 2014 is $10.852 billion.

Tax depreciation method

Tax depreciation is a tax deductible expense that is used as an input in the calculation of the business's tax liabilities. In the 2011 FAD, the ACCC confirmed the use of straight line depreciation for the estimation of 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.

Other tax liabilities

In the 2011 FAD, the ACCC observed that Telstra may also be liable to pay other taxes, such as the GST. However, only corporate tax liabilities are included in the tax building block in the FLSM. The ACCC considered that any issues associated with incorrect pass-through of applicable taxes are not included in the FADs and can be resolved through binding rules of conduct (BROC).

6.2 Discussion paper

The ACCC sought views on whether the current approach to calculating tax liabilities in the FLSM—which has been adopted for the 2011 and 2013 FADs—is still appropriate.

6.3 Submissions

Telstra did not state whether or not it supported maintaining the approach of the 2011 and 2013 FADs. Telstra observed that under the fixed principles the tax rate is linked to the legislated corporate tax rate, which is 30 per cent.[426] Telstra also submitted that the best estimate of the value of imputation credits is 0.25.

Frontier submitted that consistency with the AER's approach is desirable, to the extent possible, which suggests an approach that estimates tax asset value based on the actual tax position of the assets that constitute the RAB.[427]

6.4 ACCC's draft decision

The ACCC's draft decision is to maintain the current approach of calculating tax liabilities in the FLSM and maintain its current approach to the treatment of other tax liabilities. The methodology adopted in the FLSM is consistent with the conventional accounting treatment of tax.

[426] Telstra (2014), *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014, Confidential Version, p. 94.

[427] Frontier Economics (2014), *Submission on the final access determinations for fixed line services – A report prepared for the competitive carriers' coalition*, October 2014, p. 57.

7 Demand forecast

Key Points

- Telstra's demand forecasts provided under the BBM RKR were made subject to the recognised need for updating once better information on NBN policy and rollout was available.
- For this reason, initial submissions from stakeholders were focused on Telstra's forecasting methodology rather than the forecast values submitted in response to the BBM RKR information request.
- Telstra provided the ACCC with revised demand forecasts as part of its submission in response to the ACCC's July 2014 Discussion Paper.
- For the revised forecasts, Telstra modified its methodology to develop forecasts that account for the NBN and can be updated for future changes in the NBN rollout plan.
- Telstra also provided demand forecasts not required under the BBM RKR but necessary for the cost allocation framework it has proposed.
- For the purpose of this draft decision, the ACCC's decision is to use Telstra's revised demand forecasts for setting draft primary price terms. The ACCC considers that Telstra's revised demand forecasts for the 2014–15 to 2018–19 forecast period are reasonable.

7.1 Introduction

Demand forecasts are required to determine the FAD primary price terms for the declared services. The fixed line services model (FLSM) also uses demand forecasts as inputs to determine cost allocation factors within the cost allocation framework that forms part of the FLSM. In addition, forecasts for operating and capital expenditure are dependent on demand forecasts.

Telstra was required under the BBM RKR to provide demand forecasts for the five year forecast period (2014–15 to 2018–19). Telstra also provided an explanation of the methodology used to generate the forecasts and a comparison with historical values and trends. Telstra stated that it prepared its BBM RKR forecasts using similar approaches to those adopted for Telstra's planning processes and from its assumptions of the impact of the NBN rollout on the fixed line network. Assumptions were based on the NBN rollout schedule as at June 2013 and the fibre-to-the-premises (FTTP) architecture of the previous NBN policy.

Telstra's demand forecasts provided under the BBM RKR were made subject to the recognised need for updating once better information on NBN policy and rollout was available. Telstra subsequently provided the ACCC with revised demand forecasts as part of its submission in response to the ACCC's July 2014 discussion paper on primary price terms (the discussion paper).

This chapter sets out the ACCC's draft decision on Telstra's revised demand forecasts.

7.2 Discussion paper

The ACCC noted in the discussion paper that Telstra's BBM RKR forecasts would require revision, given that Telstra's NBN assumptions for preparing its BBM RKR forecasts were based on out-of-date information and did not reflect the mixed-technology-model (MTM) architecture adopted under the revised NBN policy. The revised forecasts were required to

reflect the impact of the changes to the NBN policy and revised NBN rollout schedule on the forecast demand.[428]

Other key issues on which the ACCC sought views from stakeholders included[429]:

- the transparency of Telstra's forecasting methodology
- the demand for declared and non-declared services over both the NBN and the PSTN network
- other relevant factors in assessing the reasonableness of Telstra's demand forecasts.

7.3 Submissions

Initial submissions to the discussion paper generally did not provide detailed commentary on the demand forecasts provided by Telstra in response to the BBM RKR. Stakeholders were aware that the forecasts would need to be updated and consequently did not focus on the forecast values themselves. Stakeholders initially submitted on the transparency and reasonableness of Telstra's forecasting methodology, accuracy in forecasts and other factors considered relevant.

NBN

Optus submitted that uncertainty regarding the NBN rollout and the migration are important factors that need to be accounted for within the FLSM.[430] **[c-i-c start]** [redacted] **[c-i-c end]**

Transparency of forecasting methodology

Frontier Economics submitted that in the face of uncertain market conditions, the forecasting methodology was reasonable. However it considered that more information could be supplied regarding drivers and forecasting models to increase transparency for some services.[433]

[c-i-c start] [redacted] **[c-i-c end]** Frontier also submitted that Telstra's actual retail and wholesale volumes would assist stakeholders to analyse the forecasts.[435]

428 ACCC, *Public Inquiry into final access determinations for fixed line services – primary price terms, Discussion Paper, July 2014,* p.34
429 Ibid.
430 Optus, *Submission in response to ACCC discussion paper; Fixed line services final access determination—primary prices*, October 2014 p. 19.
431 Ibid., p. 10.
432 Ibid., p. 10.
433 Frontier Economics, *Submission on the final access determinations for fixed line services – A report prepared for the competitive carriers' coalition*, October 2014, p.10.
434 Ibid., p.10.
435 Ibid., p.10.

Demand for declared and non-declared services

Optus submitted that it is concerned with the allocation of declining demand for wholesale services compared to Retail (non-declared) services,[436] while TPG submitted that it is concerned about the accuracy of the forecasts. TPG submitted that it does not accept the forecast rate of take-up for declared fixed line services over the five year forecast period. TPG considered that there does remain a solid demand for PSTN calls for end-users and cites that its success in selling bundled telephony and broadband is an indication of strong demand for the service.[437]

In its initial submission to the discussion paper, Frontier submitted that Telstra needs to provide clarity around the demand forecasts for other fixed line and non-fixed line services. Frontier highlighted the link between Telstra's demand forecasts and Telstra's proposed cost allocation framework and stated that it questions the usefulness of Telstra's alternative cost allocation proposal if information of a similar quality (to that provided for other fixed line and non-fixed line services) cannot be provided for the declared services.[438]

Frontier submitted that Telstra's revised (October 2014) forecasts imply access seekers' share of total SIOs increases over the forecast period.[439] Frontier submitted it considers that the NBN adjusted forecasts have direct and indirect links between declines in SIOs and in MOUs (respectively) to NBN rollout assumptions for brownfield migration.[440]

Other relevant factors

Frontier submitted that the existing structure of the FLSM is such that cost allocation between services sharing assets is closely aligned with demand forecasts, so that forecast changes in volumes have a minor impact on unit costs and prices. Frontier submitted that Telstra's proposal to change cost allocation would increase the importance of reliable demand forecasting.[441]

Frontier submitted that in Telstra's cost allocation proposal, the overall demand forecast figures for lines or calls will have the greatest impact on unit costs and prices when compared to the composition of individual service forecasts.[442]

The Department of Communications submitted that all forecasts need to align with what 'happens on the ground'.[443] The Department also submitted that a significant proportion of Telstra's costs are invariant to changes in demand, and therefore given that demand is forecast to decline steeply, there is a potential for a sharp increase in service prices.[444]

---

436 Optus, *Submission*, October 2014, p. 5.

437 TPG Telecom, *Submission by TPG Telecom Limited (October 2014) to the Australian Competition and Consumer Commission (ACCC), Telecommunications Final Access Determination Inquiries – FLSM,* October 2014, p. 2.

438 Frontier Economics, *Submission*, October 2014, p.11.

439 Frontier Economics, *Assessment of Telstra's revised forecasts – a report prepared for the Competitive Carriers Coalition,* December 2014, pp.3-4.

440 Ibid., p.4.

441 Frontier Economics, *Submission*, October 2014, p.10

442 Ibid., p.10

443 Department of Communications, *Final access determinations for fixed line services—primary price terms, Department of Communications submission to the Australian Competition and Consumer Commission,* October 2014, p.9.

444 Ibid., p.2.

7.4 Revised Telstra demand forecasts

In its submission to the discussion paper, Telstra provided demand estimates for an expanded range of services provided over the fixed line network.[445] This included services that are required for Telstra's proposed cost allocation framework in addition to the services covered under the BBM RKR.[446] Telstra provided two sets of revised demand forecasts for the period 2014-15 to 2018-19 using the same underlying forecasting approach used for its BBM RKR response[447]:

- Pre NBN forecasts—forecasts that assume the NBN is not rolled out and act as a counterfactual.[448] These forecasts reflect organic change in volumes without any impact from the NBN.[449]
- Post NBN forecasts—generated through applying an 'NBN Rollout scenario' to the pre NBN forecasts.[450] Telstra has developed an NBN Rollout scenario (the Base Case scenario) based on the information contained in NBN Co's Strategic Review from December 2013 and assumptions regarding the rate of migration in ready for service areas.[451] The revised forecasts vary with NBN-assumptions in the forecast model which may be altered to reflect updated information or different views and scenarios regarding the NBN rollout.[452]

[c-i-c start] [redacted] **[c-i-c end]**

The ACCC's key observations regarding the modified methodology used by Telstra to derive revised forecasts include:

- Telstra's forecast model allows for the input of explicit NBN adjustments to 'pre NBN' forecasts to derive the 'post-NBN' forecasts. The BBM RKR forecasts did not allow for such an adjustment.
- Demand forecasts for both usage-based and SIO-based services are adjusted for the impact of the NBN rollout. In the BBM RKR demand forecasts, only the SIO-based declared services (i.e. ULLS, LSS, WLR and Wholesale ADSL) were explicitly scaled down to factor in the impact of the NBN rollout.
- **[c-i-c start]** [redacted]

445 Telstra, *Public Inquiry into final access determinations for fixed line services – primary prices, Response to Discussion Paper*, 3 October 2014.
446 Telstra's FLSM 2014–15 to 2018–19 for 9 December 2014.
447 Telstra, *Main submission*, October 2014, p. 51.
448 Ibid.
449 Pre NBN forecasts do not include organic Greenfields growth over the forecast period.
450 Telstra, *Main submission*, October 2014, p. 34
451 NBN Co, Strategic Review, Final Report, 12 December 2013.
452 Telstra, *Main submission*, October 2014, p. 34
453 Telstra, *Forecast Model v1.05–Framework and Guide to Forecast Assumptions*, October 2014, pp. 12-13.
454 [c-i-c start] [redacted] [c-i-c end]

[redacted] **[c-i-c end]**

Pre NBN Forecasts

Telstra's pre NBN forecasts for the declared services are provided in table 7.1. Telstra stated that the methodology used to generate revised pre NBN forecasts included analysis of historic trends in service relativities and shares among major services, information on service volumes, and the impact of exogenous factors on overall market size.[456]

[c-i-c start] [redacted]

Table 7.1: Telstra proposed pre NBN forecasts for the declared fixed line services [c-i-c start]

[redacted]

[c-i-c end] Figures 7.1, 7.2 and 7.3 display the revised forecasts against actual data that the ACCC has collected from Telstra through a variety of reporting requirements.

455 Ibid,. p.18.
456 Telstra, *Main submission*, October 2014, p. 51.
457 Telstra, *Forecast Model Documentation*, October 2014, p.13.
458 Ibid., p.13.

Figure 7.1: WLR, ULLS, LSS and Wholesale ADSL SIOs pre NBN forecasts against actuals [c-i-c start]

[c-i-c end]

459 Telstra, Forecast Model Documentation, October 2014, p. 16

460 Ibid., p. 16

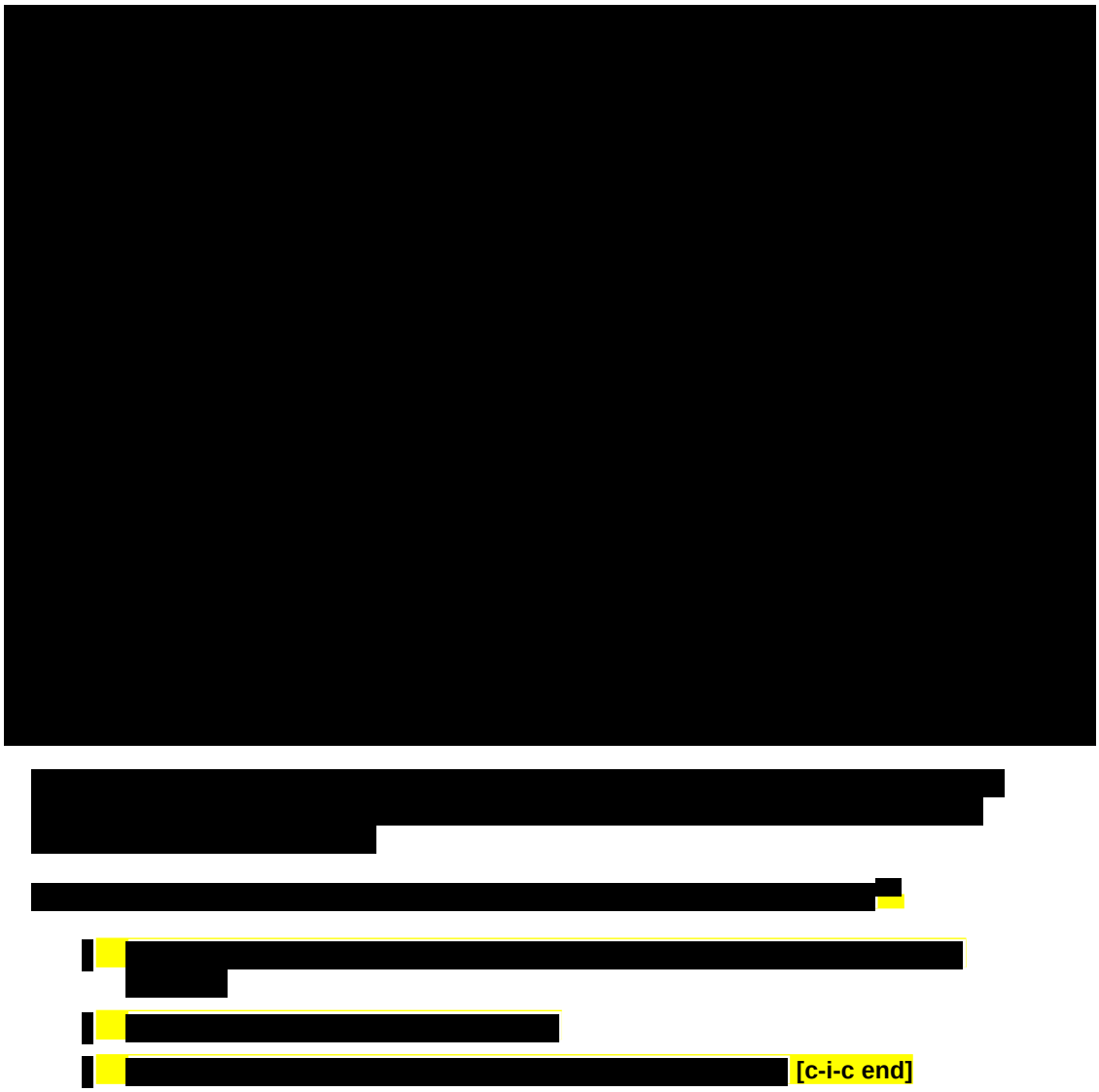
461 ACCC, *Public inquiry to make a final access determination or the Wholesale ADSL service*, Final Report, May 2013, pp. 69-70

462 ACCC, *Public inquiry into the fixed line services declarations, Final Report*, April 2014, pp. 69-70

Figure 7.2: Wholesale and Retail ADSL SIOs and peak usage (Mbps) forecasts against actuals [c-i-c start]

463 [redacted]

Figure 7.3: PSTN FOAS/FTAS and LCS MOU forecasts against actuals [c-i-c start]



[redacted] [c-i-c end]

Post NBN Forecasts

Telstra's post NBN forecasts apply Telstra's 'Base Case' NBN rollout scenario across all services for which it has provided forecasts. Table 7.2 shows Telstra's post NBN forecasts for the declared fixed line services.

Telstra's 'Base Case' NBN scenario assumes:

- a linear forecast interpolation on premises declared ready-for-service based on the indicative rollout schedule for December 2016 and December 2020 set out in scenario 6 of the December 2013 NBN Co Strategic Review[465]
- the rate of migration of end users to the NBN once a premises is declared ready for service by NBN Co is set at 55 per cent at 12 months past the ready-for-service date, and 100 per cent at 24 months (which Telstra stated to be consistent with the 18 month

[464] Telstra, *Forecast Model Documentation*, October 2014, p.14.

[465] Telstra, *Main Submission*, October 2014, p.10. NBN Co, Strategic Review, Final Report, 12 December 2013.

migration timeline).[466] **[c-i-c start]** [redacted] **[c-i-c end]**

Table 7.2: Telstra proposed (post NBN) forecasts for the declared fixed line services

[c-i-c start]

[redacted]

[c-i-c end]

Figure 7.4 displays the 18 month migration timeline from NBN rollout in service areas (when a premises is declared 'Ready for Service') to the time when forced NBN migration occurs (the disconnection date (called 'Brownfield connections' in Telstra's submission).

[466] Telstra, *Main Submission*, October 2014, p.10

[467] Telstra, *Forecast Model Documentation,* October 2014, p. 9.

Figure 7.4: Cumulative Percentage of SIOs lost as a result of a fall in total demand and due to SIOs migrated to NBN, 2014–15 to 2018–19 (2013-14 base year) [c-i-c start]

[c-i-c start] **[c-i-c end]** The ACCC's assessment of Telstra's post NBN forecasts focused on the reasonableness of adjustments post NBN that Telstra has included as its 'base case'.

Key observations on Telstra's demand forecasts for declared services include: **[c-i-c start]**

[468] Telstra, *Forecast Model Documentation*, October 2014, p. 12.

[redacted]

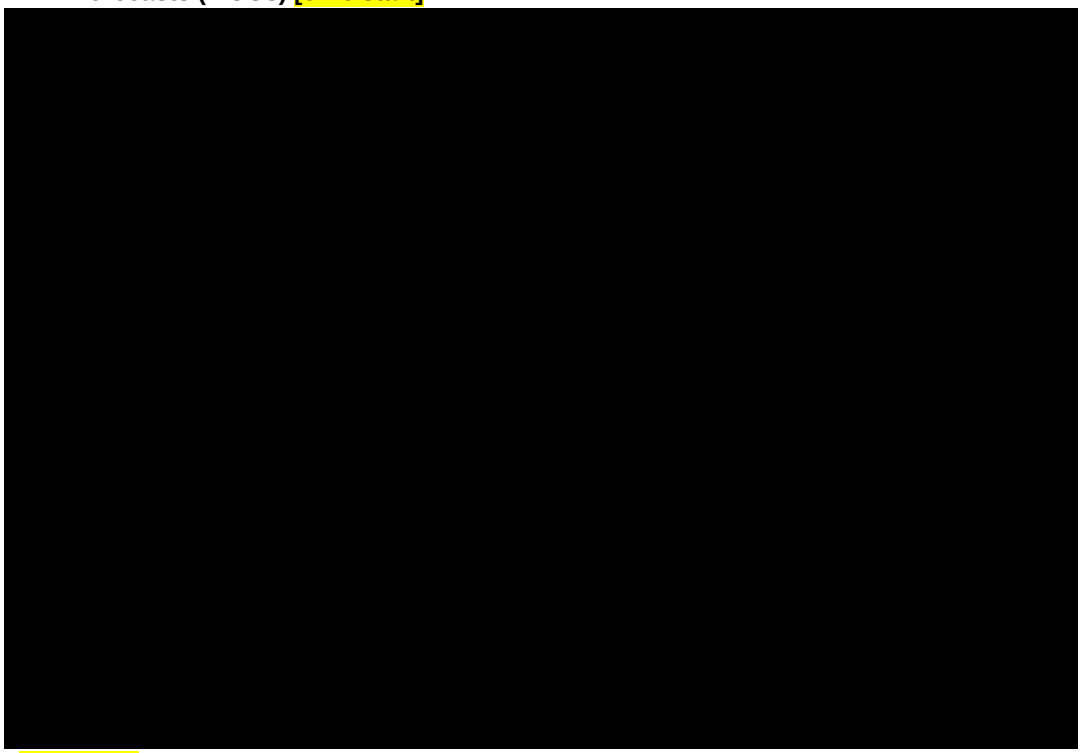
[redacted]

[c-i-c end]

Figures 7.5, 7.6 and 7.7 below show the impact the NBN assumptions from Telstra's Base Case scenario has on the revised pre NBN forecasts and the BBM RKR forecasts.

[c-i-c end]

Figure 7.6: Comparison of revised PSTN FOTAS and LCS MOU forecasts with BBM RKR forecasts (MOUs) [c-i-c start]



[c-i-c end]

Figure 7.7: Comparison of revised Wholesale ADSL SIOs and Mbps forecasts with BBM RKR forecasts [c-i-c start]

[c-i-c end]

7.5 ACCC draft decision

The ACCC has assessed the revised demand forecasts submitted by Telstra against the Fixed Principle provisions, which specify that Telstra's demand forecasts should:

- be based on an appropriate forecasting methodology
- be based on reasonable assumptions about the key drivers of demand
- be determined using the best available information before the ACCC, including historical data that can identify trends in demand; and
- be determined taking into account current demand and economic conditions.[469]

The ACCC's draft decision is that it considers Telstra's proposed demand forecasts (as set out in table7.2 in section 7.4) for the 2014–15 to 2018–19 forecast period to be reasonable. This section sets out the ACCC's reasons for its draft decision.

Pre NBN Forecasts

The ACCC's assessment of Telstra's pre NBN demand forecasts focused on assessing the historic trends in market share. The ACCC considers that market share trends that Telstra provide in its submission on the discussion paper adequately reflect the historic SIO trends seen for individual services. The ACCC formed this view from analysis of quarterly data from the Telstra Economic Model (TEM) reports received from the third quarter of the 2011–12 financial year to the fourth quarter of the 2013–14 financial year.[470] The ACCC considered this data useful in assessing the pre NBN service growth rate. The ACCC used this approach because it considers that the changing investment incentives as a result of the NBN mean that the trend analysis should be based on recent years. Figure 7.8 shows the growth rates and linear trend lines for declared fixed line SIO-based services as taken from the observable TEM data.

[469] Fixed Principle Provisions, clause 6.11.

[470] The Telstra Economic Model (TEM) is a management accounting system used internally by Telstra for its own business planning purposes. Under clause 18 and schedule 9 of its SSU, Telstra commits to supplying financial reports that are drawn from its TEM, for publication by the ACCC.

Figure 7.8: Declared Fixed Line SIO-based Services—growth rate of services based on historic data from TEM reporting requirements from Q3 Financial Year 2012 to Q4 Financial Year 2014 [c-i-c start]

[c-i-c end]

[c-i-c start] **[c-i-c end]** The ACCC considers that access seekers have weaker incentives to continue DSLAM investments and that the rollout of the NBN and uncertainty associated with it may already have impacted on access seekers' decisions.[471] However, the ACCC notes that access seekers possess excess capacity within the DSLAM footprint to reasonably continue uptake in ULLS in the future. Notwithstanding that Telstra does not explicitly take into account fundamentals regarding access seekers' incentives, particularly at this time of transition within the sector, the ACCC considers that the relative utilisation of ULLS and WLR is unlikely to differ significantly from the Telstra forecasts.

[c-i-c start] **[c-i-c end]**

[471] ACCC, Public inquiry to make a final access determination or the Wholesale ADSL service, Final Report, May 2013, pp. 69-70

Figure 7.9: Historic and forecast market shares for PSTN Retail, ULLS and WLR
[c-i-c start]

[c-i-c end] The ACCC notes that Telstra has had to modify its forecasting methodology to maintain consistency across services, and considers that the forecast SIOs for declared services and PSTN Retail Voice are reasonable when considered with respect to past actuals.

The ACCC analysed Telstra's forecasts for declared usage services when compared to undeclared services (figure 7.10). **[c-i-c start]**

[c-i-c end]

472 Telstra BBM RKR explanatory information 25 November 2013, pp. 36-37
473 Telstra, *Forecast Model Documentation,* October 2014, P. 20
474 TPG Telecom, *Submission*, October 2014, p. 2

Figure 7.10: Minutes of use for declared and undeclared fixed line voice services (MOUs) [c-i-c start]

[c-i-c end]

Telstra's pre NBN demand forecasts have been based largely on trends evident in historic data on market shares and ratios. However, facets of the methodology could be made clearer and more transparent to the ACCC. In this regard, the ACCC notes that forecasting demand is subject to judgements that must be made by the forecaster. The ACCC has requested further information from Telstra regarding the exact derivation of forecasts. At the time the ACCC was making its draft decision, Telstra had yet to provide a response but has stated in a response to an information request that it is preparing information to provide on this aspect.[475]

For the purposes of this draft decision, the ACCC will accept Telstra's revised pre NBN demand forecasts. The ACCC's draft decision that the forecasts are reasonable is based on information provided on the methodology and assumptions used to derive forecasts, and analysis of Telstra's forecasts against historical data and current demand and economic conditions.

Post NBN Forecasts

Telstra has used information on the MTM and rollout schedule provided by NBN Co in its Strategic Review of December 2013 as the basis for adjusting its pre NBN forecasts to obtain post NBN forecasts. The ACCC considers the NBN rollout schedule assumptions used by Telstra in its Base Case NBN scenario are appropriate and reasonable. However, the ACCC

[475] Telstra, *Fixed line services final access determination inquiry: ACCC request for information, Response to request for information*, 30 January 2014.

notes that there is considerable uncertainty attached to this aspect of the demand forecasts (discussed in chapter 11).[476]

The ACCC also finds reasonable Telstra's assumption on the migration rate for a service area between the point in time that the area is declared 'ready for service' and the time the area is migrated to the NBN.

For these reasons the ACCC considers that the revised demand forecasts Telstra has submitted for the 2014–15 to 2018–19 forecast period are reasonable. The ACCC's draft decision is therefore to accept Telstra's revised demand forecasts for the purposes of setting draft primary price terms.

[476] The ACCC notes that NBN Co has released an updated indicative figure on the cumulative premises that will be passed at the end of the NBN rollout in its corporate plan; NBN Co, Corporate Plan – 2014-17, p.13

8 Other pricing issues

Key Points

- In the July 2014 discussion paper, the ACCC discussed two technical modelling issues: cash flow timing assumptions and the approach to indexation in the FLSM.
- The ACCC noted that any assumptions relating to the timing of cash flows in the FLSM may be considered against other cash flow timing assumptions in determining whether they are appropriate.
- The ACCC noted that, in the current version of the FLSM, the price index used to convert expenditure inputs to real terms is different from the index used to convert price outputs to nominal terms.
- The ACCC considers that the inconsistent assumptions in the FLSM relating to the timing of capital expenditure and revenue may result in over-compensation. The ACCC's draft decision is to achieve consistency with respect to cash flow timing assumptions by removing the half-WACC adjustment to capital expenditure.
- The ACCC's draft decision is to align the indices used to convert FLSM inputs and outputs between real and nominal terms, and to use CPI as the measure of inflation for all conversions.
- The ACCC's draft decision on the forecast level of inflation as measured by the CPI is 2.4 per cent.
- Telstra's BBM RKR response included total asset lives for each FLSM asset class. These asset lives are generally shorter than those reflected in the FLSM. The ACCC's draft decision is that, based on the information provided by Telstra, a departure from the asset lives established in the previous FADs is not justified or appropriate. An exception to this is copper cables: the ACCC's draft decision is to adopt a shorter asset life for this asset class to maintain Telstra's incentives for efficient investment in the transition to the NBN.

8.1 Introduction

This chapter discusses technical modelling issues on which the ACCC sought views in the July 2014 discussion paper. The first of these issues relates to the assumptions made about the timing of cash flows that are reflected in the FLSM. The second issue relates to the inflation index used to convert FLSM inputs and outputs between real and nominal terms.

This chapter also discusses the issue of asset lives for new capital expenditure, which was not addressed in the July 2014 discussion paper.

8.2 July 2014 discussion paper

Timing of cash flows

In the July 2014 discussion paper, the ACCC raised the issue of cash flow timing assumptions in the FLSM, noting that the FLSM assumes that the return on and of capital occurs at the end

of each year.[477] This assumption is reflected in the calculation of the annual revenue requirement, which is based on the opening value of the RAB and regulatory depreciation in a given year.

However, the ACCC noted that this assumption does not reflect the actual timing of cash flows, since revenues are received throughout the year.[478] Given this reality, the end-of-year assumptions in the FLSM regarding capital-related revenues may result in a higher revenue requirement than would be the case if the timing of revenue inflows were estimated more precisely. The ACCC noted two potential sources of higher capital-related revenues arising from these end-of-year timing assumptions:

- Firstly, building block revenues are based on a value of the RAB that is higher than would be the case if the intra-year return of capital (that is, depreciation received via revenues for regulated services) was recognised.

- Secondly, capital revenues received throughout the year can be reinvested and generate a return in excess of that allowed by the annual revenue requirement.[479]

The ACCC also noted the assumption, reflected in the FLSM, about the timing of capital expenditure.[480] In the current version of the FLSM it is assumed that capital expenditure is incurred evenly throughout the year — half way through the year on average. To compensate the access provider for the period of time between when capital expenditure is assumed to be incurred (mid-year on average) and when a return on capital is provided (at the beginning of the following year), capital expenditure is uplifted by a half-WACC as it is rolled into the RAB.

The ACCC cited its April 2013 draft decision on NBN Co's Special Access Undertaking (SAU), in which the ACCC formed the view that a half-WACC adjustment to capital expenditure should not be considered in isolation, but rather should be considered against other cash flow timing assumptions and the potential for over-compensation that may arise from any inconsistencies.[481] Following the SAU draft decision and further consultation and assessment by the ACCC, the half-WACC adjustment was removed from the SAU lodged by NBN Co in November 2013 and accepted by the ACCC in December 2013.

In the July 2014 discussion paper, the ACCC considered that the appropriateness of the half-WACC adjustment in the FLSM may also be considered against other cash flow timing assumptions.[482] The ACCC noted that if the half-WACC adjustment were removed from the FLSM, the assumed timing of capital expenditure would then align with that of other cash flows.[483]

Indexing

In the July 2014 discussion paper, the ACCC noted that the FLSM is a real model which operates in 1 July 2009 dollar terms.[484] This means that all expenditure inputs must be converted to 2009 terms before they are entered into the model. Once prices are calculated in real terms, they are converted to nominal terms to set FAD prices.

The ACCC also noted that in the current version of the FLSM, the price index used to convert expenditure inputs to real terms is different to the index used to convert price outputs to

---

477 ACCC, *Public inquiry into final access determinations for fixed line services – primary price terms discussion paper*, July 2014, p. 75.
478 Ibid., p. 75.
479 Ibid., pp. 75-76.
480 Ibid., p. 76.
481 Ibid., p. 77.
482 Ibid., p. 77.
483 Ibid., p. 77.
484 Ibid., p. 80.

nominal terms.[485] Inputs are converted to real terms using a combination of labour and equipment indices and CPI, whereas outputs are converted to nominal terms using only CPI.

The ACCC raised a potential alternative approach to indexing, whereby the index used to convert inputs and outputs to real and nominal terms (respectively) would be aligned — to the extent possible and appropriate — and would use CPI as the measure of inflation for all conversions.[486]

8.3 Submissions

Timing of cash flows

Telstra submitted that there is no reason to expect that the half-WACC adjustment would result in over-compensation.[487] The half-WACC adjustment is commonly applied in building block models and reflects a reasonable assumption that capital expenditure will be incurred (on average) mid-way through the year.[488]

Telstra further submitted that the issue of cash flow timing in the context of the NBN Co SAU was specific to the SAU, and the same issue does not arise in this context.[489]

Frontier submitted that it agrees that the half-WACC adjustment is difficult to justify. While there may be an independent case for it, the benefits of the timing of return on capital would seem to more than compensate Telstra for this.[490]

Frontier further submitted that it would be desirable to maintain consistency with the NBN Co regulatory approach.[491]

Indexing

Telstra submitted that it agrees it is appropriate to align methodologies for the conversion of expenditure inputs.[492] However, Telstra submitted that CPI may not be an appropriate escalator for all cost inputs.[493]

Frontier submitted that there is some benefit in aligning the approaches to indexation, and to use CPI for all conversions.[494] The benefits of using specific indices are not obvious if the purpose of indexation is primarily to measure the real value of expenditure. Using CPI has the advantage of being straightforward and consistent.[495]

---

485 Ibid., p. 80.
486 Ibid., pp. 80-81.
487 Telstra, *Public inquiry into final access determinations for fixed line services—primary prices—Response to Discussion Paper*, main submission, p. 143.
488 Ibid., p. 143.
489 Ibid., p. 143.
490 Frontier Economics, *Submission on the final access determinations for fixed line services – A report prepared for the competitive carriers' coalition*, October 2014, p. 56.
491 Ibid., p. 56.
492 Telstra submission, p. 143.
493 Ibid., p. 143.
494 Frontier submission, p. 57.
495 Ibid., p. 57.

8.4 ACCC draft decision

Timing of cash flows

In response to Telstra's submission, the ACCC considers that the issue of cash flow timing in the context of the FLSM is directly analogous to the issue in the context of NBN Co's SAU. Both the FLSM and the SAU apply a building block model with a RAB roll-forward mechanism to determine an annual revenue requirement. The ACCC discussed cash flow timing assumptions in the SAU in several public documents throughout the SAU assessment process, in which it outlined why it did not consider a half-WACC adjustment to be appropriate.[496] The ACCC's reasoning did not depend on any factors that were specific to NBN Co or the SAU; rather, it was based purely on the inconsistency between cash flow timing assumptions that existed in the original SAU and the over-compensation that may have resulted.

Similarly, while the half-WACC adjustment in the FLSM—which reflects the assumption that capital expenditure is incurred evenly throughout the year—may appear reasonable when considered in isolation, it is inconsistent with the end-of-year assumptions made about the receipt of revenue. As noted above, these end-of-year revenue assumptions may result in a higher revenue requirement than would be the case if the timing of revenue inflows were estimated more precisely.

The ACCC's draft decision is to correct this inconsistency by removing the half-WACC adjustment to capital expenditure in the FLSM. The ACCC considers that this is a simple and transparent means of aligning the assumptions made about the timing of cash flows and removing any bias or over-compensation that may result from any inconsistency.

Indexing and CPI forecast

The ACCC's draft decision is to align the price indices used to convert inputs and outputs to real and nominal terms in the FLSM, and to use CPI as the measure of inflation for all conversions. The ACCC considers that the benefits of aligning the method of conversion outweigh any benefit that may exist in using specific equipment and labour indices. The ACCC considers that making this adjustment to the FLSM is appropriate for the following reasons:

- it would remove any potential bias that might arise from using different measures of inflation to convert inputs to real terms and outputs to nominal terms
- CPI is a more stable and predictable measure of inflation than specific equipment and labour indices, which can be volatile
- it would be consistent with the common practice among economic regulators of using the same index for all real-nominal conversions in determining regulated charges, and using CPI as the measure of inflation
- it is transparent and straightforward to administer.

In the July 2014 discussion paper, the ACCC noted that the nominal expenditure forecasts in Telstra's BBM RKR response had been converted from real terms using Telstra's forecasts of CPI. The ACCC considered that it was appropriate to use these forecasts of CPI to deflate the expenditure forecasts to real terms for use in the FLSM to preserve their underlying dollar value. However, Telstra's revised expenditure forecasts (discussed in chapters 3 and 4) are derived in nominal terms, and do not depend on any forecasts of CPI.

[496] See, for example: ACCC, *Draft Decision on the Special Access Undertaking lodged by NBN Co on 18 December 2012*, April 2013, p. 133.

Therefore, the ACCC will calculate the index used to convert inputs and outputs to real and nominal terms (respectively) using actual CPI for years where it is available (as published by the ABS) and the ACCC's forecast of CPI for subsequent years. As discussed in chapter 5, the ACCC's forecast of CPI is calculated by taking the 10-year geometric average of: the RBA's forecasts of CPI for the years available; and the mid-point of the RBA's target band (that is, 2.5 per cent) for subsequent years. The ACCC's current forecast of CPI for the purposes of this draft decision is 2.4 per cent. The ACCC notes that this is subject to change depending on the availability of updated information.

The ACCC notes that its forecast for the CPI differs from Telstra's forecast for the CPI. Telstra stated in its BBM RKR response that its forecast for the CPI was derived from internal multi-variant economic modelling.[497] However, Telstra did not provide details of its forecasting modelling or its assumptions regarding the macro-economic variables on which its forecasts for the CPI are based. The ACCC considers the best available view on future inflation as measured by the CPI is the estimate based on the RBA's short-term forecasts and inflation target.

Asset lives

Asset lives are used in the FLSM to determine a depreciation schedule for each asset class and facilitate the rolling forward of the RAB. During the 2011 FAD inquiry, Telstra advised the ACCC that it was unable to provide reliable information for the determination of asset lives. Consequently, the ACCC estimated asset lives for CAN and core assets based on the asset lives used in Telstra's TEA model and the Analysys cost model, respectively. The ACCC revised some of these asset lives after Telstra provided further information.[498] This approach was also adopted for the 2013 wholesale ADSL FAD.[499] In the FLSM, the initial RAB—that is, the depreciated value of the FLSM asset classes as at 30 June 2009—is rolled forward using the remaining lives of the assets in place at that time, while the RAB for capital expenditure in 2009-10 onwards is rolled forward separately using total asset lives for new assets.

Telstra's BBM RKR response included total asset lives for forecast new investments (that is, investments in 2014-15 onwards) for each FLSM asset class, as required by Rule 8(e) of the BBM RKR. These total asset lives are, for most asset classes, shorter than the asset lives currently reflected in the FLSM. In its explanatory statement, Telstra explained in general terms how it derived the asset lives, noting the mapping process used to allocate assets to FLSM asset classes and the formula used to determine a single weighted average asset life for those assets.[500] Telstra noted that the lives of the assets which are mapped to FLSM asset classes, and which form the basis of the weighted average, are based on those assets' service lives in Telstra's accounting system.[501]

Further, Telstra noted that the asset lives assigned to some assets are impacted by the NBN rollout because such assets will no longer be used following the completion of the rollout. Telstra has identified copper cables as such an asset.[502]

The ACCC has considered Telstra's explanation for its calculation of asset lives for the FLSM asset classes. The ACCC's draft decision is that, based on the information provided, a departure from the asset lives established in the 2011 and 2013 FADs is not justified or appropriate. The ACCC notes that if these asset lives were used in place of the total asset lives currently in the FLSM, it would have the effect of accelerating the depreciation schedule for most asset classes and materially increasing the regulated revenue requirement and, in turn, prices for the declared services (all else being equal).

---

497 Explanatory Statement, p. 9.
498 April 2011 discussion paper, p. 59.
499 May 2013 final report, p. 30.
500 Explanatory Statement, pp. 76-77.
501 Explanatory Statement, pp. 77-78.
502 Explanatory Statement, p. 77.

In general, the ACCC considers that it would accord with regulatory best practice to review asset lives if better and more up-to-date information were to become available.[503] However, the ACCC considers that the explanatory material provided by Telstra regarding total asset lives is insufficiently detailed and transparent to enable the ACCC to be satisfied that the information on which they are based is superior to that used for the previous FADs. The ACCC has therefore retained the asset lives used for the 2011 and 2013 FADs in determining the draft prices set out in chapter 13 of this draft decision.

In the particular case of asset lives impacted by the NBN rollout, the ACCC's draft decision is that shortening asset lives for this purpose would be appropriate in the case of copper cables. Telstra will still be required, while the NBN is being rollout out, to invest in copper cables in order to maintain continuity of service. Adopting a shortened asset life for copper cables that aligns with the expected completion date of the NBN rollout would provide Telstra with the opportunity to recover these costs before the assets will no longer be able to generate revenue. The ACCC considers that this is appropriate because it maintains Telstra's incentives for efficient investment in copper cables.

[503] However, any change to asset lives would only be applied on a forward-looking basis. That is, they would apply only to forecast capital expenditure during the regulatory period.

9 Impacts of the National Broadband Network

Key Points

- The transition from the legacy fixed line network to the NBN is occurring under arrangements between Telstra and NBN Co to migrate customers to the NBN and for NBN Co to lease and acquire certain infrastructure from Telstra. These arrangements will significantly affect the way Telstra's fixed line assets are used.
- The ACCC did not account for the impacts of the NBN in determining prices for the 2011 and 2013 FADs due to uncertainty about the NBN rollout and the expected minor impact of the NBN over the relevant regulatory period. However, the ACCC indicated that it would consult on any changes made to the FLSM to account for NBN impacts in the next regulatory period.
- In the July 2014 discussion paper, the ACCC considered that the Telstra-NBN Co arrangements should be accounted for in determining prices for the next regulatory period, and sought stakeholder views on an appropriate way to do this.
- The ACCC's draft decision is to adopt a regulatory values approach to account for the arrangements in determining prices, whereby adjustments would be made in the FLSM based on the values assigned in the RAB to assets affected by the arrangements. This reflects the positions outlined in the ACCC's October 2014 position statement.
- The regulatory values approach maintains the ACCC's cost based approach to setting prices for the declared services, which at its establishment in the 2011 FAD inquiry received broad industry support. The ACCC considers that it will result in prices that are based on the efficient cost of service provision and will therefore encourage efficient use of and investment in infrastructure and promote efficient competition by access seekers in the transition to the NBN.
- A further impact of the NBN is the increase in unit operating costs that will occur over the next regulatory period as services are migrated from Telstra's fixed line network to the NBN. The ACCC is still considering this issue and, in particular, how it will identify the increase in unit operating costs due to NBN-induced loss of economies of scale and density. The ACCC invites comments from stakeholders on this issue.

9.1 Introduction

The National Broadband Network (the NBN) will replace Telstra's fixed line network as the infrastructure used to provide fixed line telecommunications services in Australia. The transition from Telstra's fixed line network to the NBN is occurring under arrangements between Telstra and NBN Co to migrate customers to the NBN and for NBN Co to lease and acquire certain infrastructure from Telstra. These arrangements will have significant impacts on the way Telstra's fixed line assets are used and are important considerations in determining prices for the declared services.

The ACCC did not make any specific adjustments to prices for declared services to account for the impacts of the NBN in the 2011 FADs. This was primarily due to insufficient certainty about the timing of the NBN rollout and the expected minor impact the NBN would have for Telstra over the three-year regulatory period.[504] However, the ACCC indicated that it would develop

[504] ACCC, *Public inquiry to make final access determinations for the declared fixed line services – final report*, July 2011, pp.32–33.

and consult on the design of the fixed line services model (the FLSM) to take into account the impact of the NBN rollout for the next regulatory period.[505]

The current arrangements between Telstra and NBN Co are formalised in the 'Definitive Agreements'. The Definitive Agreements were first signed in June 2011 and reflected a predominantly fibre-to-the-premises (FTTP) network design for the NBN. In December 2014, Telstra and NBN Co signed revised Definitive Agreements which reflect the Government's multi-technology NBN policy. These arrangements between Telstra and NBN Co provide for the following key elements:

- customers will be migrated from Telstra's fixed line network as the NBN is rolled out
- NBN Co will lease certain infrastructure from Telstra
- certain assets will be transferred from Telstra to NBN Co.

The Definitive Agreements also provide for migration payments and infrastructure payments to be made by NBN Co to Telstra:

- NBN Co will pay Telstra a one-off migration payment for each end-user disconnected from its copper network when they are migrated to the NBN in areas covered by NBN Co's fixed line network.
- NBN Co will pay Telstra ongoing infrastructure payments for the lease of certain infrastructure. NBN Co will lease ducts, rack space in exchange buildings, and dark fibre (optical fibre with no active electronics attached) from Telstra. NBN Co will also pay Telstra a one-off payment for each lead-in conduit (that is, the pipe leading into a customer premise that houses the lead-in copper cable) that is transferred to NBN Co as customers are migrated to the NBN.

9.2 July 2014 discussion paper

In the July 2014 discussion paper, the ACCC discussed the issue of accounting for the impacts of the Telstra-NBN Co arrangements in determining prices for the declared fixed line services. The ACCC noted that these arrangements will fundamentally change the way Telstra's fixed line assets are used, and that as the NBN rollout progresses, the share of the network used to supply declared fixed line services will fall.

The ACCC considered that as a result of this change in the use of Telstra's assets, the Telstra-NBN Co arrangements should be accounted for in determining prices for the declared services. This is for two main reasons: first, it will ensure that only assets that are used in supplying declared fixed line services are reflected in prices for those services; and second, it would ensure that, to the extent that assets are used for the NBN and do not create any benefits for users of declared fixed line services, these assets are not reflected in prices for declared services.

The ACCC considered that a key issue in accounting for the arrangements is quantifying their impact. The two main approaches identified by the ACCC were:

- to base any adjustments on the values assigned within the FLSM to the underlying assets affected by the arrangements
- to base any adjustments on the value of the payments made to Telstra by NBN Co.

[505] ACCC, *Public inquiry to make final access determinations for the declared fixed line services – final report*, July 2011, pp.32–33.

In considering the two methods for quantifying the impacts of the Telstra-NBN Co arrangements, the ACCC identified the following two issues as relevant considerations:

- the relationship between the payments from NBN Co and the impact on underlying assets, and in particular the relationship between migration payments and the decommissioning of fixed line assets

- whether payments from NBN Co could be conceptualised as regulated revenue or non-regulated revenue.

Finally, the discussion paper outlined some potential options for implementing the two approaches identified for accounting for the Telstra-NBN Co arrangements in the FLSM.

9.3 October 2014 position statement

In October 2014, the ACCC released a position statement setting out how it intended to account for the arrangements between Telstra and NBN Co in determining prices for the declared fixed line services.

The ACCC considered that a regulatory values approach should be adopted to account for the impacts of the Telstra-NBN Co arrangements in determining prices for the declared fixed line services.[506] This would involve adjustments within the FLSM to account for the various transactions under the arrangements, based on the values assigned to affected assets in the RAB. The ACCC noted that in adopting this approach, it did not propose to take the value of payments made by NBN Co to Telstra into account in setting prices for the declared services.[507]

The ACCC considered that the use of regulatory values for these adjustments would maintain the current cost based approach to setting prices for the declared services, and is consistent with the common practice in other regulated sectors of relying on regulatory asset valuations for price setting purposes.[508]

The ACCC considered that using the payments established in the Definitive Agreements to account for the arrangements in setting prices for the declared fixed line services would result in prices changing for reasons other than changes in the cost of supplying services.[509]

Finally, the ACCC outlined how it intended to implement a regulatory values approach in the FLSM for each type of transaction under the arrangements.[510]

9.4 Submissions

Prior to the release of the July 2014 discussion paper, the ACCC received three early submissions on the issue of accounting for the impact of the Telstra-NBN Co arrangements from Optus, Herbert Geer (on behalf of TPG and iiNet) and the Ministers for Communications and Finance. These submissions provided views on alternative methods for accounting for the arrangements in determining prices for the declared services.[511]

---

506 ACCC, *Position statement on the treatment of the Telstra-NBN Co arrangements for regulated pricing*, October 2014, p. v.

507 Ibid.

508 Ibid.

509 Ibid., p. 10.

510 Ibid., pp. 11-12.

511 Submissions made before the discussion paper are available on the ACCC website: http://www.accc.gov.au/regulated-infrastructure/communications/fixed-line-services/fixed-line-services-fad-inquiry-2013/receipt-of-preliminary-submissions. These submissions were summarised and discussed in the discussion paper.

Key points of submissions to the discussion paper and position statement are summarised in the sections below.

9.4.1 Submissions to the discussion paper

Submissions to the July 2014 discussion paper on the issue of accounting for the Telstra-NBN Co arrangements were received from Optus, the Department of Communications (the Department), Telstra, the Competitive Carriers' Coalition (the CCC), Frontier Economics on behalf of the CCC (Frontier), iiNet and TPG.

Approach to quantifying the impact of the Telstra-NBN Co arrangements

Optus submitted that the NBN payments should be taken into account when setting access prices, as otherwise there is a risk that Telstra will be over-compensated for the provision of fixed line services.[512] Optus submitted that it is in the interests of competition and end-users that NBN payments be factored into wholesale pricing arrangements.[513]

The CCC submitted that the NBN payments are, at least in part, payments for disposal of assets and must be taken into account in determining regulated revenues, and these assets should no longer form part of the RAB.[514] The CCC also submitted that if lease payments are not accounted for, this could result in over-recovery of costs.[515]

Frontier submitted that, at a minimum, the ACCC must account for NBN Co's usage of Telstra's network when allocating costs to declared services to ensure that access seekers and end-users pay no more than a reasonable share of common network costs.[516] Frontier further submitted that the RAB value associated with network assets stranded as a result of NBN migration should be removed from the RAB, and that migration payments provide the necessary return of capital for these assets.[517]

The Department submitted that it is inherent in the FLSM and the fixed principles that the Telstra-NBN Co arrangements be accounted for by making adjustments to the values assigned within the FLSM. Costs associated with declared services should be allocated to the actual users of those services, thereby ensuring that regulated prices reflect the cost of providing services. The Department submitted that the unregulated NBN payments are therefore irrelevant to the setting of regulated prices.[518]

The Department submitted that the uncertainties associated with the renegotiation of the Definitive Agreements and the multi-technology NBN create the risk of regulatory error, and lend themselves to a conservative regulatory approach which emphasises price stability.[519] The Department submitted that long term certainty could be provided in this context if the ACCC made a fixed principle in relation to the treatment of the NBN payments.[520]

Telstra submitted that the NBN payments are irrelevant to determining prices for the fixed line services, as they do not relate to the cost of supplying fixed line services. Accounting for the

---

512 Optus, *Submission in response to ACCC Discussion Paper: Fixed Line Services Final Access Determination – Primary Prices*, October 2014, p. 4.
513 Optus submission, October 2014, p. 9.
514 CCC, *Supplementary Submission in Response to Ministers' Letter*, October 2014, p. 2.
515 CCC supplementary submission, p. 1.
516 Frontier Economics, *Submission on the final access determinations for fixed line services: A report prepared for the Competitive Carriers' Coalition*, October 2014, p. 43.
517 Frontier submission, p. 43.
518 Department of Communications, *Final access determinations for fixed line services—primary price terms: Submission to the ACCC*, October 2014, p. 5.
519 Department of Communications submission, p. 11.
520 Department of Communications submission, p. 2.

payments would be inconsistent with the fixed principles, which establish a cost-based pricing framework.[521] However, Telstra submitted that the Telstra-NBN Co arrangements should be taken into account to the extent that they impact on the cost of supplying the declared services.[522] Further, Telstra considered that the option identified by the ACCC in the discussion paper to base any adjustments on RAB values of assets affected by the arrangements is consistent with the fixed principles.[523]

Telstra further submitted in response to arguments made by access seekers that the NBN payments would compensate Telstra for any adjustments made to account for the Telstra-NBN Co arrangements beyond those permitted by the fixed principles.[524] Telstra submitted that its acceptance of the deal with NBN Co was not on the basis that it would be compensated for declining demand and/or the stranding of fixed line assets; rather, it was accepted because on balance it was preferable to a scenario where it was not accepted.[525]

iiNet submitted that a pragmatic approach to accounting for migration payments would be to adjust the regulated cost base so as to offset NBN-induced declining demand.[526] This would ensure that Telstra is not compensated by access seekers for falling demand caused by NBN migration, for which Telstra is already being compensated by NBN Co.[527]

TPG submitted that the NBN payments are in large part a payment for declared services, and that if access seekers continue to pay the full amount of Telstra's costs, and NBN Co does not, Telstra will over-recover.[528] TPG submitted that it supports the 'revenue approach' discussed by NERA in Optus' early submission to the FAD inquiry — that is, an approach whereby the RAB or revenue requirement is reduced to reflect the NBN payments.[529]

Implications of the treatment of the Telstra-NBN Co arrangements for the long-term interests of end-users

Optus submitted that the NBN payments will significantly enhance Telstra's capital position relative to its competitors, have the potential to distort competition in post-NBN fixed line and related horizontal communications markets, and undermine the benefits of NBN structural reforms. Optus submitted that this distortion could be mitigated through appropriate consideration of the NBN payments.[530]

Optus submitted that the ACCC is required under Part XIC to consider what is best for all end-users and not place undue weight on the interests of Telstra shareholders.[531] Optus submitted further that the ACCC should not place undue weight on the objective of price stability, as it is only relevant to the extent that it promotes competition, and ignoring NBN payments in the interest of price stability will not promote competition.[532]

---

521 Telstra, *Public inquiry into final access determinations for fixed line services—primary prices: Response to Discussion Paper*, October 2014, p. 41.

522 Telstra submission, p. 32.

523 Telstra submission, p. 42.

524 In its primary submission to the discussion paper, Telstra submitted that only adjustments to reflect the transfer of assets to, and usage of assets by, NBN Co are permitted by the fixed principles.

525 Telstra, *Public inquiry into final access determinations for fixed line services—primary prices—Response to industry submissions*, December 2014, p. 6.

526 iiNet supplementary submission, p. 19.

527 iiNet supplementary submission, p. 19.

528 TPG submission, p. 3.

529 TPG submission, p. 3. The NERA report submitted by Optus in March 2014 is discussed in the July 2014 discussion paper, p. 72.

530 Optus submission, October 2014, p. 5.

531 Optus submission, October 2014, p. 10.

532 Optus submission, October 2014, p. 10.

The CCC submitted that the impact of the NBN payments should not be ignored in the FAD as this would be detrimental to competition and risk harming the long-term interests of end-users by giving rise to distortions in the market.[533]

Frontier submitted that accounting for the NBN payments would minimise access prices while allowing Telstra to recover its costs; this would promote efficient use of infrastructure (without compromising efficient investment) and protect Telstra's legitimate business interests.[534] Frontier further submitted that accounting for the NBN payments would minimise potential distortions to competition.[535]

The Department submitted that it would be in the long-term interests of end-users for the ACCC to consider setting access prices so as to promote price stability in the transition to the NBN.[536] The Department submitted that, in considering the treatment of the Telstra-NBN Co arrangements and other factors that may affect prices (for example, expenditure and demand forecasts), the ACCC should consider the forthcoming FAD in the context of the transition to the NBN, and should consider promoting real price stability to facilitate this transition.[537]

Telstra submitted that it disagrees with the early submissions to the FAD inquiry (discussed in section 7.3 of the discussion paper) which suggest that a treatment of the Telstra-NBN Co arrangements that would be in the long-term interests of end-users would be the one that results in the lowest access prices. Telstra submitted that an approach that minimises prices cannot be in the long-term interests of end-users if it does not allow Telstra a reasonable opportunity to recover its costs, nor if it leads to significant price volatility during the transition to the NBN.[538]

Telstra submitted that its proposal for accounting for NBN impacts is the most appropriate approach, as it considers all the impacts of the NBN on the basis of its impact on the cost and usage of the underlying assets, thus ensuring prices are set in the long-term interests of end-users.[539]

Treatment of sold assets

Optus did not submit to the discussion paper specifically in relation to the treatment of transferred assets. Optus did, however, refer to its earlier submission to the FAD inquiry (discussed in section 7.3 of the discussion paper) which argued that payments for the sale of assets should be deducted from Telstra's fixed line cost base.[540]

The Department submitted that transferred assets should be removed from the RAB at their regulatory value, and that they should be removed at the time of transfer. This would ensure that prices would not reflect the costs associated with assets no longer used to provide declared services.[541]

Telstra submitted that any asset in the RAB that is transferred to NBN Co under the Telstra-NBN Co arrangements should be treated as an asset disposal in the roll-forward of the RAB. This would be consistent with the fixed principles and ensure that adjustments in relation to transferred assets would reflect the change in the cost base at the time of transfer.[542]

---

533 CCC submission, pp. 1-2.
534 Frontier Economics submission, p. 43.
535 Frontier Economics submission, p. 44.
536 Department of Communications submission, p. 10.
537 Department of Communications submission, pp. 9-10.
538 Telstra submission, p. 46.
539 Telstra submission, p. 33.
540 Optus submission, October 2014, p. 9.
541 Department of Communications submission, pp. 6-7.
542 Telstra submission, p. 76-77.

Treatment of leased assets

Optus submitted that payments for NBN Co's use of assets contained in Telstra's RAB represents a return of capital to Telstra shareholders, and accordingly, the ACCC should deduct this RAB-related element of lease payments from the RAB.[543] Optus submitted that if NBN Co's usage of Telstra's assets were ignored, this would be inconsistent with the fixed principle which specifies that cost allocation should reflect the relative usage of the network by various services.[544]

Frontier submitted that the ACCC must, at a minimum, account for network usage by NBN Co in allocating costs to the declared services. This would be consistent with the fixed principle which specifies that cost allocation should reflect the relative usage of the network by various services.[545]

The Department submitted that, where NBN Co uses an asset that is also used to provide declared services, this should be accounted for in the cost allocation framework and excluded from the regulated revenue requirement.[546] This would mean that prices would not reflect the share of assets no longer used to provide declared services, and would be consistent with the fixed principles provision which states that cost allocation factors should reflect the relative usage of the network by various services.[547]

Telstra submitted that, in the context of its proposed fully allocated cost framework,[548] it is necessary to incorporate NBN Co's expected increased usage of Telstra's ducts and exchange space over time. This is to ensure that the costs of these assets can be fully allocated across the services that use them, thereby ensuring a fair sharing of these costs among users.[549]

Treatment of assets affected by migration and migration payments

Optus submitted that migration payments should be viewed as return of capital to Telstra shareholders, and accordingly, Telstra should no longer earn a return on or of capital with respect to assets for which payments are made.[550] Optus submitted that its position is consistent with the fixed principles provision which specifies that asset disposals will be removed from the RAB.[551]

Frontier submitted that the RAB value of network assets stranded as a consequence of NBN migration should be removed from the RAB as an asset disposal.[552] Frontier also submitted that the migration payments provide at least the necessary return of capital for these assets. This would be consistent with the fixed principle which specifies the RAB roll-forward mechanism.[553]

---

543 Optus submission, October 2014, p. 10.

544 Optus, *Submission in response to ACCC Discussion Paper: Public Inquiry into final access determinations for fixed line services – primary price terms*, August 2014, p. 7.

545 Frontier Economics submission, pp. 42-43.

546 Department of Communications submission, p. 7.

547 Department of Communications submission, p. 7.

548 As discussed in section 3.2 of the discussion paper, Telstra has proposed a fully allocated cost framework for the purposes of allocating its total fixed line costs to the declared services.

549 Telstra submission, p. 108.

550 Optus submission, August 2014, p. 7.

551 Optus submission, August 2014, p. 7.

552 Frontier Economics submission, p. 43.

553 Frontier Economics submission, p. 43.

Telstra submitted that assets expected to be decommissioned should be treated as asset disposals, with their remaining RAB value removed from the RAB at the time of decommissioning.[554]

9.4.2 Submissions to the position statement

In January 2015, iiNet submitted a letter to the ACCC in response to the October 2014 position statement, and an accompanying report by Frontier Economics.

iiNet submitted that it appears that the ACCC has based its position on a regulatory values approach on an assertion that such an approach is standard regulatory practice and that regulators only consider costs attributable to regulated services.[555] iiNet noted that the ACCC did not indicate in the position statement whether it intends to implement a regulatory values approach within the current partially allocated cost framework or a fully allocated framework as proposed by Telstra.[556]

Based on the findings of the Frontier report, iiNet submitted that there are examples where regulators have used proceeds from asset sales to value transactions affecting regulated assets rather than regulatory values, and that regulators have taken account of non-regulated sources of revenue in setting regulated prices of services that use shared assets.[557]

iiNet further submitted, based on the Frontier report, that the ACCC's partially allocated cost framework can be reconciled with a regulatory values approach to accounting for the Telstra-NBN Co arrangements. iiNet submitted that the partial allocation approach has several advantages, including that it contributes to regulatory predictability, maintains the existing allocation of demand risk, and avoids issues relating to the initial RAB that arise from changing cost allocation methodologies.[558]

Finally, iiNet submitted that in light of its conclusions, the ACCC should consider whether it is appropriate to maintain its position on the use of regulatory values and, if it does, consider iiNet's submission that the regulatory values approach can be reconciled with the partially allocated cost framework.[559]

9.5 ACCC draft decision

The sections below set out the ACCC's draft decision on accounting for the impacts of the Telstra-NBN Co arrangements for the FADs, and reflect the positions outlined in the October 2014 position statement. The section also sets out ACCC concerns regarding the impact of the NBN on unit operating costs.

9.5.1 Quantifying the impacts of the Telstra-NBN Co arrangements

The ACCC's draft decision is to adopt a regulatory values approach to account for the impacts of the Telstra-NBN Co arrangements in determining prices for the declared fixed line services. Any adjustments to account for the arrangements between Telstra and NBN Co will be based on the values assigned to affected assets in the RAB (as reflected in the FLSM) and not based on the value of payments received from NBN Co.

As noted in the position statement, the ACCC is adopting common regulatory practice in using regulatory values as a basis for valuing transactions affecting regulated assets. To use for regulatory purposes the payments established in the commercially negotiated Definitive

554 Telstra submission, p. 34.
555 iiNet, Letter to the ACCC, 8 January 2015.
556 Ibid.
557 Ibid.
558 Ibid.
559 Ibid.

Agreements, rather than the regulatory values of relevant assets determined in the FLSM, would result in prices of declared fixed line services changing for reasons other than changes in the cost of supplying those services.[560]

The regulatory values approach maintains the ACCC's cost based approach to setting prices for Telstra's declared fixed line services which, when it was adopted for the 2011 FADs in place of a TSLRIC pricing framework, received broad industry support due to the regulatory certainty and price stability it would encourage.[561]

During that FAD inquiry, the ACCC considered that a BBM would improve certainty by 'locking in' the initial value of the regulated assets, which would then be rolled forward by actual changes in the value of the asset base.[562] The ACCC considered that this certainty would promote efficient use of and investment in infrastructure through greater predictability in revenue and price paths.[563] Further, the ACCC considered that determining prices through a transparent and cost based pricing model will provide regulatory certainty for both access provider and access seeker about the way the ACCC would set prices, and that such certainty would promote efficient investment and competition in the markets for carriage services.[564]

The ACCC notes iiNet's submission to the position statement regarding the ACCC's comments on regulatory practice in other regulated sectors. The ACCC recognises that regulators have adopted different approaches to dealing with proceeds from asset sales and accounting for non-regulated sources of revenue. Indeed, in the July 2014 discussion paper the ACCC discussed the specific issue of whether to treat the payments from NBN Co as regulated or non-regulated revenue, and cited the AER's Shared Asset Guideline, which prescribes a treatment of non-regulated revenues received by regulated businesses that provide regulated services using shared assets.[565]

The ACCC considers that its decision to adopt a regulatory values approach in accounting for the Telstra-NBN Co arrangements is consistent with practices adopted in other regulatory contexts. Most importantly, however, the ACCC considers that the regulatory values approach is the most appropriate in the context of this decision. It will result in prices that are based on the efficient resource cost of providing services and therefore that are allocatively efficient. This will encourage efficient use of and investment in infrastructure and promote efficient competition by access seekers.

Further, the ACCC's position on a regulatory values approach is independent of its position on whether to adopt full cost allocation, and the ACCC does not consider that there is a causal link between these approaches. While a fully allocated model such as Telstra's allows for the ACCC to account for NBN Co's usage of Telstra's fixed line network, it is not necessary for this purpose. The ACCC's draft decision to adopt a fully allocated cost framework is set out in chapter 10.

The ACCC notes iiNet's submission on the allocation of demand risk and the interaction between the initial RAB and cost allocation. These issues are addressed in chapter 10.

9.5.2 Implementing a regulatory values approach

The October 2014 position statement provided general guidance on how the ACCC intended to implement a regulatory values approach in the FLSM. The ACCC stated that:

560 ACCC position statement, p. 10.
561 ACCC, *Inquiry to make final access determinations for the declared fixed line services – Final Report*, July 2011, p. 27.
562 ACCC, *Public inquiry to make final access determinations for the declared fixed line services – Discussion paper,* April 2011, pp. 25-26.
563 ACCC 2011 final report, p. 133.
564 ACCC 2011 final report, p. 133.
565 July 2014 discussion paper, pp. 70-71.

- Assets sold to NBN Co should be treated as asset disposals and removed from the RAB at their regulatory value.

- Leasing arrangements should be reflected in the cost allocation framework of the FLSM by explicitly recognising NBN Co's use of Telstra's fixed line assets.

- Assets that are decommissioned, and an appropriate share of assets utilised to a lesser extent, as a result of NBN migration should be removed from the regulated cost base at their regulatory value.

The ACCC has considered these approaches further, and provides its draft decision on specific implementation issues below. The ACCC notes that, while the approaches outlined below have been used to estimate the draft prices included in chapter 13, the final implementation will depend on whether further and more up-to-date information that is relevant (for example, on the relative mix of NBN technologies and respective rollout timeframes) is available by the time the ACCC makes a final decision.

Assets sold to NBN Co

The ACCC's draft decision is that assets sold to NBN Co will be treated as asset disposals and removed from the RAB, and that the amount to be removed from the RAB will be based on the regulatory value of those assets.

Under the Telstra-NBN Co arrangements, the assets to be sold to NBN Co that form part of the RAB include copper cables in FTTN areas.[566] The ACCC has treated a proportion of the RAB value of the copper cables asset class as an asset disposal in each year, with that proportion being based on the expected rate of FTTN rollout.[567]

Assets leased to NBN Co

The ACCC's draft decision is that, to the extent that NBN Co uses assets that are also used to provide declared services, this will be accounted for in the cost allocation framework of the FLSM. This will ensure that the costs allocated to, and recovered from, declared services reflect the costs of supplying declared services. It will also ensure that Telstra does not continue to receive revenue from users of declared fixed line services for the share of assets no longer used to provide those services.

This approach constitutes a regulatory values treatment of leased assets, as the allocation of asset costs to users of the fixed line network (including NBN Co) in the FLSM will be based on the values assigned to those assets in the RAB.

Under the Telstra-NBN Co arrangements, the assets to be leased to NBN Co include ducts, rack space in exchange buildings, and dark fibre links. The ACCC has therefore explicitly accounted for NBN Co's usage of 'ducts and pipes', 'other communications plant and equipment' and 'inter-exchange cables' (respectively) in the cost allocation framework.

As discussed in chapter 10, Telstra's proposed cost allocation framework includes a mechanism whereby the allocation factors for these asset classes are adjusted to reflect expected usage by NBN Co over time. As noted in section 10.4.1, the ACCC has decided to adopt a fully allocated cost framework. However, this is subject to an assessment of the inputs used within the model to arrive at the final allocation factors — including the methodology used to account for NBN usage of the assets being leased by Telstra.

---

[566] Telstra will also be selling lead-in conduits to NBN Co, however these assets do not form part of the RAB and are therefore not considered.

[567] As set out in NBN Co's December 2013 Strategic Review.

Assets affected by the migration of customers to the NBN

Under the Telstra-NBN Co arrangements, customers will be migrated from Telstra's fixed line network to the NBN as it is rolled out. NBN Co will pay Telstra a one-off migration payment for each customer that is disconnected from Telstra's fixed line network and migrated to the NBN.

The ACCC considers that it is important to consider the impact that NBN migration will have on the assets that are used to provide declared services. The ACCC considers that a consequence of migration is that certain assets will be either decommissioned or utilised to a lesser extent. This will ultimately mean that some assets that are currently used to provide declared services will no longer be used for this purpose, either fully or in part. The ACCC considers that this should be accounted for in determining prices for the declared services where it is appropriate to do so. This is discussed further in the sections below.

Decommissioned assets

The ACCC's draft decision is that assets that are decommissioned as a result of NBN migration should be removed from the fixed line cost base, and that the amount to be removed should be based on the regulatory value of those assets.

The ACCC considers that copper cables — specifically those in FTTP and HFC areas where they will not form part of the NBN — will be progressively decommissioned as customers are migrated to the NBN. This is because, as the NBN is rolled out in these areas, customers will be disconnected from the copper network and then connected to the NBN via either fibre optic or coaxial cable. The disconnected copper cables would no longer be used to provide declared services.

The ACCC will therefore treat a proportion of the RAB value of the copper cables asset class as an asset disposal in each year, with that proportion being based on the expected rate of FTTP and HFC rollout.

Taking together the ACCC's draft decisions on the treatment of decommissioned copper cables and copper cables sold to NBN Co, the copper cables asset class in the FLSM will be reduced in proportion to the overall expected rate of the fixed line NBN rollout. Under this approach, a proportion of the RAB value of copper cables (based on the expected rate of the overall fixed line NBN rollout) will be treated as an asset disposal in each year.

Assets utilised to a lesser extent

In its position statement the ACCC considered that an appropriate share of assets utilised to a lesser extent as a result of NBN migration should be removed from the regulated cost base, and that the amount to be removed should be based on the regulatory value of those assets.

The ACCC considers that the assets which will be most directly impacted and potentially under-utilised as a result of NBN migration are local switching equipment (which is used to provide WLR, FTAS/FOAS and LCS) and data equipment (which is used to provide wholesale ADSL). This is because, of the asset classes in the core, these are the network elements closest to end-users. As the NBN is rolled out in a particular geographic area, customers in that area will be progressively disconnected from local switches and DSLAMs and hence will no longer contribute to the voice or data traffic traversing them. All else being equal, this may lead to a fall in the utilisation of these assets.

The ACCC has further considered the issue of NBN-induced declining utilisation and its potential impact on these asset classes.

In the case of data equipment, the ACCC's draft decision is that adjustments to account for any under-utilisation of these assets are not required. Data equipment has a short asset life (six years for new assets) and capital expenditure on data equipment is forecast to decline sharply.

The combined effect of these two factors is that the data equipment RAB is forecast to fall sharply over the regulatory period, such that the forecast pace of decline in the regulatory value of data equipment aligns closely with that of total ADSL SIOs. The ACCC considers that this alignment does not support an argument that data equipment should be adjusted to reflect potential under-utilisation.

Further, despite the shrinking of Telstra's fixed line network, per SIO data traffic is an area of growth. The ACCC considers that it is appropriate to provide incentives for efficient investment in and operation of the legacy data network, particularly during the transition to the NBN.

For these reasons, the ACCC considers that an adjustment to the data equipment asset class to reflect under-utilisation is not required.

In the case of local switching equipment, the ACCC considers that these assets will be utilised progressively less during the upcoming regulatory period. The ACCC's draft decision is that adjustments are required to reflect the resulting under-utilisation in the FLSM.

Unlike data equipment, local switching equipment has a long asset life (27 years for new assets). While capital expenditure on local switching equipment is forecast to be relatively minor and trend slightly downwards (in real terms) over the regulatory period, investment rolled into the RAB between 2009-10 and 2013-14 was relatively significant. As a result, the local switching equipment RAB is forecast to fall at a relatively slow rate over the forecast period, such that the forecast pace of decline in the regulatory value of local switching equipment is significantly slower than that of either total MOUs or total SIOs.[568] The ACCC considers that this divergence suggests that local switching equipment will be progressively under-utilised over the upcoming regulatory period, and that this will occur to a large extent as a direct consequence of NBN migration.

The ACCC notes that the migration payments received from NBN Co under the Definitive Agreements provide replacement revenues to Telstra.[569] The progressive disconnection of customers from the fixed line network, for which Telstra will receive the migration payments, will contribute to the under-utilisation of local switching equipment and will subsequently lead to higher unit costs for WLR, FOAS/FTAS and LCS than would otherwise be the case. The ACCC therefore considers that it would be inappropriate for Telstra to recover, through regulated charges, higher unit costs that arise from under-utilisation of local switching equipment caused by NBN migration.

To ensure that these higher unit costs are not borne by users of the fixed line network, the ACCC has treated a proportion of the RAB value of the local switching equipment asset class as an asset disposal in each year, with that proportion being based on the expected rate of the overall fixed line NBN rollout.

9.5.3 Loss of economies of scale due to the NBN

A further impact of the NBN is the increase in unit operating costs that will occur over the next regulatory period as services are migrated from Telstra's fixed line network to the NBN. This increase is due to the loss of economies of scale in the operation of the network as services are disconnected.

WIK-Consult identified the loss of economies of scale due to the NBN as an issue in its report on the efficiency and prudency of Telstra's expenditure forecasts. WIK-Consult made a range of arguments regarding NBN-related loss of economies of scale, including the following:

---

568 Both MOUs and SIOs are relevant because under Telstra's proposed cost allocation framework, allocation factors for local switching equipment are based on the proportion of assets within the asset class whose costs are driven by either MOUs or SIOs. These proportions are based on the written down values of these assets in Telstra's asset register as at 2013.

569 Telstra media release, 'Telstra signs NBN Definitive Agreements', 23 June 2011.

- Telstra has reached a certain degree of economies of scale from which Telstra and users of fixed line services have benefited through lower costs and lower prices. Through progressive disconnection and migration to the NBN, remaining customers will face a loss of economies of scale. However, this loss is not caused by a change in demand for fixed line services, but due to migration to the NBN.[570]

- The concept of cost based pricing for fixed line services implies that only those costs that are incurred in the provision of fixed line services should be included in the cost base. That principle is fundamental. Any additional expenditure incurred by Telstra due to the NBN roll-out is not caused by the business of access seekers. The same applies on the increase of average costs of fixed line services.[571]

- Telstra has argued that [c-i-c starts] [redacted] [c-i-c ends]

- The average amount of duct and cable costs attributed to CAN SIOs must not increase as the number of active wire pairs declines in the course of NBN roll-out. That is, access seekers must not be charged for diseconomies of density caused by the NBN roll-out.[573]

- The migration of customers to NBN Co implies that the amount of active wire pairs on a copper cable declines. This results in higher costs for regulated fixed line services. However, these diseconomies of scale have not been caused by access seekers. The access seekers have no influence on the speed of the migration. Consequently, access seekers should not pay for diseconomies of scale associated with copper cables.[574]

The ACCC also notes Frontier's submission that Telstra's forecasts will result in NBN-specific expenditure being allocated to all users of the fixed line network, rather than recovered from NBN Co directly, and that this will be detrimental to efficient use of infrastructure and competition. Frontier further submitted that Telstra's forecasts result in all users of the network facing higher costs from a loss of economies of scale arising from the combination of fixed costs and NBN-induced declining usage of the network. Frontier submitted that the ACCC should remove all expenditure that is incremental to NBN Co's demand for fixed line assets, and ensure that expenditure forecasts are consistent with NBN migration causing no loss of economies of scale.[575]

The ACCC agrees with WIK-Consult that loss of economies of scale in the provision of fixed line services is likely to be predominantly incremental to the NBN. Further, the ACCC considers that access seekers should not incur higher charges for fixed line services as a consequence of the decision by Telstra regarding the future of its copper network. The ACCC is still considering this issue and, in particular, how it will identify the increase in unit operating costs due to NBN-induced loss of economies of scale and density. The ACCC invites comments from stakeholders on this issue in submissions.

---

570 WIK-Consult, *Assessment on the efficiency and prudency of Telstra's expenditure forecasts,* 2 March 2015, p. 29

571 Ibid., p. 90

572 Ibid., p. 45

573 Ibid., p. 89

574 Ibid., p. 94-95

575 Frontier Economics (2014), *Assessment of Telstra's revised forecasts – a report prepared for the competitive carriers coalition*, December 2014, pp. 11-12.

10 Cost allocation and declining demand

Key Points

- Cost allocation factors are used to allocate Telstra's costs to declared fixed line services. Costs allocated to declared services form the basis for setting prices for declared services.
- In the 2011 FADs the ACCC determined cost allocation factors by adopting cost allocation factors from the 'Analysys model' and updating them annually by changes in demand for declared services. This framework is a 'partially allocated' approach in that it took into account demand for declared services but not for other services supplied over the fixed line network.
- Telstra has proposed that a fully allocated cost framework, which takes into account all services supplied on the fixed line network, should be adopted for the next regulatory period. Telstra has submitted a detailed cost allocation model that reflects a fully allocated framework.
- The choice of cost allocation framework has important implications for how the impacts of declining demand are shared between access seekers, Telstra and other users of the fixed line network. Under the approach the ACCC used in 2011, prices remained invariant to changes in demand and Telstra bore the impacts from declining demand. Under a fully allocated approach, costs are spread over a declining customer base and all users of the network bear a share of the impacts of declining demand.
- The ACCC's draft decision is to adopt a fully allocated cost framework in the next regulatory period. The ACCC considers that a fully allocated cost framework:
    - will provide the opportunity for Telstra to recover the full efficient costs of providing declared services
    - is most likely to reflect relative use of Telstra's fixed line network and in turn determine an appropriate share of costs to allocate to declared services
    - is an appropriate basis for explicitly accounting for the use of Telstra's infrastructure by NBN Co and other NBN related impacts
    - is consistent with the fixed principles provisions on cost allocation.
- The ACCC considers that it is appropriate for all users of the fixed line network to bear the impacts of the declining fixed line market. The ACCC considers that any compensation to Telstra for loss of market share is likely to be minor and will not create any adverse competitive outcomes in downstream markets.
- The ACCC's draft decision is to adopt Telstra's proposed cost allocation framework as the basis of a full cost allocation approach. The final decision will be subject to further verification of model inputs between the draft and final decisions.

10.1 Introduction

Telstra's fixed line network is used to provide both declared and non-declared services. Cost allocation factors are used in the Fixed Line Services Model (FLSM) to allocate a share of each asset class's total revenue requirement to individual declared services to estimate the costs of providing those services. Prices for declared services are then calculated based on costs allocated to those services.

The majority of cost allocation factors for the 2011 FADs were based on a model previously developed by Analysys Mason (the Analysys model). The Analysys model was a TSLRIC+ model developed in 2007-08 before the building block model was adopted by the ACCC. The

Analysys model's allocation factors were used as a starting point for determining the allocation factors used in the FLSM for the 2011 FADs. The ACCC made a number of adjustments to these cost allocation factors, including de-optimisation[576] of certain cost allocation factors and updating cost allocation factors to reflect forecast changes in demand for declared services.

The cost allocation framework adopted in the 2011 FADs does not explicitly allocate costs of shared assets to non-declared services such as Telstra's retail services and mobile services and thus does not comprehensively account for the allocation of costs of the asset classes in the FLSM. Under the cost allocation framework in the FLSM, costs allocated to the declared services move in line with demand for those services, without reference to movements in the demand for other services using the fixed line network. As a result, unit costs (and hence prices) of the declared services are not impacted by the shrinking of the market for fixed line services and access seekers do not bear a share of this fall in demand. Under this framework Telstra is not compensated for declining demand due to substitution to mobile services or for loss of market share due to infrastructure based competition.

Telstra has proposed that a fully allocated cost approach to price setting should be adopted in the FADs for the next regulatory period. This approach explicitly allocates fixed line capital and operating costs to all services, both declared and non-declared, that use the fixed line network, taking into account relative change in usage of the network by all services.

Adoption of Telstra's proposed approach would change how the impacts of declining demand are shared between Telstra, access seekers and other users of the fixed line network. Under Telstra's revised approach to cost allocation, declining demand for services using particular assets will result in higher prices and the impacts will be borne by all users of the network.

This chapter provides ACCC's draft decision on the cost allocation framework used to determine primary price terms for the declared fixed line services, and the impacts of declining demand. In reaching its draft decision, the ACCC has considered submissions from stakeholders.

10.2 July 2014 discussion paper

The discussion paper provided an overview of both the 2011 cost allocation framework and Telstra's proposed model.[577] The ACCC identified a number of important observations regarding the alternative cost allocation framework. Some advantages of using the fully allocated approach discussed were that it:

- is based on detailed knowledge of Telstra's network topology and fixed line costs
- is a more transparent application of cost drivers to services
- provides a greater opportunity for Telstra to fully recover its sunk costs
- establishes a more complete and consistent approach to allocating costs to services using the network.

Some disadvantages of using this approach were that it could:

- reduce incentives for Telstra to minimise costs
- increase incentives for subsidisation of competitive services by shifting costs to regulated services.

[576] The Analysys TSLRIC+ model estimates costs for an optimised network while the FLSM models for the actual assets making up the Telstra network.

[577] See also ACCC, *Public Inquiry into final access determinations for fixed line services: Additional information on cost allocation*, July 2014.

- distort investment by Telstra toward achieving low costs in the competitive segment and high costs in the regulated segments.

The ACCC sought feedback from the stake-holders on a range of issues, including:

- whether a partially allocated approach or fully allocated approach would be a better method of estimating the cost of declared services for the next regulatory period
- any alternative cost allocation approach that would be preferred
- any further information that may be required from Telstra to make the model more transparent or more accurately reflect usage of network resources
- impacts of higher regulated prices that may arise when moving from a partially allocated cost approach to Telstra's fully allocated cost approach.

The discussion paper also discussed the implications of declining demand for fixed line services under each cost allocation framework.

The ACCC identified three main sources of declining demand. These were migration of customers to the NBN; loss of market share through increased infrastructure based (ULLS/LSS) competition by access seekers; and take-up of mobile technologies.

The ACCC indicated that it would make explicit adjustments to account for the impacts of the NBN (discussed in chapter 9 of this draft report).[578]

The discussion paper noted that under the fully allocated model proposed by Telstra, a share of the impacts of declining demand will be borne by access seekers through higher access prices. This would be a departure from the ACCC's previous approach that did not compensate Telstra for declining demand.

For substitution away from fixed line services, the ACCC also noted its previously held view that it was not appropriate that prices should be increased in line with reduced demand due to consumers choosing alternative products. In its discussion paper the ACCC sought views from stakeholders on:

- whether the impacts of declining demand should be shared between Telstra and access seekers, and cost approaches that appropriately share the impact of declining demand between Telstra and access seekers
- whether different sources of declining demand should be accounted for in different ways, that is, whether Telstra or access seekers should bear the impacts of some sources of declining demand but not others.

10.3 Submissions

This section sets out stakeholders' submissions on cost allocation and declining demand.

Telstra's proposed fully allocated cost framework

Several submissions supported the fully allocated approach. Telstra submitted that only a fully allocated cost approach will ensure that costs are neither over-recovered nor under-recovered.[579] Telstra stated that the "failure to fully allocate costs across all network services

[578] See also ACCC, Position statement on the treatment of the Telstra-NBN Co arrangement, October 2014.

[579] Telstra, *Cost Allocation Framework for the ACCC Fixed Line Services Model, Framework and Model Guide, Version 1,* July 2014, p. 4.

constitutes an explicit and discriminatory cross-subsidy from Telstra's retail customers to wholesale customers".[580]

The Department of Communications also considered that costs should be allocated to specific users and that revenue to cover those costs should be linked to the specific uses of the assets. The Department also submitted that when customers migrate to the NBN and assets are transferred to NBN Co, the ACCC should reduce the RAB to remove these assets. For common assets used by both Telstra and NBN Co, the costs apportioned to those asset categories should reflect the relative usage of the asset.[581]

Frontier (on behalf of CCC) submitted that some of the principles of Telstra's approach appear sound and in line with the fixed principles. Frontier considered that the fully allocated cost approach is more transparent and uses more relevant data compared to the partially allocated approach. Frontier also noted that the fully allocated approach results in clearer allocation to non-fixed line services, which is important for properly accounting for NBN Co's use of assets.[582]

Several stakeholders including Frontier[583], TPG[584] and iiNet[585] expressed concern about the possible increase in access prices if the fully allocated cost model is adopted. These stakeholders stated that it does not promote the LTIE and is inconsistent with the prices that would result in a competitive market. iiNet also stated that Telstra's proposed fully allocated cost model will not necessarily promote more efficient use of infrastructure and that a higher access price is not required to satisfy Telstra's legitimate business interests.

2011 partially allocated approach

Optus[586] and iiNet[587] strongly opposed the adoption of Telstra's fully allocated approach. Optus submitted that Telstra's proposed cost allocation model should not be adopted as, in its view, the rationale for many of the changes is a cost shifting exercise from retail to wholesale services. Optus also noted that the current approach enabled Telstra to recover its costs as Telstra continued to report a high EBITDA margin in recent periods.

iiNet submitted that there is no benefit gained in re-opening cost allocation issues given the significant amount of work already done in 2011. According to iiNet, the current inquiry should be limited to determining the inputs to the ACCC's existing FLSM that are necessary to 'roll forward' the FLSM. iiNet added that it believes that Telstra's proposed cost allocation framework should be rejected because it requires the ACCC to revisit issues that were appropriately determined at the time the FLSM was created and that it will lead to an increase in access prices that is contrary to the long-term interests of end-users. iiNet also stated that the ACCC should consider, and give appropriate weight to, the outputs of its current cost model rolled forward.[588]

---

[580] Telstra, *Public inquiry into final access determinations for fixed line services – primary prices, Response to industry submissions,* December 2014, p. 5.

[581] Department of Communications, *Final access determinations for fixed line services – primary price terms, Department of Communications submission to the Australian Competition and Consumer Commission, October 2014,* p. 8.

[582] Frontier Economics, *Submission on the final access determinations for fixed line services, a report prepared for the competitive carriers' coalition,* October 2014, p. 25.

[583] Frontier Economics submission, October 2014, p 32

[584] TPG, *Submission by TPG Telecom Limited to Australian Competition and Consumer Commission (ACCC), Telecommunications Final Access Determination inquiries – FLSM,* October 2014, p. 2.

[585] iiNet, *Public inquiry into final access determinations for fixed line services – primary price terms, Discussion Paper – July 2014, Submission by iiNet Limited,* November 2014, pp. 6-9.

[586] Optus, *Supplementary submission in response to ACCC Discussion Paper, Fixed Line Services Final Access Determination – Primary prices,* October 2014, pp. 5-6.

[587] iiNet submission, November 2014, p 3

[588] iiNet submission, November 2014, p 11

Frontier submitted that it is not necessary to change the ACCC's current allocation method and it would not be in the LTIE to change allocation methods without making subsequent adjustments in other areas.[589] Frontier also submitted that retaining the ACCC's existing cost allocation framework[590]:

- contributes to certainty and predictability of the regulatory process
- is less information and resource intensive to implement as it only requires demand forecasts for the declared fixed line services
- avoids specific problems such as:
    - demand risks being shifted from Telstra to access seeker
    - setting of the initial RAB (as the initial RAB value was set to create a 'tie point' for the price of ULLS and was therefore dependent on the approach to cost allocation used).

Telstra rejected the partially allocated approach and stated that it resulted in the cost of declining demand being borne entirely by Telstra's retail end-users. Telstra also submitted an expert report by Mr. Jeff Balchin, who stated that prices should be cost reflective. He stated that in order for Telstra to continue to provide access services efficiently, regulated prices must enable Telstra to recover its costs fully in the face of declining demand. He stressed that this outcome cannot be achieved if the building block model was back-engineered to create a predetermined non-cost reflective price. He also stated that full cost recovery in the face of declining demand would result in the same outcome as that in a competitive market, where investments are made under efficient long term contracts.

Consistency with fixed principles provisions

Telstra submitted that the fixed principles provisions included in the 2011 and 2013 FADs require that costs are allocated to services on the basis of their proportional usage of the network, and that it will not be in the LTIE to depart from the fixed principles provisions to deliver a particular price outcome.

iiNet argued that the fixed principles provisions do not require the ACCC to set prices on the basis of the relative usage of all services that use the network. Rather, iiNet argued that the fixed principles provisions only require that the allocation of costs of operating the PSTN should reflect relative usage of the network by declared services. Telstra disagreed with iiNet and stated that this would imply that any arbitrary allocation can be made between the declared services and other services using the same network. Telstra also stated that at one extreme, this could mean that 100 per cent of costs are allocated to declared services and all costs would be borne by the end-users of those services.

Frontier submitted that, if the allocation framework is to be revisited, then the initial RAB value must be reopened because of the interdependence between the two in setting a $16 tie point for the ULLS service (discussed further below). Telstra responded to this by stating that the initial RAB value is locked in under the fixed principles provisions. Telstra further stated that even if it was permitted by the fixed principles provisions to revisit the initial RAB, it would not be appropriate to do so because the initial RAB was the product of a lengthy consultation process in which the ACCC considered a range of methodologies and took into account various considerations. Telstra submitted that there is no need to revisit the fixed principles provisions in order to adopt a fully allocated framework because the fixed principles provisions, in its view, clearly require that costs are allocated to services on a fully allocated cost basis.

[589] Frontier Economics submission, October 2014, p 37

[590] Frontier Economics, *Implementing the regulatory values approach, A report prepared for Thomson Geer*, December 2014, p 20

Incenta[591] (on behalf of Telstra) considered that the partially allocated cost approach is inconsistent with the fixed principles provisions because:

- the fixed principles require costs to be allocated between regulated and unregulated services on the basis of relative use. The partially allocated cost approach results in a much lower proportion of costs being allocated to regulated use
- the fixed principles require the demand forecasts used to set regulated prices to reflect the best forecasts of the sale of the fixed line services over the regulatory period. However, the partially allocated cost approach uses the ACCC's 'deemed optimal use' of the relevant assets as the denominator when setting prices
- a starting value for the RAB and a formula for updating it over time is prescribed in the fixed principles. The partial allocation approach will not deliver a stream of cash flows over time with a present value equal to the RAB and is therefore not consistent with the RAB values prescribed in the fixed principles
- a partially allocated approach does not provide an opportunity for Telstra to recover its costs as required in a building block model,[592] which the fixed principles state will be used to estimate the costs of supplying the declared services.

Declining demand due to loss of market share

Optus[593], TPG[594] and iiNet[595] submitted that it is not appropriate to compensate Telstra for a loss of market share or reduction in the size of the market. This is because in a competitive market, an access provider would not be able to spread the cost of inefficient assets over remaining customers and remain competitive with more efficient suppliers.

Optus also noted that Telstra's loss of market share is offset by:

- mobile substitution – because Telstra is the largest mobile provider and has increased its market share since 2010
- migration to the NBN – because the Definitive Agreements between Telstra and NBN Co provide for substantial compensation to Telstra
- increasing over the top services - as these services rely on broadband access and Telstra is the largest broadband provider.

iiNet submitted that it is appropriate for Telstra to continue to bear the impact of declining demand because Telstra did not provide the ACCC with information required for a fully allocated cost approach for the 2011 FADs. That Telstra has now chosen to provide more detailed information about the use of its assets is irrelevant to the issue of methodological principle that has already been set.

TPG submitted that, since declining demand will result in lower costs for Telstra, there is no need to make specific allowances for declining demand.[596]

[591] Incenta Economic Consulting, Jeff Balchin, *Cost allocation for fixed line services, Gilbert+Tobin,* October 2014, pp 3-4
[592] Incenta, *Balchin report on cost allocation*, October 2014, p 3
[593] Optus submission, October 2014, p 5
[594] TPG submission, October 2014, p 3
[595] iiNet submission, November 2014, p 17
[596] TPG submission, October 2014, p 3

Telstra submitted that it is not seeking compensation for loss of market share. Rather, Telstra is seeking to ensure that it has an opportunity to recover the cost of providing network access and that the cost recovery burden is shared proportionately among all network users.[597]

Declining demand due to shrinking fixed line market

iiNet[598] and Optus[599] submitted that there may not be a need to further compensate Telstra for declining demand as Telstra is compensated for the effects of declining demand through increased mobile volumes and payments from NBN Co.

Telstra submitted that with declining demand, costs may rise across all remaining services, including Telstra retail services and wholesale services. Further, Incenta[600] on behalf of Telstra submitted that compensation through Telstra's mobile business is likely to be incomplete and short-lived. This is because the mobile market is competitive and any additional revenue that Telstra earns from mobile services will only just be sufficient to cover the incremental cost of serving new (mobile) customers. On arguments regarding payment from NBN Co, Incenta submitted that Telstra's agreements with NBN Co were developed at the same time as the fixed principles and if the ACCC's intention had been for Telstra to recover the cost of some of its assets through the agreements, then this is something the fixed principles could have provided for explicitly, which was not the case.[601]

Interactions between cost allocation frameworks and the initial RAB

Frontier submitted that the ACCC cannot consider changing the cost allocation methodology without also considering the impact on the setting of the initial RAB. Frontier submitted that the initial RAB was inflated based on the prices determined by ACCC's partial allocation method being too low.[602]

The ACCC increased the RAB in 2011 to promote price stability and to create a $16 'tie point' between old and new ULLS prices. According to Frontier, this increase in the RAB was only required because of the partial allocation approach adopted in 2011 and would not have been required if a fully allocated cost approach had been adopted at that time. Frontier considers that adopting Telstra's full cost allocation methodology without an offsetting adjustment to the RAB would create a windfall gain for Telstra, which is not in the long-term interests of end-users and cannot be necessary to protect Telstra's legitimate business interests.

Telstra responded that the initial RAB value cannot be revisited by the ACCC, as the value of the initial RAB is locked in under the fixed principles. [603] Telstra stated further that the initial RAB value was the product of a lengthy consultation process in which the ACCC considered a range of methodologies and took into account various considerations.

Specific cost allocation factors

Frontier commented on cost allocation factors for some specific asset classes,[604] and raised questions about:

---

[597] Telstra submission, December 2014, p 21
[598] iiNet submission, November 2014, p 17
[599] Optus submission, October 2014, p 5
[600] Incenta Economic Consulting, Jeff Balchin, Cost allocation and declining demand for fixed line telecommunications services: comments on submissions and the ACCC proposal paper, December 2014, pp. 6-7.
[601] Incenta, Balchin report, December 2014, p 6
[602] Frontier Economics submission, December 2014, pp 1-10
[603] Telstra submission, December 2014, p 20
[604] Frontier Economics submission, October 2014, pp 28-32

- how the use of duct kilometres has been measured and what data is provided to the ACCC as assurance about the accuracy of this measurement and how the share of duct capacity between different user groups is to be determined.

- whether Telstra's allocator for 'Telstra racks' adequately separates out usage for fixed line services from other uses of racks in its exchanges and if there is a more transparent method of allocating costs on the basis of the fixed network's share of land and building space.

- whether or how Telstra has allocated the costs of dark fibre leased to NBN Co (or other users) and whether Telstra's proposed allocation method is the best for this asset class. Frontier considers that a better measure of usage is the number of cables used for each service as well as fibre kilometres

- the general allocator approach. Frontier submitted that if there is no direct usage-based allocator, this may be a second or third best alternative.

In its submission of December 2014, Telstra updated the platform allocators for inter-exchange cables to change how CAN fibre should be allocated. Telstra recognised that the costs of CAN fibre should be shared across PSTN voice, DSL and other platforms, rather than allocated solely to PSTN voice services as had previously been the case.

Telstra also updated the transmission equipment allocator in its cost allocation framework. Telstra stated that this was due to a refinement in their data extraction process which resulted in slight movements between the platform allocators for SDH and PDH equipment.

10.4 ACCC draft decision

The ACCC's draft decision is to adopt a fully allocated cost approach to determine the costs of supplying declared services in the next regulatory period. Further, the ACCC considers that Telstra's proposed approach to cost allocation is appropriate because it is internally consistent and, for most allocators, is based on relevant information regarding the use of assets. However, the ACCC considers that the basis of certain allocators within the Telstra cost allocation model require further substantiation and verification. Therefore, the ACCC will undertake further analysis of certain aspects of Telstra's cost allocation framework prior to making its final decision.

The ACCC's draft decision to adopt a fully allocated cost framework means that the impacts of the declining demand for fixed line services will be shared between Telstra and access seekers, subject to the amendments to account for the impacts of the NBN (as discussed in chapter 9 of this draft decision).

The ACCC's reasons for its draft decision on cost allocation and declining demand are set out in following sections.

10.4.1 Cost allocation

The ACCC considers that a fully allocated cost framework is the most appropriate for allocating Telstra's fixed line network costs for a number of reasons.

First, the ACCC considers that a fully allocated approach is the most compatible with the objectives of a building block approach to regulatory price setting. A key objective of the building block approach is to provide regulated entities with a reasonable opportunity to recover the efficient costs of investing in and operating assets used to provide regulated services. A fully allocated approach is consistent with this objective because all costs are explicitly allocated to all services that use particular assets. If costs are not fully allocated between all relevant services, the access provider cannot have an expectation it will be able to recover its efficient costs, and this is likely to discourage efficient investment in the fixed line network.

Second, the ACCC considers that a fully allocated approach is likely to result in cost allocation factors that reflect the relative use of Telstra's fixed line assets by all services that use those assets. This will result in prices that reflect the relative cost of supplying those services and promote efficient use of and investment in infrastructure used to provide fixed line services. The ACCC recognised the importance of this in the fixed principles provisions included in the 2011 and 2013 FADs.

The ACCC also considers that Telstra possesses relevant information on its network topology and use needed to develop a fully allocated cost framework that appropriately reflects relative use of its fixed line network by all relevant services. The ACCC therefore considers that the cost allocation framework Telstra has submitted to the ACCC provides an appropriate basis from which to implement a fully allocated cost approach. The ACCC considers that it is reasonably transparent, internally consistent and is based on the most relevant and useful information available regarding use of Telstra's fixed line assets. Subject to further review and verification of model inputs for certain cost allocation factors, the ACCC intends to use Telstra's proposed model to determine cost allocation factors in the next regulatory period (this is discussed further in section 10.4.4).

Third, the ACCC considers that a fully allocated cost framework represents an appropriate basis for explicitly accounting for the leasing of assets to NBN Co. A fully allocated approach can include NBN Co as an explicit user of Telstra's fixed line assets for all leased assets. Access seekers have agreed that NBN Co's use of assets should be explicitly reflected in the FLSM and Telstra has done this in its proposed cost allocation model.

The ACCC considers that the 2011 partial cost allocation approach may not allow sufficient opportunity for full cost recovery of the declared services' share of fixed line costs, and that in some circumstances, Telstra may be prevented from recovering these costs by a significant amount. The ACCC considers a fully allocated framework is preferred to alternatives for the purposes of accounting for NBN Co's use of Telstra's fixed line assets. In particular, applying demand adjustments to cost allocation factors, as was done for the 2011 FADs, would mean that more precise information on NBN Co's use of assets would be excluded from consideration; would be unlikely to accurately reflect the impact of NBN Co's use of assets; and would be likely to result in Telstra under-recovering or over-recovering its efficient costs. Maintaining the cost allocation approach of the 2011 and 2013 FADs has similar limitations when accounting for assets that are transferred to NBN Co and assets that are decommissioned as a result of migration to the NBN.

The ACCC notes comments from stakeholders about the implications of the fixed principles provisions for the choice of cost allocation approach. The ACCC considers that there are different approaches that are consistent with the fixed principles provisions on cost allocation and that its decision to adopt a fully allocated cost framework based on Telstra's proposal satisfies those provisions.

Finally, the ACCC now has better information on the shared use of Telstra's fixed line assets that is required to develop a fully allocated cost approach than was available to it in 2011 — lack of information limited the choice of approach to cost allocation for the previous FADs. The circumstances for the next regulatory period are significantly different due to the NBN rollout which is impacting both the pace of the decline in demand for fixed line services and the use of fixed line assets.

10.4.2 Treatment of declining demand

The ACCC's views on declining demand due to the shrinking fixed line market and loss of market share are discussed below. The ACCC's draft decisions on declining demand due to the NBN and implementing its October 2014 position statement on accounting for NBN impacts are discussed in chapter 9.

Declining demand due to shrinking fixed line market

The ACCC has reconsidered its views from the 2011 FAD inquiry on the appropriate treatment of declining demand due to the shrinking of the fixed line market in the context of the move to a fully allocated model in the next regulatory period. The ACCC considers that several important differences in the circumstances between the 2011 regulatory period and the next regulatory period warrant this reconsideration.

At the time the FADs were made in 2011, while the decline in demand for fixed line services due to changes in technology and consumer preferences was noted, there was significant uncertainty around the timing of the NBN rollout. This meant that the impact of the NBN could not be factored into expenditure forecasts. In addition, there was insufficient reliable information to account for the expected use of Telstra's assets by NBN Co, although the ACCC expected NBN Co to use Telstra's infrastructure over the period.

Although there is still uncertainty about the NBN, the level of uncertainty now is far less than in 2011. For example, Telstra has been able to develop demand and expenditure forecasts that reflect the impact of the most recent NBN rollout forecasts. It has also been able to provide explicit forecasts around NBN Co's use of assets and when assets will be sold to NBN Co.

Consequently, the ACCC considers that it can determine a total cost base for fixed line services that more explicitly reflects the impacts of the NBN, and allocate costs across all users of the fixed line network, including NBN Co.

The ACCC considers the issue of declining demand should be separated into treatment of the impacts of service migration to the NBN and the approach to other sources of declining demand for Telstra's fixed line services. These are the shrinking of the fixed line market due to changing technology and consumer preference and the loss of market share to access seekers.

The ACCC considers that it is appropriate that all users of Telstra's fixed line network should bear the impacts of total declining demand due to the evolution of the market for fixed line services, and that each user should bear a share of these impacts that is commensurate with their relative use of the fixed line network.[605] This outcome would be achieved through a fully allocated cost framework.

The ACCC notes the analysis by Frontier of Telstra's revised expenditure and demand forecasts using the partially allocated approach. The ACCC agrees that using the partially allocated approach with Telstra's revised forecasts will result in significantly lower prices than under the fully allocated cost approach, but that this price difference will be mostly reflective of under-recovery of efficient costs.

Finally, in the 2011 FADs the ACCC made adjustments to cost allocation factors for the switching equipment asset classes because it considered that these assets had been overprovisioned in light of declining voice traffic. The effect of these adjustments was to prevent the costs of the overprovisioned portion of switching equipment from being recovered through declared services. However, the ACCC notes that all switching equipment assets that were in place as of 1 July 2009 have now been fully depreciated. There is no evidence to suggest that Telstra's investment in switching equipment since that time has again resulted in overprovisioning of these assets. The ACCC does not consider that adjustments to switching equipment allocators such as those made in 2011 will be required, and considers that it is appropriate for cost allocation factors for switching equipment to be determined on a fully allocated basis.

[605] This is subject to further consideration of the treatment of loss of economies of scale due to the NBN rollout. See section 9.5.2 for further discussion.

Declining demand due to loss of market share

In the 2011 FAD inquiry, the ACCC considered that Telstra should not be compensated for loss of market share due to increased competition from access seekers. This position reflects principles in the Competition Principles Agreement made by the Council of Australian Governments in 1995 that in determining terms and conditions for access, 'costs associated with losses arising from increased competition in upstream and downstream markets' should not be taken into account.[606]

The ACCC has considered whether Telstra would potentially recover costs for loss of market share in a fully allocated cost framework, and whether any such cost recovery will be material and affect competitive outcomes. The ACCC's analysis indicates that any allowance to recover costs associated with loss of market share is likely to be minor and is unlikely to affect competition in downstream markets. The reasons for this view are outlined below.

In cases where access seekers use Telstra's resale products (that is, WLR and wholesale ADSL) to gain market share, there is no change in the way Telstra's fixed line assets are used. WLR and wholesale ADSL are wholesale equivalents of Telstra's retail access and ADSL services and use the same fixed line assets. The same fixed line costs are therefore recovered from that service, even if the revenue comes from an access seeker rather than a Telstra end-user. Telstra will lose the retail margin from its retail customer, but these costs are not included in the FLSM and Telstra will not be able to recover them through declared services.[607] This means that Telstra will not receive compensation for lost revenue if a Telstra retail customer moves to an access seeker that supplies services through Telstra resale services.

However, in cases where access seekers use the ULLS or LSS service and their own infrastructure to gain market share, there is a change in the way Telstra's fixed line assets are used. This is because there are a number of assets used to supply retail access, WLR, and retail and wholesale ADSL services that are not used by a ULLS or LSS based competitor. Infrastructure based competition results in a reduction in the use of these assets, and a fully allocated cost approach spreads the fixed costs of these assets across a smaller number of customers (wholesale and retail), thereby resulting in higher prices for resale services. In this case there is an argument that Telstra could receive compensation for lost revenue due to competition as a result of the fully allocated framework. However, the ACCC has reached the view that any compensation for lost revenue through the fully allocated cost approach is likely to be immaterial or transitory, and is unlikely to create any adverse competitive outcomes in downstream markets. The reasons for this are as follows.

For local switching equipment, inter-exchange cables, transmission equipment and core radio bearer equipment, the ACCC considers that the declining volumes on which cost allocation factors for these asset classes for WLR and wholesale ADSL are based (that is, SIOs and MOUs), which can be reasonably attributable to loss of market share, is likely to be minor. In the case of SIOs, the ACCC has analysed historical demand figures from Telstra's previous financial results publications and forecast demand figures (both pre- and post-NBN) from Telstra's forecast model and estimates that, on average over the upcoming regulatory period, around one third of non-NBN induced declining demand, and around one tenth of overall declining demand, can be attributed to loss of market share. In the case of MOUs, the ACCC does not have sufficient information to be able to estimate the effect of loss of market share on demand. In any case, of these assets, only local switching equipment is relevant when considering MOUs as a cost driver (since it is allocated costs for WLR). This asset class makes up around 3 per cent of the aggregate fixed line revenue requirement over the regulatory period, and of this, around 5 per cent is allocated to WLR.

For data equipment, cost allocation factors are based on SIOs. As noted above, the ACCC considers that the forecast decline in SIOs attributable to loss of market share will be minor given the overall forecast decline in SIOs. Further, data equipment has a relatively short asset

606 Council of Australian Governments, Clause 9(2), Competition Principles Agreement, 11 April 1995, see https://www.coag.gov.au/node/52

607 This point was also made by Telstra in its supplementary submission, December 2014, p.21.

life (six years for new assets) and the data equipment RAB is forecast to decline sharply and in line with the forecast decline in SIOs. As a result, the ACCC considers that any data equipment costs attributable to loss of market share will be minor and short lived as the data equipment RAB scales down over time.

10.4.3 Interaction between cost allocation factors and the RAB

As noted previously, Frontier submitted in its supplementary submission to the discussion paper that:

- the ACCC increased the RAB for ducts and pipes in 2011 to promote price stability and to maintain a $16 tie point for ULLS
- the increase in the RAB was required only because of the cost allocation methodology adopted in 2011.
- the increase in the RAB would not have been necessary if a fully allocated approach was adopted in 2011.
- adopting a fully allocated approach now without offsetting adjustments to the RAB would create a windfall gain for Telstra.[608]

The ACCC has considered arguments made by Frontier regarding linkages between the initial values set in 2011 for the RAB and cost allocators. The ACCC notes that the fixed principles provisions lock in the initial RAB value and the RAB roll forward mechanism.

The ACCC also notes that there exists an appropriate range of initial RAB values between the depreciated actual cost (DAC) and the depreciated optimised replacement cost (DORC) of the network. The adjustment to the RAB for ducts and pipes in the initial RAB was made within those bounds to promote price stability during the transition to a new pricing approach.

The initial RAB for ducts and pipes was determined with regard to a number of factors, one of which was the cost allocation methodology. Other relevant factors included the return on assets, depreciation, forecast operating and capital expenditures, the tax building block and demand forecasts. The methodologies used to determine these elements have also changed since 2011, particularly the forecasting methodology. If the initial RAB for ducts and pipes was to be reconsidered in light of changes in the cost allocation framework, changes in methodology for the other elements would need to be considered.

10.4.4 Verification of cost allocators

As noted in section 10.4.1, the ACCC's draft decision is to adopt a fully allocated cost approach and to use Telstra's cost allocation framework as a basis.

Telstra's proposed cost allocation factors are based on information about the use of Telstra's fixed line assets by relevant services. This includes demand forecasts for declared and non-declared fixed line services. It also includes a range of other inputs that either reflect use of Telstra's fixed line network by non-fixed line services or represent cost drivers on which allocations are based. This information includes the following:

- Duct kilometres for each ULLS band used for fixed-line and non-fixed line purposes (including forecast NBN Co use of ducts and pipes).
- Copper cable kilometres for each ULLS band
- Information from Telstra's asset register on:

[608] Frontier Economics submission, December 2014, pp 9-10.

- the proportion of local switching asset costs that are driven by the number of SIOs and the proportion driven by traffic volumes
- the composition of transmission equipment

- Information on the length and use of fibre optic cables
- Volumes for various traffic types (voice, mobile, shared data, dedicated data, transmission)
- Information on third party use of Telstra exchange buildings (including forecast NBN Co use of exchange buildings)
- Routing factors (which are used as demand weights to reflect the different ways Telstra's fixed line assets are used in the provision of different services).

The ACCC considers that information of this type is necessary to identify and measure use of the fixed line network by all relevant services and to determine cost allocation factors. However, most of this information is obtained or derived from internal Telstra databases over which the ACCC and stakeholders have no visibility. The ACCC is unable at this stage to verify whether all of this information is accurate, has been developed using reasonable methods or assumptions, or reflects forecast relative use of assets by all relevant services.

In its report prepared for the ACCC, WIK-Consult has identified some concerns relating to aspects of Telstra's forecast model that are necessary inputs into Telstra's cost allocation framework. For example, WIK-Consult considers that the determination of the relative usage of ducts by fixed line and other services is not transparent, and that the method used to determine the usage of copper cables by fixed line services may not be appropriate.[609]

The ACCC will work with Telstra between the draft and final decisions to verify that its proposed cost allocation framework is based on accurate information, has been developed using reasonable methods and assumptions, and appropriately reflects forecast relative use by all relevant services. For the purposes of this draft decision, the ACCC has decided to use Telstra's current cost allocation framework to determine draft prices for the next regulatory period. The ACCC will obtain expert advice on the methodology and assumptions Telstra has used to develop its proposed cost allocation framework and on a verification of the inputs necessary to determine cost allocation factors. This will enable the ACCC to address issues raised by Frontier and WIK-Consult on specific cost allocation factors and any further comments made in submissions to the draft decision on this matter.

[609] WIK-consult, draft report, February 2015, p. 16; p. 63-64.

11 Term of the final access determinations

Key Points

- The ACCC's draft decision is that the fixed line services FAD price terms will apply for a four year period, commencing on 1 July 2015 and expiring on 30 June 2019.
- To ensure a reasonable balance between pricing certainty and flexibility, the ACCC is stating its intent to initiate a 'trigger and review' process at the mid-point of the FAD term, under which the ACCC will review FAD prices if the rate of the NBN rollout differs significantly from that expected at the time of making the FADs.
- The ACCC will review FAD prices if, at the mid-point of the FAD term, the actual rate of the NBN rollout up to that point, or the expected rate of the rollout up to the expiry of the FAD term, is different by at least 20 per cent from the forecasts used as inputs in setting FAD prices.

11.1 Introduction

Access determinations must have an expiry date which aligns with the expiry date of the declaration for the relevant service unless there are circumstances that warrant a different expiry date.[610] The current declarations for the fixed line services expire on 31 July 2019, and the current declaration for the wholesale ADSL service expires on 13 February 2017.[611]

For the 2011 FADs, the ACCC determined a regulatory period of three years. While the ACCC's preference at the time was for a five year regulatory period, it had regard to industry submissions that a regulatory period of no more than three years would be preferred. It also recognised the difficulties of developing sufficiently reliable forecasts for a five year period.

In determining an expiry date for the wholesale ADSL FAD in 2013, the ACCC decided to align the expiry of that FAD with the expiry of the 2011 FADs. The ACCC considered that aligning the expiry of these FADs would: allow wholesale ADSL prices to be reviewed at the same time as the prices for the other declared fixed line services; ensure consistency between the pricing approach used in setting prices; and reduce the risk of the access provider over or under-recovering its costs of supplying those services.

11.2 July 2014 discussion paper

In the July 2014 discussion paper, the ACCC noted that a number of factors are relevant to a decision on the length of the regulatory period. The ACCC considered that the term of the FAD should balance the need to provide longer term pricing stability and certainty to support industry investment planning with the flexibility to review prices and price structures when there are changes in industry circumstances.[612]

The ACCC noted that there are trade-offs involved in determining a regulatory period. A shorter regulatory period would mean greater certainty regarding expenditure and demand forecasts, but would create greater regulatory and administrative burden due to more frequent price reviews. A longer regulatory period provides Telstra and access seekers with greater pricing certainty and provides Telstra with stronger incentives to minimise costs and increase

---

610 Subsection 152BCF(6) of the CCA.

611 ACCC, *Public inquiry into the fixed line services declarations final report*, April 2014, pp.66-75; ACCC, *Wholesale ADSL service declaration*, February 2012, p.1

612 ACCC, *Public inquiry into final access determination for fixed line services—primary price terms*, July 2014, p. 85

productivity; however, there is an increased risk that costs may be over- or under-recovered.[613] In this regard, the ACCC noted the difficulty of developing reliable forecasts beyond a two to three year horizon, particularly given the uncertainties relating to the NBN rollout and the extent to which they may impact the reliability of expenditure and demand forecasts.

The discussion paper sought stakeholders' views on an appropriate term for the FADs and the factors that are relevant to determining this.

11.3 Submissions

Submissions to the discussion paper generally preferred a regulatory period of no more than three years. Telstra, however, submitted that the expiry dates for the FADs should be 30 June 2019, as this would closely align with the expiry of the relevant declarations, and would provide industry participants with pricing certainty during the transition to the NBN. Telstra noted that its submitted forecast model has the flexibility to account for changes in exogenous factors and provides a robust view of demand and expenditure requirements out to 2018-19.[614]

Optus submitted that a three year FAD term would be preferred. Optus submitted that a shorter FAD term is beneficial, as more frequent reviews ensure that costs are accurately forecast and that prices more closely reflect actual costs.[615]

In its report prepared for the CCC, Frontier submitted that the length of the regulatory period should be considered in the broader context of the design of the FAD. Frontier submitted that the incentive mechanisms in the existing FADs are relatively 'high powered', but considered that the three year term had reduced some of the risks associated with such a regime.[616]

Frontier submitted that the uncertainties relating to the NBN rollout have implications for the reliability of Telstra's forecasts. It suggested several options to appropriately balance encouraging efficient expenditure and protecting the interest of end-users, including: maintaining a short regulatory period to mitigate the effects of mis-forecasting; rolling forward the RAB based on actual costs and depreciation; and implementing a mixed incentive regime, whereby Telstra would retain efficiency gains up to a point and share the remainder with consumers. Frontier submitted that these latter two options would both reduce the emphasis on forecasts while also maintaining incentive effects.[617]

TPG submitted that a three year term with a check point at 1.5 years (to compare Telstra's forecasts against actual experience) is appropriate. TPG noted its concern that the critical inputs to the building block model are impacted by the estimated progress of the NBN rollout, which is uncertain. TPG submitted that the only reasonable way to deal with this issue is to make the FAD term shorter. TPG submitted that the ACCC could consider an automatic adjustment mechanism based on the difference between forecasts and actuals.[618]

11.4 ACCC draft decision

The ACCC's draft decision is that the FAD price terms will apply for a four year period from 1 July 2015 to 30 June 2019. To account for the risk of forecasting error arising from uncertainty regarding the NBN rollout, the ACCC is stating its intent to initiate a 'trigger and review' process

613 ACCC, *Public inquiry into final access determination for fixed line services—primary price terms*, July 2014, p. 86

614 Telstra, *Public inquiry into final access determination for fixed line services—primary prices, response to Discussion Paper,* 3 October 2014, p.118.

615 Optus, *Submission in response to ACCC Discussion Paper, fixed line services final access determination – primary prices, public version*, October 2014, pp.6,10-11.

616 Frontier submission, pp. 51-53.

617 Frontier Economics, *Submission on the final access determinations for fixed line services, a report prepared for the Competitive Carriers' Coalition*, October 2014, pp. 54-55.

618 TPG, *Submission by TPG Telecom limited to ACCC, Telecommunications final access determination inquiries – FLSM*, October 2014, pp.2-3.

at the mid-point of the FAD term. Under this process, the ACCC may decide to review FAD prices if the rate of the NBN rollout differs significantly from that expected at the time of making the FADs.

The ACCC's reasons for its draft decision on the FAD term, and the design of the 'trigger and review' process are set out below.

Length of the regulatory period

The ACCC considers that, while a shorter regulatory period means that there would be greater certainty around Telstra's expenditure and demand forecasts, it also increases the likelihood of price instability. This is because, over the forecast period, the forecast rate of decline in volumes is greater than that of the regulated revenue requirement.[619] Therefore, if a short regulatory period (of two or three years, for example) were adopted, there would likely be a significant fall in prices, which would then necessarily be followed by a significant increase in prices in the subsequent period. In addition, more frequent price reviews would increase the regulatory burden for Telstra and access seekers and the cost of regulation by the ACCC.

On the other hand, a longer regulatory period of four years would mean that these effects would be smoothed out and would result in relative price stability between the current and subsequent regulatory periods. As discussed in chapter 13, the ACCC's draft decision is to decrease prices for all declared fixed line services by 0.7 per cent. This price stability is achieved in large part by adopting a four year regulatory period. The ACCC considers that a regulatory period of four years, and the relative price stability that results, will promote the efficient use of, and investment in, the infrastructure used to provide the declared fixed line services.

Dealing with NBN rollout uncertainty

The ACCC acknowledges stakeholders' concerns that Telstra's expenditure and demand forecasts largely depend on the expected speed of the NBN rollout. By adopting a longer regulatory period, there is a risk that prices in later years of the regulatory period will be based on levels of demand and expenditure that, while representing best estimates at the time of making the FADs, do not reflect both the realised rate of migration, and the short term expected rate of migration, to the NBN. Moreover, the ACCC notes that there is also uncertainty as to what is the best view regarding the likely rate of migration to the NBN over the next four years. In its submission on revisions to its demand and expenditure forecasts of 3 October 2014, Telstra stated that its forecasts are based on the NBN rollout schedule for the multi technology mix (MTM) in NBN Co's December 2013 strategic review (scenario 6 in the review) but that this was not necessarily Telstra's best view.[620] NBN Co has since provided updated information on the MTM in its Corporate Plan released in November 2014, but details of the rollout are not significantly changed since December 2013.[621]

The ACCC recognises that dealing with demand uncertainty is an inherent aspect of regulatory frameworks involving the use of forecasts, and that it is a standard task for economic regulators. However, the ACCC considers that the circumstances of its decision on the fixed line FAD price terms for the next regulatory period are not typical. This is because Telstra's expenditure and demand forecasts are closely linked to expectations about the NBN rollout—an exogenous variable which is outside Telstra's control and highly uncertain—but for which better information is likely to be available well before the end of the four year regulatory period. The ACCC considers that it should have regard to such information and, if appropriate, vary the FADs. This is because, if the NBN rollout deviates significantly from what is assumed at the time of making the FADs, prices for the declared fixed line services could significantly diverge

619 For details of the regulated revenue requirement in each year of the regulatory period, see chapter 12.
620 Telstra submission, p. 10.
621 http://www.nbnco.com.au/content/dam/nbnco2/documents/nbn-co-corporate-plan-2014-17-Nov11.pdf

from cost reflective levels and no longer encourage the efficient use of and investment in infrastructure.

To deal with this uncertainty, the ACCC is stating its intent to initiate a 'trigger and review' process at the mid-point of the FAD term. Under this process, the ACCC will, before the mid-point of the FAD term, review the most up-to-date information about the rollout of the NBN, both realised and forecast. If this information indicates that the assumptions made about the rollout at the time of making the FADs are significantly inaccurate, the ACCC will make a decision on whether to commence a variation inquiry to review the FAD prices. In deciding whether to commence an inquiry, the ACCC will have regard to this information and its impact on expenditure and demand forecasts. The ACCC intends that any variation to FAD prices arising from this process would be forward-looking, and that any changes in prices would only apply from the date on which the variation comes into force, which would be no earlier than 1 July 2017.

The NBN rollout metric used as an input in determining Telstra's expenditure and demand forecasts is the cumulative number of premises passed by the NBN fixed line network in a given year. As noted above, before the mid-point of the FAD term, the ACCC will use the most up-to-date rollout information to determine whether a variation of FAD prices may be triggered. If either:

- the actual cumulative number of premises passed by the mid-point of the FAD term, or

- the forecast cumulative number of premises passed by the expiry of the FAD term

is at least 20 per cent above or below the level used as an input to determine FAD prices, the ACCC will make a decision on whether to commence a variation inquiry to review the FAD price having regard to this new information and its impact on expenditure and demand forecasts.

This threshold of 20 per cent has been chosen as a result of scenario modelling by the ACCC. The assumptions made about the speed of the NBN rollout, which are used to determine expenditure and demand forecasts, were adjusted to determine the likely impact on the uniform price change. The ACCC considers that a movement in the uniform price change, either upwards or downwards, would be material if it exceeded 1 per cent. The ACCC estimates that the rate of the NBN rollout would need to deviate by at least 20 per cent from what is currently expected for the impact on the uniform price change to exceed 1 per cent.

The ACCC notes that Telstra has submitted a forecast model which estimates the impact of different assumptions regarding the NBN rollout on its expenditure and demand forecasts. The ACCC has, in reaching its draft decision, formed a view on the reasonableness of Telstra's forecasts based on the information available to it. The ACCC has assessed the expenditure forecasts generated by the forecast model for a given set of assumptions about the NBN rollout, as submitted by Telstra. The ACCC has not, however, assessed the robustness of the forecast model or the outputs generated under alternative rollout assumptions. Further, the ACCC notes that while it may, as part of the 'trigger and review' process described above, have regard to Telstra's forecast model and any outputs it generates, any variation of the FAD price terms under this process will be based on the ACCC's assessment of the reasonableness of any alternative expenditure and demand forecasts given the most up-to-date expectations about the rollout of the NBN.

Finally, the ACCC notes that it is able to initiate an inquiry to vary an access determination at any time if it considers this is necessary. However, to improve regulatory certainty, the ACCC has decided to state in this draft decision how it intends to respond should the NBN rollout deviate significantly from current expectations, and the metrics it intends to use to decide whether to hold an inquiry to vary the FADs for reasons related to the NBN rollout.

12 Summary of estimated revenue requirement

12.1 Introduction

The FLSM calculates the aggregate revenue required by Telstra to recover its costs of supplying access services. 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 and non-regulated services.

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 3–6 of this draft decision.

12.2 ACCC draft decision

The ACCC's draft decision on the aggregate revenue requirement for each year (in real terms) and each component of the revenue requirement is set out in table 12.1. The aggregate revenue requirement shown in the table 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 declared fixed line services and other regulated and unregulated services.

The ACCC's draft decision on the revenue requirements (in real terms) allocated to the declared fixed line services and other regulated and unregulated services are set out in Table 12.2.

Table 12.1: Aggregate revenue requirement ($million, 2009)

	2015-16	2016-17	2017-18	2018-19	Total
Operating expenditure	[c-i-c starts]				
Return on capital (RAB*WACC)					
Return of capital (regulatory depreciation)					
Tax payments					
Estimated revenue requirement					[c-i-c ends]

Source: ACCC analysis.

Table 12.2 Revenue requirement allocated to services ($million, 2009)

		2015–16	2016–17	2017–18	2018–19	Total
Declared fixed line services	Operating expenditure	[c-i-c starts]				
	Return on capital					
	Return of capital					
	Tax payments					
	Sub Total					
Other regulated and unregulated services	Operating expenditure					
	Return on capital					
	Return of capital					
	Tax payments					
	Sub Total					
Total						[c-i-c ends]

Source: ACCC analysis.

13 Determining prices and pricing structures

Key Points

- The ACCC's draft decision on the setting of individual prices is that a uniform nominal price change should be applied once to all declared services on 1 July 2015, with prices then remaining constant for the four-year regulatory period. The effect of this decision is to maintain existing price relativities between declared services.
- The ACCC's draft decision is a one-off nominal prices decrease of 0.7 per cent for all declared services.
- The ACCC does not propose to make any changes to price structures for ULLS, wholesale ADSL, or FOAS and FTAS.
- The ACCC considers that using the approach adopted in 2011 for setting prices for individual services will result in significant price increases for some declared services and significant decreases for other declared services. This could:
    - create adverse outcomes for competition in downstream markets for fixed lien services and in developing markets for NBN services
    - create incentives for access seekers to change the way they provide fixed line service to end-users.
- The ACCC considers that applying a uniform price increase to all declared services will promote price stability for the industry and promote efficient use of and investment in infrastructure in the lead up and transition to the NBN.
- The ACCC does not propose to take into account costs incurred and revenue received by Telstra in the 2014-15 financial year in determining price to apply from 1 July 2015.

13.1 Introduction

After revenue requirements for each asset class are calculated in the fixed line services model (the FLSM) and a share of these costs have been allocated to declared services, prices for each declared service must then be determined. The approach to setting prices for individual declared services has important implications for efficient use of declared services, efficient investment in fixed line assets and for competition in downstream markets. The approach to setting prices for individual services is therefore an important consideration in this inquiry and for this draft decision.

In the 2011 final access determinations (FADs), prices for individual declared services were based directly on the revenue requirement allocated to respective declared services, so that the expected revenue to be recovered from each declared service was equal to the revenue requirement allocated to that service by the cost allocation factors. For ULLS prices, a further adjustment was made to determine a price for ULLS bands 1 to 3 and a price for ULLS band 4 using geographic cost relativities that were adopted from the Analysys model. For wholesale ADSL prices included in the 2013 FAD, separate prices were determined for the AGVC service and port charges for Telstra's two ADSL pricing zones.

In its submission to the price terms discussion paper, Telstra has proposed a one-off nominal price increase of 7.2 per cent, applied uniformly across all declared services. This increase ensures that the expected revenue to be recovered from declared services equals the total revenue requirement allocated to declared services (given Telstra's assumptions about expenditure, demand, cost allocation and other matters). This differs from the approach

adopted in 2011, in that the price for each declared service is not based directly on the costs allocated to that service.

This chapter sets out the ACCC's draft decision on the approach to setting prices for individual declared services. It sets out the ACCC's views on the overall methodology to be adopted, including the method used in the 2011 FADs and Telstra's proposal for a one-off uniform price change, and on specific issues relating to the structure of prices for ULLS, wholesale ADSL and FOAS and FTAS prices. It also sets out the ACCC's views on the related issue of how to treat costs incurred and revenue received by Telstra in the 2014-15 financial year.

13.2 Discussion paper

In the discussion paper the ACCC raised a potential alternative approach to setting prices for individual services. This approach, which had initially been suggested by Telstra, involves setting prices for declared services so that they would be collectively expected to recover the total revenue requirement allocated to all declared services, subject to the condition that the price for each declared service are set between the avoidable cost and standalone cost of providing that service.[622] The ACCC indicated that such an approach is consistent with commonly accepted principles for regulatory price setting and has been adopted in a variety of other regulatory settings.[623] It highlighted that the alternative approach provided significantly more flexibility in the setting of individual prices compared the approach adopted in 2011, and could be used to pursue other pricing objectives such as promoting price stability, minimising price shocks or maintaining price relativities. The ACCC sought stakeholder views about the merits of the two approaches to individual price setting.

The ACCC also highlighted specific pricing issues relating to a number of declared services, as discussed below:

- For ULLS, the ACCC sought views on whether the current price structure, in which separate prices apply for ULLS bands 1-3 and ULLS band 4, should be maintained for the next regulatory period.[624] It also sought views on the approach to estimating the costs of providing ULLS in different bands if geographically de-averaged prices are retained.

- For wholesale ADSL, the ACCC sought views on whether a two-part pricing structure for wholesale ADSL should be maintained.[625] It also sought views on the appropriate proportion of costs to be recovered from the fixed and usage services (and the potential effects of changing this proportion on incentives), the possibility of changing usage based charges in response to changes in data traffic volumes and whether separate port charges for different zones should apply in the next regulatory period.[626]

- For FOAS and FTAS, the ACCC discussed the possibility of a 'price matrix' based on geographically differentiated prices, which Telstra had used before 2011.[627] The ACCC highlighted some possible benefits of a price matrix, including providing price signals and allowing for more efficient use of network elements. It also identified some practical considerations with a price matrix, including the need for accurate information to determine whether there are significant geographic cost differences and the extent to which costs are fixed or variable. The ACCC sought stakeholder feedback on the possibility of introducing a price matric for FOAS and FTAS.

---

622 ACCC, *Public inquiry into final access determination for fixed line services – primary price terms: discussion paper*, July 2014, p. 51-52

623 *Ibid*., p. 52

624 Ibid., p. 58

625 Ibid., p. 65

626 Ibid., p. 66

627 Ibid., pp. 58-60

13.3 Submissions

Stakeholders made the following comments on the pricing of individual services in their submissions:

Overall approach

Telstra proposed a nominal price increase of 7.2 percent across all declared services that would be applied once on 1 July 2015 with prices then held constant for the remainder of the period.[628] Telstra stated that this uniform price increase across all declared services would imply a steady decline in real prices over the remainder of the period.[629]

Telstra proposed that 'prices for declared services be adjusted one-time and only to the extent necessary to ensure recovery of Telstra's supply costs.[630] Telstra stated that this would be an alternative approach to determining prices after accounting for the impact of the NBN in its base case scenario.[631] Telstra stated that the objective of maintaining stability in relativities in prices is in the LTIE and was the reason that Telstra proposed to 'apply a small uniform price increase across all services'.[632] Telstra further stated that maintaining the approach to individual price setting used in 2011 would result in significant prices shocks for many declared services.

Other stakeholders generally opposed the alternative approach to setting individual prices and recommended that the current approach be maintained. Specific comments from other stakeholders on this matter include the following:

- Optus does not support the setting of prices outside the FLSM pricing framework and that the ACCC should consider decisions that would 'tend to lower access prices'.[633] Submitting in response to Telstra's submission to the discussion paper, Optus stated that Telstra would still have incentive to invest in the fixed line network and would be able to recover its costs without the proposed nominal price increase.[634]

- TPG submitted that it did not understand how the uniform price increase would not result in total revenue recovered potentially exceeding the assessed revenue, and that this approach is 'completely inconsistent with the logic of the current methodology for assessing appropriate prices'.[635]

- Frontier submitted that it was beneficial for the ACCC to 'continue to prudently apply traditional techniques for allocating common costs, such as usage-based allocation principles'.[636]

- The Department of Communications submitted that price stability (in real terms), particularly in the form of stable price relativities, is important to maintain during the transition period to the NBN and would support structural reform of the industry.[637]

---

628 Telstra, Public inquiry into Final Access Determinations (FADs) Inquiry for fixed line services – Response to Discussion Paper, October 2014, p. 119.

629 Ibid., p. 2.

630 Ibid., p. 7.

631 Ibid., p. 123.

632 Ibid., p. 137.

633 Optus, Supplementary submission in response to ACCC Discussion Paper, Fixed Line services Final Access Determination – Primary prices, Public Version, October 2014, p. 2.

634 Ibid., p. 3.

635 TPG Telecom, *Submission by TPG Telecom Limited (October 2014) to the Australian Competition and Consumer Commission (ACCC), Telecommunications Final Access Determination Inquiries – FLSM,* October 2014, p.2.

636 Frontier Economics, *Submission on the final access determinations for fixed line services – A report prepared for the competitive carriers' coalition*, October 2014, p. 48

Telstra submitted in December 2014 their views in response to stakeholder's submissions.[638] Telstra stated that nominal wholesale price increases are something that would not be inconsistent with previous ACCC decisions and would unlikely have a material impact on the industry.[639] Telstra stated that this would ensure access seekers maintain high margins in the supply of fixed services given price relativities were maintained.[640]

ULLS

Submissions generally agreed with the current ULLS band structure. The main issue raised was whether multiple bands should be averaged or not. Telstra submitted that the price structure in the 2011 FADs 'continues to be appropriate'.[641] Telstra proposed adjustments for 'allocating costs of certain asset classes…between geographic areas' to 'better reflect the geographic variations in the costs for these asset classes'.[642] However, Telstra stated that existing price relativities (between geographic areas) 'should be maintained' when determining ULLS prices due to 'real price stability' and to promote the LTIE.[643]

Optus submitted that it supports the de-averaged ULLS price structure and that the approach set in the 2011 FAD using cost relativities should be retained.[644] Optus stated that ULLS cost relativities were unlikely to have changed and that the level of competition for the service has remained 'largely static', primarily within Band 1 and Band 2.[645]

However, Optus stated that easing the transition to the NBN (in terms of price stability) by setting an averaged Band 1–3 price is a rationale that 'remains ill conceived'.[646] In absolute terms, the increase in Band 3 SIOs over the past three years has been 'extremely minor' compared to Band 1 SIOs in absolute terms. Optus also stated that the ACCC's considerations for the 2011 ULLS price structure 'largely failed to eventuate' as there were no significant changes in Optus's ULLS take up in Band 3 areas or administrative cost changes.[647]

Wholesale ADSL

Telstra submitted that the two-part tariff structure and geographic de-averaged port charges previously established continues to be appropriate.[648] Telstra also considers that price relativities should be maintained to promote real price stability and the LTIE.[649]

Optus submitted that the two-part tariff structure should be maintained while the rates should more closely align with efficient costs of supply. Optus considers current access prices are inconsistent with the LTIE.[650] Optus stated that this was due to the prices being too high, the requirement for access seekers to purchase additional, non-regulated services as a mandatory

---

[637] Department of Communications, *Final access determinations for fixed line services—primary price terms, Department of Communications submission to the Australian Competition and Consumer Commission,* October 2014, pp. 9-10

[638] Telstra, Public inquiry into final access determinations for fixed line services—primary prices, response to industry submissions, December 2014.

[639] Ibid., p. 11

[640] Ibid., p. 13

[641] Telstra, Public inquiry into Final Access Determinations (FADs) Inquiry for fixed line services – Response to Discussion Paper, October 2014, p. 113

[642] Ibid.

[643] Ibid.

[644] Optus, main submission, pp. 30-31.

[645] Ibid.

[646] Ibid.

[647] Ibid.

[648] Telstra, Public inquiry into Final Access Determinations (FADs) Inquiry for fixed line services – Response to Discussion Paper, October 2014, p. 117

[649] Ibid.

[650] Optus, main submission, pp. 30-31.

feature of purchasing the Wholesale ADSL service and a lack of promotion for uniform competition during the transition to the NBN.[651] Optus gave the Telstra Business Grade Ethernet product as an example of a product that is compulsory for the provision of WADSL services to provide access to Telstra's Internet Gateway Routers.[652]

Optus submitted that Telstra's ADSL zones are based on the availability of competitive infrastructure and Telstra's own discretion; however port charges should still be geographically differentiated to meet efficient costs. Optus stated that the current level of port charges 'remains too high' as Optus' international benchmarking indicates range of $6.16 to $14.81 for port charges.[653]

FOAS and FTAS

Telstra submitted that they consider a geographically de-averaged price structure to be appropriate for FOAS and FTAS due to the very significant cost differences between geographic areas. [654]

Telstra provided evidence of geographic price differentials through providing data on geographic costs of supply. Telstra identified the total amount of cost allocated to FOAS and FTAS for 2014-2015 and the key asset classes used to supply FOAS and FTAS (local switching, inter-exchange cables, transmission equipment, and network buildings and support).[655] These were then broken down into CBD, metropolitan, provincial and rural area costs, based on the key cost drivers. Telstra attributed cost differences to economy of scale of local switching and network buildings, and the distance between PoI and local exchange. [656]

Telstra stated that commercial negotiations of FOAS and FTAS pricing with non-dominant networks featured lower network costs in CBD/metro areas.[657] However, Telstra submitted that the introduction of the averaged PSTN OTA price creates prices in metropolitan areas that feature non-dominant networks, exceed the upper bound that would have been implemented had there been de-averaged OTA price based on the Pricing Guideline issued in 2001.[658]

Optus submitted that the wholesale price structure needs to acknowledge retail pricing structures, as it reflects the underlying costs of providing service and enables competitive providers to compete with Telstra if the prices align.[659] Optus stated that the PSTN OTA (FOAS/FTAS) price that is estimated utilising the FLSM should already represent the costs expected to be incurred by Telstra in providing the service, and that Telstra's business interests align with a single national rate because it would guarantee cost recovery for Telstra.[660]

Optus submitted that a single national rate would simplify administrative costs and complexity involved in geographic estimates, while not being reflective of underlying costs or market conditions.[661]

Optus also stated that the updated FLSM should result in a reduction in the fixed termination rate and that the current PSTN OA and PSTN TA rates have been set at above cost levels. Optus compared Australian fixed termination rates to being much higher than the European

[651] Optus, main submission, pp. 35-38.
[652] Ibid.
[653] Ibid.
[654] Telstra, Public inquiry into Final Access Determinations (FADs) Inquiry for fixed line services – Response to Discussion Paper, October 2014, pp. 113-117
[655] Ibid.
[656] Ibid.
[657] Ibid.
[658] Ibid.
[659] Optus, main submission, pp. 31-33.
[660] Ibid.
[661] Ibid.

Union average for efficient rates, and that the EU rates reflect efficient, pro-competitive, costs whereas the Australian rates are still set using historic, actual incurred costs.[662]

13.4 ACCC draft decision

The ACCC's draft views on the setting of individual prices is that a uniform nominal price change should be applied once to all declared services on 1 July 2015, with prices then remaining constant for the four-year regulatory period. Based on the ACCC's draft decision on all other pricing elements, this equates to a one-off nominal price decrease of 0.7 per cent. The effect of applying this price change uniformly to all declared services is that the relative prices of the declared services do not change and that the current price structures for the declared fixed line services set in previous FADs will continue to apply. The primary prices with the 0.7 per cent nominal price decrease applied are set out in the following table.

Table 13.1 Draft decision for primary prices for the declared fixed line services

Service	Unit	Current charges	Draft decision
ULLS Bands 1 to 3	$ per line per month	16.21	16.10
ULLS Band 4	$ per line per month	48.19	47.87
WLR	$ per line per month	22.84	22.69
LSS	$ per line per month	1.80	1.79
LCS	¢ per call	8.90	8.84
FOAS & FTAS	¢ per minute	0.95	0.94
Wholesale ADSL Zone 1	$ per port per month	24.44	24.28
Wholesale ADSL Zone 2/3	$ per port per month	29.66	29.46
Wholesale AGVC/VLAN	$ per Mbps per month	32.31	32.09

The ACCC considers that applying a uniform price change to all declared services will provide a degree of stability to the industry in the lead up to and during the transition to the NBN. The ACCC considers that stability in prices (and price relativities) for declared services will maintain efficient use of declared services investment in fixed line assets by Telstra and provide a more stable environment for access seekers as customers migrate to the NBN.

The ACCC considers that maintaining the current approach to individual price setting, where prices for each declared service are based directly on the costs allocated to that service, will result in significant price increases for some declared services and significant price decreases for other declared services. This is likely for a number of reasons, including the change from a partially allocated to a fully allocated cost framework, changes in expenditure patterns between asset classes and differences in demand changes between declared services.

The ACCC considers that the significant movements in relative prices could cause instability in the market for fixed line services. This could create some unintended and adverse competition implications, both in downstream markets for fixed line services and for developing markets for NBN services.

[662] Ibid.

Further, the ACCC considers that a significant change in price relativities could give access seekers incentives to change the way they supply services to end-users over Telstra's fixed line network. For example, an access seeker that provides fixed line services using ULLS and its own infrastructure may have incentives to start providing services using resale services such as WLR and wholesale ASDL (or vice versa). The ACCC considers that significant changes in the way services are provided over the fixed line network, particularly in the lead up to the transition to the NBN, would not represent efficient investment in infrastructure or efficient use of declared services.

The ACCC considers that applying a uniform price change to all declared services and maintaining price relativities will minimise any undesirable consequences of setting prices for individual services using the current approach. The ACCC considers that the uniform price change will provide stability to the industry in the transition to the NBN. This will minimise incentives for access seekers to change the way they provide services to end users and allow for continued efficient use of infrastructure already in use, which will in turn promote efficient use of declared services. It will also avoid any adverse impacts on competition from changing price relativities.

In response to views raised by stakeholders in relating to specific price structure issues, the ACCC makes the following comments:

- Separate prices for ULLS bands 1-3 and ULLS bands 4, and the ratio between the two prices, should be retained to promote price stability, as discussed above. The ACCC considers that Telstra's proposed approach for reflecting geographic cost differences between ULLS bands directly through cost allocation factors is more likely to accurately reflect these differences, compared to the current approach (which relies on geographic cost ratios adopted from the Analysys model). The ACCC proposes to adopt this approach as part of the cost allocation framework. As discussed in chapter 10, the ACCC will work with Telstra between the draft and final decisions to verify inputs into the cost allocation model.

- The existing two part tariff, including the separate port charges for different zones, should be retained to promote price stability, as discussed above. The ACCC acknowledges the comments made by Optus in relation to requirements to purchase non-regulated products. The ACCC considers that applying the uniform price increase to wholesale ADSL charges, notwithstanding other products that also need to be purchased, is the approach most likely to promote price stability. To apply a different price change to wholesale ADSL services could create some of the adverse consequences discussed above and create disruption in the lead up to the transition to the NBN.

- Although geographically de-averaged price for FOAS and FTAS is more likely to result in cost reflective prices and reflect cost differences between areas, the ACCC considers that a uniform price for these services should be retained in the interests of price stability. The ACCC considers that a move to de-average FOAS and FTAS prices could create some of the adverse consequences discussed above.

Treatment of 2014-15 forecasts and revenue requirement

As previously noted, the FADs will come into force on 1 July 2015. The 2011 fixed line FADs and the 2013 wholesale ADSL FAD were originally due to expire on 30 June 2014, however the ACCC extended them until replacement FADs come into force. An effect of the extension is that the prices set for the previous FADs will continue to apply until the commencement date of the new FADs.

The regulated prices for the fixed line services in the existing FADs were determined in the FLSM using forecast revenue requirements up to and including 2013-14. As noted above, the extension of the FADs had the effect of maintaining these prices until replacement FADs come into force. If prices for the replacement FADs are determined using forecast revenue

requirements for 2015-16 onwards, this would mean that the revenue requirement for 2014-15 would not be explicitly accounted for in either regulatory period.

The ACCC considers that the revenue requirement for 2014-15 should not be accounted for in determining prices that will apply from 2015-16. The regulatory framework within which the ACCC makes access determinations for the declared fixed line services is forward-looking. Revenue requirements are calculated using forecasts of demand and expenditure and forward-looking assumptions on matters such as the cost of capital and depreciation for only the regulatory period in which the prices are to apply. Without explicit provisions to take into account revenue requirements or revenues received in years outside the regulatory period (for example, a revenue cap or other 'unders and overs' mechanisms), these are generally not taken into account. Excluding the 2014-15 revenue requirement from the pricing calculation maintains this approach.

Notwithstanding this, the ACCC has used capital expenditure forecasts and depreciation for 2014-15 to establish the opening RAB for 2015-16, consistent with the standard process for rolling forward the RAB (and as required under the fixed principles).

Part B: Pricing approach: supplementary price terms

14 Internal interconnect cable (IIC)

Key Points

- The IIC service is essential for access seekers that supply services to end-users using the ULLS and LSS.
- In June 2014 the ACCC varied the existing ULLS and LSS FADs to include price terms for the IIC charge.
- The varied FADs specify an IIC charge of $0.056 (excluding GST) per month. This charge is the same as that set in the 2012 arbitral final determinations (FDs). This variation commenced on 1 July 2014 (the day after the existing arbitral determinations expire).
- The ACCC sets the current charge for the IIC using a model that was proposed by Telstra but with adjustments to ensure consistency with the FLSM and the service description of the declared services.
- The ACCC's draft decision is to include IIC charge of $0.056 (excluding GST) per month in the FAD price terms. This charge is determined by applying the same uniform price decrease as for the primary price terms to the current IIC charge.

14.1 Introduction

The internal interconnect cable (IIC) is a twisted copper pair cable connecting an access seeker's equipment to Telstra's customer access network (CAN) and is essential to an access seeker being able to obtain an Unconditioned Local Loop Service (ULLS) or Line Sharing Service (LSS) from Telstra. Specifically, IIC connects a point of interconnection in the relevant access seeker's equipment space to Telstra's main distribution frame (MDF) (or its equivalent). It is installed by the relevant access seekers but is owned and operated by Telstra.

The ACCC currently regulates the IIC charge via the ULLS and LSS final access determinations (FADs) varied on 30 June 2014.[663] The price terms ($0.056 per month per pair installed) in the ULLS and LSS FADs are the same as those set out in the final arbitral determination made in November 2012 under the previous Part XIC regime.[664] The ACCC's view when it varied the ULLS and LSS FADs was that the IIC FAD price terms should remain the same as those determined in the final arbitral determinations until the ACCC makes new FADs for these services.

The IIC charge relates to access to a small component of Telstra's network and represents a small fraction of Telstra's revenue from regulated services. In the 2012 IIC final determinations (FD), the ACCC set the current IIC charge of $0.056 per copper pair installed per month by adjusting Telstra's IIC cost model to more closely align the model with the pricing approach from the Fixed Line Services Model (FLSM).[665]

The ACCC sought stakeholder views on the IIC charge in its May 2013 discussion paper on non-price terms and conditions (NPTC) and supplementary prices. In its submission on the discussion Telstra proposed that the IIC charge could be set using the FLSM. Telstra provided further details on its proposed approach received in November 2014 and January 2015.

---

663 ACCC, *Fixed Services Review, Inquiry into varying the WLR, LCS, ULLS and LSS final access determinations, Final report*, June 2014.

664 ACCC, *ULLS and LSS Access Disputes–Chime Communications Pty Ltd / Telstra–Reasons for Final Determination*, November 2012.

665 ibid., p 16.

This chapter provides the ACCC's draft decision on the IIC charge. In reaching its draft decision, the ACCC has considered Telstra's proposal to use the FLSM to set the IIC charge and other submissions received on the discussion paper.

14.2 2012 IIC Final Determinations

In November 2012, the ACCC made FDs for 13 access disputes in relation to the charge levied by Telstra for the IIC. The FDs specified an IIC charge of $0.056 (excluding GST) per pair installed per month.

In setting the IIC charge, the ACCC noted that it would be desirable to consider IIC pricing within the FLSM because the initial regulatory asset base (RAB) in the FLSM is likely to include capital costs related to the IIC.[666] However, the FLSM was not used because: [667]

- Asset classes in the FLSM were not sufficiently disaggregated to readily derive IIC costs based on specific assets used to provide the IIC service.
- Significant additional modelling would have been required.

The ACCC's approach was therefore to verify Telstra's proposed model and make a number of adjustments to ensure consistency with the FLSM.[668] The key adjustments were:[669]

- Removing MDF and related costs from Telstra's model. The 2012 FDs noted that allowing Telstra to recover MDF and related costs via the IIC charge would likely result in over-recovery of costs. This is because the price of the declared services (and other fixed line services) should recover an appropriate share of costs associated with the MDF.
- Adjusting operating expenditure to ensure consistency with the FLSM.

14.3 Submissions

The NPTC discussion paper considered IIC related pricing.[670] The paper sought inputs from the stakeholders on whether the previous approach to determine the IIC charge should continue or whether there is a better approach to price the IIC. A number of submissions were received.

iiNet submitted that the IIC charge should be $0 because Telstra 'does not incur any costs that can be attributed to the IIC that are not already recovered via other charges that are allocated in the FLSM'.[671] iiNet noted that certain costs attributed to Telstra[672] are 'not incurred by Telstra but are incurred by access seekers, who pay for the installation, operation and maintenance of the IIC'. iiNet also submitted that allocating these costs to the IIC charge results in access seekers 'paying the costs twice, and Telstra receiving a windfall payment'. iiNet further submitted that '[Telstra Equipment Building Access (TEBA)] rack and power charges should also be declared as TEBA is a natural bottleneck service that should be subject to regulation'.

Macquarie Telecom initially submitted that the IIC charge should remain at the current charge of $0.056 per month at a 'temporary basis until the ACCC make a thorough assessment of all

666 ACCC, *ULLS and LSS access disputes–Chime Communications Pty Ltd/Telstra–Reasons for final determinations*, November 2012, p. 15.

667 ibid., p. 16.

668 ibid., p. 49–51.

669 ibid.

670 ACCC, *FAD Inquiries – Non Price Terms and Conditions and Supplementary Pricing Issues – Position Paper*, May 2014, pp. 16–17.

671 iiNet, *Determination inquiries – non-price terms and conditions supplementary prices Position Paper, Submission by Thomson Geer Lawyers on behalf of: iiNet Limited*, August 2014, pp. 16-18.

672 iiNet stated that in determining the IIC charge in the 2012 FD, the ACCC attributed costs to Telstra for ancillary equipment used to facilitate installation and operation of the IIC as well as operation and maintenance costs for IIC.

relevant factors under its substantive FAD inquiry'.[673] Macquarie Telecom noted that this price has been determined by the ACCC through the arbitration process and it is the 'best currently available estimate of the appropriate IIC price and as such it is practical and expedient that it be adopted.'

Macquarie Telecom later submitted that the IIC charge should be $0.[674] Macquarie Telecom considered that the costs incurred by Telstra of supplying the IIC are 'negligible' and would be readily absorbed by Telstra given that 'Telstra's EBITDA margin on its fixed services is more than 60 per cent'.

Optus submitted that 'all ancillary charges associated with facilities access, including IIC charge, should be based strictly on a cost incurred basis'.[675] Optus stated that the ACCC should 'impose a cost orientation obligation on the access provider for all ancillary charges with all access determinations'. Optus submitted that 'where the access provider with significant market power cannot identify costs incurred that are not taken into account when setting access charges, no charge should be levied'.

TPG submitted that the IIC price terms should be included in the ULLS and LSS FADs and that they should be the same as those determined in the final arbitral determinations until the ACCC makes new FADs for these services.[676] TPG stated that it 'does not agree with Telstra's view in the 2012 FD that the cost allocation for the ULLS and WLR do not allow it to recover MDF and MDF housing costs for the equipment side of the MDF'. TPG agreed with the ACCC's view (in the 2012 FDs) that allowing Telstra to recover the MDF housing costs via the IIC charge would likely result in over-recovery or double-recovery of costs'.

TPG also submitted that a number of Telstra services (including the IIC services)[677] should be regulated through the FADs because these are required in order for ULLS to be operational.[678]

Aussie Broadband supported pricing IIC related charges in the FADs and noted that this will make 'the regulated charge available to all ULLS and LSS access seekers rather than only those that were parties to the FDs in 2012'.[679] Aussie Broadband also considered that in making the FDs in 2012, the ACCC had 'appropriate and thorough regard to all available evidence and that the concluded charges were fair then and now'. Aussie Broadband added that it agrees that the 2012 FD price for the IIC 'better promotes the long term interests of end-users LTIE and better satisfies the additional statutory criteria than Telstra's commercial price; however, given better pricing methodology even lower new FAD prices will be possible'.

Telstra submitted that it is 'imperative that the ACCC consider IIC pricing as part of the inquiry into primary prices to ensure consistency and minimise the risk of over or under recovery of costs'.[680] However, Telstra stated that any additional regulation of facilities access is 'unwarranted and would not be in the LTIE'. Telstra reasoned that this is because facilities access is 'already regulated through long established and well understood mechanisms'. Telstra also wrote that it does not 'consider there is a need to include any other supplementary charge for declared services in the FADs'.

---

673 Macquarie Telecom, Letter to ACCC regarding *Fixed Services – Inquiry into varying the WLR, LCS, ULLS and LSS final access determinations*, 19 May 2014, p. 4.

674 Macquarie Telecom, Letter to ACCC regarding *Telecommunications Final Access Determination inquiries – non-price terms and conditions and supplementary prices*, 23 July 2014, p. 7.

675 Optus, *Submission in response to ACCC Position Paper, Non-price terms and conditions and supplementary prices, Final Access Determination*, July 2014, p. 4.

676 TPG, *Submission by TPG Telecom Limited to Australian Competition and Consumer Commission, Telecommunications Final Access Determination inquiries – non-price terms and conditions and supplementary prices Position paper (May 2014)*, July 2014, p. 5.

677 Telstra equipment building access service (TEBA), External interconnect cable access service (EIC access service) and Internal interconnect cable (IIC service).

678 TPG, op. cit., July 2014, p. 6.

679 Aussie broadband, *Inquiry into varying the WLR, LCS, ULLS and LSS final access determinations – Response to ACCC discussion paper of April 2014*, May 2014, pp. 5–6.

680 Telstra, *Final Access Determination inquiry on supplementary pricing, Response to ACCC position paper*, 15 July 2014, pp. 3–4.

14.4 Telstra's proposed approach for pricing the IIC

Telstra informed the ACCC that it is [c-i-c starts] [redacted] [c-i-c ends]

On 19 January 2015, Telstra submitted more detail on how the FLSM may be used to price the IIC service in response to an ACCC information request.[683]

14.5 ACCC draft decision

The ACCC's draft decision is that IIC charge of $0.056 per pair installed per month should be included in the price terms for the forthcoming FADs. This charge is determined by applying the same uniform price decrease as for the primary price terms. The ACCC has considered the following matters in reaching this decision.

Inclusion of the IIC charge in the price terms for the FADs

The ACCC has had regard to the following key reasons in proposing to include the IIC charge in the price terms for the FADs:

- As in the 2012 FDs, the ACCC still considers that the IIC service is necessary in order for access seekers to access the ULLS/LSS and provide services to end users, and the IIC is therefore used in connection with the supply of a declare services. As the IIC is used in order to provide a carriage services, it relates to an aspect of access.
- Even though the IIC is not part of the ULLS or LSS, access seekers are unable to provide ULLS or LSS based services to end users without the IIC service. Therefore, when determining prices for ULLS and LSS, IIC prices must also be determined.
- Telstra has not provided sufficient evidence or justification that the IIC service is not essential to the supply of ULLS/LSS services and the supply of ULLS/LSS based services to end users.

681 [c-i-c starts] [redacted] [c-i-c ends]

682 Telstra, *Submission to the ACCC's Fixed line Services Final Access Determination*, November 2014.

683 Telstra, *Fixed line services final access determination inquiry: ACCC request for information*, 19 January 2015.

Approach for setting the IIC charge

The ACCC has considered a variety of approaches for setting the IIC charge.

As in the 2012 FDs, the ACCC has considered using the FLSM for setting the IIC charge.[684] However, the asset classes used in the FLSM continue to be insufficiently disaggregated to readily derive IIC costs based on specific assets used to provide the IIC service. Telstra has been unable to provide further detailed information on assets used to supply the IIC service compared to those provided in the 2012 FDs. [c-i-c starts] [redacted]

- [redacted] [c-i-c ends]
- Telstra has previously stated that it does not record 'specific costs in relation to the IIC' in the 2012 FDs.[686]

The ACCC has considered Telstra's initial and revised approach for setting the IIC charge. However, the ACCC's draft decision is to not proceed with Telstra's proposal at this stage for the following reasons:

- The information submitted by Telstra is insufficient [c-i-c starts] [redacted] [c-i-c ends] [687]
- Telstra's approach is based on a number of assumptions [c-i-c starts] [redacted] [c-i-c ends] Telstra has not provided evidence or justification for these assumptions.
- [c-i-c starts] [redacted] [c-i-c ends]

The ACCC therefore considers that an alternative approach needs to be applied. The ACCC considers that the approach taken in the 2012 FDs to determine IIC price terms could be a useful starting point to determine an IIC charge. The ACCC notes that it has received support for this approach.[689]

The ACCC's draft decision is to include IIC charge of $0.056 (excluding GST) per month in the FAD price terms. This is estimated by adopting the previous IIC charge of $0.056 per pair

---

684 ACCC, *ULLS and LSS access disputes–Chime Communications Pty Ltd/Telstra–Reasons for final determinations*, November 2012, pp. 15–17.

685 As the in the 2012 FDs, the following FLSM asset classes were identified to contain assets used to supply the IIC service: other communications plant and equipment (asset class CO07); network land (asset class CO08); and network buildings and support (CO09).

686 ACCC, *ULLS and LSS access disputes–Chime Communications Pty Ltd/Telstra–Reasons for final determinations*, November 2012, p. 16.

687 Telstra, *Response to information request*, 19 January 2015.

688 [c-i-c starts] [redacted] [c-i-c ends]

689 Both Telstra and Aussie Broadband have supported this approach. Aussie broadband submitted that given its related entity (Wideband) was involved in the 2012 FDs, it is aware of the process that went into setting the price for IIC. They further submitted that the IIC charges set in 2012 FDs were 'fair then and are fair now'.

installed per month and adjusting for the same uniform change in prices[690] across all declared services over the regulatory period (FY2016 to FY2019).

The ACCC notes some submissions for the IIC charge to be $0.[691] However, the ACCC considers that Telstra would bear some costs for supplying the IIC for the following reasons:

- The 2012 FDs noted that the initial RAB in the FLSM is likely to include capital costs related to the IIC.[692]
- As in the 2012 FDs, Telstra has provided the FLSM asset classes used for providing the IIC service (and other TEBA related services).[693]
- Frontier Economics (in a submission for access seekers during the 2012 FDs) has previously noted that 'cost categories related to the provision of the IIC…would be part of…the FLSM'.[694]

The ACCC's draft decision is that Telstra is bearing some costs attributable to the IIC service. However, the level of information currently available to the ACCC does not allow an estimation of a stand-alone IIC charge.

The ACCC also notes submissions that other Telstra facilities, such as TEBA power and TEBA racks should also be regulated.[695] As the ACCC is not currently considering other TEBA services and has not consulted on these services, the ACCC's draft decision is that only IIC charges should be considered for the current FAD.

690 Uniform changes refers to applying the same proportion of change in IIC charges as that for other declared services that were calculated within the FLSM.

691 Macquarie Telecom and iiNet, op.cit..

692 ACCC, *ULLS and LSS access disputes–Chime Communications Pty Ltd/Telstra–Reasons for final determinations*, November 2012, p. 15.

693 Telstra, *Response to request for information*, 19 January 2015.

694 ACCC, *ULLS and LSS access disputes–Chime Communications Pty Ltd/Telstra–Reasons for final determinations*, November 2012, p. 15–16.

695 iiNet, op.cit., August 2014, pp. 16–18.

Part C: Scope of the application of the SAOs

15 Geographic exemptions

Key points

- The ACCC's draft decision is that the SAOs and the FADs for WLR and LCS should apply to all geographic areas.

15.1 Introduction

From the time that a service is declared, an access provider that supplies the declared service to itself or another party must also supply the service, upon request, to all other service providers in accordance with the standard access obligations set out in section 152AR of the CCA (the category A SAOs). The category A SAOs require an access provider to:

- supply the service to an access seeker on request
- take all reasonable steps to ensure that the technical and operational quality and fault detection, handling and rectification of the service provided to the access seeker is equivalent to that which it provides to itself; and
- allow interconnection.[696]

As the fixed-line services are declared on a national basis, the SAOs apply to all access providers nationally. However, the ACCC may include terms and conditions in the FAD which provide that the SAOs do not apply to a carrier or carriage service provider (CSP) either unconditionally or subject to certain conditions and limitations. Such terms and conditions are commonly referred to as 'exemptions'.

In the past, access providers have sought for the ACCC to include two types of exemptions in its FADs:

- geographic exemptions, which would exempt an access provider from the application of the SAOs when it supplies services in specific geographic areas. There are currently no geographic exemptions included in the fixed line services FADs
- carrier-specific exemptions, which would exempt specific carriers/CSPs from the application of the SAOs. There is an exemption in the existing wholesale ADSL FAD, which limits the application of the category A SAOs to Telstra only.[697] Carrier-specific exemptions are discussed in further detail in chapter 17.

15.1.1 The ACCC's 2014 declaration decision

In its recent 2014 declaration decision, the ACCC expanded the declarations for the WLR service and LCS to include CBD areas.

Previously, between 2002 and 2014, the service description for the LCS exempted this service in the CBD areas of Sydney, Melbourne, Adelaide, Brisbane and Perth from the declarations. The service description for WLR included this exemption from when it was first separately declared in 2006 until 2014. This meant that access providers were not obliged to supply these services in CBD areas and the FADs for these services and the SAOs did not apply to their supply in CBD areas.

[696] Section 152AR of the CCA.
[697] Final Access Determination No. 1 of 2013 (WADSL), paragraph 5.

The ACCC's 2014 declaration decision meant that Telstra had to comply with the Category A SAOs and the regulated terms and conditions in the relevant FADs when supplying the WLR service and LCS in CBD areas, from 1 August 2014. (The ACCC also varied the fixed line services FADs to specifying price and non-price terms for the supply of the LCS and WLR service in CBD areas, on 18 June 2014).

A number of submissions were made in relation to the CBD exemptions during the declaration inquiry process, both from Telstra and access seekers. The ACCC carefully considered these submissions in making its decision to remove the exemptions, along with responses to an information request and the outcome of the ACCC's analysis on the state of competition in CBD areas.

As the declaration decision was made within the last twelve months the ACCC considers that the information and analysis undertaken in making that decision is relevant to its consideration of the CBD exemptions in this FAD inquiry. In reaching this draft decision, the ACCC has had regard to this information and the ACCC's reasoning, as well as more recent information presented in submissions to this inquiry. As such, it is useful to repeat the conclusions from the Declaration Inquiry.

Summary of the April 2014 FSR Declaration Decision for WLR and LCS

Demand for traditional voice services in CBD areas

In the declaration inquiry, the ACCC concluded that there remained significant demand for copper-based voice-only services in CBD areas. The ACCC uses the term 'voice-only' to describe a voice SIO, which includes Telstra Retail basic access SIOs and WLR SIOs.

Based on data provided by Telstra, the ACCC determined that a significant number of CBD-based end-users purchase 'voice-only' services.[698]

In its declaration decision, the ACCC disagreed with Telstra's claim that declining demand justifies a WLR price in CBD areas above the nationally averaged retail price. Instead, the ACCC considered that as Telstra had been able to maintain high prices in CBD areas in the face of declining demand, this indicated that it had market power due to the lack of effective competition in supplying these end-users.[699]

1 Impact on retail prices

The ACCC found that the high commercial WLR price was likely to keep retail prices high for end-users in CBD areas because of the constraints on access seekers' ability to compete with Telstra on price. The ACCC used four illustrative examples to demonstrate the effect of the higher WLR prices charged in the CBD areas on the ability of access seekers to compete with Telstra for different types of end-users that are typically located in CBD areas.[700] These end-users are voice-only residential end-users, small business end-users, medium-sized business end-users and large business end-users. Information submitted by access seekers indicated that small and medium-sized businesses represent approximately one third and one quarter, respectively, of all businesses located in CBD areas.[701]

[698] In June 2013, Telstra had **[c-i-c]** [redacted] **[c-i-c]** WLR only SIOS in CBD areas and it supplies **[c-i-c]** [redacted] **[c-i-c]** retail voice-only services: Telstra, October 2013, response to information request, Appendix.
[699] ACCC, *Public Inquiry into the fixed line services declarations: Final report,* April 2014, p. 42.
[700] ACCC, *Public Inquiry into the fixed line services declarations: Final report*, April 2014, pp. 40-41.
[701] Macquarie Telecom, AAPT and Optus, November 2013 case studies.

These calculations demonstrated that retail competition in relation to end-users that require a small number of lines to their premises were adversely affected as a result of the CBD exemptions.[702]

In each of these examples, the ACCC estimated the ability for access seekers and Telstra to make a profit in supplying services to these three types of end-users. In order to estimate this, the ACCC compared an approximation of the costs incurred by Telstra in supplying a retail service to end-users with the retail price of a service generally supplied to that type of end-user. The ACCC then compared an approximation of the costs incurred by access seekers in supplying the service to end-users with an approximate retail price of a service generally supplied to that type of end-user.

To estimate the costs incurred by access seekers, the ACCC used the average price charged for WLR in CBD areas and an understanding that access seekers require a gross profit margin of 20-25 per cent to cover their retail costs.[703]

To estimate the costs incurred by Telstra in supplying a retail line rental service to an end-user, the ACCC used a range of between **[c-i-c]** [redacted] **[c-i-c]** and the regulated WLR price for, set in the ACCC's FAD, as an indicator of the cost of supply.[704] The ACCC also recognised that Telstra would also incur retail costs that would need to be covered from its gross profit margin.

Voice-only end-users

The ACCC found that retail service providers typically charge between $22 and $29.95 per month for a basic voice-only service.[705] The ACCC considered that access seekers that are required to pay the CBD WLR price of $27.60 would, therefore, earn little to no (or even a negative) gross margin on supplying retail services to CBD end-users. The ACCC considered that this limited access seekers' ability to compete with Telstra in supplying voice-only services to these residential end-users.[706]

Small business end-users

Information submitted by access seekers indicated that small business end-users typically require two line rental services; one for a broadband and/or voice service, and one for an EFTPOS machine.[707] The ACCC's analysis found that access seekers would make an overall gross margin of between 22 and 29 per cent. In contrast, Telstra's estimated margin for supplying the same bundle of services would be between 32 and **[c-i-c]** [redacted] **[c-i-c]** per cent.[708]

The ACCC considered that the difference in costs faced by access seekers and Telstra significantly inhibited access seekers' ability to compete effectively for small business end-users in CBD areas.[709]

---

[702] ACCC, *Public Inquiry into the fixed line services declarations: Final report*, April 2014, p. 36.

[703] ACCC, *Public Inquiry into the fixed line services declarations: draft report*, December 2013, p. 62.

[704] This was a conservative estimate of the costs of supply due to the fact that the costs of supplying a line rental service in CBD areas is likely to be lower than nationally averaged costs due to the higher population densities and shorter distances to reach customer premises mean that less ducts and pipers and copper cables are needed to provide each service compared to non CBD areas.
ACCC, *Review of the 1997 telecommunications access pricing principles for fixed line services: Draft report*, September 2010, p.91.

[705] ACCC, *Public Inquiry into the fixed line services declarations: Final report*, April 2014, pp. 59-60.

[706] Ibid, p. 40.

[707] Macquarie Telecom, AAPT and Optus, November 2013 case studies.

[708] ACCC, *Public Inquiry into the fixed line services declarations: Final report*, April 2014, p. 40. Updated figures calculated using the draft WLR FAD price indicate that Telstra's estimated margin on supplying this bundle of services would be the same.

[709] Ibid.

Medium-sized business end-users

Based on information submitted by access seekers, the ACCC assumed that these end-users also typically require two line rental services in each of their premises, one for an EFTPOS machine and another for a bundled voice and broadband service.[710] Based on information provided by access seekers, the ACCC assumed an average medium-sized end-user would have premises in 50 locations: 25 within and 25 outside CBD areas. The ACCC's analysis found that access seekers' overall gross margin on supplying the typical bundle of services to a medium-sized end-user would be between 26 and 29 per cent. In contrast, Telstra's estimated margin on supplying the same bundle of services would be between 30 and **[c-i-c]**[redacted] **[c-i-c]** per cent.[711]

The ACCC considered that the difference in costs faced would constrain access seekers' ability to compete effectively in this segment of the market, including by limiting access seekers' ability to offer competitive discounts for providing a package of telecommunications services across all premises.[712]

Large business end-users

The ACCC considered an example of a large business end-user that would require a traditional copper-based voice solution rather than an IP-based solution and so is therefore supplied a WLR service. Based on information supplied by access seekers, the ACCC assumed that this could be a mass market retail outlet that requires telecommunications services to their corporate office locations (usually outside the CBD areas), along with a large number of dispersed retail outlets in CBD and non-CBD locations which are relatively small and require around two lines per premises.[713]

The ACCC considered that this would reduce the ability of access seekers reliant on resale services to compete effectively with Telstra and ULLS-based access seekers in offering discounts for the package of services typically demanded by large business end-users, particularly given that there is significant competition for these businesses.[714]

2 Impact on other markets

The ACCC found that the commercial WLR price charged by Telstra tended to hold up retail prices for voice services in CBD areas.[715] This affected access seekers' ability to offer competitively priced 'whole of business' packages of voice and broadband to corporate and business end-users. The ACCC found that lower prices for resale services in CBD areas would promote the LTIE as it would enable access seekers to provide end-users with additional choices, in terms of service providers and variety of products. A lower price would also allow access seekers to compete more effectively with Telstra to offer competitively priced products to end-users.[716]

3 Economically efficient use of and investment in

[710] Macquarie Telecom, AAPT and Optus, November 2013 case studies.
[711] ACCC, *Public Inquiry into the fixed line services declarations: Final report*, April 2014, p. 40. Updated figures calculated using the draft WLR FAD price indicate that Telstra's estimated margin on supplying this bundle of services would be between 29 and **[c-i-c]**[redacted] **[c-i-c]** per cent.
[712] Ibid.
[713] Macquarie Telecom, AAPT and Optus, November 2013 case studies.
[714] ACCC, *Public Inquiry into the fixed line services declarations: Final report*, April 2014, p. 40.
[715] Ibid, p. 41.
[716] Ibid, p. 43.

infrastructure

The ACCC considered that the removal of the CBD exemptions from the WLR and LCS service descriptions would be more likely to promote the efficient use of infrastructure used to supply fixed voice and fixed broadband services than if the exemptions were maintained, especially during the transition to the NBN.[717]

The ACCC noted that access seekers' investments in exchange equipment has slowed significantly since 2009. The rollout of the NBN has reduced the incentives to invest in copper-based infrastructure such as DSLAMs, which are likely to become redundant as the NBN is rolled out, due to the greater risk that an adequate return on such investments may not be received.[718]

The ACCC found that wherever it is efficient to do so, access seekers will continue to use their own fibre networks to supply services to end-users in order to recover their sunk investments. Where cost-effective solutions can be supplied to end-users over fibre networks, the ACCC expects that access seekers will continue to use, and invest in, these networks to supply retail services to these end-users.[719]

Similarly, the ACCC found that where access seekers have made investments in DSLAMs and other exchange-based equipment, they will continue to use this equipment to supply end-users, due to the lower costs of using ULLS and LSS and the competitive benefits from product differentiation and greater control over service quality. Further, the ACCC considered that where it would be commercially efficient to do so, access seekers would continue to invest in their own exchange equipment.[720]

The ACCC concluded that if the CBD exemptions were not removed, this could result in resale services not being provided on reasonable terms and conditions, including price. The higher price may force access seekers to make more efficient investment decisions in the current telecommunications environment. This may mean that access seekers utilise Telstra's existing copper-based exchanged equipment by acquiring resale services and independently investing in new IP-based systems to adapt to the IP-based NBN environment.

4 Removing the exemptions for the LCS in CBD areas

While the ACCC did not receive evidence that Telstra was supplying the LCS at a rate that is well above the economically efficient cost price, the ACCC considered that given the lack of effective competition in supplying voice-only services in CBD areas, Telstra would have an incentive and the ability to raise the LCS price in CBD areas in the event that the CBD exemptions were removed only from the WLR service description.[721]

The ACCC therefore found that removing the CBD exemptions from the LCS service description would lead to lower retail prices, greater innovation and choice and so would promote the LTIE.[722]

[717] Ibid, p. 44.
[718] Ibid, p. 34.
[719] Ibid, p. 45.
[720] Ibid.
[721] Ibid, p. 44.
[722] Ibid.

15.2 Submissions to the FSR FAD inquiry (on exemptions)

Following the declaration decision of April 2014 to expand the operation of the WLR and LCS service declarations to CBD areas (to take effect from 1 August 2014), submissions to this FAD inquiry were received, primarily, in October 2014. As part of this inquiry to determine the prices, terms and conditions for supply of the WLR service and LCS the ACCC has been asked to consider the issue of 'carving out' the application of the SAOs and regulated FAD terms in CBD areas.

Telstra, iiNet and Macquarie Telecom made submissions to the ACCC's discussion paper on the inclusion of CBD exemptions in the WLR and LCS FADs.

Telstra's submission largely focused on the ACCC's declaration decision to remove the CBD exemptions from the WLR and LCS service descriptions. The ACCC is not re-opening or re-making its April 2014 declaration decision. However, the ACCC has considered the matters raised in Telstra's submission in its current consideration of whether to narrow the application of the category A SAOs through the WLR and LCS FADs.

Telstra submitted that the SAOs should not apply to the supply of WLR and LCS in CBD areas as these infrastructure facilities are not enduring bottlenecks.[723] Telstra's submission also covered the state of competition in CBD areas and the application of the LTIE in section 152BCA(1)(a) of the CCA.

Macquarie Telecom's submission responded to a number of the matters raised by Telstra. In particular, Macquarie Telecom submitted that given their bottleneck characteristics, access to WLR and LCS on cost-based terms is essential to protect resale competition and would promote viable and productive use of scarce infrastructure in CBD areas.[724]

iiNet and Macquarie Telecom submitted that it is appropriate for the ACCC to adopt its final decision in the fixed services review declaration inquiry in relation to CBD exemptions and it would not be an effective use of regulatory resources to revisit the decision.[725] Further, iiNet and Macquarie Telecom submitted that revisiting the issue so soon after the decision would lead to uncertainty within the industry.[726]

15.2.1 Market structure and state of competition

Telstra submitted that WLR and LCS cannot reasonably be considered an essential facility or an enduring bottleneck in CBD areas as access seekers have a choice of multiple alternative wholesale inputs within CBD areas and there are a wide range of alternative end-user services that are available alongside WLR-based services.[727]

Telstra submitted that IP-based services operate as full substitutes to traditional PSTN voice services including WLR and LCS in CBD areas.[728]

Telstra submitted that there is extensive infrastructure-based and ULLS-based competition in the CBD areas, which enables competitive provision of services to end-users. All 16 CBD ESAs have between **[c-i-c]** [redacted] **[c-i-c]** fibre providers and between **[c-i-c]** [redacted] **[c-i-c]** DSLAM-based competitors. Telstra argues this has resulted in a decline in the use of Telstra's

[723] Telstra, October 2014 submission, p. 25.
[724] Macquarie Telecom, December 2014 submission, p. 3.
[725] Macquarie Telecom, December 2014 submission, pp. 1-3 and iiNet, November 2014 submission, p. 1.
[726] Ibid.
[727] Telstra, October 2014 submission, p. 25.
[728] Ibid, p. 14.

retail line rental and WLR in CBD areas at levels above the national decline in the last three years.[729]

Telstra submitted that voice services supplied over ULLS, fibre and wireless networks (VoIP services) are now commonplace in the corporate voice market and are attracting more customers in the consumer market.[730]

Telstra further submitted that the migration to the NBN is necessitating the transition of business services, such as EFTPOS, facsimile and security alarms, to IP networks.[731] The use of fixed-line services for EFTPOS machines is being subsumed by the use of mobile EFTPOS machines. In June 2009, mobile EFTPOS transactions made over Telstra's network accounted for **[c-i-c]** **[c-i-c]** per cent of all EFTPOS transactions and in June 2014 **[c-i-c]** **[c-i-c]** of all EFTPOS transactions made over Telstra's network were mobile.[732]

Macquarie Telecom submitted that the economics of providing services to end-users that only require one or two PSTN lines has not changed. Macquarie Telecom confirmed its previous advice that the economics of ULLS to provide the type of voice line services required by small businesses and many retail outlets with the need for broadband services only becomes economic where there are **[c-i-c]** **[c-i-c]** or more lines in use.[733]

15.2.2 Consideration of the LTIE

Telstra submitted that in considering whether CBD exemptions promote the LTIE, the ACCC should focus on the current state of competition in the CBD areas, the extent of competing infrastructure and the likely effect of a regulated price on incentives for efficient use of and investment in infrastructure. Telstra stated that the ACCC used its regulated prices (generated using the BBM) to measure market power in its declaration decision and this is inappropriate.

Telstra submitted that ongoing competitive investment has led to more effective competition in CBD areas than at any other time.[734] Telstra further submitted that the ACCC should consider whether the re-regulation of WLR and LCS in CBD areas will have negative effects on investment incentives for infrastructure within CBD areas.[735]

Macquarie Telecom submitted that CBD areas did not evidence effective competition prior to the ACCC's declaration decision.[736] Further, there is little or no prospect that infrastructure providers will invest in the supply of alternative wholesale services given the roll-out of the NBN and NBN-like services.[737]

These submissions are considered in more detail below.

15.3 FAD Inquiry draft decision

15.3.1 Market structure and state of competition

In deciding whether to include geographic exemptions in a FAD, the ACCC is required to consider a number of matters. In particular, the ACCC must consider whether its decision on exemption will promote competition in markets for listed services. This involves identifying the

[729] Ibid, p. 5.
[730] Ibid, p. 22.
[731] Ibid.
[732] Ibid, p. 19.
[733] Macquarie Telecom, December 2014 submission, pp. 3-4.
[734] Telstra, October 2014 submission, p. 5.
[735] Telstra, October 2014 submission, p. 4.
[736] Macquarie Telecom, December 2014 submission, p. 3.
[737] Ibid.

relevant markets for the services in question and assessing the state of competition in these markets.

The ACCC recently considered the markets for the WLR and LCS and the state of competition in these markets in its 2014 decision to declare these services. The ACCC considers that the material and conclusions it drew on in making the declaration decision remain relevant and have been considered in making this draft decision.

To the extent that new information or issues have been raised in this inquiry, the ACCC considers them below. However, having regard to the reasons set out in its declaration decision and the new matters discussed below, the ACCC considers that the relevant markets for the supply of WLR and LCS are the same as those identified in the declaration decision. These are the:

- retail and wholesale markets for the supply of fixed voice services
- retail market for the supply of a bundle of fixed voice and fixed broadband services.[738]

15.3.1.1 The ACCC's approach to defining the scope of the relevant markets

It is important to note that Part XIC of the CCA does not require the ACCC to precisely define the scope of relevant markets. Accordingly, a market definition analysis under Part XIC should be seen in the context of shedding light on how geographic exemptions would promote competition. For the purpose of this inquiry, the ACCC considers that it is sufficient to broadly identify the scope of the markets likely to be affected by the relevant exemptions.

Section 4E of the CCA provides that a market includes goods or services that are substitutable for, or otherwise competitive with, the goods or services under analysis. Accordingly, substitution is key to market definition.

Substitution involves switching from one service to another in response to a change in the relative price, service or quality of the product the subject of the inquiry. There are two types of substitution—demand-side substitution, which involves end-user switching at the retail level; and supply-side substitution, which involves access seeker-switching at the wholesale level.[739]

When considering whether a product is substitutable, the ACCC generally considers customer attitudes, the function or end-use of the service, the cost of switching to another service, past behaviours of buyers, relative price levels, and physical and technical characteristics of a product.[740]

The ACCC's approach to market definition focuses on two key dimensions of substitution—the product dimension and the geographic dimension.

15.3.1.2 Product dimension

In its decision to declare WLR and LCS, the ACCC considered that from an end-user's perspective, there are three potential substitutes open to them in the event that the price of traditional (POTS) voice-only services supplied over Telstra's PSTN increases:

- VoIP services as part of a fixed-line broadband service, such as a Naked DSL service

[738] ACCC, *Public Inquiry into the fixed line services declarations: Final report*, April 2014, pp. 11-16.
[739] ACCC, Merger guidelines, November 2008, p. 16.
[740] Ibid, pp. 16-17.

- wireless voice services, such as a mobile voice service or a bundled mobile voice and data service.[741]

The ACCC concluded that:

- only POTS-emulation VoIP services are a good substitute for traditional voice services. There are also some technical limitations to VoIP services, meaning that VoIP services cannot perform some functions of traditional voice services, such as EFTPOS and security alarms. Therefore, VoIP services are not a strong substitute and are of limited relevance to the ACCC's LTIE assessment
- mobile voice services are not substitutable for traditional fixed-voice services due to switching costs, technical and pricing limitations. [742]

In its decision to declare WLR and LCS, the ACCC considered that from an access-seeker's perspective, the potential substitutes available to them in the event of a price increase for WLR and/or LCS are self-supply or acquisition of services supplied over the ULLS or an alternative end-to-end network such as an HFC or fibre network.[743]

The ACCC concluded that:

- self-supply over the ULLS is not substitutable for WLR and LCS due to the costs associated with investing in exchange and associated switching equipment
- resale fixed-voice services supplied over the ULLS are not substitutable for WLR and LCS due to the restrictions placed on such services, such as a requirement for an end-user to have a minimum number of voice lines and a minimum spend requirement
- fixed-voice services supplied over alternative networks are not substitutable for WLR and LCS due to technical and price limitations.[744]

15.3.1.3 Submissions

Demand-side substitutability

As noted above, Telstra submitted that from an end-user's perspective, IP-based voice services operate as full substitutes to traditional PSTN voice services including WLR and LCS in CBD areas.[745] Telstra's submission appears to base this on a number of reasons:

- the cost of using IP-based voice services such as VoIP is gradually decreasing. Telstra gave the example of My NetFone which provides low cost converters that enable end-users to plug an analogue handset into a broadband router and use facsimile machines[746]
- end-users are now more familiar with contracts for bundles of broadband and voice services and so the imposition of a contract for voice-only services (to cover the additional costs of IP telephony) is unlikely to limit the substitutability of these alternative services[747]
- as the NBN is progressively rolled out, a large proportion of the Australian fixed voice telephony market will progressively shift to IP telephony. This particularly relevant to

[741] ACCC, Public Inquiry into the fixed line services declarations: Final report, April 2014, p. 15.
[742] Ibid.
[743] Ibid, p. 13.
[744] Ibid, pp. 13-14.
[745] Telstra, October 2014 submission, p. 14
[746] Ibid, p. 21.
[747] Ibid.

businesses with multiple locations as where one location moves to the NBN, this may trigger a company-wide refresh to ensure a consistent whole of business experience. Even if a company-wide refresh is not triggered, the business will become familiar with the IP environment from their sites in an NBN area and therefore it will be easier to sell IP-based services to the business in the future[748]

- significant work is being carried out by both retail service providers and providers of the underlying services to ensure that services that have previously operated only over traditional voice-only services are able to operate on the NBN. This means that these services (EFTPOS, facsimile, security alarms, elevator telephones and back-up telephones) will become contestable to service providers offering technology other than Telstra's PSTN[749]
- fixed wireless has become a viable alternative to traditional voice services[750]
- the use of fixed line services for EFTPOS is being subsumed by the use of mobile EFTPOS machines. In June 2009 only **[c-i-c]** [redacted] **[c-i-c]** of EFTPOS transactions made over Telstra's network were mobile. In June 2014, **[c-i-c]** [redacted] **[c-i-c]** of EFTPOS transactions made over Telstra's network were mobile. Moreover, EFTPOS terminals are widely available for use where a fixed solution is preferred and the customer is connected to a ULLS or fibre network.[751]

Telstra cited research undertaken by Ovum shows that VoIP is "now entrenched with the telecoms ecosystem and its use will grow increasingly over the next five years… VoIP is now commonplace in the corporate voice market and is attracting more customers in the consumer market."[752]

Telstra submitted that office space in CBD areas has grown each year by approximately 450,000m^2 since 2007, while PSTN voice SIOs (WLR and Telstra retail basic access) has declined by **[c-i-c]** [redacted] during this time. Telstra submitted that this evidences the expansive use of alternative infrastructure to supply voice services to the significant amount of new office space in the CBD areas. [753]

Macquarie Telecom submitted that mobile EFTPOS machines are not substitutable for a fixed line EFTPOS solution. Further, there is not an equivalent wholesale service that is available to access seekers on an equivalent basis.[754]

Supply-side substitutability

Telstra's submission argues that DSLAM-based infrastructure enables competitive alternatives to Telstra-supplied PSTN voice services at the wholesale level due to the fact that:

- there are no material barriers to ULLS-based entry and expansion
- the NBN rollout is not a disincentive as there has been either no or minimal deployment in CBD areas.
- CBD areas have a larger addressable market and a significantly higher proportion of higher margin business SIOs

[748] Ibid, p. 22.
[749] Ibid.
[750] Ibid, p. 15.
[751] Ibid, p. 19.
[752] Ibid, p. 22.
[753] Ibid, p. 15.
[754] Macquarie Telecom, December 2014 submission, p.5.

- **[c-i-c]** [redacted] **[c-i-c]**.[755]

Telstra further submitted that there are multiple alternative infrastructure providers, including non-Telstra fibre networks, Telstra-owned DTCS tails supplied to buildings that are capable of supplying multiple voice channels and fixed-wireless networks.[756] In addition, the concentration of investment in DSLAM-based infrastructure within CBD ESAs can be shown by the fact that **[c-i-c]** [redacted] **[c-i-c]**.[757]

As stated above, Macquarie Telecom submitted that it is only economical for access seekers to supply voice-only services using the ULLS where there are **[c-i-c]** [redacted] **[c-i-c]** or more lines in use. Macquarie Telecom submitted that this is evidenced by the fact that access seekers have not made further investments in DSLAMs to enable them to supply voice-only services. Macquarie Telecom considers that "competitors, having already invested heavily in DSLAMs in these CBD locations, would have made the additional investment to provide voice only [sic] services [using the ULLS] if it was economic to do so."[758]

15.3.1.4 FAD draft decision

As set out above, the substitutability of IP-based services for traditional voice services was considered by the ACCC in detail in the declaration inquiry. Telstra has provided only limited information in addition to that which was considered by the ACCC in making its declaration decision.

The ACCC acknowledges that there are other alternative infrastructure providers to WLR and LCS and that a move to fibre-based alternatives is occurring. However, the ACCC remains of the view that it is not a full substitute for traditional voice services for a significant subset of end-users in CBD areas.

Demand-side substitutability

The ACCC remains of the view that some end-users may be reluctant to switch from a traditional voice service to IP-based services (supplied over ULLS or an alternate network) or a mobile service for a range of reasons. These reasons include the switching costs in moving to VoIP and/or mobile services, the need to enter into a contract for the supply of the underlying internet services or the mobile service and end-user perceptions as to the quality of alternate services.[759] Further, some complex services, such as EFTPOS and lift telephones, cannot yet be supplied over IP or mobile mediums in all circumstances and for comparable costs, as set out in Macquarie Telecom's submission.

While Telstra submitted that the cost of VoIP services are falling, the ACCC does not accept that this is the case for all VoIP services. The ACCC has reviewed a number of VoIP plans that are currently available.[760] These plans all require a VoIP enabled router and some have a

---

[755] Ibid, pp. 16-17.
[756] Ibid, p. 14.
[757] Ibid, p. 16.
[758] Macquarie Telecom, December 2014 submission, p. 4.
[759] In November 2014, Telstra advised the ACCC that **[c-i-c]** [redacted] **[c-i-c]**.
[760] The ACCC reviewed the following plans:
Dodo $4.90 VOIP service (http://c.dodo.com/pdfs/plansummary/4000_$4.90_VOIP_Service.pdf)
Engin VoIP Super Saver, Engin VoIP Mobile Saver and Engin VoIP Extreme Saver (http://www.engin.com.au/legal/critical-information-summaries)
Exetel – Our Exefone (http://www.exetel.com.au/phone/exefone), Exetel – Exephone National, Exetel – ExeFone Mobile and Exetel – Exephone Global (http://www.exetel.com.au/files/cis/voip/CIS_ExeFone.pdf)
iiNet VoIP service (http://www.iinet.net.au/about/legal/cis/cis-voip.pdf)

minimum contract term or a setup fee if the end-user does not sign up to a contract.[761] While Telstra claims end-users are now familiar with fixed-term telecommunications contracts, the ACCC remains of the view that many voice-only end-users will be unwilling to enter into a 12 or 24 month contract for the supply of these services which also requires the installation of new equipment.

The ACCC recognises Telstra's argument that significant work is underway to ensure that all services can be supplied using the NBN. There are some services which have historically been provided over a voice-only copper line and include point of sale equipment, facsimile, security alarms, elevator telephones and back-up telephones. However, this work is not yet complete and there are still many services for which there are not equivalent IP-based solutions.[762] The ACCC also understands that where an IP-based solution exists, it requires significant end-user investment in replacing equipment at the end-user premises for it to be compatible with an IP solution.[763]

For the reasons set out in its draft report in the 2014 declaration inquiry, and confirmed in its final decision, the ACCC does not consider that mobile services are a close substitute for traditional voice-only services as certain equipment, such as alarms and EFTPOS equipment, either do not operate over a mobile network or the quality is not comparable. Where a mobile alternative is available, it may require the end-user to incur costs in switching from a copper-based product to a mobile-based product.[764]

Supply-side substitutability

The ACCC remains of the view that while the ULLS and alternative networks could be used by access seekers to supply technically equivalent services to traditional voice-only services, significant investment is required to use these networks to supply these equivalent services. Accordingly, the ACCC remains of the view that the resale of or self-supply of fixed voice services via the ULLS and the resale of or self-supply of fixed voice services over alternative networks are not close substitutes for traditional voice-only services.

Internode – NodePhone2 Special, Internode – NodePhone2 Starter, Internode – NodePhone2 Value and Internode – NodePhone2 Premium (http://www.internode.on.net/pdf/legal/cis/cis-internode-nodephone.pdf)
MyNetPhone – MegaSaver (https://www.mynetfone.com.au/media/Ts-Cs/Offer-Summaries-CIS/CIS_MNF_MegaSaver-20130228.pdf)
MyNetFone – Megasaver Premium (https://www.mynetfone.com.au/media/Ts-Cs/Offer-Summaries-CIS/CIS_MNF_MegaSaverPremium-20130226.pdf)
MyNetFone – GlobalSaver (https://www.mynetfone.com.au/media/Ts-Cs/Offer-Summaries-CIS/CIS_MNF_GlobalSaver-20130925.pdf)
MyNetFone – GlobalSaver Premium (https://www.mynetfone.com.au/media/Ts-Cs/Offer-Summaries-CIS/CIS_MNF_GlobalSaverPremium-20131105.pdf)
MyNetFone – UltimateTalk (https://www.mynetfone.com.au/media/Ts-Cs/Offer-Summaries-CIS/CIS_MNF_UltimateTalk-20130226.pdf)
MyNetFone – Megasaver Yearly (https://www.mynetfone.com.au/media/Ts-Cs/Offer-Summaries-CIS/CIS_MNF_UltimateTalk-20130226.pdf)
MyNetFone – GlobalSaver Yearly (https://www.mynetfone.com.au/media/Ts-Cs/Offer-Summaries-CIS/CIS_MNF_GlobalSaverYearly-20130226.pdf)
MyNetFone – Megasaver Premium Yearly (https://www.mynetfone.com.au/media/Ts-Cs/Offer-Summaries-CIS/CIS_MNF_MegaSaverPremiumYearly-20130226.pdf)
Primus Telecom – Lingo Starter, Primus Telecom – Lingo National and Primus Telecom – Lingo Australia (URL), Primus Telecom – Lingo 50 Countries (http://www.iprimus.com.au/products/lingo-voip/).

761 The MyNetPhone contracts have a minimum term of 12 months and the Primus Telecom contracts have a setup fee if the end-user does not sign up to a 6 or 12 month contract.

762 For example, the Communications Alliance NBN OTT Services Transition Working Group (NOST) is continuing work is to be undertaken to assess the implications for over the top device transition arising from the introduction of FTTN to the range of access technologies to be used during the roll-out of the NBN. http://www.commsalliance.com.au/Activities/committees-and-groups/nost-wg

763 ACCC, *Public Inquiry into the fixed line services declarations: draft report*, December 2013, p. 65.

764 ACCC, *Public Inquiry into the fixed line services declarations: draft report*, December 2013, p. 19.

In particular, throughout the course of the declaration inquiry, access seekers submitted evidence that there are higher unit costs in providing voice services using access seeker equipment and the ULLS. AAPT stated that these additional costs derive from **[c-i-c]** [redacted] **[c-i-c]**[765]

Macquarie Telecom **[c-i-c]** [redacted] **[c-i-c]**.[766] Further, access seekers submitted that alternative wholesale services to Telstra's WLR also have minimum purchase requirements, including that **[c-i-c]** [redacted] **[c-i-c]**.[767] Telstra has not provided any evidence to contradict access seekers' submissions about the economies of scale of ULLS-based supply of voice-only services. Accordingly, the ACCC remains of the view that for end-users that demand **[c-i-c]** [redacted] **[c-i-c]** voice-only services to a particular premise, ULLS-based supply is not an effective substitute for the WLR service.

With regard to the substitutability of alternative networks, the ACCC considers that these could potentially be used by access seekers to supply voice services with minimal investment and so could be a supply-side substitute for the WLR service. However, as there is a class of end-users that continue to require functionality that can only be supplied using Telstra's PSTN, these alternative networks are not an effective substitute for the WLR service.[768]

15.3.1.5 Geographic dimension

As set out above, the ACCC decided to declare WLR and LCS on a national basis. However, consistent with the ACCC's approach to considering geographic exemption applications in the past, the ACCC considered the implications for competition within the CBD areas in undertaking its LTIE assessment.

The ACCC has adopted this approach in making this draft decision.

15.3.1.6 State of competition

As noted above, the ACCC considers that the relevant market for retail fixed voice services includes traditional fixed voice services along with POTS-emulation VoIP services.

In its declaration decision, the ACCC stated that the retail market for fixed line voice services remained highly concentrated[769] and Telstra remains the dominant provider of retail fixed voice services with a market share of **[c-i-c]** [redacted] **[c-i-c]**.[770]

The ACCC did not receive any further submissions regarding Telstra's significant market power in the wholesale market for resale voice services in this inquiry. Accordingly, the ACCC remains of the view that Telstra is the dominant wholesale and retail provider of fixed voice services in CBD areas and that this dominance is likely to enable it to exploit economies of scale and scope.

---

765 AAPT, October 2013, response to information request, p. 6.
766 Macquarie Telecom, December 2014 submission, p. 4.
767 Optus, October 2013, response to information request, p. 2.
768 ACCC, *Public Inquiry into the fixed line services declarations: Final report*, April 2014, p. 15.
769 ACCC, *Public Inquiry into the fixed line services declarations: Final report*, April 2014, p. 18.
770 ACCC, *ACCC Telecommunications reports 2013-14*, February 2015, p. 3 (UNDER EMBARGO).

15.3.2 Promotion of the LTIE

Section 152AB of the CCA provides that in determining whether a particular decision will promote the LTIE, the ACCC must have regard to the extent to which the decision is likely to:

- promote competition in markets for listed services
- encourage the economically efficient use of infrastructure and
- encourage efficient investment in infrastructure.

In its declaration decision, the ACCC considered whether exemptions for the supply of WLR and LCS in CBD areas would promote the LTIE and decided that not including the exemptions would promote the LTIE. The ACCC considers that the material and conclusions it drew on in making the declaration decision are relevant to this FAD inquiry.

15.3.2.1 Submissions to the FAD inquiry

As noted above, Telstra argued the ACCC should include CBD exemptions in the WLR and LCS FADs as it considers that there is effective competition in the supply of WLR and LCS in CBD areas.[771]

Macquarie Telecom submitted that CBD areas did not evidence competition prior to the application of the FADs as evidenced by the fact that access seekers paid significantly more for the WLR service in CBD areas than in non-CBD areas.[772] WLR and LCS should be supplied nationally in order to protect resale competition and to promote the viable and productive use of scarce infrastructure in CBD areas.[773]

Assessment of the LTIE

Telstra submitted that in considering whether to include CBD exemptions in the WLR and LCS FADs, the ACCC must conduct a genuine, evidence-based market review in CBD areas[774] and should not focus primarily on an analysis of the difference between the prevailing market price for WLR in CBD areas and the regulated price set in the WLR FAD.[775] Telstra further submitted that "the mere fact that Telstra's pricing of WLR in CBD areas does not match the output of the ACCC's building block cost model cannot be taken as evidence of market power, in and of itself."[776]

Telstra submitted that "[i]n order for regulation of a service to be in the LTIE, it must be demonstrated that the service responds to a market 'bottleneck'… Only once it has been determined that regulation is warranted based on market evidence will there be a need for application of the building block model to determine a regulated price."[777]

Demand for traditional voice services in CBD areas

Telstra submitted that within CBD areas, there is competition from alternative infrastructure providers (including fibre and wireless providers) and DSLAM-based competition[778] and that the

[771] Telstra, October 2014 submission, p. 14.
[772] Macquarie Telecom, December 2014 submission, p. 3.
[773] Ibid.
[774] Telstra, October 2014 submission, p. 11.
[775] Ibid.
[776] Ibid.
[777] Ibid.
[778] Ibid, p. 14.

ACCC underestimated the strong business case for using this alternative infrastructure over Telstra's WLR and LCS.[779]

Telstra submitted that there are fibre-based competitors in all CBD ESAs, with more than 10 fibre-competitors in five of the CBD ESAs.[780] In addition, Telstra supplies fibre-based DTCS tails to CBD premises, which can be used to supply multiple voice channels.[781] Telstra further submitted that fixed wireless has become a viable alternative for the supply of voice services and that Vodafone has announced that it will commence supplying voice services over LTE in 2015 which will be substitutable for the supply of voice and broadband services.[782]

With regard to DSLAM-based competition, Telstra submitted that there are between seven and 10 DSLAM-based competitors in each of the CBD ESAs and that access seekers have installed more interconnect pairs in CBD ESAs than there are active SIOs.[783] Telstra further submitted that there is significant spare capacity on this installed infrastructure and virtually no lines are constrained by the presence of 'line blockers' such as large pair gain systems.[784]

Telstra submitted that in the past seven years office floor space in CBD areas has expanded by 3 million m^2 and that during this time PSTN voice SIOs in CBD areas have declined by 31.7 per cent. Telstra considers that this illustrates that there has been significant expansive use of alternative infrastructure to provide voice services during the time when WLR and LCS were exempt from regulation in CBD areas.[785]

Retail prices in CBD areas

In its submission, Telstra estimated that of the approximately 2 million fixed voice telephony ends in the total corporate and government segment, only approximately 41,000 SIOs are located in CBD areas. Telstra submitted that therefore, the ACCC should not have considered the impact on this very small sub-set in its declaration decision.[786]

Telstra submitted that there is little differentiation between Telstra and its competitors in their national standing offers for voice-only services, even though access seekers have not had access to a regulated WLR price in CBD areas.[787]

Telstra further submitted that there is scant merit in the ACCC's argument for the regulation of LCS in CBD areas, particularly as Telstra has not increased the LCS price since December 2005, meaning that it has decreased in real terms.[788]

With regard to the case studies considered by the ACCC, Telstra made a number of submissions. While some of these submissions were considered by the ACCC in making its declaration decision, Telstra raised a number of new issues. In particular:

- Telstra's most popular plan is the HomeLine Plus plan and the ACCC should have used this in its analysis of the possible Telstra and access seeker margins[789]
- the more appropriate metric to use in conducting a margin analysis is the average revenue per user (ARPU) metric as this includes calling revenue[790]

[779] Ibid.
[780] Ibid.
[781] Ibid, pp. 14-15.
[782] Ibid, p. 14.
[783] Ibid, p. 16.
[784] Ibid.
[785] Ibid, p. 15.
[786] Ibid, pp. 23-24.
[787] Ibid, p. 23.
[788] Ibid.
[789] Ibid.

- retail premises of all sizes account for approximately four per cent of floor space in CBD areas[791]
- access seekers could use IP-based solutions to supply end-users that require multiple services, rather than a combination of WLR and wholesale ADSL[792]
- **[c-i-c]** [redacted] **[c-i-c]** of broadband supplied by access seekers using Telstra's infrastructure is via ULLS and LSS rather than wholesale ADSL, therefore the ACCC's analysis of bundled products underestimates the margins available to access seekers[793]
- as retail floor space in CBD areas accounts for less than 9 per cent of total retail stock, the example of a business with half its retail outlets in CBD areas and half outside CBD areas does not seem realistic[794]
- generally, the larger the organisation, the more complex its telecommunications needs are.[795] There are thousands of medium-sized business end-users in CBD areas with complex telecommunications needs that could be serviced by competitive fibre networks or ULLS-based offerings[796]
- in Telstra's experience, a business has 25-50 locations is unlikely to acquire individual phone services for each location. In Telstra's experience, service providers would market an IP solution to such customers[797]
- the ACCC should consider a broader range of examples, such as 'the headquarters of a banks (sic), multinational corporations, accounting firms, architectural design firms, law courts, Government departments, insurance company (sic), museums, universities and other types of organisations with a CBD presence.'[798]

Macquarie Telecom submitted that it supports by the examples provided to the ACCC during the declaration inquiry.[799] Macquarie Telecom noted that the information it submitted to the ACCC throughout the declaration inquiry was based on Macquarie Telecom's actual customer profile[800] and that the profile of Macquarie Telecom's CBD customers has not materially changed.[801]

Macquarie Telecom further submitted that it considers that the appropriate way to estimate the size and types of businesses located in CBD areas is by the employee number and industry sector.[802]

---

790 Ibid.
791 Ibid, p. 19.
792 Ibid, p. 20.
793 Ibid, p. 20.
794 Ibid.
795 Ibid, p. 21.
796 Ibid, p. 20.
797 Ibid.
798 Ibid.
799 Macquarie Telecom, December 2014 submission, p. 3.
800 Ibid, p. 4.
801 Ibid, p. 3.
802 Ibid, p. 4.

Economically efficient use of and investment in infrastructure

Telstra submitted that that there is significant spare capacity on access seekers' DSLAMs and that "the economically efficient use of installed infrastructure would argue for the utilisation of that access capacity through ULLS/LSS based service offerings rather than under-utilisation encouraged by low prices for WLR set by regulation."[803]

Telstra submitted that NBN Co's roll out plan shows that there has been minimal infrastructure deployment in CBD areas to date and there will be minimal investment in CBD areas in the next three years. Telstra submitted that this suggests that the NBN rollout will have minimal impact on access seekers' investment schedules.[804]

Macquarie Telecom submitted that the only change in the operating environment in recent months is the reported likelihood that fibre to the basement will be rolled out more quickly than was anticipated two years ago. Macquarie Telecom considers that this makes it even more unlikely that it would be economic for competitors to invest in upgraded DSLAMs to deliver alternative voice services over the existing copper network.[805]

15.3.2.2 FAD draft decision

For the reasons set out below, the ACCC considers that the WLR and LCS FADs should apply in CBD areas and that the inclusion of CBD exemptions in the WLR and LCS FADs will not promote the long term interests of end-users as such exemptions would not promote competition, nor would they promote the economically efficient use of, and investment in, infrastructure.

The ACCC does not consider that the objective of achieving any-to-any connectivity is relevant to this matter.

Promoting competition

In determining whether the inclusion of CBD exemptions in the WLR and LCS FADs will promote the LTIE, the ACCC must assess whether the exemptions would result in the promotion of competition in the relevant markets in the CBD areas.

The ACCC considers that the operation of the WLR and LCS FADs in CBD areas (that is, not including CBD exemptions in the WLR and LCS FADs) will promote competition in the relevant markets as there is still significant demand for traditional voice-only services and Telstra's pricing of WLR services has a flow on effect on retail prices for voice services. Accordingly, the inclusion of such exemptions would not promote the LTIE.

Demand for traditional voice services in CBD areas

The ACCC notes that voice services can be supplied using IP, mobile and wireless solutions. the evidence submitted by access seekers during this inquiry indicates that the economies of scale of using ULLS to supply voice services are such that it is only viable to do so if certain minimum purchase requirements are met.[806]

While the ACCC acknowledges the fact that CBD areas are characterised by a higher level of DSLAM-based investment compared to non-CBD areas, the ACCC maintains its view that

[803] Telstra, October 2014 submission, p. 24.
[804] Ibid, p. 17.
[805] Macquarie Telecom, December 2014 submission, pp. 5-6.
[806] That is, unless **[c-i-c]** [redacted] **[c-i-c]**.

there are limited competitive supply substitutes for supplying voice-only services in the CBD areas. In addition, the ACCC does not accept Telstra's position that there are limited or no barriers to access seekers switching to these alternative networks. Accordingly, the ACCC maintains its view that the relevant market to consider is the market for traditional copper-based voice services.[807]

As set out above, Telstra reiterated that there are only [c-i-c] [redacted] [c-i-c] CBD-based end-users with a single PSTN voice-only service and no broadband service and that premises with multiple voice-only lines could be effectively supplied by ULLS-based and fibre-based competitors.[808] However, as noted above, the ACCC used the term 'voice-only' to describe a voice SIO, which includes both Telstra Retail basic access SIOs and WLR SIOs.

Telstra submitted updated statistics which show that in June 2014, there were at least [c-i-c] [redacted] [c-i-c] such SIOs in CBD ESAs.[809] While this figure has decreased by [c-i-c] [redacted] [c-i-c] since June 2013, the ACCC maintains its view that based on information provided by Telstra, there remain a significant number of voice-only customers in CBD areas, for which it would not be economical for access seekers to supply using the ULLS or competing fibre networks.

Impact on retail prices

Throughout the declaration inquiry, the ACCC received evidence from access seekers that the price charged by Telstra for WLR in CBD areas was significantly higher in CBD areas than the regulated WLR price of $22.84.[810] The ACCC found that this higher price was likely to keep retail prices high not just for the SIOs supplied by access seekers but also for the voice-only SIOs supplied by Telstra Retail. This was because the high WLR prices paid by access seekers made it more difficult for them to compete with Telstra on price in CBD areas.[811]

The ACCC remains of the view that in an effectively competitive market, retail prices of services would reflect the costs of supplying the services and this would promote innovation and choice for end-users. This has not occurred in CBD areas. Instead, the price charged by Telstra for WLR in CBD areas was significantly above the ACCC's estimated costs of supply.[812] Telstra has not submitted evidence that indicates that the costs of supplying WLR in CBD areas are higher than the nationally averaged cost estimate derived using the building block methodology.

As set out above, the ACCC used four case studies to demonstrate the inability of access seekers to compete with Telstra on price for voice-only customers in CBD areas. The ACCC chose these case studies based on market profiles of WLR customers in CBD areas.[813] These case studies demonstrate that access seekers earn little or no gross margin on supplying these types of end-users and in each case, access seekers will earn a lower margin than Telstra. Access seekers' margins are significantly lower than Telstra's margins in the case of small and medium-sized business end-users.

---

[807] As set out in the market definition section above, the ACCC maintains the view that there are further costs in providing voice services using access seekers' equipment and the ULLS, in addition to the cost of installing the equipment. Access seekers are restricted in their ability to provide services to certain end-users. The ACCC considers that the higher costs per unit that access seekers face in providing services to customers is an impediment to competition.

[808] Telstra, October 2014 submission, p. 18.

[809] Of these, [c-i-c] [redacted] [c-i-c] were WLR SIOs and [c-i-c] [redacted] [c-i-c]: Telstra, October 2014 submission, p. 30.

[810] ACCC, *Public Inquiry into the fixed line services declarations: Final report*, April 2014, p. viii.

[811] ACCC, *Public Inquiry into the fixed line services declarations: Final report*, April 2014, p. 37.

[812] Ibid, p. 40.

[813] Macquarie Telecom, AAPT and Optus, November 2013 case studies.

Voice-only end-users

Telstra submitted that in conducting a margin analysis, the ACCC should compare the Telstra ARPU and access seeker ARPU for the relevant services. Telstra also submitted that the relevant Telstra service is the Homeline Plus plan, rather than the Homeline Budget plan that the ACCC considered in its declaration decision.[814]

The ACCC has found that conducting a margin analysis based on Telstra and Access seekers' ARPU is unlikely to lead to a different result as the basic access (line rental) component of PSTN now accounts for 63 per cent of the total cost of PSTN expenditure.[815]

Similarly, with regard to the relevant Telstra plan to consider in conducting a margin analysis, the ACCC does not consider that using this plan will lead to a different result as the underlying costs of providing the service will not change. If a higher value plan was considered, access seekers may earn a higher margin on the customer, however there is still a significant difference between access seekers' and Telstra's margins which affects the capacity of access seekers to compete effectively with Telstra.

Small, medium and large business end-users

Telstra's submission indicated that it considers that retail floor space accounts for only four per cent of CBD floor space and therefore, the ACCC's case studies were not appropriate examples of typical CBD end-users.[816] However, Telstra has not submitted any evidence as to the types and sizes of businesses that are located in CBD areas.

The ACCC acknowledges that it may be possible for access seekers to supply some end-users using alternative infrastructure such as competitive fibre networks, fibre-based DTCS tails and fixed wireless. However, as set out above, the ACCC's case studies and associated assumptions were based on information submitted by access seekers in the declaration inquiry. In its submission, Macquarie Telecom confirmed that the information it submitted to the ACCC's declaration inquiry still accurately reflects its customer base in CBD areas.[817] The ACCC also considered publicly available information published by the Australian Bureau of Statistics on the types and sizes of businesses in Australian CBDs. The ACCC considers that the case studies represent the types of businesses typically found in CBD areas that are likely to require copper-based voice services.

The ACCC does not consider that floor space is an appropriate indicator of the number of SIOs in CBD areas. Nor is it an appropriate indicator of the type or size of businesses located in CBD areas. Rather, the ACCC considers that the number of businesses is a more appropriate indicator. ABS data indicates that based on employee number, approximately 85.5 per cent of businesses in the cities of Adelaide, Melbourne, Brisbane, Sydney and Perth are small businesses and 9.9 per cent are medium-sized businesses.[818] Only 0.4 per cent of businesses located in these cities employ more than 200 staff.[819] The ACCC considers that at least a reasonable proportion of small and medium-sized businesses in CBD areas are likely to require and/or prefer traditional copper-based voice services rather than an IP-based solution.

The ACCC acknowledges that certain businesses may be served by technologies that are not copper-based. As set out above, the ACCC accepts the information submitted by access seekers, that IP-based solutions are not an option for all end-users in CBD areas and that

814 Telstra, October 2014 submission, p. 18.
815 ACCC, *ACCC Telecommunications reports 2013-14*, February 2015, p. 88 (UNDER EMBARGO).
816 Telstra, October 2014 submission, p. 19.
817 Macquarie Telecom, December 2014 submission, p. 3.
818 ABS, March 2013, *8165.0 Counts of Australian Businesses including entries and exists June 2009 to June 2013*. http://www.abs.gov.au/ausstats/abs@.nsf/mf/8165.0
819 Ibid.

supplying voice services over the ULLS only becomes economic when **[c-i-c]** **[c-i-c]** or more services are supplied to a single premises.

The ACCC acknowledges that the overwhelming majority of broadband supplied by access using Telstra's infrastructure is via ULLS and LSS rather than wholesale ADSL. However, as set out above, some end-users continue to rely on traditional voice services for services such as EFTPOS, facsimile machines and elevator telephones. Based on information provided to it to date, the ACCC considers that in circumstances where an end-user requires only a small number of lines, it will still not be economic for an access seeker to use the ULLS to supply copper-based voice services.

Economically efficient use of, and investment in, infrastructure

As set out above, in its declaration decision, the ACCC found that removing the CBD exemptions from the WLR and LCS FADs would be more likely to promote the efficient use of infrastructure used to supply fixed line services than if the exemptions were maintained. This decision was based on the fact that investment in exchange equipment has slowed since 2009 and the ongoing rollout of the NBN. The ACCC found that maintaining the CBD exemptions could lead to inefficient investment in copper-based equipment as a result of the higher WLR price in CBD areas.

Telstra submitted that as there is spare capacity on existing DSLAMs, it would not be rational for access seekers to install additional DSLAMs and that it would be efficient for access seekers to use this spare capacity to supply voice services using ULLS and LSS.[820] As set out above, the ACCC accepts the information submitted by access seekers which indicates that it is not economic for access seekers to use the ULLS to supply voice services to end-users that require only a small number of voice services.[821]

Telstra further submitted that the NBN rollout will have a minimal impact on access seekers' investment schedules in CBD areas as NBN Co's rollout summary suggests only minimal NBN investment in the CBD in the next three years.[822]

Macquarie Telecom disagreed with Telstra's submission and stated that fibre to the basement rollouts will make it even more unlikely that it will be economic for access seekers to invest in copper-based infrastructure.[823]

In recent months, NBN Co announced that it will make fibre to the basement services available to high rise buildings in Melbourne, Sydney and the ACT.[824] Further, NBN Co has announced that it has reached agreement with both Telstra and Optus in relation to the acquisition of their HFC assets which will enable a faster NBN rollout.[825]

Accordingly, the ACCC remains of the view that not including CBD exemptions in the WLR and LCS FADs will promote the efficient use of, and investment in, infrastructure. Accordingly, the ACCC does not consider that the inclusion of such exemptions in the WLR and LCS FADs would promote the LTIE.

---

820 Telstra, October 2014 submission, p. 24.

821 Macquarie Telecom, December 2014 submission, p. 4.

822 Ibid, p. 17.

823 Macquarie Telecom, December 2014 submission, p. 4.

824 NBN Co, Blog: *NBN Co announces location of first 6,000 homes to receive Fibre to the Building*, 19 January 2015. http://www.nbnco.com.au/blog/nbn-co-announces-location-of-first-6000-homes-to-receive-fibre-to-the-building.html

825 NBN Co, Media releases: *NBN Co to acquire Optus cables to enable faster NBN rollout* and *Landmark deal paves way for faster NBN rollout*, 14 December 2014. http://www.nbnco.com.au/corporate-information/media-centre/media-releases/nbn-co-to-acquire-optus-cables-to-enable-faster-nbn-rollout.html and http://www.nbnco.com.au/corporate-information/media-centre/media-releases/landmark-deal-paves-way-for-faster-nbn-rollout.html

15.3.2.3 The remaining matters in 152BCA

Legitimate business interests of a carrier or carriage service provider

The ACCC considers that it is in a carrier or carriage service provider's legitimate business interests to seek to recover its efficient costs, including a normal commercial return on investment having regard to the relevant risk involved.

In deciding that the WLR and LCS FADs and the SAOs should apply in CBD areas (and not include geographic exemptions in the WLR and LCS FADs), the ACCC has taken Telstra's legitimate business interests into account.

The ACCC considers that it is in Telstra's legitimate business interests to recover its costs, including a normal commercial return on investment, having regard to the relevant risk involved.

Interests of all persons who have rights to use the declared service

In deciding that the WLR and LCS FADs and the SAOs should apply in CBD areas (and not to include geographic exemptions in the WLR and LCS FADs), the ACCC has also taken into account the legitimate interests of access seekers.

The ACCC considers that it is in access seekers' legitimate business interests to not include CBD exemptions in the WLR and LCS FADs. The application of the regulated price in CBD areas will enable access seekers to face cost structures for supplying end-users similar to those faced by Telstra in 'self-supplying' its wholesale services. Similar cost structures for access seekers and access providers will promote competition in the supply of retail voice-only services and other related services.

The ACCC also considers that this will give access seekers' certainty regarding the prices charged in all ESAs and thereby reduce investment risk. As set out in 15.3.2.2 above, the ACCC considers that this will allow access seekers to make more efficient investment decisions in the current telecommunications environment. This may include acquiring copper-based resale voice services while investing in new IP-based systems to adapt to the IP-based NBN environment.

Direct cost of providing access to the declared service

The ACCC must have regard to the costs incurred in providing access including a contribution to direct costs. The ACCC considers that the application of the SAOS and the WLR and LCS FADs in CBD areas (and not including geographic exemptions in the WLR and LCS FADs) will enable Telstra to recover its direct costs of providing the service.

As noted in 15.3.2.2 and 15.3.2.3, the ACCC considers that the proposed pricing approach ensures that the direct costs of providing access to WLR and LCS are included in the revenue requirement in the FLSM. The revenue requirement calculated using a cost-based approach includes an allowance for all the costs incurred in providing the WLR and LCS nationally—both within the CBD and outside CBD areas.

Value to a party of extensions, or enhancement of capability, whose cost is borne by someone else

The ACCC is of the view that the value to a party of extensions, or enhancement of capacity, whose cost is borne by someone else is not relevant to this particular matter.

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

This 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.

The ACCC is of the view that the safe and reliable operation of a carriage service, a telecommunications network, or a facility will be unaffected by the draft decision not to include CBD exemptions in the WLR and LCS FADs.

Economically efficient operation of a carriage service, a telecommunications network or a facility

As noted in in 1.3.1 and 1.3.2 above, the ACCC considers that the proposed pricing approach ensures that the efficient costs of providing access to WLR and LCS in CBD areas are included in the revenue requirement used to calculate prices. The ACCC considers that this will provide incentives to carriers to invest in a manner that encourages the efficient operation of carriage services and networks.

Accordingly, the ACCC considers that including geographic exemptions in the WLR and LCS FADs would not further encourage the efficient operation of a carriage service, a telecommunications network or a facility.

Supply of one or more other eligible services

The ACCC has considered the substitutability of other eligible services supplied by Telstra for the supply of WLR and LCS.

Other matters the ACCC considers relevant

At this time, the ACCC considers that the matters it must take into account under subsections 152BCA(1) and 152BCA(2) of the CCA are the only relevant considerations in determining this matter.

16 Carrier-specific exemptions

Key points

- The ACCC's draft decision is to include a term in the wholesale ADSL FAD which limits the application of the SAOs and the FAD to Telstra in relation to the supply of wholesale ADSL.
- The ACCC's draft decision is that the SAOs and the FADs for all remaining fixed line services should apply to all carriers and carriage service providers.

16.1 Introduction

The ACCC considered whether to include carrier-specific exemptions in the service descriptions for the fixed line services in its declaration decision. In this decision the ACCC noted that:

- declarations are a service based regime and relate to specific services. A service description describes the service and the identity of the service provider is not relevant to that description. Where the ACCC grants carrier-specific exemptions, it does this by including a provision in the relevant FAD for the declared service where it is satisfied that granting such an exemption is in the LTIE
- in granting carrier-specific exemptions for the wholesale ADSL service in 2012, the ACCC concluded that requiring non-Telstra providers to supply the regulated wholesale ADSL service may require these providers to undertake significant investment in billing and provisioning systems to provide a wholesale ADSL service. The ACCC has not received any evidence that there would be significant additional costs for non-Telstra providers in supplying the declared fixed line services and notes that these services have been declared for some time.
- the ACCC is aware of service providers other than Telstra that are currently providing wholesale fixed line services. The ACCC considered that exempting these providers from the application of the category A SAOs in relation to the supply of the declared services would not promote competition or be in the LTIE. [826]

The existing wholesale ADSL FAD includes a term that all only Telstra is required to comply with the SAOs in respect of the wholesale ADSL service. That is, all other carriers and carriage service providers are exempt from the application of the SAOs in respect of wholesale ADSL.

The ACCC included this term in the wholesale ADSL FAD on the grounds that non-Telstra access providers are sufficiently constrained by competition from Telstra.[827] In June 2012, Telstra dominated the national wholesale ADSL market with a market share of over **[c-i-c]** **[c-i-c]** per cent.[828]

The ACCC concluded that many owners of competitive DSLAM infrastructure did not currently have the capability to offer a wholesale ADSL service and would need to undertake significant investment in billing and provisioning systems to comply with the SAOs. Further, the ACCC concluded that giving effect to carrier-specific exemptions would be likely to ensure that access

[826] ACCC, *Public Inquiry into the fixed line services declarations: Final report*, April 2014, pp. 62-63.
[827] ACCC, *Public inquiry to make a final access determination for the Wholesale ADSL service: Final report,* May 2013, p. 70.
[828] ACCC, *Public inquiry to make a final access determination for the Wholesale ADSL service: Draft report,* March 2013, p. 94.

seekers with their own DSLAMs, but without existing wholesale customers, are not required to undertake significant investments without a business case that provides a commercial risk-adjusted rate of return. For this reason, the ACCC considered that giving effect to carrier-specific exemptions was likely to encourage efficient investment in infrastructure.[829]

The ACCC also concluded that the incremental costs of acquiring wholesale ADSL services from multiple providers and Telstra's significantly larger network coverage give Telstra a competitive advantage in the wholesale ADSL market for particular customer segments. As a result, non-Telstra access providers seek to attract customers by differentiating their wholesale ADSL product offerings in order to offset factors that reduce their ability to compete with Telstra. The ACCC considered that giving effect to carrier-specific exemptions was likely to allow non-Telstra access providers the flexibility to differentiate their product offerings from those of Telstra in order to compete for wholesale customers. The ACCC has concluded that giving effect to carrier-specific exemptions is likely to promote competition.[830]

16.2 Submissions

Optus submitted that the ACCC should include terms and conditions in the fixed line services FADs to ensure that the category A SAOs and FADs apply only to access providers that have significant market power in the relevant markets. Optus submitted that this will provide the maximum net benefits to consumers and will reduce compliance costs and red tape burden on providers that do not have market power.[831]

Optus further submitted that if the fixed line services FADs apply to all access providers this will not promote the LTIE as there are:

- no benefits to consumers as these operators cannot operate without regard to the market and
- significant compliance costs and red-tape burden on these firms.[832]

16.3 FAD Draft Decision

16.3.1 Wholesale ADSL

The ACCC has not received any submissions which indicate that Telstra's share of the wholesale ADSL market has decreased since the ACCC made the wholesale ADSL FAD in May 2013. Nor has the ACCC received any submissions which indicate that wholesale customers have made any investments in their billing and provisioning systems to offer wholesale ADSL services to other access seekers.

In the absence of such information, and having considered its May 2013 reasoning the inclusion of carrier-specific exemptions in the wholesale ADSL FAD, the ACCC considers that it should include carrier-specific exemptions in the wholesale ADSL FAD.

Accordingly, the ACCC has included a term in the draft wholesale ADSL FAD exempting all non-Telstra access providers from the category A SAOs in relation to the supply of wholesale ADSL.

---

829 Ibid, p. 72
830 Ibid.
831 Optus, July 2014 submission, p. 4.
832 Ibid, pp. 4-5.

16.3.2 Remaining fixed line services

As the ACCC has not received any specific information which indicates that including carrier-specific exemptions in the remaining fixed-line services FADs would align with the matters set out set out in subsection 152BCA(1) of the CCA. In this regard, the ACCC notes that these remaining services have been declared and subject to the relevant SAOs and have been covered by access determinations for many years. Accordingly, the ACCC's draft decision is to not include such terms in the remaining fixed-line services FADs.

Appendices

A Appendix A: Relevant legislative framework for final access determinations

This section sets out the relevant legislative framework in relation to final access determinations (FADs).

A.1 Content of final access determinations

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.[833]

A.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.[834] Such a provision allows the ACCC to 'lock-in' a term so that it would be consistent across consecutive FADs.

A.3 Varying final access determinations

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.[835]

A.4 Commencement and expiry provisions

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

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.[836]

A.5 Matters to consider when making FADs

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

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

833 Subsection 152BC(5) of the CCA.
834 Section 152BCD of the CCA.
835 Subsection 152BCN(4) of the CCA.
836 Subsection 152BCF(6) of the CCA.

(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, and
(g) the economically efficient operation of a carriage service, a telecommunications network or a facility.

The subsection 152BCA(1) matters reflect the repealed subsection 152CR(1) matters that the ACCC was required to take into account in making a final determination (FD) in an access dispute. The ACCC interprets the subsection 152BCA(1) matters in a similar manner to the approach taken in access disputes.

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

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

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

A.5.1 Paragraph 152BCA(1)(a)

The first matter 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.[837] 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.[838]

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):

> 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 …

[837] 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.
[838] ibid., p. 33.

> * 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.[839]

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.[840]

Promoting competition

In assessing whether particular terms and conditions will promote competition, the ACCC analyses the relevant markets in which the declared services are supplied (retail and wholesale) and considers whether the terms set in those markets remove obstacles to end-users gaining access to telephony and broadband services.[841]

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 decisions.

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)
- 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

---

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

840 Subsection 152AB(2) of the CCA.

841 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].

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.[842]

The ACCC considers that this matter 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.[843]

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), and
- 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.[844]

842 Subsection 152AB(8) of the CCA.
843 Subsections 152AB(6) and (7A) of the CCA.
844 Telstra Corporation Ltd (No. 3) [2007] ACompT 3 at [159].

> …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.[845]
>
> …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.[846]

A.5.2 Paragraph 152BCA(1)(b)

The second matter 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.[847] 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.[848]

The Tribunal has taken a similar view of the expression 'legitimate business interests'.[849]

A.5.3 Paragraph 152BCA(1)(c)

The third matter 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 matter requires it to have regard to the interests of access seekers. The Tribunal has also taken this approach.[850] The access seekers' interests would not be served by higher access prices to declared services, as it would inhibit their ability to compete with the access provider in the provision of retail services.[851]

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.[852]

---

845 ibid. at [164].
846 ibid.
847 ACCC, *Resolution of telecommunications access disputes – a guide,* March 2004 (revised) (Access Dispute Guidelines), p. 56.
848 ACCC, *Access pricing principles—telecommunications,* July 1997 (1997 Access Pricing Principles), p. 9.
849 Telstra Corporation Limited [2006] ACompT 4 at [89].
850 Telstra Corporation Limited [2006] ACompT 4 at [91].
851 ibid.
852 ibid.

However, the ACCC does not consider that this matter 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 matters.

A.5.4 Paragraph 152BCA(1)(d)

The fourth matter requires the ACCC to 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.

The ACCC interprets this matter, 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.[853] A contribution to indirect costs can also be supported by other matters.

However, the matter does not extend to compensation for loss of any 'monopoly profit' that occurs as a result of increased competition.[854]

The ACCC also notes that the Tribunal (in another undertaking decision) considered the direct costs matter 'is concerned with ensuring that the costs of providing the service are recovered.'[855] 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 matter.[856]

A.5.5 Paragraph 152BCA(1)(e)

The fifth matter 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 that this matter:

> …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.[857]

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

A.5.6 Paragraph 152BCA(1)(f)

The sixth matter 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 matter 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.

---

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

854 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.

855 Telstra Corporation Limited [2006] ACompT 4 at [92].

856 ibid. at [139].

857 ACCC, 1997 Access Pricing Principles, p. 11.

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.[858]

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

A.5.7 Paragraph 152BCA(1)(g)

The final matter 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.[859]

Consistent with the approach adopted by the Tribunal, the ACCC considers that in applying this matter, 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.[860]

A.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,[861] 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.[862] As an example, the Explanatory Memorandum states:

---

858 ACCC, Final Determination – Model Non-price Terms and Conditions, November 2008, p. 8.

859 ACCC, Access Dispute Guidelines, p. 57.

860 *Telstra Corporation Limited* [2006] ACompT at [94]–[95].

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

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

> …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.[863]

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.

A.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:

- its previous decisions in relation to the fixed line services (both arbitrations and access determinations)
- consultation documents and submissions in response to those documents
- information provided to the ACCC by Telstra under RKRs.

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.

[863] ibid.

B Appendix B: Summary of submissions

Telstra submission documentation

Telstra, Confidential undertaking agreements, November 2013
Telstra, Final Access Determination (FADs) Inquiry – confidential response to information request under BBM RKR, Commercial in Confidence, November 2013
Telstra, draft submission of cost allocation model documentation, cost allocation model, routing factor model (confidential version), May 2014
Telstra, letter expressing concern regarding CBD exemption issues, June 2014
Telstra, revised draft cost allocation model, revised cost allocation framework model documentation, June 2014
Telstra, Cost Allocation Framework for the ACCC Fixed Line Services Model, Framework and Model Guide, Versions 1, July 2014
Telstra, Submission to the NPTC and supplementary prices position paper, July 2014
Telstra, presentation to the ACCC Commissioners on response to the ACCC's discussion paper, September 2014
Telstra, Public inquiry into final access determinations for fixed line services—primary prices—Response to Discussion Paper, Confidential Version, Main Submission and Appendix 1 of Telstra Submission to Discussion Paper, October 2014.
Gilbert + Tobin, Cost allocation for fixed line services, Appendix 2 of Telstra Submission to Discussion Paper, October 2014.
Incenta, Balchin report, October 2014
Telstra, Fixed Services Forecast Model Version 1.05, Appendix 3 of Telstra Submission to Discussion Paper, Confidential, October 2014.
Telstra, Forecast Model v1.05—Framework and Guide to Forecast Assumptions, Appendix 4 of Telstra Submission to Discussion Paper, Confidential, October 2014.
Sapere Research Group, Review of Telstra's fixed services forecast model—final report, Appendix 5 of Telstra Submission to Discussion Paper, Confidential, October 2014.
Telstra, Fixed Line Services FAD inquiry on price and non-price terms and conditions—Submission on the application of the SAOs for WLR/LCS in CBD areas, Supplementary

Submission to Discussion Paper, October 2014.
Castalia Strategic Advisors, Report on ACCC's Findings on the LCS and WLR Exemptions—Report to Gilbert + Tobin, Supporting Documentation of Telstra Supplementary Submission, October 2014.
Incenta, Balchin report, December 2014
Telstra, Public inquiry into final access determinations for fixed line services—primary prices—Response to industry submissions, December 2014.
Gilbert + Tobin, Cost allocation and declining demand for fixed line telecommunications services: comments on submissions and the ACCC proposal paper, December 2014.
Telstra, Updating the Fixed Line Services Model—Amendments to allow for determination of new FAD prices, December 2014.
Telstra, Fixed Services Model v1.1, January 2015
Telstra, Amendments to the Fixed Line Services Model, February 2015.

Telstra responses to requests for information

Telstra, Final Access Determinations (FADs) Inquiry – additional information in response to information request under BBM RKR, February 2014 (confidential)
Telstra, Response to ACCC IICTEBA information request, 19 January 2015
Telstra, Response to ACCC information request (14 January), 30 January 2015
Telstra, Response to ACCC information request, 6 February 2015

Other stakeholders

Optus, preliminary submission regarding NBN payments, March 2014
NERA (on behalf of Optus), preliminary submission regarding NBN payments, March 2014
Frontier Economics report (Herbert Geer submission on behalf of TPG), preliminary submission, March 2014
Aussie broadband, Submission to the NPTC and supplementary prices discussion paper, April 2014
TPG, Submission to the NPTC and supplementary prices position paper, May 2014
Macquarie Telecom, Submission to the NPTC and supplementary prices position paper, July 2014
Optus, Submission in response to ACCC Discussion Paper—Public Inquiry into final access

determinations for fixed line services —primary price terms, Response to Ministerial Letter, August 2014.
iiNet, Submission to the NPTC and supplementary prices position paper, August 2014
ACCAN, Submission - Public inquiry into Final Access Determinations for fixed line services – primary services, October 2014.
Competitive Carriers' Coalition, Supplementary Submission in Response to Ministers' Letter, October 2014.
Department of Communications, Final access determinations for fixed line services—primary price terms, Department of Communications submission to the Australian Competition and Consumer Commission, October 2014.
Frontier Economics, Submission on the final access determinations for fixed line services – A report prepared for the competitive carriers' coalition, October 2014.
iiNet, Public inquiry into final access determinations for fixed line services — primary price terms, Submission by iiNet Limited, October 2014.
iiNet, Public inquiry into final access determinations for fixed line services — primary price terms, Submission by iiNet Limited, Supplementary Submission, October 2014.
Optus, Submission in response to ACCC Discussion Paper, Fixed Line Services Final Access Determination – Primary Prices, Confidential Version, Main Submission, October 2014.
Optus, Supplementary submission in response to ACCC Discussion Paper, Fixed Line Services Final Access Determination – Primary prices, October 2014,
TPG Telecom, Submission by TPG Telecom Limited (October 2014) to the Australian Competition and Consumer Commission (ACCC), Telecommunications Final Access Determination Inquiries – FLSM, Confidential Version, October 2014
iiNet, Public inquiry into final access determinations for fixed line services — primary price terms, Submission by iiNet Limited, Submission on standard access obligations, November 2014.
Frontier Economics, Submission on the cost allocation methodology and its relationship to the opening regulatory asset base, December 2014.
Frontier Economics, Assessment of Telstra's revised forecasts – A report prepared for the competitive carriers' coalition, December 2014.
iiNet, Amendments to the FLSM, letter to the ACCC, December 2014.
Frontier Economics, Fixed line access prices using the ACCC's fixed line services model, December 2014.
iiNet, Frontier Economics report on behalf of iiNet, Further submission to the ACCC discussion paper, January 2015

C Appendix C: Assessment of expenditure forecasts

Table C.1 Telstra's forecast capital expenditure (million, nominal)

	Base years 2013-14	2014–15	2015–16	2016–17	2017–18	2018-19	Total 2015-19
Telstra proposal	[c-i-c start]						
Annual change							[c-i-c end]

Table C.2 ACCC draft decision on Telstra's total forecast capital expenditure (million, nominal)

	2014-15	2015–16	2016–17	2017–18	2018–19	Total
Telstra proposal	[c-i-c start]					
ACCC draft decision						
Difference						
Percentage difference (%)	-					[c-i-c end]

Table C.3 Telstra's forecast operating expenditure (million, nominal)

	Base years 2013-14	2014–15	2015–16	2016–17	2017–18	2018-19	Total 2015-19
Telstra proposal	[c-i-c start]						
Annual change							[c-i-c end]

Table C.4 ACCC draft decision on Telstra's total forecast operating expenditure (million, nominal)

	2014-15	2015–16	2016–17	2017–18	2018–19	Total
Telstra proposal	[c-i-c start] [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
ACCC draft decision	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Difference	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Percentage difference(%)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted] [c-i-c end]

D Appendix D: Fixed principles provisions

D.1 Introduction

The ACCC set fixed principles provisions in the 2011 fixed line services FADs. These fixed principle provisions were updated in the 2013 Wholesale ADSL FAD to reflect the inclusion in the regulatory asset base (RAB) of assets used to supply that service and not included in the RAB at the time of the 2011 FADs.

The ACCC draft decision does not include any amendments to the fixed principles provisions it made for the 2011 and 2013 FADs. The fixed principles provisions included in the 2013 Wholesale ADSL FAD are reproduced below.

D.2 Fixed principles provisions

6.1 This clause 6 sets out fixed principles provisions that apply to the FAD contained in this document.

6.2 The FAD contained in this document must not be varied so as to alter or remove any of the fixed principles provisions in this clause 6 except when the ACCC is satisfied that:

(a) there is a manifest and material error in these fixed principles provisions;

(b) any information on which these fixed principles provisions was based was false or misleading in a material respect; or

(c) such amendment or adjustment is necessary or desirable to avoid an unintended consequence of these fixed principles provisions.

6.3A The below fixed principles provisions come into force in relation to the Wholesale ADSL service on 29 May 2013.

6.4 The nominal termination date for the fixed principles provisions is 30 June 2021.

6.5A The opening regulatory asset base (RAB) for the calculation of prices for the Wholesale ADSL service is:

(a) as per clause 6.5 of the FADs dated 20 July 2011 (as varied from time to time), rolled forward to 1 July 2012 in accordance with clause 6.7 of the FADs dated 20 July 2011; and

(b) the asset class data equipment which is $1,094,008,824 as at 1 July 2012 (in nominal terms).

6.6A The opening tax asset value for the calculation of prices for the Wholesale ADSL service is:

(a) as per clause 6.6 of the FADs dated 20 July 2011 (as varied from time to time), rolled forward to 1 July 2012 in accordance with clause 6.7 of the FADs dated 20 July 2011; and

(b) the asset class data equipment which is $1,086,735,207 as at 1 July 2012 (in nominal terms).

6.7 Roll-forward mechanism

(a) 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

$depreciation_t$ = regulatory depreciation during the current year

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

(b) Land asset values will be indexed by the Consumer Price Index (CPI) where it is available or by the forecast for the CPI used in the Fixed Line Services Model (FLSM) where actual CPI is not available. This will account for appreciation over time in land values.

(c) To roll forward RAB values in nominal terms, any variables that are specified in real terms will be indexed by the actual CPI where it is available or by the forecast for the CPI used in the FLSM where the actual CPI is not available.

(d) Any variables that are specified in nominal terms will not be indexed, with the exception of land values as specified above.

(e) In these fixed principles provisions 'the FLSM' means the FLSM as it may be varied from time to time or similar model used by the ACCC for the calculation of prices for the relevant declared services.

6.8 The annual revenue requirement for each regulatory period will comprise:

(a) a return on the RAB calculated by multiplying the Weighted Average Cost of Capital (WACC) by the opening RAB for the regulatory year;

(b) a return of the RAB, that is regulatory depreciation, for that regulatory year;

(c) operating expenditure forecast to be incurred in that regulatory year; and

(d) an allowance for tax liabilities.

6.9 Under a building block model (BBM) approach, forecast operating expenditures should reflect prudent and efficient costs. The following matters are relevant to whether forecast operating expenditures reflect prudent and efficient costs:

(a) the access provider's level of operating expenditure in the previous regulatory period;

(b) reasons for proposed changes to operating expenditure from one regulatory period to the next regulatory period;

(c) any relevant regulatory obligations, or changes to such obligations, applicable to providing the relevant declared fixed line services; and

(d) any other matters relevant to whether forecast operating expenditures reflect prudent and efficient costs.

6.10 Under a BBM approach, forecast capital expenditures should reflect prudent and efficient costs. The following matters are relevant to whether capital expenditure forecasts reflect prudent and efficient costs:

(a) the access provider's level of capital expenditure in the previous regulatory period;

(b) reasons for proposed changes to capital expenditure from one regulatory period to the next regulatory period;

(c) whether the access provider's asset management and planning framework reflects best practice;

(d) any relevant regulatory obligations, or changes to such obligations, applicable to providing the relevant declared fixed line services; and

(e) any other matters relevant to whether forecast capital expenditures reflect prudent and efficient costs.

6.11 Demand forecasts should:

(a) be based on an appropriate forecasting methodology;

(b) be based on reasonable assumptions about the key drivers of demand;

(c) be determined utilising the best available information before the ACCC, including historical data that can identify trends in demand; and

(d) be determined taking into account current demand and economic conditions.

6.12 Weighted average cost of capital

(a) A vanilla WACC is used to estimate the return on capital.

(b) The cost of equity is estimated using the Capital Asset Pricing Model.

6.13 Tax liabilities

(a) The tax rate used in estimating tax liabilities in the FLSM will be set equal to the corporate tax rate specified in subsection 23(2) of the *Income Tax Rates Act 1986* (Cth) as amended from time to time.

6.14 Cost allocation factors

(a) The allocation of the costs of operating the PSTN should reflect the relative usage of the network by various services.

(b) Direct costs should be attributed to the service to which they relate.

The cost allocation factors for shared costs should reflect causal relationships between supplying services and incurring costs.

(c) No cost should be allocated more than once to any service

(d) The determination of cost allocation factors should reflect the principles in 6.14 (a) – (c) above except where reliable information is not available to support the application of the principles.

6.15 The matters set out in the fixed principles provisions at clauses 6.7 – 6.14 inclusive are subject to assessment, calculation, implementation and/or application, as relevant, by the ACCC in making interim and final access determinations for the relevant declared services.

E Appendix E: Description of the declared fixed line services

The following are service descriptions to the seven declared fixed line services. Declaration to ULLS, LSS, WLR, LCS, FOAS and FTAS took effect on 1 August 2014 and expires on 31 July 2019.[864] Declaration to wholesale ADSL took effect on 14 February 2012 and expires on 13 February 2017.[865]

More information on service declarations are available from the ACCC's website www.accc.gov.au.

E.1 Unconditioned local loop service

The unconditioned local loop service is the use of unconditioned communications wire between the boundary of a telecommunications network at an end-user's premises and a point on a telecommunications network that is a potential point of interconnection located at or associated with a customer access module and located on the end-user side of the customer access module.

E.2 Line sharing service

The line sharing service is the use of the non-voiceband frequency spectrum of unconditioned communications wire (over which wire an underlying voiceband PSTN service is operating) between the boundary of a telecommunications network at an end-user's premises and a point on a telecommunications network that is a potential point of interconnection located at, or associated with, a customer access module and located on the end-user side of the customer access module.

E.3 Wholesale line rental

The wholesale line rental service is a line rental telephone service which allows an end-user to connect to a carrier or carriage service provider's public switched telephone network, and provides the end-user with:

(a) an ability to make and receive any 3.1khz bandwidth calls (subject to any conditions that might apply to particular types of calls), including, but not limited to, local calls, national and international long distance calls; and
(b) a telephone number

however, the wholesale line rental service does not include services where the connectivity between the end-user and the carrier or carriage service provider's network is provided in whole or in part by means of a Layer 2 bitstream service that is supplied by an NBN corporation.

E.4 Local carriage service

The local carriage service is a service for the carriage of telephone calls from customer equipment at an end-user's premises to separately located customer equipment of an end-user in the same standard zone, however, the local carriage service does not include services where the connectivity between the end-user and the carrier or carriage service provider's

[864] ACCC, Public Inquiry into the fixed line services declarations, Final Report, April 2014, pp 66-79.
[865] ACCC, Declaration under section 152AL(3) of the Competition and Consumer Act 2010, Wholesale ADSL service declaration.

network is provided in whole or in part by means of a Layer 2 bitstream service that is supplied by an NBN corporation.

E.5 Fixed originating access service

(The fixed originating access service is) an access service for the carriage of telephone calls (i.e. voice, data over the voice band) to a Point of Interconnect (POI) from end-customers assigned numbers from the geographic number ranges of the Australian Numbering Plan and directly connected to the access provider's network.

For the avoidance of doubt, the service also includes a service for the carriage of telephone calls from customer equipment at an end-user's premises to a POI, or potential POI, located at or associated with a local switch (being the switch closest to the end-user making the telephone call) and located on the outgoing trunk side of the switch.

E.6 Fixed terminating access service

(The fixed terminating access service) is an access service for the carriage of telephone calls (i.e. voice, data over the voice band) from a POI to end-customer assigned numbers from the geographic number ranges of the Australian Numbering Plan and directly connected to the access provider's network.

For the avoidance of doubt, the service also includes a service for the carriage of telephone calls from a POI, or potential POI, located at or associated with a local switch and located on the incoming trunk side of the switch to customer equipment at an end-user's premises.

E.7 Wholesale asymmetric digital subscriber line

The wholesale asymmetric digital subscriber line service is an internet-grade, best efforts point to point service for the carriage of communications in digital form between a point of interconnection and an end-user network boundary that:[866]

(a) is supplied by means of Asymmetric Digital Subscriber Line (ADSL) technology over a twisted metallic pair that runs from the end-user network boundary to the nearest upstream exchange or remote integrated multiplexer or customer multiplexer; and
(b) uses a static layer 2 tunnelling protocol (L2TP) over a transport layer to aggregate communications to the point of interconnection.

[866] ACCC, Declaration of the wholesale ADSL service, Final decision, February 2012, p 60.