



DRAFT DECISION

Multinet Gas

Access arrangement

2018 to 2022

Overview

July 2017

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Invitation for submissions

This is our draft decision on Multinet's access arrangement for the period 1 January 2018 to 31 December 2022. Multinet will submit a revised proposal in response to this draft decision by 14 August 2017. Interested parties are invited to make submissions on both our draft decision and Multinet's revised proposal by 15 September 2017.

We will consider and respond to all submissions received by that date in our final decision.

Submissions on our draft decision should be sent to: VicGAAR2018-22@aer.gov.au.

Alternatively, submissions can be sent to:

Mr Chris Pattas
General Manager
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001

Submissions should be in Microsoft Word or another text readable document format.

We prefer that all submissions be publicly available to facilitate an informed and transparent consultative process. Submissions will be treated as public documents unless otherwise requested. Parties wishing to submit confidential information should:

- (1) clearly identify the information that is the subject of the confidentiality claim
- (2) provide a non-confidential version of the submission in a form suitable for publication.

All non-confidential submissions will be placed on our website. For further information regarding our use and disclosure of information provided to us, see the *ACCC/AER Information Policy* (June 2014), which is available on our website.¹

¹ <https://www.aer.gov.au/publications/corporate-documents/accc-and-aer-information-policy-collection-and-disclosure-of-information>

Note

This overview forms part of the AER's draft decision on the access arrangement for Multinet for 2018-22. It should be read with all other parts of the draft decision.

The draft decision includes the following documents:

Overview

Attachment 1 - Services covered by the access arrangement

Attachment 2 - Capital base

Attachment 3 - Rate of return

Attachment 4 - Value of imputation credits

Attachment 5 - Regulatory depreciation

Attachment 6 - Capital expenditure

Attachment 7 - Operating expenditure

Attachment 8 - Corporate income tax

Attachment 9 - Efficiency carryover mechanism

Attachment 10 - Reference tariff setting

Attachment 11 - Reference tariff variation mechanism

Attachment 12 - Non-tariff components

Attachment 13 - Demand

Attachment 14 - Other incentive schemes

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Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
ATO	Australian Tax Office
capex	capital expenditure
CAPM	capital asset pricing model
CESS	Capital Expenditure Sharing Scheme
CPI	consumer price index
DRP	debt risk premium
ECM	(Opex) Efficiency Carryover Mechanism
ERP	equity risk premium
Expenditure Guideline	Expenditure Forecast Assessment Guideline
gamma	Value of Imputation Credits
MRP	market risk premium
NGL	national gas law
NGO	national gas objective
NGR	national gas rules
NPV	net present value
opex	operating expenditure
PTRM	post-tax revenue model
RBA	Reserve Bank of Australia
RFM	roll forward model
RIN	regulatory information notice
RPP	revenue and pricing principles
SLCAPM	Sharpe-Lintner capital asset pricing model
STTM	Short Term Trading Market
TAB	Tax asset base
UAFG	Unaccounted for gas
WACC	weighted average cost of capital
WPI	Wage Price Index

1 Introduction

The Australian Energy Regulator (AER) regulates energy markets and networks under national energy market legislation and rules. Our network regulatory functions, which relate to energy networks in all Australian states and territories, except Western Australia, include setting the amount of revenue that monopoly network businesses can recover from customers for using networks (electricity poles and wires and gas pipelines) that transport energy.

The National Gas Law and Rules (NGL and NGR) provide the regulatory framework governing gas networks. Our work under this framework is guided by the National Gas Objective (NGO):²

...to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.

Multinet Gas (Multinet) owns and operates a gas distribution pipeline servicing customers in Victoria. Gas pipelines that are subject to full regulation—like Multinet's—are regulated by the AER under an approved access arrangement.³ An access arrangement specifies certain pipeline services (reference services) and the price and non-price terms and conditions on which those reference services will be offered over the next five years (2018–2022). This forms the foundation for negotiations between pipeline operators and users.

To approve an access arrangement, we make regulatory decisions on the revenue that Multinet can recover from users of its reference services. For this draft decision, our assessment is based on the proposal Multinet submitted on 21 December 2016. Multinet's proposal sets out its view of its expected costs, demand and required revenues for the period 1 January 2018 to 31 December 2022.

This Overview, together with its attachments, constitutes our draft decision on Multinet's proposal. This draft decision is one of the key steps in reaching our final decision. Multinet will have the opportunity to submit a revised proposal in response to this draft decision. Stakeholders will then have the opportunity to make submissions to us on both our draft decision and Multinet's revised proposal. Subject to stakeholder interest, we will also consider holding a public forum following submission of Multinet's revised proposal.

² NGL, s. 23.

³ The NGL provides for different types of regulation to apply to gas pipelines, based on competition and significance criteria. A 'full regulation' pipeline must periodically submit an access arrangement to the AER, setting out pricing for a reference service sought by a significant part of the market (see section 3 of this Overview). 'Light regulation' pipelines are not subject to upfront price regulation. The light regulation model is more a negotiate-arbitrate approach, placing greater emphasis on commercial negotiation and information disclosure. The AER plays a role only if dispute resolution mechanisms are triggered.

Following receipt of the revised proposal and submissions, we will then make our final decision taking into account the revised proposal, submissions and any other relevant information. Table 1-1 lists key dates and consultation deadlines for this review.

Table 1-1 Key dates and consultation timelines

Task	Date
Access arrangement revision proposal submitted to the AER	21 December 2016
Public forum	1 February 2017
Submissions on access arrangement proposal closed	3 March 2017
AER draft decision published	6 July 2017
Revised proposal due	14 August 2017
Submissions on draft decision and revised proposal close	15 September 2017
AER final decision published*	29 November 2017

* This date is indicative only.

1.1 Structure of this overview

This Overview provides a summary of our draft decision and its individual components:

- Section 2 provides a high level summary of our draft decision
- Section 3 sets out our draft decision on the reference services covered by this access arrangement, and the mechanism for setting and varying reference tariffs
- Section 4 sets out our draft decision on the total revenue requirement
- Section 5 provides a break-down of our revenue decision into its key components
- Section 6 sets out our draft decision on new incentive schemes to apply from 2018
- Section 7 sets out our draft decision on the non-tariff components of Multinet's access arrangement proposal
- Section 8 explains our views on the regulatory framework and the NGO
- Section 9 outlines the consultation process we undertook in reaching our draft decision
- Appendix A lists the stakeholder submissions received on Multinet's proposal.

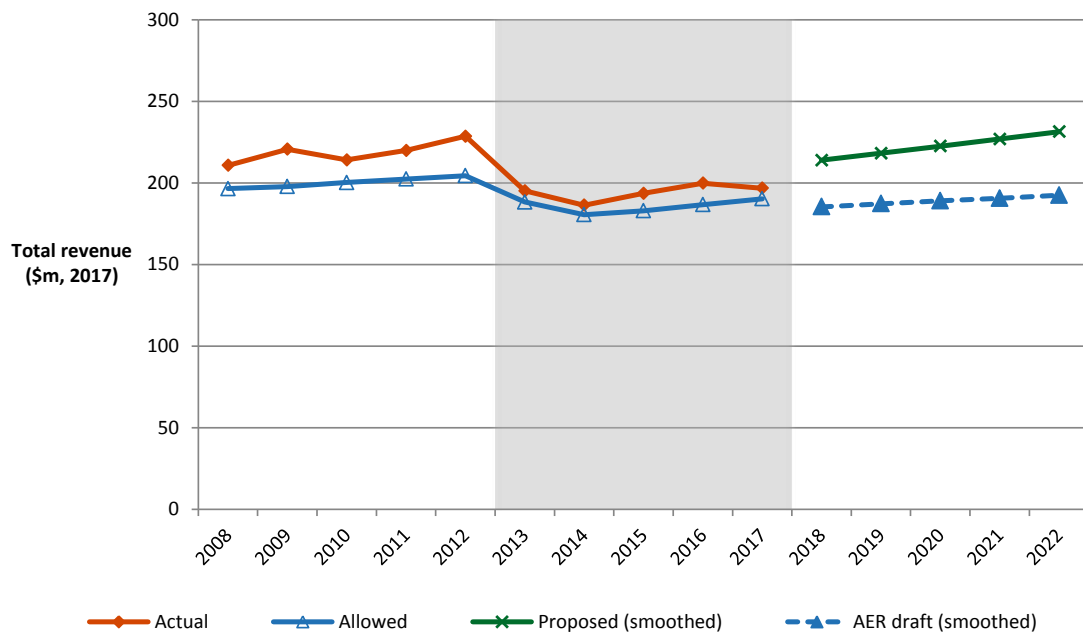
In our attachments to this Overview we set out detailed analysis of the constituent components that make up our draft decision.

2 Draft decision

Our draft decision is that Multinet can recover \$1016.7 million (\$ nominal, smoothed) from consumers over the 2018–22 access arrangement period. This is a 13.2 per cent reduction from Multinet's proposed revenue requirement of \$1171.1 million (\$ nominal, smoothed). Our draft decision would allow Multinet to recover 11.3 per cent more revenue than its 2013-17 allowance of \$913.3 million (\$ nominal).

Figure 2-1 compares our draft decision on Multinet's revenue for 2018–22 to its proposed revenue, and to the revenue allowed and recovered during the current, 2013-17 access arrangement period. Our draft decision includes a reduction to revenues from 2017 to 2018 instead of Multinet's proposed increase. Additionally, revenue increases in the following four years (from 2019 to 2022) will also be less than those in Multinet's proposal.

Figure 2-1 Multinet's past total revenue, proposed total revenue and AER draft decision total revenue (\$ million, 2017)



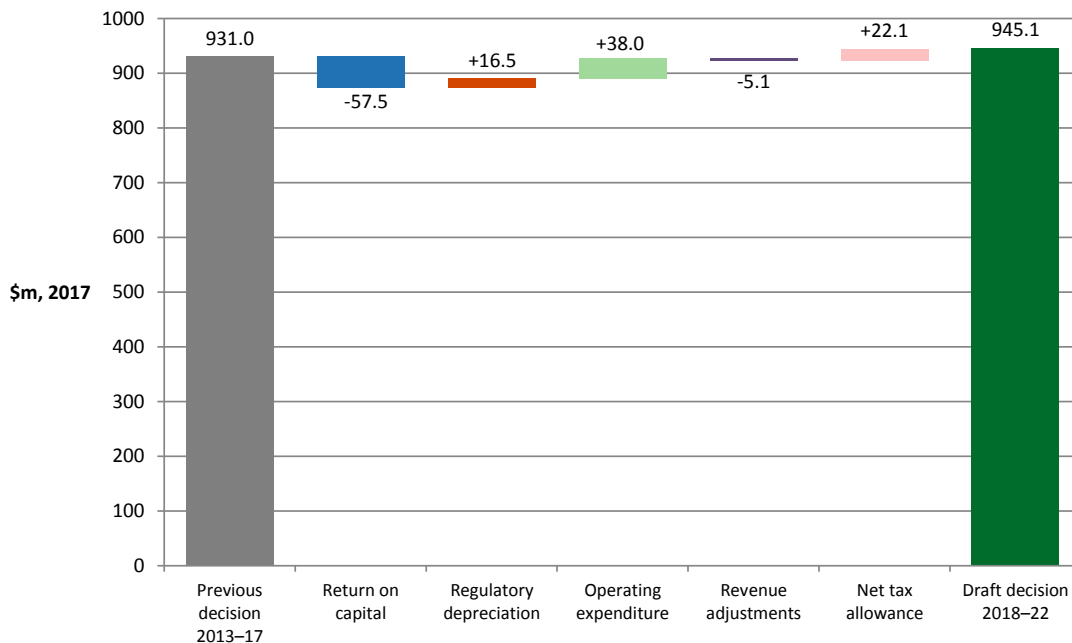
Source: AER analysis.

2.1 What is driving proposed revenue?

The impact of inflation makes it difficult to compare revenue across different time periods on a like-for-like basis. We therefore use real values based on a common year, which have been adjusted for the impact of inflation, to compare revenue from one access arrangement period to the next. In real dollar terms, our draft decision approves annual revenues for the 2018–22 access arrangement period that are \$15.8 million (\$ 2017)—or 1.7 per cent—higher than approved in our 2013–17 decision.⁴

Figure 2-2 compares our draft decision for the 2018–22 access arrangement period to Multinet's allowed revenue for the current period, broken down by the various building block components that make up the forecast revenue allowance.

Figure 2-2 AER's draft decision for the 2018–22 access arrangement period and Multinet's 2013–17 allowed building block costs (\$ million, 2017)



Source: AER analysis.

These figures highlight that the decrease in the return on capital is a key factor in the minimal change in revenues from period to period. The lower return on capital is driven by a reduction in the rate of return from 7.0 per cent in the current period to 5.8 per cent for 2018–22.

⁴ The comparison of average annual revenues between the 2018–22 and 2013–17 access arrangement periods is based on smoothed revenues. In nominal dollar terms, our final decision average annual revenues for the 2018–22 access arrangement period is about \$103.5 million (or 11.3 per cent) higher than the average annual revenues approved for the 2013–17 access arrangement period.

This decrease in the return on capital offsets increases in forecast operating expenditure (opex), reflecting growth in Multinet's customer numbers and changes in operating costs over time. The increase in forecast opex is also offset by a negative carryover of \$5.1 million (\$ 2017) under the opex efficiency carryover mechanism in the 2013–17 access arrangement period.

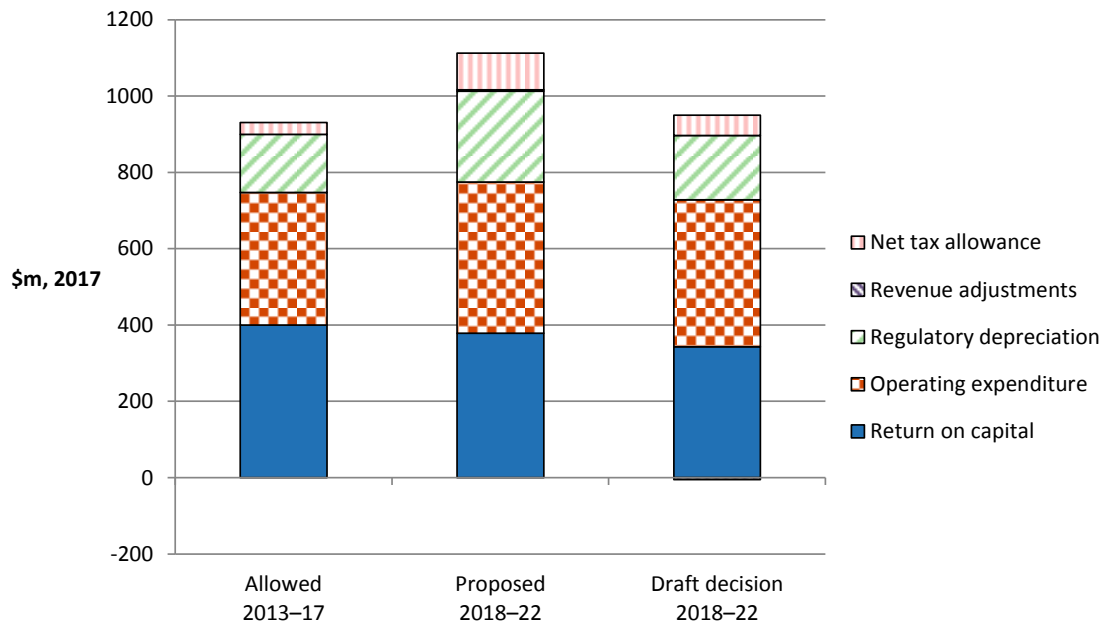
2.2 Key differences between our draft decision and Multinet's proposal

Multinet proposed total forecast revenue of \$1171.1 million (\$ nominal), or \$1113.0 million (\$ 2017), for the 2018–22 access arrangement period.

Our draft decision of \$1016.7 million (\$ nominal) allows 13.2 per cent less revenue than Multinet sought to recover through the access arrangement proposal it submitted in December 2016.

Figure 2-3 compares the building block revenue from our draft decision to that proposed by Multinet for the 2018–22 access arrangement period, and to approved revenue for the 2013–17 period.

Figure 2-3 AER's draft decision on components of total revenue (\$ million, 2017)



Source: AER analysis.

The key differences between our draft decision and Multinet's proposal are that:

- our draft decision applies a rate of return of 5.75 per cent, compared to Multinet's proposed 6.12.

- our draft decision applies a value of imputation credits (gamma) of 0.4, compared to Multinet's proposed 0.25, and therefore a lower corporate income tax allowance.
- we have reduced Multinet's proposed opex forecast by 2.8 per cent (\$2017), in large part because we have not accepted its proposal to increase opex to allow for expenditure on marketing. We consider marketing is a 'business-as-usual' expense for Multinet to prioritise within its existing base opex forecast, if it is prudent and efficient to do so in the current operating environment. Our decision not to accept Multinet's proposed marketing step change has also had consequential impacts on its demand forecasts, and therefore its forecast capex for new connections.
- we have reduced Multinet's forecast capex by 24 per cent (\$2017), as a result of our adjustments to its proposed expenditure on mains replacement. On the information before us we are not satisfied that the increase in mains replacement expenditure Multinet included in its capex forecast is justified. The total capex forecast in our draft decision includes a lower mains replacement forecast of \$159.5 million, which is based on Multinet's historical annual replacement rates and the leak data provided by Multinet.
- Our draft decision on forecast capex for mains replacement is also a key driver of our reductions to Multinet's proposed allowance for regulatory depreciation.

Multinet will have the opportunity to address these differences in its revised proposal.

2.3 Impact of our draft decision on gas bills

The annual gas bill for customers in Victoria reflects the combined cost of all the gas supply chain components. Changes in gas bills over time reflect movements in one or more of the components in the bill. The main components are:

- the cost of purchasing gas (the wholesale energy cost)
- the cost of the pipelines used to transport the gas (the transmission and distribution networks), and other infrastructure such as metering cost;
- the retailer's costs and profit margin.

Our draft decision on Multinet affects the component of the bill related to distribution pipelines. For customers on Multinet's network distribution charges account for approximately 19 per cent of an average residential customer's annual gas bill and approximately 11 per cent of an average small business customer's annual gas bill.⁵

We estimate the bill impact by varying the distribution charges in accordance with our draft decision, while holding other components of the bill constant. Our estimates are in nominal terms (taking into account expected future inflation to determine what the

⁵ Based on average annual distribution charges calculated within the PTRM and average standing residential offers at June 2017 from Switch On comparison tool using average annual consumption used in the PTRM for each of Multinet's tariff regions (postcodes 3102, 3139 and 3984).

nominal price levels will be in future periods) because it will be nominal amounts that consumers will be paying.

Based on this approach, we expect that our draft decision will result in the distribution component of the average annual residential gas bills for Multinet customers rising over the 2018–22 access arrangement period. The distribution component of the average annual residential gas bill in 2018 is expected to be about \$9 (nominal) below the current, 2017 level. By the end of the 2018–22 access arrangement period, the distribution component of the average annual bill is expected to be about \$38 above the current level. Similarly, the distribution component of the average annual small business gas bill in 2018 is expected to be about \$18 (nominal) lower than in 2017, and about \$75 (nominal) above the current 2017 level by 2022.

Table 2-1 shows our estimated impact of this draft decision over the 2018–22 access arrangement period on the average annual gas bills for residential and small business customers on Multinet's network compared with Multinet's proposal. These estimates are indicative only, and individual customers' actual bills will also depend on their usage patterns and the structure of their chosen retail tariff offering.

Table 2-1 AER's estimated impact of our draft decision and Multinet's proposal on the average annual gas bills for the 2018–22 access arrangement period (\$ nominal)

	2017	2018	2019	2020	2021	2022
AER draft decision						
Residential annual gas bill	1415 ^a	1406	1417	1429	1441	1453
Annual change ^c		-9 (-0.6%)	11 (0.8%)	12 (0.8%)	12 (0.8%)	12 (0.9%)
Small business annual gas bill	4914 ^b	4896	4918	4941	4964	4989
Annual change ^c		-18 (-0.4%)	22 (0.4%)	23 (0.5%)	23 (0.5%)	25 (0.5%)
Multinet proposal						
Residential annual gas bill	1415 ^a	1446	1459	1473	1488	1503
Annual change ^c		31 (2.2%)	13 (0.9%)	14 (0.9%)	15 (1%)	15 (1%)
Small business annual gas bill	4914 ^b	4975	5002	5029	5059	5090
Annual change ^c		61 (1.3%)	27 (0.5%)	27 (0.6%)	30 (0.6%)	31 (0.6%)

Source: AER analysis, Switch On comparison tool, www.compare.switchon.vic.gov.au

- (a) Based on average standing residential offers at June 2017 on Switch On comparison tool using average annual consumption calculated in the PTRM for each of Multinet's tariff regions (postcodes 3102, 3139 and 3984).
- (b) Based on average standing small business offers at June 2017 on Switch On comparison tool using average annual consumption calculated in the PTRM for each of Multinet's tariff regions (postcodes 3102, 3139 and 3984).
- (c) Annual change amounts and percentages are indicative. They are derived by varying the distribution component of 2017 bill amounts by the nominal weighted average expected change in tariffs. Actual bill impacts will vary depending on consumption and tariff class.

We do not expect gas distribution charges flowing from this draft decision will be a notable contributor to overall gas bill changes.

While our approach isolates the effect of our decision on gas prices, it does not imply that other components will remain unchanged across the access arrangement period. Wholesale gas costs make-up a smaller percentage of the retail gas prices paid by consumers. Modelling by the Australian Energy Market Operator (AEMO) forecasts retail prices to rise on average by 2.1 per cent per annum (in real dollar terms) for residential customers, driven mainly by wholesale prices.⁶ AEMO's modelling projects that the delivered wholesale cost of gas in Australia will increase by 48 per cent by 2036.⁷

⁶ AEMO, *National Gas Forecasting Report for Eastern and Southern Australia*, December 2016, p. 26.

3 Reference services and tariffs

3.1 Services covered by the access arrangement

An access arrangement sets out at least one service likely to be sought by a significant part of the market (reference services). For each reference service, including services ancillary to the reference services, the access arrangement specifies the reference tariff and the other terms and conditions on which these services will be provided.⁸

Multinet is to provide access to its reference services, but may negotiate alternative terms and conditions at alternative prices with users. Multinet may also offer other non-reference services (negotiated services) which are not subject to regulation under the access arrangement. We may be called upon to determine the tariff and other conditions of access to services if an access dispute arises.⁹

Our draft decision approves Multinet's proposal to continue to offer the same reference services and ancillary reference services in 2018–22 as it has in the current, 2013–17 access arrangement period, these being:

- haulage reference services:
 - Allowing injection of gas at transfer points
 - Conveyance of gas from transfer points to distribution supply points
 - Allowing withdrawal of gas at distribution supply points
 - Meter installation and scheduled meter reading
- ancillary reference services:
 - Meter and gas installation tests
 - Disconnections, being:
 - removal of the meter at a metering installation
 - the use of locks or plugs at a metering installation.
 - Energisation and reconnection
 - Special meter reading

We also approve Multinet's proposal to offer a new 'installation of a second service valve' ancillary reference service, which it proposes to offer in response to requests from retailers. The purpose of this new service is to make the process of disconnection and reconnection of gas at residential premises easier in instances where Multinet cannot get access to the gas meter.

⁸ NGR, r. 48.

⁹ NGL, Chapter 6.

3.2 Reference tariff setting and the reference tariff variation mechanism

Our draft decision on Multinet's proposed access arrangement includes decisions on the structure of its reference tariffs and the mechanism by which those tariffs will be determined from year to year (the annual reference tariff variation mechanism).

Multinet proposed to change its reference tariff variation mechanism from its current weighted average price cap to a revenue cap, to address its concerns about declining demand and consequential volume forecasting risk to Multinet under the current control mechanism.¹⁰ After submission of its proposal, Multinet advised that given the submissions received and further consideration internally it would not object if our draft decision did not accept its proposal and sought to apply a price cap mechanism.¹¹

Our draft decision is to retain the current price cap control mechanism. Under Multinet's proposed revenue cap, forecasting risk would sit with customers. That is, should actual volumes be lower than forecast, under a revenue cap customers would face higher per unit tariffs through which Multinet would recover its regulated revenues. Under the price cap mechanism applied in this draft decision prices will not be impacted by within-period changes in demand. This maintains Multinet's incentives to maintain (or grow) gas consumption in order to achieve scale efficiencies and reduce unit costs.

Our draft decision also updates the cost pass through events that will apply to Multinet in the 2018–22 access arrangement period. This aligns the treatment of common risks between Multinet and the other Victorian gas distributors (AGN and AusNet).

3.3 Forecast demand

Under a weighted average price cap, demand is an important input into the derivation of Multinet's reference tariffs. In simple terms, tariffs are determined by dividing cost (as reflected in forecast revenue) by total demand (GJ/day), so that a decrease in forecast demand has the effect of increasing tariffs and vice versa. Forecast demand also affects the forecasts of operating and capital expenditure (new connections) that form part of our decision on the total revenue requirement.

Our draft decision accepts Multinet's demand forecasts for small commercial customers and industrial customers. However, our draft decision demand forecast for residential customers amends Multinet's for two reasons:

- as a consequence of our draft decision not to accept Multinet's proposed step increase in opex for marketing, we have removed the associated increases in its proposed demand forecast; and

¹⁰ Multinet, *2018 to 2022 Access Arrangement Information*, December 2016, p.49

¹¹ Multinet - Email to AER - Price control mechanism - 20170608 - PUBLIC

- we have amended Multinet's forecast growth rate in new residential customer numbers, which was inconsistent with the higher forecast connection numbers used by Multinet for its connections capex projection.

The forecasts from our draft decision represent:

- a decrease in total residential gas demand of 1.2 per cent per year over 2018-22 access arrangement period. This is slightly lower than the current period, which saw a fall of approximately 1 per cent per year.¹² The result for forecast residential demand is due to forecast reductions in consumption per connection of 1.8 per cent per year being offset by slight net customer growth of 0.7 per cent per year.¹³
- a reduction in total small commercial demand of 2.7 per cent per year over the 2018-22 access arrangement period. This compares to 2.5 per cent per year in the current period. This reduction in small commercial demand is due to a forecast fall of 1.7 per cent per year in consumption per connection and a fall in commercial net connections of 1 per cent per year.¹⁴
- a reduction in industrial demand of 1.9 per cent per year over the 2018-22 access arrangement period. This compares to an increase of 0.5 per cent per year in the current period.

¹² Note that figures in the current period include estimated values for 2017.

¹³ This compares to a reduction in consumption per connection of 1.65 per cent per year and a growth in net customer connections of 0.7 per cent in the current period.

¹⁴ This compares to a reduction in consumption per connection of 1.5 per cent per year and a reduction in net customer connections of 0.9 per cent in the current period

4 Total revenue requirement

The total revenue requirement is a forecast of the efficient cost of providing gas distribution services over the access arrangement period. We determine annual revenue—and the total revenue requirement—in nominal terms because it will be in nominal amounts that consumers will be paying. To do this, we take into account expected future inflation to determine what the nominal price levels will be in future periods. Our draft decision uses 10 year inflation expectations on average to convert revenues to nominal values.

Tariffs are derived from the total revenue requirement after consideration of demand for each tariff category. Our draft decision is that Multinet will continue to operate under a weighted average price cap. This means the tariffs we determine (including the means of varying the tariffs from year to year) are the binding constraint across the 2018–22 access arrangement period, rather than the total revenue requirement set in our decision.¹⁵ Tariffs are adjusted each year using the 'X factors'. X factors are percentage changes in real weighted average tariffs from year to year. The process of determining X factors is discussed in section 4.3.

4.1 The building block approach

We have employed the building block approach to determine Multinet's total revenue requirement—that is, we based the total revenue requirement on our estimate of the efficient costs that Multinet is likely to incur in providing its reference services. The building block costs, as shown in Figure 4-1, include:¹⁶

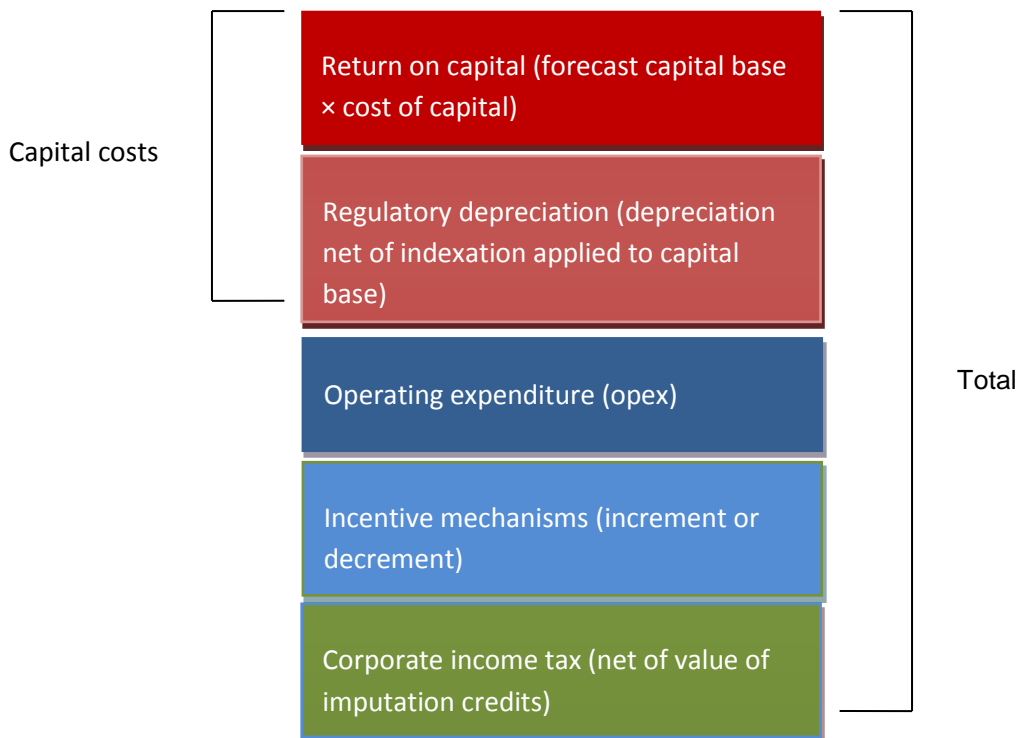
- return on the projected capital base (return on capital)
- depreciation of the projected capital base (return of capital)
- the estimated cost of corporate income tax
- revenue increments or decrements resulting from incentive schemes such as the efficiency carryover mechanism
- forecast opex.

Our assessment of capex directly affects the size of the capital base and therefore, the revenue generated from the return on capital and depreciation building blocks.

¹⁵ Where actual demand across the 2017–22 access arrangement period varies from the demand forecast in the access arrangement, Multinet's actual revenue will vary from the revenue allowance determined in our decision. In general, if actual demand is above forecast demand, Multinet's actual revenue will be above forecast revenue, and vice versa.

¹⁶ NGR, r. 76.

Figure 4-1 The building block approach to determining total revenue



4.2 Draft decision on total revenue

Our draft decision sets out a number of amendments to the building block inputs making up Multinet's proposed total revenue requirement (smoothed) of \$1171.1 million (\$ nominal). We expand on these in section 5.

Based on our assessment of the building block costs, and using the building block approach set out in rule 76 of the NGR, we determine a lower smoothed total revenue requirement of \$1016.7 million (\$nominal).¹⁷

As stated in section 3.2, Multinet proposed a revenue cap form of control. It follows that our draft decision requires amendments to the 2018 tariffs set out in Multinet's proposal, which was for a weighted average increase in real tariffs of 9.6 per cent. We also require amendments to Multinet's proposed 2018–22 tariff path, which was for weighted average increases in real tariffs of 2.7 to 2.9 per cent in each of the remaining years of the access arrangement period:¹⁸

¹⁷ This is calculated by smoothing the unsmoothed building block revenue for the 2018–22 access arrangement period as set in this draft decision.

¹⁸ 2.7 per cent per year for 2019 and 2020, 2.9 per cent in 2021 and 2.8 per cent in 2022. These tariff changes are calculated based on the WAPC X factors implied by Multinet's proposed revenue profile.

As a result of our lower total revenue requirement and changes to Multinet's demand forecast, our draft decision approves a real decrease in weighted average tariffs of 5.6 per cent in 2018, followed by real increases of 1.7 per cent in each of the remaining years of the access arrangement period. Section 4.3 discusses our approach to revenue equalisation (smoothing) and tariffs further below.

Table 4-1 sets out our draft decision on Multinet's total revenue requirement, by building block, for each year of the 2018–22 access arrangement period, the total revenue after equalisation (smoothing) and the X factors for use in the tariff variation mechanism.

Table 4-1 AER's draft decision on Multinet's smoothed total revenue and X factors for the 2018–22 access arrangement period (\$ million, nominal)

Building block	2018	2019	2020	2021	2022	Total
Return on capital	68.6	71.6	74.1	76.4	78.5	369.2
Regulatory depreciation	31.1	33.1	36.4	39.3	42.6	182.4
Operating expenditure	76.8	79.7	82.7	86.0	89.4	414.6
Revenue adjustments	-2.2	4.9	-2.4	-5.9	0.0	-5.6
Corporate income tax	10.1	10.1	10.8	13.1	13.1	57.3
Building block revenue – unsmoothed (including ARS)	184.4	199.4	201.6	208.8	223.6	1017.8
Less: Ancillary reference services	2.4	2.4	2.5	2.6	2.7	12.6
Building block revenue - unsmoothed (excluding ARS)	182.1	197.0	199.1	206.3	220.9	1005.3
Building block revenue – smoothed (excluding ARS)	187.5	194.0	200.8	207.4	214.5	1004.2
X factor^a	5.56%	-1.70%	-1.70%	-1.70%	-1.70%	n/a
Inflation forecast	2.45%	2.45%	2.45%	2.45%	2.45%	n/a
Nominal price change	-3.25%	4.2%	4.2%	4.2%	4.2%	n/a
Building block revenue - smoothed (including ARS)	189.9	196.5	203.3	209.9	217.1	1016.7

Source: AER analysis.

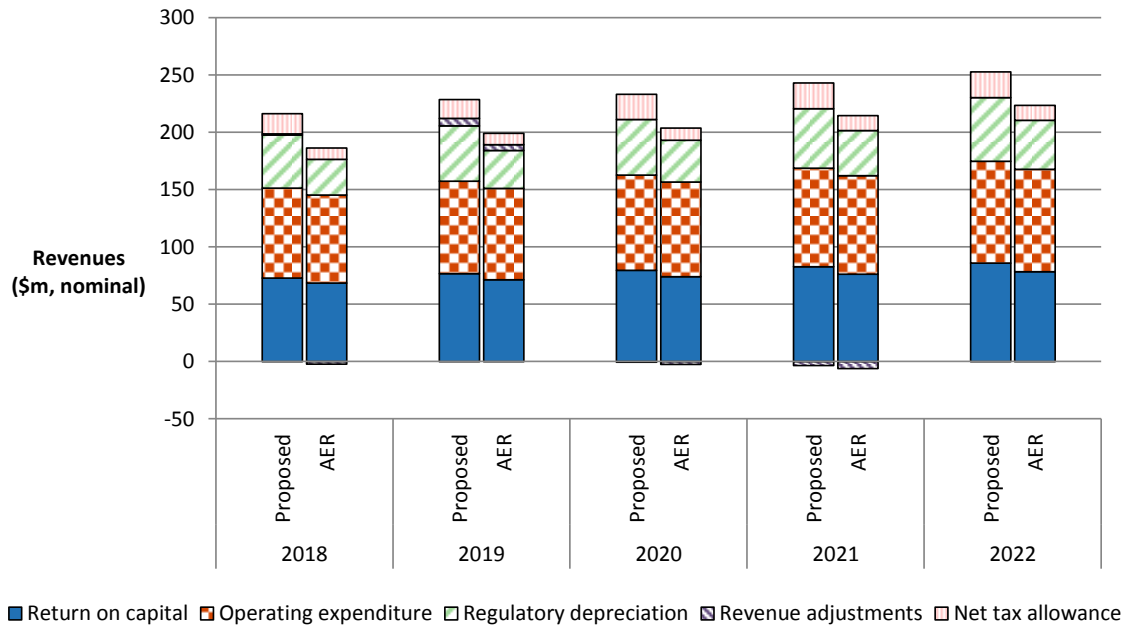
n/a: not applicable.

(a) Under the CPI-X form of control, a positive X factor is a decrease in price (and therefore in revenue).

The X factor for 2018 is indicative only. The draft decision establishes 2018 tariffs directly, rather than referencing a change from 2017 tariffs.

Figure 4-2 shows the effect of our draft decision adjustments to Multinet's proposed building blocks for the 2018–22 access arrangement period. It shows the reductions to Multinet's proposed return on capital, depreciation and tax building blocks.

Figure 4-2 AER’s draft decision and Multinet's proposed building block revenue (unsmoothed) (\$ million, nominal)



Source: AER analysis.

4.3 Revenue smoothing and tariffs

After our assessment of Multinet’s total building block revenue (unsmoothed revenue), we need to determine the smoothed revenue profile across the 2018–22 access arrangement period.¹⁹

Although Multinet proposed to change its reference tariff variation mechanism from its current weighted average price cap to a revenue cap, our draft decision is to retain the current price cap control mechanism. This means that under the tariff variation mechanism we determine the weighted average tariff change each year. This weighted average tariff change is labelled the 'X factor'. The X factors that we determine must ensure that the sum of the smoothed revenues across the period equals the unsmoothed building block revenue in net present value (NPV) terms.

The X factors represent the weighted average real change in tariffs. As part of the annual reference tariff variation process, we combine the X factors we have determined in our decision with actual inflation to create reference tariffs for the coming year. This means that the prices paid by consumers, and therefore the revenues received by the networks, change with actual inflation, but (ignoring other non-inflation factors) are constant in real terms.

¹⁹ This process of smoothing revenues is described in the NGR as 'revenue equalisation'. NGR, r. 92.

Table 4-2 presents our draft decision X factors, and compares them to the calculated equivalent WAPC X factors for the revenue profile Multinet’s proposal.

Table 4-2 Weighted average tariff change across the access arrangement period (X factors) — comparison of Multinet's proposal and AER's draft decision (per cent)

	2018	2019	2020	2021	2022
AER draft decision					
X factor ^a	5.56%	-1.70%	-1.70%	-1.70%	-1.70%
Nominal price change ^b	-3.2%	4.2%	4.2%	4.2%	4.2%
Multinet proposal^c					
X factor ^a	-9.60%	-2.73%	-2.68%	-2.87%	-2.77%
Nominal price change ^b	12.3%	5.2%	5.2%	5.4%	5.3%

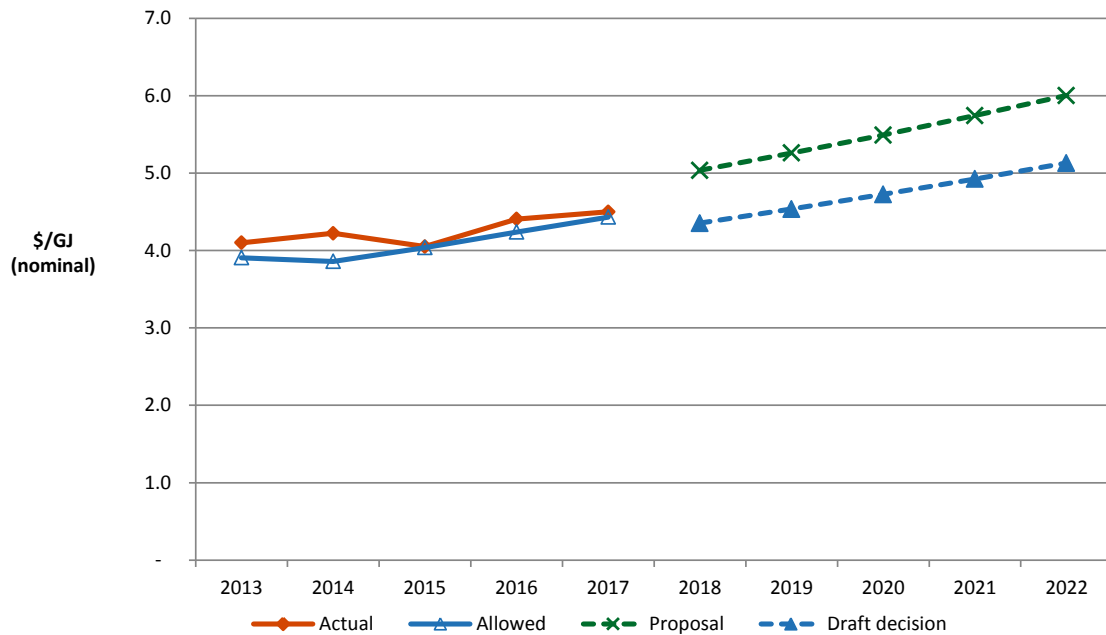
Source:

- (a) Under the CPI-X form of control, a positive X factor is a decrease in price (and therefore in revenue). For example, an X factor of 5.56 per cent in 2018 means a real price decrease of 5.56 per cent that year. After consideration of inflation (assumed at 2.45 per cent) this becomes a nominal price decrease of 3.2 per cent.
- (b) For comparison purposes the nominal price changes are derived from the real price changes for Multinet adjusted by AER's draft decision forecast inflation of 2.45 per cent.
- (c) The proposed X factors and nominal price changes listed in the table, have been calculated based on the WAPC X factors implied by Multinet's proposed revenue profile.

Figure 4-3 shows indicative tariff paths for Multinet's reference services from 2013 to 2022. It compares Multinet's proposed tariff path with that approved in the 2013–17 access arrangement, and with this draft decision.²⁰ This provides a broad overall indication of the average movement across several access arrangement periods.

²⁰ The tariff path for 2013–22 uses actual inflation outcomes for the 2013–17 period, and expected inflation for 2018–22.

Figure 4-3 Indicative reference tariff paths for Multinet's reference services from 2013 to 2022 (nominal index)



Source: AER analysis;

Multinet's proposed tariff path suggested an increase of 11.4 per cent (nominal) in 2018, followed by tariffs that increase at an average of 4.5 per cent per year for the remaining years of the 2018–22 access arrangement period.²¹ Our draft decision provides for lower total smoothed revenue than Multinet's proposal, in line with our amendments to total unsmoothed revenue. As such, a decrease of 3.2 per cent to tariffs is required at the start of the 2018–22 access arrangement period to reflect the change in smoothed revenue from the 2013–17 access arrangement period. This is followed by smaller increases in subsequent years in line with smaller X factors offset by higher expected inflation at 2.45 per cent per annum.

In choosing the smoothing profile for this draft decision we have balanced a number of competing objectives:

- Equalising (in NPV terms) unsmoothed and smoothed revenue
- Providing price signals that reflect the underlying efficient costs
- Minimising tariff variability from 2017 and within the 2018–22 access arrangement period
- Minimising the likelihood of variability in tariffs at the start of the 2023–27 access arrangement period.

²¹ Multinet's proposed nominal tariff path also reflects its proposed expected inflation of 1.68 per cent.

Each of these points is discussed in turn.

First, we are satisfied that our draft decision tariff path for Multinet's 2018–22 access arrangement period achieves revenue equalisation as required by rule 92(2) of the NGR.²² As set out above, our draft decision reduces the unsmoothed revenue proposed by Multinet. Accordingly, we set the tariff path so that it adjusts the smoothed revenue downward to better reflect the unsmoothed building block costs.

Second, but closely related to the first point, our smoothing allows closer alignment of tariffs and costs. This aids the achievement of the NGO and the revenue and pricing principles, including through providing a price signal that facilitates efficient use of natural gas services.²³ Our draft decision tariff path shows a decrease (rather than Multinet's proposed increase) in the first year of the 2018-22 access arrangement period, reflecting the lower unsmoothed building block costs.

Third, in setting the tariff path, we aim to minimise tariff volatility from 2017 to 2018 and within the 2018–22 access arrangement period. Our chosen tariff path reflects this objective, but also reflects the consideration we must give to other competing objectives. For instance, setting a flat tariff path from 2017 would better minimise volatility within the 2018-22 access arrangement period, but would not achieve revenue equalisation between tariffs and costs.

Fourth, in setting the tariff path, we also aim to minimise the likelihood of tariff volatility between this access arrangement period and the next. We do not know with certainty what Multinet's efficient costs will be in 2023 or across the 2023–27 access arrangement period more generally. The unsmoothed building block costs for 2022 (the last year of Multinet's 2018–22 access arrangement period) are the best available proxy. Hence, this objective requires minimising the divergence between the smoothed and unsmoothed revenues for the last year of the access arrangement period. If we assume no significant changes in forecast costs from 2022 to 2023, this final year divergence gives us an estimate of the size of the tariff change at the start of the 2023–27 access arrangement period.

For this draft decision, this final year divergence is 2.92 per cent. The divergence is within our usual target range of 3 per cent. However, the profile of unsmoothed building block revenues and forecast demand constrain our ability to smooth the revenues without causing significant tariff volatility. Working with these constraints, our draft decision is to give primary weight for smoothing tariffs within the 2018–22 access arrangement period, while minimising the final year divergence of smoothed revenue and unsmoothed revenues to the extent possible. We note that if there are significant changes in costs at the start of the 2023–27 access arrangement period, this might increase or decrease the required tariff change at that time.

²² The revenue equalisation occurs in NPV terms, discounting the yearly cash flows at the rate of return to reflect the time value of money.

²³ NGL, rr. 23, 24.

We are satisfied that our draft decision tariff path reflects our balanced consideration of these competing objectives. We will review this smoothing profile for the final decision if necessary.

5 Key elements of our draft decision on revenue

The components of our draft decision include the building blocks we use to determine the revenue that Multinet may recover from its users.

The following sections summarise our revenue decision by building block. The attachments to this draft decision provide a more detailed explanation of our analysis and findings.

5.1 Capital base

The capital base roll forward accounts for the value of Multinet's regulated assets over the access arrangement period. The opening capital base value for a regulatory year within the access arrangement period is rolled forward by indexing it for inflation, adding any conforming capex, and subtracting depreciation and other possible factors (for example, disposals or customer contributions). Following this process, we arrive at a closing value of the capital base at the end of each year of the access arrangement period. The opening value of the capital base is used to determine the return of capital (regulatory depreciation) and return on capital building block allowances.

We are required to make a decision on Multinet's opening capital base as at 1 January 2018 for the 2018–22 access arrangement period. We are also required to make a decision on Multinet's projected capital base for the 2018–22 access arrangement period.

We determine an opening capital base of \$1192.4 million (\$ nominal) as at 1 January 2018. This is slightly higher (\$1.6 million, or 0.1 per cent) than that set out in Multinet's proposal, because we have corrected some input and modelling errors in the roll forward model Multinet submitted with its proposal.

Table 5-1 summarises our draft decision on the roll forward of Multinet's capital base during the 2013–17 access arrangement period.

Table 5-1 AER’s draft decision on Multinet’s capital base roll forward for the 2013–17 access arrangement period (\$ million, nominal)

	2013	2014	2015	2016	2017
Opening capital base	1055.0	1087.4	1108.7	1135.7	1166.9
Net capex	57.7	53.1	60.1	75.6	75.1
Indexation of capital base	21.1	23.5	25.6	17.1	15.1
Less: straight-line depreciation	46.0	55.3	58.7	61.5	64.7
Closing capital base	1087.4	1108.7	1135.7	1166.9	1192.4
Difference between estimated and actual capex in 2012 ^a					0.0
Return on difference for 2012 capex					n/a
Opening capital base as at 1 January 2018					1192.4

Source: AER analysis.

(a) Actual 2012 capex was able to be included in Multinet's 2013 approved opening capital base as a result of the delayed decision due to the appeal process; therefore no true-up is required in this determination.

Our draft decision does not accept Multinet’s proposed roll forward of its projected capital base over the 2018–22 access arrangement period, or its proposed closing capital base of \$1446.1 million (\$ nominal) at 31 December 2022. This is primarily because our draft decision approves lower forecast capex and depreciation allowances than Multinet proposed. These are key inputs to the projected capital base roll forward. Adjusting for our reductions to these inputs, we determine a projected closing capital base of \$1401.0 million (\$ nominal) as at 31 December 2022. This is \$45.1 million (\$ nominal) less than that proposed by Multinet, a reduction of 3.1 per cent. The main driver of this decrease is our draft decision on the expected inflation rate. The higher expected inflation rate increases the indexation of the capital base component for the 2018–22 access arrangement period by \$47.9 million.²⁴ Combined with our draft decision reduction to forecast capex, the net impact is a lower capital base at 31 December 2022 than Multinet proposed.

Table 5-2 sets out the projected roll forward of the capital base during the 2018–22 access arrangement period.

²⁴ The inflation on the opening capital base is removed from the regulatory depreciation allowance. See section 5.4 and attachment 5 for further details.

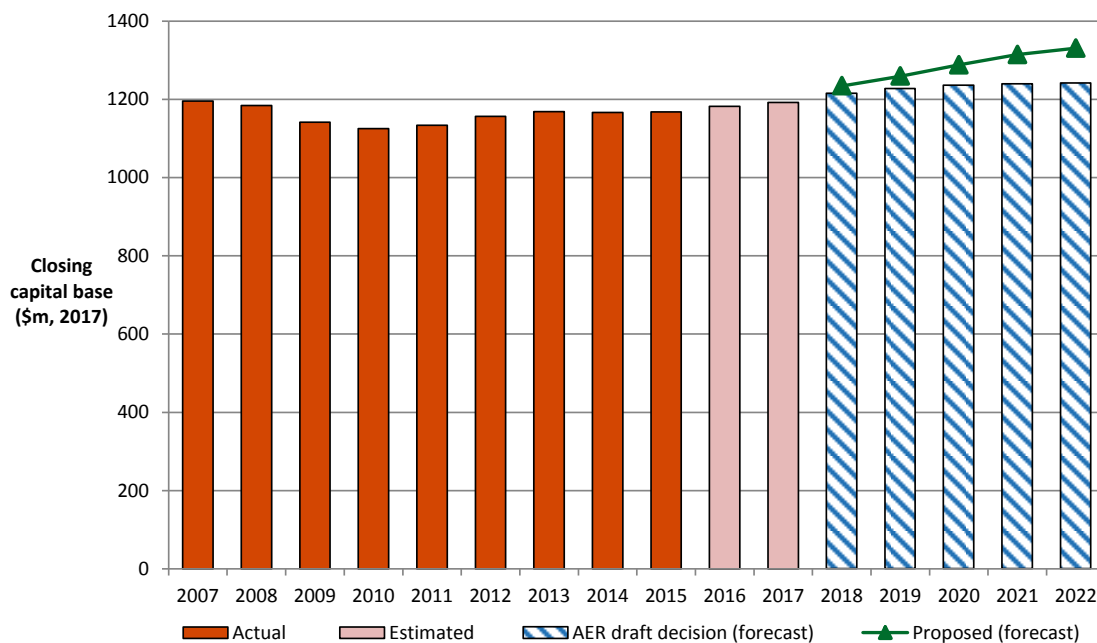
Table 5-2 AER’s draft decision on Multinet's projected capital base roll forward for the 2018–22 access arrangement period (\$ million, nominal)

	2018	2019	2020	2021	2022
Opening capital base	1192.4	1245.2	1287.9	1328.6	1364.8
Net capex	83.8	75.8	77.0	75.6	78.7
Indexation of capital base	29.2	30.5	31.6	32.5	33.4
Less: straight-line depreciation	60.3	63.6	67.9	71.8	76.0
Closing capital base	1245.2	1287.9	1328.6	1364.8	1401.0

Source: AER analysis.

Figure 5-1 compares our draft decision on Multinet's forecast capital base to Multinet's proposal and actual capital base in real dollar terms.

Figure 5-1 Multinet’s actual, proposed forecast, and AER draft decision forecast capital base (\$ million, 2017)



Source: AER analysis.

5.2 Rate of return (return on capital)

The allowed rate of return provides a service provider a return on capital to service the interest on its loans and give a return on equity to investors. The return on capital building block is calculated as a product of the rate of return and the value of the RAB.

We are satisfied that the allowed rate of return of 5.75 per cent (nominal vanilla) we determined contributes to the achievement of the NGO, and achieves the allowed rate

of return objective (ARORO) set out in the NGR.²⁵ That is, we are satisfied that this allowed rate of return is commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to Multinet in providing reference services.²⁶ We are not satisfied that Multinet's proposed (indicative) 6.12 per cent rate of return for 2018 will achieve the ARORO.²⁷

Table 5-3 sets out our rate of return and Multinet's proposed rate of return.

Table 5-3 Draft decision on Multinet's rate of return (% nominal)

	Previous allowed return (2013-17)	Multinet's proposal (2018-22)	AER draft decision (2018)	Allowed return over 2018 regulatory control period
Return on equity (nominal post-tax)	7.92	8.31	7.2	Constant (7.2%)
Return on debt (nominal pre-tax)	6.44	4.67	4.79	Updated annually
Gearing	60	60	60	Constant (60%)
Nominal vanilla WACC	7.03	6.12	5.75	Updated annually for return on debt
Forecast inflation	2.5	1.68	2.45	Constant (%)

Source: AER analysis; Multinet, *Rate of Return Overview*, 16 December 2016, pp.43-56

Our return on equity estimate for this draft decision is 7.2 per cent. We derived this estimate by applying the foundation model approach (as set out in the Guideline) used to determine the allowed return on equity in our most recent decisions.²⁸ This is a six step process, where we have regard to a considerable amount of relevant information, including various equity models.

Our return on equity point estimate and the parameter inputs are set out in the table below.

²⁵ NGR, r. 87(2).

²⁶ NGR r. 87(3).

²⁷ Multinet Gas, *Rate of Return Overview*, 16 December 2016, p. 43.

²⁸ For example, see AER, *Final decision: AusNet Services determination 2015 -16 to 2019-20, Attachment 3—Rate of return*, May 2016.

Table 5-4 Draft decision on Multinet's return on equity (% nominal)

	AER previous decision (2013–17)	Multinet's proposal (2018– 22)	AER draft decision (2017-18)
Nominal risk free rate (return on equity only)	3.12%	1.92% ^a	2.6% ^b
Equity risk premium	4.8%	5.25%	4.55%
Market risk premium	6%	7.50%	6.5%
Equity beta	0.8	0.7	0.7
Alpha		1.14%	
Nominal post-tax return on equity	7.92%	8.31% ^(c)	7.2%

Source: AER analysis; Multinet, *Rate of Return Overview*, 16 December 2016, pp.43-56

^a Based on Multinet's indicative averaging period adopted for its proposal of 8 August 2016 to 19 August 2017

^b Calculated with a placeholder averaging period of 20 business days up to 28 April 2017.

Multinet proposed departing from the approach in the Guideline by for the equity beta and the market risk premium parameters. Multinet has also proposed to include an additional 'alpha' term in the Sharpe-Lintner CAPM.

We are not satisfied that Multinet's proposal would result in an outcome that better achieves the ARORO.²⁹ Further detail on our draft decision in regards to Multinet's allowed rate of return is set out in attachment 3.

Our return on debt estimate is based on a gradual transition from the 'on-the-day' approach we used in the past to the 'trailing average' approach we proposed in the Guideline. The trailing average approach reflects the return on debt that a network business would face if it raised debt annually in equal parcels. Our return on debt approach incorporates a transition to the new approach.

Our decision is also to update the return on debt annually. Therefore, our estimate in this decision is for the first year of the regulatory period. Due to this, we update our rate of return annually.

We commence the trailing average with an initial estimation of the return on debt that is then progressively updated over the regulatory period. In practice, this means that for new debt that is issued (10 per cent of the initial estimate each year) we apply an estimate of the observed return on debt immediately. For existing debt issued before the commencement of the trailing average approach, we will continue to apply the on-the-day approach for the portion that has not been updated. Consequently, at the end

²⁹ NGR, cl. 87(18)

of 10 years the total debt portfolio will have been updated and incorporated into the trailing average.

Our return on debt estimate is developed on the basis that a benchmark efficient entity issues debt with a 10 year term and has a BBB+ credit rating. To estimate the yield on this debt, we use an independent third party data service provider. We have reviewed the recent draft proposals and decided to adopt a simple average of the data series provided by the Reserve Bank of Australia and Bloomberg.

Our estimation procedure allows the service provider to propose a period between 10 business days and 12 months in length before the start of each regulatory year, over which the observed rates are averaged to estimate the return on debt. This results in service providers proposing an averaging period consistent with its debt practices and therefore, our return on debt estimate is different for different service providers.

Our return on debt estimate for the first year of Multinet's access arrangement period in this draft decision is 4.79 per cent. This return on debt number will be updated annually during the regulatory period to partially reflect prevailing interest rates. Our approach and estimation procedures are consistent with the Guideline. We note that Multinet in its current draft proposal adopted our return on debt approach as set out in the Guideline and proposed a return on debt of 4.67 per cent. We note the differences in the return on debt number reflect different averaging periods used for the estimation of the rates in the revenue proposal and the AER's draft decision. We also note, in line with the Guideline approach the AER has followed, Multinet proposed updating of the return on debt for the final agreed averaging period.

Our estimate of expected inflation is estimated as the geometric average of 10 annual expected inflation rates. We use the RBA's forecasts of inflation for the first two annual rates and the mid-point of the RBA's inflation target band for the remaining eight annual rates.

Multinet proposed estimating expected inflation using the bond break-even approach and proposed an expected inflation rate of 1.93 per cent. We do not accept Multinet's approach. We consider that long-term inflation expectations are relatively stable and anchored to the RBA's inflation target band and that the RBA forecasts and target band approach is more likely to reflect this than the bond break-even approach. Our consideration is based on the information before us in this determination process. We are currently conducting an industry-wide review of inflation. That review is yet to be finalised and so findings from the review cannot be included in this draft decision. Findings from the review may inform our final decision.

Further detail on our draft decision in regards to Multinet's allowed rate of return is set out in attachment 3.

5.3 Value of imputation credits (gamma)

Under the Australian imputation tax system, investors can receive an imputation credit for income tax paid at the company level.³⁰ These are received after company income tax is paid, but before personal income tax is paid. For eligible investors, this credit offsets their Australian income tax liabilities. If the amount of imputation credits received exceeds an investor's tax liability, that investor can receive a cash refund for the balance. Imputation credits are therefore valuable to investors and are a benefit to investors in addition to any cash dividend or capital gains they receive from owning shares.

However, the estimation of the return on equity does not take imputation credits into account. Therefore, an adjustment for the value of imputation credits is required. This adjustment could take the form of a decrease in the estimated return on equity itself. An alternative but equivalent form of adjustment, which is employed under the NER, is via the revenue granted to a service provider to cover its expected tax liability. Specifically, the NER requires that the estimated cost of corporate income tax be determined in accordance with a formula that reduces the estimated cost of corporate tax by the 'value of imputation credits' (represented by the Greek letter, γ , 'gamma'). This form of adjustment recognises that it is the payment of corporate tax which is the source of the imputation credit return to investors.

Our draft decision adopts a value of imputation credits of 0.4. We do not accept Multinet's proposed value of imputation credits (or gamma) of 0.25. We consider that a value for imputation credits of 0.4 will result in equity investors in the benchmark efficient entity receiving an ex ante total return (inclusive of the value of imputation credits) commensurate with the efficient equity financing costs of a benchmark efficient entity.

In coming to a value of imputation credits of 0.4:

- We adopt a conceptual approach consistent with the Officer framework, which we consider best promotes the objectives and requirements of the NER/NGR. This approach considers the value of imputation credits is a post-tax value before the impact of personal taxes and transaction costs.³¹ As such, we view the value of imputation credits as the proportion of company tax returned to investors through the utilisation of imputation credits.³²
- We consider our conceptual approach allows for the value of imputation credits to be estimated on a consistent basis with the allowed rate of return and allowed revenues under the post-tax framework in the NER/NGR.³³

³⁰ *Income Tax Assessment Act 1997*, parts 3–6.

³¹ Post-tax refers to after company tax and before personal tax.

³² This means one dollar of claimed imputation credits has a post (company) tax value of one dollar to investors before personal taxes and personal transaction costs.

³³ In finance, the consistency principle requires that the definition of the cash flows in the numerator of a net present value (NPV) calculation must match the definition of the discount rate (or rate of return / cost of capital) in the

- We use the widely accepted approach of estimating the value of imputation credits as the product of two sub-parameters: the 'distribution rate' and the 'utilisation rate'. Our definition of, and estimation approach for, these sub-parameters is set out in Table 5-5.

Table 5-5 Gamma sub-parameters: definition and estimation approach

Sub-parameter	Definition	Estimation approach
Distribution rate (or payout ratio)	The proportion of imputation credits generated that is distributed to investors.	Primary reliance placed on the widely accepted cumulative payout ratio approach. Some regard is also given to Lally's estimate for listed equity from financial reports of the 20 largest listed firms.
Utilisation rate (or theta)	The utilisation value to investors in the market per dollar of imputation credits distributed. ³⁴	A range of approaches, with due regard to the merit of each approach: equity ownership approach tax statistics implied market value studies.

Source: AER analysis.

Overall, the evidence suggests a range of estimates for the value of imputation credits might be reasonable. With regard to the merits of the evidence before us, we choose a value of imputation credits of 0.4 from within a range of 0.3 to 0.5.

In considering the evidence on the distribution and utilisation rates, we have broadly maintained the approach set out in the Rate of Return Guideline (the Guideline), but have re-examined the relevant evidence and estimates. This re-examination, and new evidence and advice considered since the Guideline, led us to depart from the 0.5 value of imputation credits we proposed in the Guideline.

Further detail on our draft decision in regards to the value of Multinet's imputation credits is set out in attachment 4.

5.4 Regulatory depreciation (return of capital)

When determining the total revenue for Multinet, we include an allowance for the depreciation of the projected capital base (otherwise referred to as 'return of capital').³⁵ Regulatory depreciation is used to model the nominal asset values over the 2018–22

denominator of the calculation (see Peirson, Brown, Easton, Howard, Pinder, Business Finance, McGraw-Hill, Ed. 10, 2009, p. 427). By maintaining this consistency principle, we provide a benchmark efficient entity with an ex ante total return (inclusive of the value of imputation credits) commensurate with the efficient financing costs of a benchmark efficient entity.

³⁴ In this decision we use the terms theta, utilisation value and utilisation rate interchangeably to mean the same thing.

³⁵ NGR, r. 76(b).

access arrangement period and the depreciation allowance in the total revenue requirement.³⁶

Our draft decision on Multinet's regulatory depreciation allowance is \$182.4 million (\$ nominal) in total for the 2018–22 access arrangement period as set out in Table 5-6.

Table 5-6 AER's draft decision on Multinet's regulatory depreciation allowance for the 2018–22 access arrangement period (\$ million, nominal)

	2018	2019	2020	2021	2022	Total
Straight-line depreciation	60.3	63.6	67.9	71.8	76.0	339.6
Less: indexation on capital base	29.2	30.5	31.6	32.5	33.4	157.3
Regulatory depreciation	31.1	33.1	36.4	39.3	42.6	182.4

Source: AER analysis.

We approve Multinet's proposal to use the real straight-line method to calculate the regulatory depreciation allowance. However, we do not approve Multinet's proposed regulatory depreciation allowance of \$250.8 million (\$nominal) for the 2018–22 access arrangement period. This is mainly because of corrections to the application of the year-by-year tracking approach and our draft decisions on other components of Multinet's proposal which impact on the regulatory depreciation allowance. These include our draft decisions on Multinet's opening capital base and forecast capex. Some errors in calculation were also corrected.

We have not accepted all of Multinet's proposed standard asset lives. For example, we consider its proposed standard asset life for buildings to be too short. However, the standard asset lives for all other asset classes are broadly comparable with the standard asset lives approved in our recent determinations for other gas network service providers, and we have accepted these.³⁷ The exception to this is meters. While we accept Multinet's proposed revision to metering asset lives is reasonable and consistent with other gas service providers, we have recalculated the remaining asset lives of existing meters and do not accept Multinet's proposal to reduce the lives of all existing meters to 5 years.

We accept Multinet's proposed individual tracking approach to determining depreciation. While not our preferred weighted average remaining life (WARL) approach,³⁸ we accept that a year by year approach can meet the criteria of having the

³⁶ Regulatory depreciation allowance is the net total of the straight-line depreciation (negative) and the annual inflation indexation (positive) on the projected capital base.

³⁷ For example, *AER: Access arrangement final decision APA GasNet Australia (Operations) Pty Ltd 2013–17 Part 2: Attachments*, March 2013, p. 149; *AER: Final decision Amadeus Gas Pipeline access arrangement attachment 5 — Regulatory depreciation*, May 2016, p. 9.

³⁸ Year by year tracking is administratively more complex and costly, and can increase revenue fluctuations as depreciation depends more on when individual assets expire. A change of approach between access arrangement

depreciation schedule reflect the asset's economic life, where it tracks the asset's technical life. In deciding to accept this element of Multinet's proposal, we have assessed the new approach against the other criteria in the NGR, in particular, whether the approach leads to efficient development in the market for reference services. Under this criterion we also need to consider the impact of the change in the long run and any significant disruption in the short to medium term from a change in previous practice. The proposed change to year by year tracking does increase depreciation (and prices) over short to medium term, other things being equal. CCP11 has raised this potential impact as a concern.³⁹ However, our analysis suggests the impact in this case to be modest and therefore unlikely to have a significant impact on the efficient growth in the market for reference services.

We accept Multinet's proposed accelerated depreciation of mains and services to be replaced over the 2018–22 access arrangement period, subject to adjustments made to forecast capex reflecting a reduction in the length of mains to be replaced over the 2018–22 access arrangement period. Based on our conclusion that Multinet's mains replacement program will not be completed until 2040 (seven years later than Multinet proposed), our draft decision extends the remaining asset lives of the residual older mains and services by seven years.

5.5 Capital expenditure (capex)

Capital expenditure (capex) refers to the capital costs and expenditure incurred in the provision of pipeline services.⁴⁰ This investment mostly relates to assets with long lives. Multinet recovers the costs of these assets through the return on capital and depreciation building blocks that form part of its total revenue. In this way Multinet recovers the financing cost and depreciation associated with these assets over the expected life of these assets.

Our draft decision includes an assessment of Multinet's actual capex in the current, 2013–17 period, which forms part of its opening capital base.⁴¹ It also includes an assessment of Multinet's forecast capex for the 2018–22 access arrangement period, which forms part of its projected capital base.⁴²

Figure 5-2 compares Multinet's past and proposed forecast capex, and the forecasts approved by us in our 2013–17 final decision and this draft decision for 2018–22.

periods can also cause revenue (and price spikes) which may not be helpful to efficient development in the market for reference services.

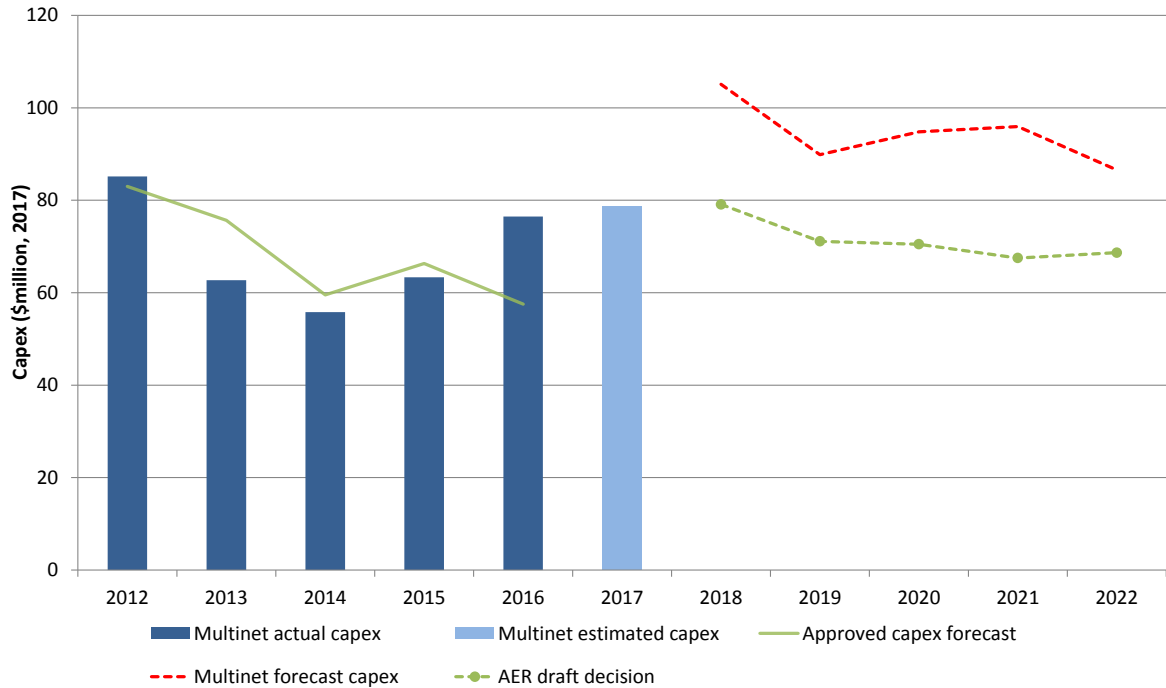
³⁹ CCP11, *Submission on AGN, AusNet and Multinet proposals*, 3 March 2017, p.53.

⁴⁰ NGR, r. 69.

⁴¹ NGR, r. 77.

⁴² NGR, r. 78(b)

Figure 5-2 AER draft decision compared to Multinet's past and proposed capex (\$ million, 2017)



Source: AER analysis.

5.5.1 Conforming capex for the current period

Multinet expects to spend in line with current period (2013-17) net capex forecasts overall, but notes significant overspends relative to the forecasts of mains replacement (17 per cent) and connections (26 per cent) capex contemplated in our final decision on the 2013–17 access arrangement.

We approve \$258.3 million (\$2017) of total net capex for Multinet during the 2013–16 period as conforming capex under the NGR.⁴³ Multinet's actual 2012 capex was included in its 2013 approved opening capital base and therefore does not require assessment as part of this review.

We will review Multinet's actual capex for 2017 as part of our next review of its access arrangement in 2022.

5.5.2 Conforming capex for 2018-22

Multinet's proposed forecast (net) capex of \$472.3 million (\$ 2017) for 2018–22 is 40 per cent higher than its actual net capex in 2013–17.⁴⁴ Our draft decision approves a

⁴³ NGR, r. 79(1).

⁴⁴ Multinet's capex for 2017 is based on an estimate only.

lower forecast of \$356.9 million. This is around 24 per cent less than Multinet proposed, and closer to its current period expenditure.

The difference between our draft decision and Multinet's proposal primarily relates to following areas of its forecast:

- Multinet's forecast mains replacement capex made up around 49 per cent of its total forecast gross capex. Its proposed expenditure of \$249.7 million is \$118 million higher than Multinet's actual mains replacement expenditure in the current period. On the information before us we are not satisfied that this increase in mains replacement expenditure is justified. In particular, the proposed forecast volume of mains to be replaced exceeds that required to minimise risks of leaks and improve network safety. The total capex forecast in our draft decision includes a lower mains replacement forecast of \$159.5 million, which is based on Multinet's historical annual replacement rates and the leak data provided by Multinet.
- We have not accepted Multinet's forecast of its overheads for 2018–22, and have reduced this component of its total capex by \$9.1 million. Our alternative forecast relies on actual data reported by Multinet for the years 2013–16, whereas Multinet relied on a shorter period, averaging actual data for 2015 only and estimated data for 2016 and 2017.
- We have included Multinet's forecast expenditure on recurrent information and communications technology (ICT capex) in our total capex forecast, and also a number of non-recurrent projects that we considered and approved in our final decision on United Energy's capex last year and which we consider can be included in Multinet's forecast capex expenditure for similar reasons. However, on the information before us we are not satisfied that the remaining non-recurrent IT projects in Multinet's proposal are prudent and efficient. We have therefore reduced this component of its total capex by \$7.5 million.
- Our draft decision reduces Multinet's forecast connections capex of \$108.1 million by 2.9 per cent (to \$105.2 million) as a consequence of our decision not to accept Multinet's opex step change for marketing expenditure, or the associated increase in demand.
- We have reduced Multinet's forecast capex for SCADA of \$6.6 million by 38 per cent (to \$4.1 million) because we consider that the proposed capex for medium and low pressure step control has not been justified by Multinet.
- We have reduced Multinet's forecast capex for meter replacement by \$2.1 million to remove its proposal for a new digital gas metering pilot study, which we are not satisfied Multinet has justified on a cost-benefit basis.

Table 5-7 compares Multinet's proposed capex forecast to that approved in our draft decision.

Table 5-7 Comparison of forecast capex in Multinet's proposal and this draft decision (\$ million, 2017)

Category	Proposed	Approved	Difference (\$ millions)
Connections	108.1	105.2	-2.9
Mains replacement	249.7	159.5	-90.2
Meter replacement	9.9	7.9	-2.1
Augmentation	15.0	15.0	0.0
SCADA	6.6	4.1	-2.5
Other capex	45.5	45.5	0.0
IT	45.7	38.1	-7.6
Escalation	4.0	3.2	-0.8
Overheads	29.0	20.0	-9.1
GROSS TOTAL CAPITAL EXPENDITURE	513.6	398.2	-115.4
Contributions	41.3	41.3	0.0
NET TOTAL CAPITAL EXPENDITURE	472.3	356.9	-115.4

Source: AER analysis. Totals may not sum due to rounding.

5.6 Operating expenditure (opex)

Operating expenditure (opex) is the operating, maintenance and other non-capital expenses, incurred in the provision of reference services for a pipeline. Forecast opex is one of the building blocks we use to determine a service provider's total revenue requirement.

Multinet proposed an opex forecast of \$396.4 million (\$ 2017) over the 2018–22 access arrangement period.⁴⁵ Our draft decision is not to accept this forecast and substitute a lower forecast of \$385.1 million (\$2017).⁴⁶ This is a reduction of 2.8 per cent from Multinet's proposal.

Table 5-8 compares our draft decision to Multinet's proposal.

⁴⁵ Includes ancillary reference services and debt raising costs.

⁴⁶ Includes ancillary reference services and debt raising costs.

Table 5-8 Our draft decision on total opex (\$ million, 2017)

	2018	2019	2020	2021	2022	Total
Multinet initial proposal	77.2	78.0	79.1	80.4	81.8	396.4
AER draft decision	75.0	75.9	76.9	78.0	79.2	385.1
Difference	-2.2	-2.1	-2.1	-2.3	-2.6	-11.3

Source: Multinet, *Access arrangement review pricing model*, 16 December 2016; AER analysis.

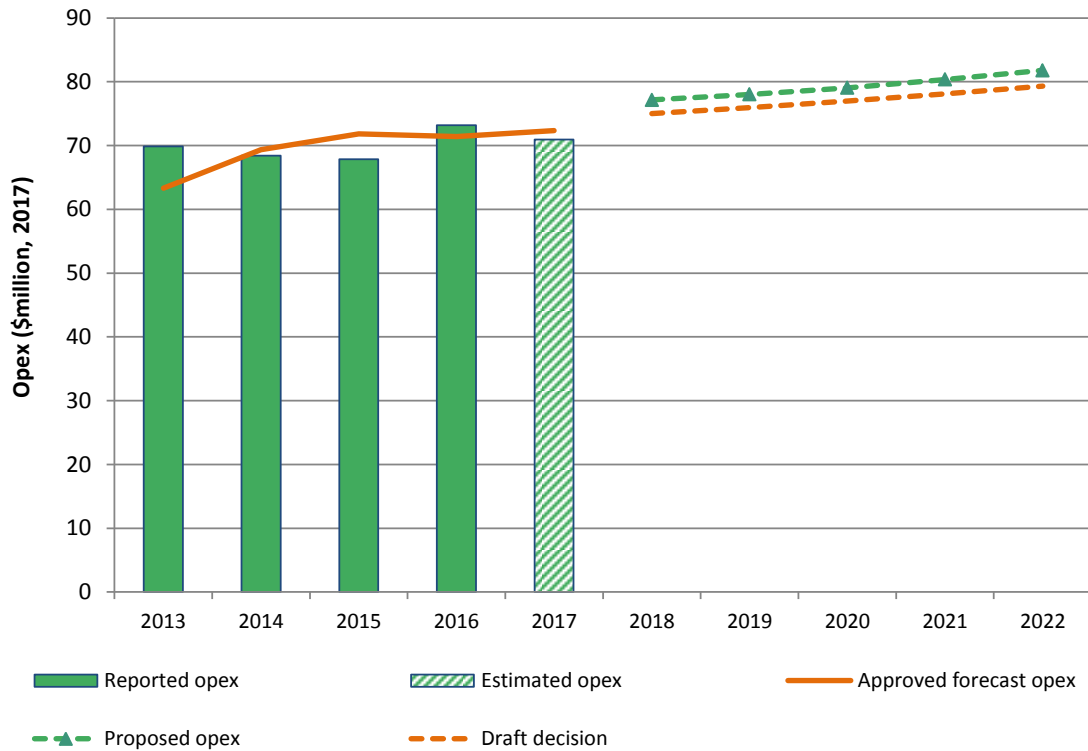
Note: Includes debt raising costs. Numbers may not add up due to rounding.

The key differences between our draft decision and Multinet's proposal are:

- we did not include a step change for marketing (\$23.3 million). We consider marketing is a 'business-as-usual' expense for Multinet to prioritise within its existing base opex forecast, if it is prudent and efficient to do so in the current operating environment.
- we have updated our estimate of Multinet's 2016 base year expenditure with actual data including movements in provisions, and have included the forecast cost of its distribution licence fees in the opex forecast rather than treating them as an annual adjustment in the tariff variation mechanism (\$12.7 million).

Figure 5-3 shows our draft decision and Multinet's proposal in the context of its past allowances and actual expenditure.

Figure 5-3 Our draft decision compared to Multinet's past and proposed opex (\$ million, 2017)



Source: Multinet, *Final RIN templates - Multinet Gas response*, January 2017; AER analysis.

Note: Includes debt raising costs.

5.7 Efficiency carryover mechanism

The opex efficiency carryover mechanism in Multinet's access arrangement provides an additional incentive to that provided under an incentive based regime for Multinet to pursue efficiency improvements in its opex over an access arrangement period. It does this by allowing Multinet to retain efficiency savings achieved within a particular period for a longer period of time.

Our draft decision is to approve a negative carryover amount of $-\$5.1$ million ($\$2017$) from the application of the efficiency carryover mechanism in the 2013–17 access arrangement period. This is $\$8.8$ million ($\$2017$) less than Multinet's proposed carryover of positive $\$3.7$ million. The main reason for the difference is we updated Multinet's estimated opex for 2016 with actual opex. The negative carryover in this draft decision partly offsets the increase in opex from 2013–17 to 2018–22.

Table 5-9 shows our draft decision on Multinet's proposed carryover amounts.

Table 5-9 AER draft decision on carryover amounts (\$ million, \$2017)

	2017	2018	2019	2020	2021	Total
Multinet's proposed carryover	0.9	6.4	-0.4	-3.2	–	3.7
Draft decision	-2.1	4.6	-2.2	-5.4	–	-5.1
Difference	-3.0	-1.8	-1.8	-2.2	–	-8.8

Source: AER analysis.

Note: Numbers may not add up due to rounding.

We accept Multinet's proposal to retain the same efficiency carryover mechanism for the 2018–22 access arrangement period. However, we have amended Multinet's proposed efficiency carryover mechanism to reflect improvements included in the efficiency benefit sharing scheme we released in November 2013 for electricity service providers. Importantly, the amendments will give Multinet more flexibility in the choice of base year it uses to forecast opex in the following period. We have also reduced the number of costs categories we will exclude from the mechanism. The total opex forecasts we will use to calculate efficiency gains and losses for the 2018–22 access arrangement period are set out in table 9.2 of attachment 9.

5.8 Corporate income tax

Multinet has adopted the post-tax framework to derive its revenue requirement for the 2018–22 access arrangement period.⁴⁷ Under the post-tax framework, a separate corporate income tax allowance is calculated as part of the building blocks assessment.

Table 5-10 sets out our draft decision on the estimated cost of corporate income tax allowance for Multinet.

Table 5-10 AER's draft decision on corporate income tax allowance for Multinet (\$ million, nominal)

	2018	2019	2020	2021	2022	Total
Tax payable	16.9	16.9	18.0	21.8	21.8	95.4
Less: value of imputation credits	6.7	6.8	7.2	8.7	8.7	38.2
Net corporate income tax allowance	10.1	10.1	10.8	13.1	13.1	57.3

Source: AER analysis.

⁴⁷ Multinet, *Access arrangement information*, December 2016, p. 147

We approve Multinet's proposed approach to calculate its forecast corporate income tax allowance. Multinet's proposed approach is consistent with the AER's post-tax revenue model (PTRM) for electricity service providers and the approach previously approved in gas access arrangement decisions.

However, we do not accept Multinet's proposed corporate income tax allowance of \$101.3 million (\$ nominal) for the 2018–22 access arrangement period. Our draft decision on Multinet's corporate income tax allowance over the 2018–22 access arrangement period is \$57.3 million (\$ nominal).

Our draft decision includes amendments to Multinet's proposed inputs for forecasting the cost of corporate income tax including the opening tax asset base (TAB), the remaining tax asset lives and the value of imputation credits (gamma). Our reductions to other building block costs, such as the rate of return on capital, return of capital (depreciation)⁴⁸ and forecast opex also reduce revenues, which in turn impact the tax calculation.⁴⁹

When these factors are taken into account, our draft decision reduces Multinet's proposed corporate income tax allowance of \$101.3 million over the 2018–22 access arrangement period by \$44.0 million (\$ nominal), or 43.5 per cent.

⁴⁸ The forecast capex amount is a key input for calculating both the return of and return on capital building blocks.

⁴⁹ Changes to other building block costs affect revenues, which also impact the tax calculation.

6 New incentive scheme proposed for 2018–22

Multinet proposed the addition of a new, Network Innovation Competition (NIC) to its access arrangement from 1 January 2018. Multinet's proposed scheme—a competition between network businesses for a pool of funding in order to develop and demonstrate new technologies—was not set out in detail in its proposal. Instead, Multinet proposed that the detailed design could be formulated through an engagement process.⁵⁰

We understand that in general regulated monopolies face a reduced incentive to innovate when compared to competitive businesses. For a regulated network business, any savings resulting from innovation in one period may lead to a lower revenue allowance in the next period. Therefore, businesses may avoid investments that could have a significant social benefit but would ultimately result in decreased revenue allowance in the subsequent period.

Our assessment is that Multinet's proposal does not address this incentive problem for the following reasons:

- Consumers bear 100 per cent of the cost of the investment, and therefore 100 per cent of the risk that the innovation project is unsuccessful.
- It is not clear how the benefits of innovation would be shared between consumers and Multinet.
- Multinet's proposal for a NIC is not targeted at a specific social or economic problem (such as emissions reduction as the scheme is in Great Britain).⁵¹

We also consider that Multinet has sufficient incentives and opportunities to invest in innovation efficiency enhancements under the current regulatory framework. Our revenue determinations provide total allowances for specific purposes, such as capex and opex investment. Service providers then decide how to spend those allowances as they consider most appropriate, which could include innovative projects that assist service providers to provide cost efficient and customer focused services.

On balance, we do not believe that a NIC will encourage efficiency in the provision of services by Multinet in the long term interests of consumers. We think that the current framework provides sufficient opportunity to invest in innovation while allowing businesses to retain any efficiency benefits.

⁵⁰ Multinet Gas, *2018 to 2022 Access Arrangement Information*, December 2016, p. 136.

⁵¹ See: <https://www.ofgem.gov.uk/gas/distribution-networks/network-innovation>

7 Non-tariff components

The non-tariff components of an access arrangement include:

- the terms and conditions for the supply of reference services
- extension and expansion requirements—the method for determining whether an extension or expansion is a part of the covered pipeline and the effect this will have on tariffs
- capacity trading requirements—the arrangements for users to assign contracted capacity and change delivery and receipt points
- provisions for receipt and delivery point changes, and
- a review submission date and a revision commencement date.⁵²

We accept these components of Multinet's access arrangement in full.

In accepting Multinet's proposed review submission date of 1 January 2022 (which is consistent with the date of submission in this review), we note that AGN proposed a review submission date of 1 December 2021 for its Victoria and Albury access arrangement. AusNet Services has indicated it is also prepared to adopt this earlier date. This means we will be able to extend consultation on AGN's and AusNet's proposals to manage limited stakeholder availability over the Christmas and New Year holiday period. In its revised proposal we encourage Multinet to consider a 1 December 2021 review submission date as well.

⁵² Although not required in the present case, all transmission pipelines and some distribution pipelines are also required to set out how any spare or developable capacity will be allocated among prospective users ('queuing requirements' - see NGR r. 103.

8 Understanding the NGO

The NGO is the central feature of the regulatory framework. The NGO is

to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.⁵³

Energy Ministers have provided us with a substantial body of explanatory material that guides our understanding of the NGO.⁵⁴ The long term interests of consumers are not delivered by any one of the NGO's factors in isolation, but rather by balancing them in reaching a regulatory decision.⁵⁵

In general, we consider that we will achieve this balance and, therefore, contribute to the achievement of the NGO, where consumers are provided a reasonable level of safe and reliable service that they value at least cost in the long run.⁵⁶ We have also considered the quality and reliability of services provided to consumers. For example, the opex allowance and pass through mechanism approved in this draft decision has been set so that Multinet can meet existing and new regulatory requirements. Our approved capex forecast includes expenditure to replace assets that are aged or in unacceptable condition.

The nature of decisions under the NGR is such that there may be a range of economically efficient decisions, with different implications for the long term interests of consumers.⁵⁷ At the same time, however, there are a range of outcomes that are unlikely to advance the NGO, or not advance the NGO to the degree that others would.

For example, we do not consider that the NGO would be advanced if allowed revenues encourage overinvestment and result in prices so high that consumers are unwilling or unable to efficiently use the network.⁵⁸ This could have significant longer term pricing implications for those consumers who continue to use network services.

Equally, we do not consider the NGO would be advanced if allowed revenues result in prices so low that investors are unwilling to invest as required to adequately maintain the appropriate quality and level of service, and where customers are making more use of the network than is sustainable. This could create longer term problems in the

⁵³ NGL, s. 23.

⁵⁴ Hansard, *SA House of Assembly*, 9 February 2005, pp. 1451–1460.
Hansard, *SA House of Assembly*, 27 September 2007, pp. 963–972.
Hansard, *SA House of Assembly*, 26 September 2013, pp. 7171–7176.

⁵⁵ Hansard, *SA House of Assembly*, 26 September 2013, p. 7173.

⁵⁶ Hansard, *SA House of Assembly*, 9 February 2005, p. 1452.

⁵⁷ *Re Michael: Ex parte Epic Energy* [2002] WASCA 231 at [143].

Energy Ministers also accept this view – see Hansard, *SA House of Assembly*, 26 September 2013 p. 7172.

AEMC, *Rule Determination National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 No. 18*, p. 50.

⁵⁸ NGL, s. 24(7).

network⁵⁹ and could have adverse consequences for safety, security and reliability of the network.

The NGL also includes the revenue and pricing principles (RPP), which support the NGO.⁶⁰ As the NGL requires,⁶¹ we have taken the RPPs into account throughout our analysis under the NGR. The RPPs are:

A service provider should be provided with a reasonable opportunity to recover at least the efficient costs the service provider incurs in—

- providing reference services; and
- complying with a regulatory obligation or requirement or making a regulatory payment.

A service provider should be provided with effective incentives in order to promote economic efficiency with respect to reference services the service provider provides. The economic efficiency that should be promoted includes—

- efficient investment in, or in connection with, a pipeline with which the service provider provides reference services; and
- the efficient provision of pipeline services; and
- the efficient use of the pipeline.

Regard should be had to the capital base with respect to a pipeline adopted—

- in any previous—
- full access arrangement; or
- decision of a relevant regulator under section 2 of the Gas Code; or
- in the Rules.

A reference tariff should allow for a return commensurate with the regulatory and commercial risks involved in providing the reference service to which that tariff relates.

Regard should be had to the economic costs and risks of the potential for under and over investment by a service provider in a pipeline with which the service provider provides pipeline services.

Regard should be had to the economic costs and risks of the potential for under and over utilisation of a pipeline with which a service provider provides pipeline services.

⁵⁹ NGL, s. 24(6).

⁶⁰ NGL, s. 24.

⁶¹ NGL, s. 28(2).

Consistent with Energy Ministers' views, we set the amount of revenue that service providers can recover from customers to balance all of the elements of the NGO and consider each of the RPPs.⁶² For example:

- In determining forecast opex and capex that reasonably reflects the opex and capex criteria, we take into account the revenue and pricing principle that we should provide Multinet with a reasonable opportunity to recover at least efficient costs (refer to capex attachment 6 and opex attachment 7).
- We take into account the economic costs and risks of the potential for under and over investment by a service provider in our assessment of Multinet's forecast capex and opex proposals (refer to capex attachment 6 and opex attachment 7).
- We consider the economic costs and risks of the potential for under and over utilisation of Multinet's network in our decisions on demand forecasting and forecast augmentation capex (refer to capex attachment 6 and demand attachment 13).
- The opex efficiency carryover mechanism in this decision provides Multinet with effective incentives which we consider will promote economic efficiency with respect to the reference service that Multinet provides throughout the access arrangement period (refer to efficiency carryover mechanism attachment 9).
- We have determined Multinet's opening capital base taking into account the capital adopted in the previous access arrangement (refer to capital base attachment 2).
- The allowed rate of return objective reflects the revenue and pricing principle in s. 24(5). We have determined a rate of return that we consider will provide Multinet with a return commensurate with the regulatory and commercial risks involved in providing pipeline services (refer to rate of return attachment 3).
- Our financing determinations provide Multinet with a reasonable opportunity to recover at least the efficient costs of accessing debt and capital (refer to rate of return attachment 3).

In some cases, our approach to a particular component (or part thereof) results in an outcome towards the end of the range of options that results in higher revenue than another option. Some of these decisions include:

- selecting at the top of the range for the equity beta
- setting the return on debt by reference to data for a BBB broad band credit rating, when the benchmark is BBB+
- the cash flow timing assumptions in the post-tax revenue model.

We take into account the RPPs when exercising discretion about an appropriate estimate. The legislative framework recognises the complexity of this task by providing

⁶² Hansard, SA House of Assembly, 27 September 2007 pp. 965, Hansard, SA House of Assembly, 9 April 2008 p. 2886, Hansard, SA House of Assembly, 26 September 2013, p. 7173.

us with significant discretion in many aspects of the decision-making process to make judgements on these matters.

Part 9 of the NGR provides specifically for the economic regulation of covered pipelines. It includes detailed rules about the individual components of our decisions. These are intended to contribute to the achievement of the NGO.

8.1 Achieving the NGO to the greatest degree

An access arrangement decision is complex. In most instances, the provisions of the NGR do not point to a single answer, either for our decision as a whole or in respect of particular components. They require us to exercise our regulatory judgment. For example, Part 9 of the NGR requires us to prepare forecasts, which are predictions about unknown future circumstances. There may be more than one plausible forecast. There is substantial debate amongst stakeholders about the costs we must forecast, supported by expert opinion. As a result, for certain components of our decision there may be several plausible answers or several plausible point estimates.

We approach this from a practical perspective, accepting that it is not possible to consider every permutation specifically. Where there are choices to be made among several plausible alternatives each of which would result in an overall decision that contributes to the achievement of the NGO, we have selected what we are satisfied would result in an overall decision that contributes to the achievement of the NGO to the greatest degree.⁶³

In reaching this draft decision we have considered Multinet's proposal and examined each of the building block components of the forecast revenue requirement, and the incentive mechanisms that should apply across the next access arrangement period. We have considered submissions we received in regard to Multinet's proposal. We have conducted our own analysis and engaged expert consultants to help us better understand if and how Multinet's proposal contributes to the achievement of the NGO. We have also considered how the individual components of our decision relate to each other, the impact that particular components of our decision have on others, and have described these interrelationships in this draft decision. We have had regard to and weighed up all of the information assembled before us in making this draft decision, and have made as much of this information publicly available as practicable for the purposes of consultation.

Therefore, we are satisfied that among the options before us, our draft decision on Multinet's access arrangement for the 2018–22 access arrangement period contributes to achieving the NGO to the greatest degree.

⁶³ NGL, s. 28(1)(b)(iii).

8.1.1 Interrelationships between individual components

Considering individual components in isolation ignores the importance of interrelationships between components of the overall decision, and would not contribute to the achievement of the NGO. As outlined by Energy Ministers, considering the elements in isolation has resulted in regulatory failures in the past.⁶⁴ Interrelationships can take various forms, including:

- underlying drivers and context which are likely to affect many constituent components of our decision. For example, forecast demand affects the forecasts of efficient levels of capex and opex in the access arrangement period (see attachments 6, 7 and 13).
- direct mathematical links between different components of a decision. For example, the value of imputation credits (γ) has an impact on the appropriate tax allowance; the benchmark efficient entity's debt to equity ratio has a direct effect on the cost of equity, the cost of debt, and the overall vanilla rate of return (see attachments 3, 4 and 8).
- trade-offs between different components of revenue. For example, undertaking a particular capex project may affect the need for opex and vice versa (see attachments 6 and 7).
- trade-offs between forecast and actual regulatory measures. The reasons supporting one part of a proposal may have impacts on other parts of a proposal. For example, completion of forecast augmentation (capex) to the network will mean the service provider has more assets to maintain, leading to higher opex requirements (see attachments 6 and 7).
- the service provider's approach to managing its network. The service provider's governance arrangements and its approach to risk management will influence most aspects of the proposal, including capex/opex trade-offs (see attachments 6 and 7).

We have considered interrelationships, including those above, in our analysis of the individual components of our draft decision. These considerations are explored in the relevant attachments.

⁶⁴ SCER, *Regulation Impact Statement: Limited Merits Review of Decision-Making in the Electricity and Gas Regulatory Frameworks – Decision Paper*, 6 June 2013 p. 6.

9 Consultation

Stakeholder participation is important to informed decision making under the NGL and NGR. It allows us to take a range of views into account when considering how a proposal or decision contributes to the NGO. Effective consultation and engagement provide confidence in our processes and are good regulatory practice. This is reflected in the consultation process set out in the NGR, under which we have:

- published Multinet's access arrangement revision proposal and the material Multinet provided in support of that proposal
- invited and had regard to submissions on Multinet's proposal
- held a public forum on Multinet's proposal
- published this draft decision and reasoning
- invited written submissions on this draft decision.

We have also consulted on our approaches to these reviews: our 2013 Better Regulation Program brought a wide range of views to our development of assessment tools and techniques and our approaches to decision making. More recently, we have commenced consultation on approaches to forecasting inflation for the purposes of modelling regulated revenues. Our continued engagement on these processes enables us to identify and reflect stakeholder priorities and will result in decisions that will or are likely to contribute to the achievement of the NGO to the greatest degree.

9.1 Multinet's engagement with customers

Multinet undertook its own engagement process in the development of its proposal, an overview of which was provided in support of that proposal.⁶⁵ Submissions noted that Multinet had 'frank and open consultation and varied its regulatory proposal to accommodate several industry suggestions'.⁶⁶

Multinet also consulted jointly with other Victorian gas distributors on incentive arrangements for gas distributors, with that consultation informing its proposed NIS.⁶⁷ This joint consultation on common issues seems to have been particularly well received, and consumer representatives have indicated that they would have preferred more combined forums.⁶⁸

⁶⁵ Multinet Gas - 2018 to 2022 Access Arrangement Information - 20161221, pp. 21-23; Multinet Gas - 7.1 - Stakeholder Engagement Overview - 20161215; See also Attachments 7.2 to 7.5 of Multinet's proposal.

⁶⁶ AGL Energy Limited - Victorian gas access arrangement proposals - 31 March 2017, p. 3.

⁶⁷ Multinet Gas - 2018 to 2022 Access Arrangement Information - 20161221, p. 136.

⁶⁸ Consumer Challenge Panel (CCP 11) - Response to proposals from AGN, AusNet and Multinet for the 2018-2022 Access Arrangements - 3 March 2017, p. 33.

We tasked the AER Consumer Challenge Panel (CCP11) specifically with advising the AER on the effectiveness of Multinet's engagement activities with its customers and how this was reflected in the development of its proposal.

CCP11 commended Multinet on its consumer and stakeholder engagement activities, which sought to involve stakeholders in the regulatory process, informing them of Multinet's plans and listening to and acting on stakeholder feedback. In considering its advice to us, CCP11 sought views from consumer representatives on their engagement with Multinet.⁶⁹ Those views were generally positive.⁷⁰

Multinet itself has recognised that:

...best practice engagement should be an integral and on-going part of our operating model. This requires a shift in culture, the introduction of new specialist skills and time to build understanding and trust with an extensive group of stakeholders who have an interest in our services.⁷¹

Feedback recognised that Multinet had learnt from its experience in last year's electricity distribution determination process for United Energy and its engagement on United Energy's tariff structure statement.⁷²

CCP11's advice identified a number of specific areas in which it suggests Multinet could further improve its engagement, which we encourage Multinet to look to in future processes. That advice⁷³ is available on our website for the benefit of other businesses as well as Multinet. Two key themes emerged:

- Previous advice from the CCP has suggested that the most reliable approach to willingness to pay studies is to undertake a 'discrete choice experiment', in which customers are offered a range of options of prices and services. In contrast, CCP11 was concerned that Multinet's focus groups may have relied on presentations provided to those groups to inadvertently feed back to Multinet what it wanted to hear.⁷⁴
- In addition to reporting feedback on consumer engagement in a dedicated section of (or attachment to) the access arrangement information, CCP11 saw benefit in

⁶⁹ Consumer Challenge Panel (CCP 11) - *Response to proposals from AGN, AusNet and Multinet for the 2018-2022 Access Arrangements* - 3 March 2017, p. 33.

⁷⁰ Consumer Challenge Panel (CCP 11) - *Response to proposals from AGN, AusNet and Multinet for the 2018-2022 Access Arrangements* - 3 March 2017, p. 34.

⁷¹ Multinet Gas - *2018 to 2022 Access Arrangement Information* - 20161221, p. 21.

⁷² Consumer Challenge Panel (CCP 11) - *Response to proposals from AGN, AusNet and Multinet for the 2018-2022 Access Arrangements* - 3 March 2017, p. 34.

⁷³ Consumer Challenge Panel (CCP 11) - *Response to proposals from AGN, AusNet and Multinet for the 2018-2022 Access Arrangements* - 3 March 2017, pp.34-37.

⁷⁴ Consumer Challenge Panel (CCP 11) - *Response to proposals from AGN, AusNet and Multinet for the 2018-2022 Access Arrangements* - 3 March 2017, pp. 34-36. CCP11 gave the particular example of a presentation on the Multinet's proposed digital metering program, in which Multinet first showed participants a slide outlining its expected benefits and cost savings of that program, and then immediately asked participants if they saw benefits in the program.

including discussion of feedback relevant to expenditure and other proposals throughout the access arrangement information. This would have enabled Multinet to provide more detailed feedback on how consumers' views had been considered at each step of its proposal.⁷⁵

⁷⁵ Consumer Challenge Panel (CCP 11) - *Response to proposals from AGN, AusNet and Multinet for the 2018-2022 Access Arrangements* - 3 March 2017, p. 37.

A List of submissions

This draft decision has been made with regard to submissions from the following stakeholders on Multinet's proposal:

Submission from:	Date received*
Jemena Gas Networks	2 March 2017
Consumer Challenge Panel (CCP11)	3 March 2017
Origin Energy	10 March 2017
AGL Energy Limited	21 March 2017
Beverly Hughson	22 March 2017

* This column lists the date on which submissions were *received* by the AER, which may differ from the date on the submission itself.