

DRAFT DECISION Multinet Gas access arrangement 2018 to 2022

Attachment 2 – Capital base

July 2017



© Commonwealth of Australia 2017

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attributions 3.0 Australia licence, with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication. The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the:

Director, Corporate Communications Australian Competition and Consumer Commission GPO Box 4141, Canberra ACT 2601

or publishing.unit@accc.gov.au.

Inquiries about this publication should be addressed to:

Australian Energy Regulator GPO Box 520 Melbourne Vic 3001

Tel: 1300 585 165

Email: <u>AERInquiry@aer.gov.au</u>

Note

This attachment forms part of the AER's draft decision on the access arrangement for Multinet Gas 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

Contents

No	ote			2-2				
Со	ontent	s	2	2-3				
Sh	orten	ed forn	ns2	<u>?-4</u>				
2	Capital base2-5							
	2.1	Draft de	ecision2	2-5				
	2.2	Multine	et's proposal2	2-7				
	2.3 Assessment approach2-							
	2	2.3.1	Interrelationships2	2-9				
	2.4 Reasons for draft decision2-1							
		2.4.1 period	Roll forward of capital base during the 2013–17 access arrangem2-					
		2.4.2 period	Projected capital base during the 2018–22 access arrangement 2-	14				
		2.4.3 arrangen	Capital base at the commencement of the 2023–27 access nent period2-	-16				
	2.5 Revisions2-17							

Shortened forms

AERAustralian Energy RegulatorATOAustralian Tax Officecapexcapital expenditureCAPMcapital asset pricing modelCESSCapital Expenditure Sharing SchemeCPIconsumer price indexDRPdebt risk premiumECM(Opex) Efficiency Carryover MechanismERPequity risk premiumBarnanvalue of Imputation CreditsMRPmarket risk premiumNGQnational gas objectiveNGRnational gas objectiveNGRnational Gas RulesNPVoperationationPRAsolard AustralianRRARever Bank of AustralianRRARever Bank of AustralianNGRrever NeurolendelleRARrever NeurolendelleRARRever Bank of AustralianRARrever NeurolendelleRARrever NeurolendelleRARRever Bank of AustraliaRARrever NeurolendelleRARrever NeurolendelleRARSchart Rever NeurolendelleRARRever Bank of AustraliaRARSchart Rever NeurolendelleRARRever Bank of AustraliaRARSchart Rever NeurolendelleRARRever Bank of AustraliaRARSchart Rever NeurolendelleRARSchart Rever NeurolendelleRARSchart Rever NeurolendelleRARSchart Rever NeurolendelleRARSchart Rever NeurolendelleRARSchart Rever NeurolendelleRAR <td< th=""><th>Shortened form</th><th>Extended form</th></td<>	Shortened form	Extended form
capexcapital expenditureCAPMcapital asset pricing modelCESSCapital Expenditure Sharing SchemeCPIconsumer price indexDRPdett risk premiumECM(Opex) Efficiency Carryover MechanismERPequity risk premiumgammaKapenditure Forecast Assessment GuidelineMRPmarket risk premiumNGLNational Gas LawNGQnational Gas RulesNPVnational Gas RulesPRMoperating expenditureOpexgenting expenditureNGRnotional Gas RulesNFMnet present valueOpexford nodelRRMingerenditureNGRingerenditureREAingerenditureREAingerenditureREAingerenditur	AER	Australian Energy Regulator
CAPMcapital asset pricing modelCESSCapital Expenditure Sharing SchemeCPIconsumer price indexDRPdebt risk premiumECM(Opex) Efficiency Carryover MechanismERPequity risk premiumExpenditure GuidelineExpenditure Forecast Assessment GuidelinegammaValue of Imputation CreditsNGPnarket risk premiumNGQnational Gas LawNGRNational Gas RulesNPVoperating expenditureopexoperating expenditurengRAReserve Bank of AustraliaRFMregulatory information noticeRPNregulatory information noticeRPNmarket resure and pricing principles	ATO	Australian Tax Office
CESSCapital Expenditure Sharing SchemeCPIconsumer price indexDRPdebt risk premiumECM(Opex) Efficiency Carryover MechanismERPequity risk premiumExpenditure GuidelineExpenditure Forecast Assessment GuidelinegammaValue of Imputation CreditsMRPmarket risk premiumNGCNational Gas LawNGQnational gas objectiveNGRoperating expenditureopexoperating expenditureopexoperating expenditureRBAReserve Bank of AustraliaRFMregulatory information noticeRPNingliatory information noticeRPNingliatory information noticeRPAScherve Bank of AustraliaRPAingliatory information noticeRPAingliatory information noticeRPA	capex	capital expenditure
CPIconsumer price indexDRPdebt risk premiumECM(Opex) Efficiency Carryover MechanismERPequity risk premiumExpenditure GuidelineExpenditure Forecast Assessment GuidelinegammaValue of Imputation CreditsMRPmarket risk premiumNGLNational Gas LawNGQnational gas objectiveNGRNational Gas RulesNPVnet present valueopexoperating expenditureRBAReserve Bank of AustraliaRFMroll forward modelRINregulatory information noticeRPPinformation noticeRPPrevenue and pricing principlesSLCAPMSharpe-Lintner capital asset pricing model	САРМ	capital asset pricing model
DRPdebt risk premiumECM(Opex) Efficiency Carryover MechanismERPequity risk premiumExpenditure GuidelineExpenditure Forecast Assessment GuidelinegammaValue of Imputation CreditsMRPmarket risk premiumNGCnational gas objectiveNGRNational Gas RulesNPVnet present valueopexoperating expenditureRBAReserve Bank of AustraliaRIMregulatory information noticeRPPinglatory i	CESS	Capital Expenditure Sharing Scheme
ECM(Opex) Efficiency Carryover MechanismERPequity risk premiumExpenditure GuidelineExpenditure Forecast Assessment GuidelinegammaValue of Imputation CreditsMRPmarket risk premiumNGCnational Gas LawNGQnational Gas RulesNFVnet present valueopexoperating expenditurePTRMpost-tax revenue modelRBAReserve Bank of AustraliaRINrel provant modelRPPindironation noticeRPPrevenue and pricing principlesSLCAPMSharpe-Linter capital asset pricing model	CPI	consumer price index
ERPequity risk premiumExpenditure GuidelineExpenditure Forecast Assessment GuidelinegammaValue of Imputation CreditsMRPmarket risk premiumNGLNational Gas LawNGOnational gas objectiveNGRNational Gas RulesNPVnet present valueopexoperating expenditureRBAReserve Bank of AustraliaRFMnol forward modelRINegulatory information noticeRPPingene and pricing principlesSLCAPMSharpe-Linter capital asset pricing model	DRP	debt risk premium
Expenditure GuidelineExpenditure Forecast Assessment GuidelinegammaValue of Imputation CreditsMRPmarket risk premiumNGLNational Gas LawNGOnational gas objectiveNGRNational Gas RulesNPVnet present valueopexoperating expenditurePTRMpost-tax revenue modelRBAReserve Bank of AustraliaRFMregulatory information noticeRPPrevenue and pricing principlesSLCAPMSharpe-Lintner capital asset pricing model	ECM	(Opex) Efficiency Carryover Mechanism
gammaValue of Imputation CreditsMRPmarket risk premiumNGLNational Gas LawNGOnational gas objectiveNGRNational Gas RulesNPVnet present valueopexoperating expenditurePTRMpost-tax revenue modelRBAReserve Bank of AustraliaRINregulatory information noticeRPPevenue and pricing principlesSLCAPMShape-Lintner capital asset pricing model	ERP	equity risk premium
MRPmarket risk premiumNGLNational Gas LawNGOnational gas objectiveNGRNational Gas RulesNPVnet present valueopexoperating expenditurePTRMpost-tax revenue modelRBAReserve Bank of AustraliaRFMroll forward modelRINregulatory information noticeRPPSharpe-Lintner capital asset pricing model	Expenditure Guideline	Expenditure Forecast Assessment Guideline
NGLNational Gas LawNGOnational gas objectiveNGRNational Gas RulesNPVnet present valueopexoperating expenditurePTRMpost-tax revenue modelRBAReserve Bank of AustraliaRFMroll forward modelRINsequal prioripation noticeRPPsevenue and prioripation sevenue modelSLCAPMShape-Lintner capital asset prioring model	gamma	Value of Imputation Credits
NGOnational gas objectiveNGRNational Gas RulesNPVnet present valueopexoperating expenditurePTRMpost-tax revenue modelRBAReserve Bank of AustraliaRFMroll forward modelRINregulatory information noticeRPPscherue and pricing principlesSLCAPMSharpe-Lintner capital asset pricing model	MRP	market risk premium
NGRNational Gas RulesNPVnet present valueopexoperating expenditurePTRMpost-tax revenue modelRBAReserve Bank of AustraliaRFMroll forward modelRINregulatory information noticeRPPsharpe-Lintner capital asset pricing model	NGL	National Gas Law
NPVnet present valueopexoperating expenditurePTRMpost-tax revenue modelRBAReserve Bank of AustraliaRFMroll forward modelRINregulatory information noticeRPPsharpe-Lintner capital asset pricing model	NGO	national gas objective
opexoperating expenditurePTRMpost-tax revenue modelRBAReserve Bank of AustraliaRFMroll forward modelRINregulatory information noticeRPPsharpe-Lintner capital asset pricing model	NGR	National Gas Rules
PTRMpost-tax revenue modelRBAReserve Bank of AustraliaRFMroll forward modelRINregulatory information noticeRPPrevenue and pricing principlesSLCAPMSharpe-Lintner capital asset pricing model	NPV	net present value
RBAReserve Bank of AustraliaRFMroll forward modelRINregulatory information noticeRPPrevenue and pricing principlesSLCAPMSharpe-Lintner capital asset pricing model	opex	operating expenditure
RFM roll forward model RIN regulatory information notice RPP revenue and pricing principles SLCAPM Sharpe-Lintner capital asset pricing model	PTRM	post-tax revenue model
RIN regulatory information notice RPP revenue and pricing principles SLCAPM Sharpe-Lintner capital asset pricing model	RBA	Reserve Bank of Australia
RPP revenue and pricing principles SLCAPM Sharpe-Lintner capital asset pricing model	RFM	roll forward model
SLCAPM Sharpe-Lintner capital asset pricing model	RIN	regulatory information notice
	RPP	revenue and pricing principles
STTM Short Term Trading Market	SLCAPM	Sharpe-Lintner capital asset pricing model
	STTM	Short Term Trading Market
TAB Tax asset base	ТАВ	Tax asset base
UAFG Unaccounted for gas	UAFG	Unaccounted for gas
WACC weighted average cost of capital	WACC	weighted average cost of capital
WPI Wage Price Index	WPI	Wage Price Index

2 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).¹ Following this process, we arrive at a closing value of the capital base at the end of the relevant year. The opening value of the capital base is used to determine the return of capital (regulatory depreciation) and return on capital building block allowances.

This attachment sets out our draft decision on Multinet's opening capital base as at 1 January 2018 for the 2018–22 access arrangement period. It also sets out our draft decision on Multinet's projected capital base for the 2018–22 access arrangement period.

2.1 Draft decision

We do not approve Multinet's proposed opening capital base of \$1190.8 million (\$ nominal) as at 1 January 2018. This is because we made several amendments to Multinet's proposed roll forward model (RFM) to correct some inputs and modelling errors.

We determine an opening capital base of \$1192.4 million (\$ nominal) as at 1 January 2018, which is \$1.6 million (or 0.1 per cent) higher than that proposed by Multinet.

Table 2.1 summarises our draft decision on the roll forward of Multinet's capital base during the 2013–17 access arrangement period.

¹ The term 'rolled forward' means the process of carrying over the value of the capital base from one regulatory year to the next.

Table 2.1AER's draft decision on Multinet's capital base roll forward forthe 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
Opening capital base as at 1 January 2018				1192.4ª	

Source: AER analysis.

(a) There is no true-up required for 2012 capex. This is because actual 2012 capex was included in Multinet's 2013 approved opening capital base. This occurred as part of the amendments to the 2013–17 access arrangement that followed a decision by the Australian Competition Tribunal.

We do not approve Multinet's proposed roll forward of its projected capital base over the 2018–22 access arrangement period, and do not approve its closing capital base at 31 December 2022 of \$1446.1 million (\$ nominal). This is because we have not approved Multinet's proposed inputs to the projected capital base roll forward, specifically the opening capital base (section 2.4.1), depreciation (attachment 5) and forecast capex (attachment 6). Based on our approved amounts for 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.

Table 2.2 sets out the projected roll forward of the capital base during the 2018–22 access arrangement period.

Table 2.2 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

2.2 Multinet's proposal

Multinet proposed an opening capital base as at 1 January 2018 of \$1190.8 million (\$ nominal). This amount is calculated by rolling forward the opening capital base as at 1 January 2013 of \$1055.0 million (\$ nominal) by adding actual net capex, removing approved forecast depreciation and adding inflation indexation on the opening capital base in each year of the 2013–17 access arrangement period.

Multinet's proposed capital base roll forward during the 2013–17 access arrangement period is shown in Table 2.3.

Table 2.3Multinet's proposed capital base roll forward during the2013—17 access arrangement period (\$million, nominal)

	2013	2014	2015	2016	2017
Opening capital base	1055.0	1087.8	1109.1	1135.7	1166.1
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	59.1	62.3	65.5
Closing capital base	1087.8	1109.1	1135.7	1166.1	1190.8
Opening capital base as at 1 January 2018				1190.8 ^ª	

Source: Multinet Gas - 0.2 - Roll Forward Model - 20161221 - PUBLIC.

(a) There is no true-up required for 2012capex. This is because actual 2012 capex was included in Multinet's 2013 approved opening capital base. This occurred as part of the amendments to the 2013–17 access arrangement that followed a decision by the Australian Competition Tribunal.

Multinet proposed a projected closing capital base as at 31 December 2022 of \$1446.1 million (\$ nominal). Multinet determined this value by adjusting the closing value at 31 December 2017 for forecast net capex (attachment 6), depreciation (attachment 5) and expected inflation (attachment 3). The projected roll forward of the capital base during the 2018–22 access arrangement period is shown in Table 2.4.

Table 2.4Multinet's proposed projected capital base roll forward duringthe 2018–22 access arrangement period (\$million, nominal)

	2018	2019	2020	2021	2022
Opening capital base	1190.8	1255.0	1301.7	1353.9	1405.0
Net capex	110.8	94.9	100.9	103.0	96.6
Indexation of capital base	20.0	21.1	21.9	22.7	23.6
Less: straight-line depreciation	66.6	69.3	70.5	74.7	79.1
Closing capital base	1255.0	1301.7	1353.9	1405.0	1446.1

Source: Multinet Gas - 0.1 - Access Arrangement Review Pricing Model - 20161221 - PUBLIC.

Multinet proposed to use forecast depreciation to determine the opening capital base as at 1 January 2022, consistent with the approach applied in the access arrangement for the 2013–17 period.²

2.3 Assessment approach

Our approach to assessing Multinet's projected capital base is consistent with that adopted in previous gas decisions made under the NGR.³ In accordance with rule 77(2) and rule 78 of the NGR, we applied three steps to calculate the projected capital base:

- First, we confirm the value of the opening capital base for the first year of the 2013–17 access arrangement period (in this case, 1 January 2013). This includes making an adjustment to account for any difference between actual and estimated capex in the final year of the previous access arrangement period (in this case, 2012).⁴ This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capex for that year.⁵ We note that this adjustment is subject to any further changes made in our assessment of conforming capex for 2012.
- Second, the opening capital base as at 1 January 2013 is rolled forward to determine the closing capital base as at 31 December 2017. This closing capital

² Multinet, Email response - RE: Depreciation to establish opening 2023 Capital Base and RIN templates (Tab 26), 9 January 2017.

³ For example, AER, Final decision: Jemena Gas Networks (NSW) access arrangement 2015–20, June 2015; AER, Final decision: ActewAGL access arrangement 2016–21, May 2016; AER, Final decision: Australian Gas Networks (SA) access arrangement 2016–21, May 2016.

⁴ This is not required for Multinet because actual 2012 capex was included in Multinet's 2013 approved opening capital base. This occurred as part of the amendments to the 2013–17 access arrangement that followed a decision by the Australian Competition Tribunal.

⁵ NGR, r. 77(2)(a).

base is also used as the value of the opening capital base for the access arrangement period as at 1 January 2018. This involves:⁶

- adding conforming actual capex for each year—this requires assessing the capex and determining that it is consistent with the provisions of the 2013–17 access arrangement and data from audited annual reporting regulatory information notices, as well as the definition of 'conforming capital expenditure' in the NGR⁷
- removing depreciation for each year based on the approach approved for the 2013–17 access arrangement
- removing any capital contributions during the 2013–17 access arrangement period⁸
- adding any speculative capex or redundant assets that were reused during the 2013–17 access arrangement period
- removing any redundant assets and disposals during the 2013–17 access arrangement period
- o indexing the roll forward each year for actual inflation.
- Third, the capital base is projected over the 2018–22 access arrangement period by rolling forward the opening capital base as at 1 January 2018 to 31 December 2022. This involves performing the following on the opening capital base:⁹
 - adding forecast conforming capex for each year, net of any forecast capital contributions
 - o removing forecast depreciation for each year
 - removing the forecast value of assets to be disposed of during the 2018–22 access arrangement period
 - o indexing the capital base of the roll forward each year for expected inflation.

2.3.1 Interrelationships

The level of the capital base substantially impacts the service provider's revenue and the price consumers pay. It is an input into the determination of the return on capital and depreciation (return of capital) allowances.¹⁰ Factors that influence the capital base will therefore flow through to these building block components and the annual building block revenue requirement. Other things being equal, a higher capital base

⁶ NGR, r. 77(2).

⁷ NGR, r. 79(1).

⁸ NGR, r. 82(3).

⁹ NGR, r. 78.

¹⁰ The size of the capital base also impacts the benchmark debt raising cost allowance. However, this amount is usually relatively small and therefore not a significant determinant of revenues overall.

increases both the return on capital and depreciation allowances. In turn, it increases the service provider's revenue, and prices for its services.

The capital base is determined by various factors, including;

- the opening capital base (meaning the value of existing assets at the beginning of the access arrangement period)
- net capex¹¹
- depreciation
- indexation adjustment so the capital base is presented in nominal terms, consistent with the rate of return.

The opening capital base depends on the value of existing assets as well as actual conforming net capex, actual inflation outcomes and depreciation in the past.

The capital base when projected to the end of the access arrangement period may increase due to forecast new capex and the indexation adjustment. The size of the indexation adjustment depends on expected inflation (which also affects the nominal rate of return or WACC) and the size of the capital base at the start of each year.

Depreciation reduces the capital base. The depreciation allowance depends on the size of the opening capital base, the forecast net capex and the depreciation schedules applied to the assets.

We maintain the capital base in real terms by indexing for inflation. A nominal rate of return (WACC) is multiplied by the opening capital base to produce the return on capital building block.¹² By convention, the indexation adjustment is offset against depreciation to prevent double counting of inflation in the capital base and WACC, which are both presented in nominal terms. This reduces the apparent size of the depreciation building block that feeds into the annual building block model for setting revenue.¹³ The implications of our approach to indexing the value of the capital base on revenues are discussed further in attachment 5.

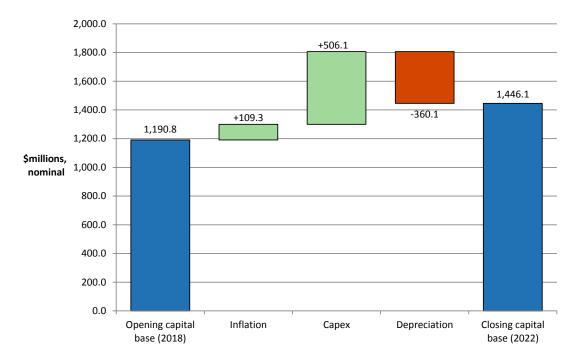
Figure 2.1 shows the key drivers of the change in the capital base over the 2018–22 access arrangement period as proposed by Multinet. Overall, the closing capital base at the end of the 2018–22 access arrangement period would be 21.4 per cent higher than the opening capital base at the start of that period based on the proposal, in nominal terms. The proposed forecast net capex increases the capital base by about 42.5 per cent, while expected inflation increases it by about 9.2 per cent. Forecast depreciation, on the other hand, reduces the capital base by about 30.2 per cent.

¹¹ Net capex is gross capex less disposals and capital contributions.

¹² NGR, r. 87.

¹³ If the asset lives are extremely long, such that the capital base depreciation rate is lower than the inflation rate, then negative regulatory depreciation can emerge. The indexation adjustment is greater than the capital base depreciation in such circumstances. Please also refer to section 5.3.1 of attachment 5 of this draft decision for further explanation of the offsetting adjustment to the depreciation.

Figure 2.1 Key drivers of changes in the capital base (\$million, nominal)



Source: AER analysis.

The capital base would rise by 13.6 per cent in real terms over the 2018–22 access arrangement period based on Multinet's proposal. The depreciation amount also largely depends on the opening capital base (which in turn depends on capex). Figure 2.1 shows forecast net capex is the largest driver of the increase in the capital base. Refer to attachment 6 for the discussion on forecast capex.

A ten per cent increase in the opening capital base causes revenues to increase by about four per cent. However, the impact on revenues of the annual change in capital base depends on the source of the capital base change, as some drivers affect more than one building block cost.¹⁴

2.4 Reasons for draft decision

We do not approve Multinet's proposed opening capital base of \$1190.8 million (\$ nominal) as at 1 January 2018. We have instead determined an opening capital base value of \$1192.4 million (\$ nominal) as at 1 January 2018, an increase of

¹⁴ If capex causes the capital base increase, then return on capital, depreciation, and debt raising costs all increase too. If a reduction in depreciation causes the capital base increase, revenue could increase or decrease. In this case, the higher return on capital is offset (perhaps more than offset) by the reduction in depreciation allowance. Inflation naturally increases the capital base in nominal terms. However, the real impact from changing the inflation forecast is inconsequential as revenues are updated annually by actual inflation and the X factor, which is generally unaffected by the assumed forecast inflation rate.

\$1.6 million or 0.1 per cent from the proposed value. This is due to the amendments we made in the proposed RFM to correct some input and modelling errors.

We also do not approve Multinet's projected closing capital base of \$1446.1 million (\$ nominal) as at 31 December 2022. We instead determine a closing capital base of \$1401.0 million (\$ nominal) as at 31 December 2022, a reduction of \$45.1 million or 3.1 per cent from the proposed value. The main reasons for our draft decision are discussed below.

We are satisfied each of these amendments is necessary having regard to the requirements of the NGR.

2.4.1 Roll forward of capital base during the 2013–17 access arrangement period

To determine the opening capital base as at 1 January 2018 we have assessed Multinet's proposed roll forward of its capital base over the 2013–17 access arrangement period. In doing so we reviewed the key inputs of Multinet's proposed RFMs, such as actual conforming capex, inflation and rate of return. We found these were generally correct and reconciled with relevant data sources such as annual regulatory reporting accounts and approved decision models for the 2013–17 access arrangement period.¹⁵ However, we consider there should be adjustments made to Multinet's proposed RFM inputs for:

- opening capital base at 1 January 2013
- movements in capitalised provisions
- forecast depreciation in the 2013–17 access arrangement period.

Our amendments to the above inputs are discussed further below, and result in a draft decision opening capital base at 1 January 2018 of \$1192.4 million, an increase of \$1.6 million or 0.1 per cent from the proposed value.

We also reviewed the other key inputs into Multinet's proposed capital base roll forward during the 2013–17 access arrangement period, such as actual conforming capex, inflation and rate of return and generally found these inputs to be correct.

2.4.1.1 Opening capital base at 1 January 2013

Multinet's proposed 2013 opening capital base values for a number of its asset classes did not match those that formed the basis of our decision on the opening capital base for the 2013–17 access arrangement period. The approved opening capital base as at 1 January 2013 included a negative value for the 'SCADA' asset class (about –\$1.1

¹⁵ We did correct a minor rounding error in the proposed 2016 actual inflation value. The 2016 actual inflation value represents inflation from September 2015 to September 2016. Under the all-lagged approach in the RFM, this value becomes part of the inflation index for 2017.

million). Multinet reallocated this amount to the opening capital base of the 'Transmission and distribution' asset class in its proposed RFM. Multinet noted in response to an information request, that it did so to avoid negative depreciation.¹⁶ We do not agree with Multinet's approach to reallocate the negative value to deal with this issue. In the 2013–17 access arrangement the negative value was written off (returned to customers through lower depreciation) in the first year of the access arrangement period within the 'SCADA' asset class. Reallocating this value to the 'Transmission and distribution' asset class at 1 January 2013 results in the asset value effectively being written off over 34 years instead (the remaining life of the 'Transmission and distribution'. We consider that this approach results in an estimated asset value for the 'Transmission and distribution' asset class at 1 January 2017 that is not arrived at on a reasonable basis.¹⁷ This is because it still includes part of the negative SCADA asset value that was written off in the first year of the 2013–17 access arrangement period. We consider that the same approach should be taken in rolling forward the capital base in this access arrangement review for the 2013–17 period.

Multinet also confirmed that the proposed reallocation of assets to the 'IT' asset class was an error in its proposal.¹⁸ We have corrected this error in our draft decision so that the value matches that approved in the final decision model for the 2013–17 access arrangement period.

2.4.1.2 Conforming capital expenditure in the 2013–17 access arrangement period

Our assessment of conforming capex is set out in capex attachment 6. In determining the opening capital base as at 1 January 2018, we assessed whether Multinet's proposed capex amounts for the 2013–17 access arrangement are properly accounted for in the capital base roll forward.

We accept Multinet's proposed actual capex as conforming capex during the 2013–17 period. Therefore, we accept that actual conforming capex has been properly accounted for in the proposed capital base roll forward consistent with the requirements of the NGR.¹⁹ However, we note that the proposed capex for 2016 and 2017 are estimates. Therefore the 'approved' capex in this draft decision for 2016 and 2017 are placeholder amounts. We expect Multinet will provide actual capex for 2016 in its revised proposal and the 2017 capex estimates may be revised based on more up to date information. We will assess whether the actual capex for 2016 is conforming capex in our final decision. We will undertake the assessment of whether the 2017 amount is conforming capex as part of the next access arrangement review.

¹⁶ Multinet, Response to information request - *IR#07* - General modelling issues, 21 February 2017.

¹⁷ NGR, r. 74(2).

¹⁸ Multinet, Response to information request - IR#07 - General modelling issues, 21 February 2017.

¹⁹ NGR, r. 77(2)(b).

2.4.1.3 Movements in capitalised provisions

Multinet's proposed reset RIN identified net movements in capitalised provisions allocated to capex of \$0.4 million between 2013 and 2015.²⁰ The capitalised provisions were allocated to the 'Transmission and distribution' asset class. Multinet's proposed RFM did not account for these capitalised provisions by adjusting the value from its capex entering the capital base.²¹ Our draft decision is to adjust the gross capex for the 'Transmission and distribution' asset class in the RFM for the movements in capitalised provisions.

We consider that the movement in capitalised provisions during the access arrangement period should be adjusted from the capex inputs to the RFM. This approach means capitalised costs related to these provisions are only included in the capital base when they are paid out by the business. This approach is consistent with adding capex as incurred and has been applied in other AER decisions, including for Multinet's access arrangement for the 2013–17 period.²²

2.4.1.4 Depreciation used in the 2013–17 asset base roll forward

Multinet's proposed RFM used forecast deprecation to roll forward its capital base over the 2013–17 access arrangement period.²³ This is consistent with the approach set out in the access arrangement for the 2013–17 period.²⁴ We reviewed the forecast depreciation inputs used in Multinet's RFM and found some minor discrepancies with those in the approved PTRM for the 2013–17 access arrangement period. We sent an information request to Multinet regarding this issue and Multinet stated that this was an error in the proposed RFM.²⁵ We have corrected this error in this draft decision and applied the approved forecast depreciation values from the PTRM for the 2013–17 access arrangement period.

2.4.2 Projected capital base during the 2018–22 access arrangement period

We forecast Multinet's projected capital base at 31 December 2022 to be \$1401.0 million (\$ nominal), a reduction of \$45.1 million or 3.1 per cent from Multinet's proposal. This results from our draft decision on the inputs to the determination of the projected capital base. We have amended the inputs in the following ways:

• We increased Multinet's opening capital base as at 1 January 2018 by \$1.6 million (\$ nominal) or by 0.1 per cent to reflect the changes required in this attachment.

²⁰ Multinet Gas, 11A - Final 2018-22 Reset RIN Templates - Multinet Gas response - 20170109 - PUBLIC.

²¹ Multinet, Response to information request - IR#07 - General modelling issues, 13 February 2017.

²² For example: AER, Preliminary decision United Energy distribution determination - Attachment 2 - Regulatory asset base, October 2015, p. 16; AER, Preliminary decision Ergon Energy - Attachment 2 - Regulatory asset base, April 2015, p. 16;

²³ Multinet Gas, 2018 to 2022 Access Arrangement Information, 20161221 - PUBLIC, p. 115.

²⁴ AER, *Multinet 2013–17 final decision - Attachments*, March 2013, p. 24.

²⁵ Multinet, Response to information request - IR#07 - General modelling issues, 21 February 2017.

- We reduced Multinet's proposed forecast net capex for the 2018–22 access arrangement period by \$115.2 million (\$ nominal) or 22.8 per cent. Our assessment of the proposed forecast capex is set out in attachment 6.
- We increased Multinet's proposed expected inflation rate of 1.68 per cent per annum to 2.45 per cent per annum (attachment 3). This results in an increase to the indexation of the capital base component for the 2018–22 regulatory control period by \$47.9 million (\$ nominal) or 43.9 per cent.
- we reduced Multinet's proposed forecast straight-line depreciation allowance for the 2018–22 access arrangement period by \$20.4 million (\$ nominal) or 5.7 per cent.²⁶ Our assessment of the proposed forecast depreciation is set out in attachment 5.

Figure 2.2 shows the key drivers of the change in Multinet's capital base over the 2018–22 access arrangement period for this draft decision. Overall, the closing capital base at the end of the 2018–22 access arrangement period is forecast to be 17.5 per cent higher than the opening capital base at the start of that period, in nominal terms. The approved forecast net capex increases the capital base by about 32.8 per cent, while expected inflation increases it by about 13.2 per cent. Forecast depreciation, on the other hand, reduces the capital base by about 28.5 per cent.

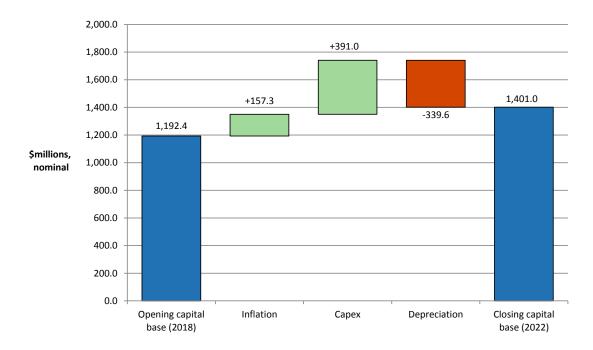


Figure 2.2 Key drivers of changes in the capital base (\$ million, nominal)

Source: AER analysis.

²⁶ Regulatory depreciation is the net total of straight-line depreciation and inflation indexation of the capital base.

2.4.3 Capital base at the commencement of the 2023–27 access arrangement period

The capital base at the commencement of the 2023–27 access arrangement period will be subject to adjustments consistent with the NGR. The adjustments for Multinet include (but are not limited to) actual inflation and approved depreciation over the 2018–22 access arrangement period.

We accept Multinet's proposal to establish the opening capital base as at 1 January 2023 using the depreciation schedules based on forecast capex over the 2018–22 access arrangement period.²⁷ We approved such an approach in our recent gas decisions.²⁸ This approach is also consistent with the approach outlined in our *Access Arrangement Guideline*.²⁹ The amount of the forecast depreciation is to be approved by us in the final decision for the 2018–22 access arrangement period.

We consider the access arrangement should further provide for the capital base as at 1 January 2023 is to be established using the approved depreciation schedules (straightline) based on forecast capex at the asset class level.³⁰ Having regard to the capital base as determined in the preceding access arrangement, we consider this will provide for a forecast of depreciation over the 2018–22 access arrangement period that provides for continuity and consistency in determining depreciation from one access arrangement period to the next.³¹

We note Multinet's access arrangement for the 2013–17 period contains fixed principle 7.2(c) regarding four adjustments to be made when establishing the opening capital base for the 2018–22 access arrangement period (the fifth access arrangement period).³² We accept that this fixed principle applies until the end of the fifth access arrangement period (2018–22), which is the approved fixed period.³³

Multinet proposed a new fixed principle 7.2(b), based on 7.2(c) from the earlier access arrangement, but extended to deal with the establishment of the opening capital base for the 2023–27 access arrangement period (the sixth access arrangement period).³⁴

We accept the new fixed principle 7.2(b), subject to the removal of one of the subclauses within it. Specifically, fixed principle subclause 7.2(b)(3) states that the opening capital base will be adjusted to take account of:

²⁷ Multinet Gas, 2018 to 2022 Access Arrangement Information, 20161221 - PUBLIC, p. 115.

²⁸ AER, Final Decision Amadeus Gas Pipeline, Attachment 2 – Capital base, May 2016, p.11; AER, Final Decision Australian Gas Networks, Attachment 2 – Capital base, May 2016, p.11.

²⁹ AER, *Final access arrangement guideline*, March 2009, pp. 61–62.

³⁰ NGR, r. 90.

³¹ NGL, s. 24(4) and s. 28(2)(a)(i).

³² Multinet, Access arrangement – Part B – Reference Tariffs and Reference Tariff Policy, April 2013, p. 22.

³³ NGR, r. 99(3).

³⁴ Multinet, Access arrangement – Part B – Reference Tariffs and Reference Tariff Policy, 23 December 2016, p. 23.

the principle that the Capital Base will not be reduced as a result of assets forming part of the Capital Base ceasing to contribute in any way to delivery of Pipeline Services.

However, r. 77(2)(e) of the NGR sets out that the capital base is to be reduced to reflect the value of redundant assets identified during the relevant access arrangement period. Hence, including this adjustment in the proposed fixed principle is inconsistent with the requirements of the NGR, and so we do not accept it.

2.5 Revisions

We require the following revisions to make the access arrangement proposal acceptable:

Revision 2.1	Make all necessary amendments to reflect this draft decision on the roll forward of the capital base for the 2013–17 access arrangement period, as set out in Table 2.1.				
Revision 2.2:	Make all necessary amendments to reflect this draft decision on the roll forward of the capital base for the 2013–17 access arrangement period, as set out in Table 2.1.				
	Amend section 7.2(b) of the access arrangement fixed principle as follows:				
	The opening capital base for the Sixth access arrangement period will be determined in accordance with rule 77(2) of the NGR and the opening capital base at the start of the Fifth Access Arrangement Period will be adjusted to take account of:				
	1. Changes to CPI over the Fifth Access Arrangement Period;				
	 the value of disposals in the ordinary course of business during the Fifth Access Arrangement Period, other than a disposal of: 				
Revision 2.3:	(a) all of the assets of the Service Provider;				
	(b) assets pursuant to which the assets of the Service Provider are sold and leased back to the Service Provider				
	3. disposals in the ordinary course of business during Calendar Year 2017, other than a disposal of:				
	(a) all of the assets and liabilities of the Service Provider;				
	 (b) assets pursuant to which the assets of the Service Provider were sold and leased back to the Service Provider; and 				
	This Fixed Principle will apply until the end of the Sixth Access arrangement period.				
	Insert the following provision after section 8 of the 2018–22 access arrangement:				
	9 Depreciation for establishing the capital base as at 1 January 2023				
Revision 2.4:	The depreciation schedule (straight-line) for establishing the opening capital base as at 1 January 2023 will be based on forecast capital expenditure at the asset class level approved for the 2018–22 access arrangement period.				