

Final Decision

**AusNet Services Transmission
Determination 2022 to 2027**

Attachment 3

Rate of return

January 2022

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Note

This attachment forms part of the AER's final decision on AusNet Services' 2022–27 transmission determination. It should be read with all other parts of the final decision.

As a number of issues were settled at the draft decision stage or required only minor updates, we have not prepared all attachments. The final decision attachments have been numbered consistently with the equivalent attachments to our draft decision. In these circumstances, our draft decision reasons form part of this final decision.

The final decision includes the following attachments:

Overview

Attachment 1 – Maximum allowed revenue

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Efficiency benefit sharing scheme

Attachment 9 – Capital expenditure sharing scheme

Attachment 10 – Service target performance incentive scheme

Attachment 12 – Pricing methodology

Attachment 13 – Pass through events

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3 Rate of return

The return each business is to receive on its regulatory asset base (RAB), known as the 'return on capital', is a key driver of proposed revenues. We calculate the regulated return on capital by applying a rate of return to the value of the RAB.

We estimate the rate of return by combining the returns of the two sources of funds for investment: equity and debt. The allowed rate of return provides the business with a return on capital to service the interest on its loans and give a return on equity to investors.

The estimate of the rate of return is important for promoting efficient prices in the long-term interests of consumers. If the rate of return is set too low, the network business may not be able to attract sufficient funds to be able to make the required investments in the network and reliability may decline. Conversely, if the rate of return is set too high, the network business may seek to spend too much and consumers will pay inefficiently high tariffs.

We also make an estimate of expected inflation over the next five years. Alongside our nominal estimate of the rate of return, these determine the effective real return that will be provided to investors over time.

3.1 Final decision

The 2018 Rate of Return Instrument (2018 Instrument) specifies how we will estimate the return on debt, the return on equity, and the overall rate of return.¹ As required under the National Electricity Law (NEL), we have applied the 2018 Instrument and estimated an allowed rate of return of 4.72 per cent (nominal vanilla).² AusNet Services' revised proposal has adopted the 2018 Instrument.³

Our calculated rate of return, in Table 3.1, will apply to the first year of the 2022–27 regulatory control period. A different rate of return will apply for the remaining regulatory years of the period. This is because we will update the return on debt component of the rate of return each year in accordance with the 2018 Instrument to use a 10-year trailing average portfolio return on debt that is rolled-forward each year.

¹ AER, *Rate of return instrument*, December 2018. See <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/rate-of-return-guideline-2018/final-decision>.

² The legislative amendments to replace the (previous) non-binding Rate of Return Guidelines with a binding legislative instrument were passed by the South Australian Parliament in December 2018. See, Statutes Amendment (National Energy Laws) (Binding Rate of Return Instrument) Act 2018 (SA). NGL, Chapter 2, Part 1, division 1A; NEL, Part 3, division 1B.

³ AusNet Services, *Transmission revenue review 2023–27, Revised revenue proposal*, September 2021, p. 124.

Table 3.1 Final decision on AusNet Services' rate of return (nominal)

	AER draft decision (2022–27)	AusNet Services' revised proposal (2022–27)	AER final decision (2022–27)	Allowed return over regulatory control period
Nominal risk free rate	1.68% ^a	1.68%	1.59% ^b	
Market risk premium	6.1%	6.1%	6.1%	
Equity beta	0.6	0.6	0.6	
Return on equity (nominal post-tax)	5.34%	5.34%	5.25%	Constant (%)
Return on debt (nominal pre-tax)	4.36% ^a	4.37%	4.37% ^c	Updated annually
Gearing	60%	60%	60%	Constant (60%)
Nominal vanilla WACC	4.76%	4.76%	4.72%	Updated annually for return on debt
Expected inflation	2.00%	2.25%	2.45%	Constant (%)

Source: AER analysis; AusNet Services, *Transmission revenue review 2023–27, Revised revenue proposal*, pp. 125–129.

(a) Calculated using a placeholder averaging period of the month ending 31 April 2021.

(b) Calculated using an averaging period of 1 September 2021 to 24 November 2021.

(c) Final decision return on debt is calculated using the proposed and accepted debt averaging period.

Our final decision is also to:

- accept AusNet Services' proposed risk free rate⁴ and debt averaging periods because they comply with conditions set out in the 2018 Instrument.⁵ We specify these periods in confidential Appendix A and they have been used to update the risk free rate and return on debt in this final decision
- accept AusNet Services' proposed gamma of 0.585 because it complies with the 2018 Instrument.⁶

⁴ This is also known as the return on equity averaging period.

⁵ AER, *Rate of return instrument*, December 2018, cll. 7–8, 23–25, 36; AER, *Draft decision, AusNet Services transmission determination 2022 to 2027, Attachment 3—Rate of return confidential appendix A: Equity and debt averaging periods*, June 2021; AusNet Services, *Revenue proposal 2023–27, Appendix 10A, Averaging periods*, 29 October 2020, pp. 2–4.

⁶ AusNet Services, *Transmission revenue review 2023–27, Revised revenue proposal*, September 2021, p. 128.

3.2 Expected inflation rate

We estimate an expected inflation of 2.45 per cent (see Table 3.2 for calculations) based on the approach adopted in our final position paper from our 2020 inflation review.⁷

AusNet Services' initial proposal stated that we should adopt the outcomes of our inflation review to this revenue determination.⁸ Its revised proposal noted our draft decision (where we implemented the approach from our 2020 inflation review) and stated that the placeholder forecast for inflation should be updated in our final decision which we have done.⁹

Table 3.2 Final decision on AusNet Services' expected inflation (%)

	Year 1	Year 2	Year 3	Year 4	Year 5	Geometric average
Expected inflation	2.25	2.50	2.50	2.50	2.50	2.45

Source: AER analysis; *RBA Statement on Monetary policy*, 2021.

In the draft decision, we noted that AusNet Services' regulatory years start in April and end in March, whereas the Reserve Bank of Australia's (RBA's) Statement of Monetary Policy (SMP) provides forecasts for years ending in June and December. Further, the RBA's SMP (May 2021) provides forecasts for December 2022 and June 2023 hence, only one year (2022–23, first regulatory year) of forecast was available for the draft decision.

We previously used December-ending RBA forecasts to estimate forecast inflation in AusNet Services' 2017–22 revenue determination. This provided one year of forecast in the 2017–22 draft decision and two years of forecast in the 2017–22 final decision.

Our final decision uses the November 2021 SMP which contains consumer price index (CPI) forecast for the year-ending December 2023. This means the first two years of the regulatory control period are based on RBA forecasts and thereafter a linear glide path from year three to the mid-point of the RBA's inflation target band (2.5 per cent) in year five.

3.2.1 2020 Inflation Review

Our previous approach to estimate expected inflation used a 10 year average of the RBA's headline rate forecasts for 1 and 2 years ahead, and the mid-point of the RBA's target band—2.5 per cent—for years 3 to 10. The period of 10 years matches the term of the rate of return.

⁷ AER, *Final position, Regulatory treatment of inflation*, December 2020.

⁸ AusNet Services, *Revenue Proposal 2023–27*, 29 October 2020, pp. 216–217.

⁹ AusNet Services, *Transmission revenue review 2023–27, Revised revenue proposal*, September 2021, pp. 128–129.

Our inflation review considered that this should be augmented by:¹⁰

- shortening the target inflation horizon from ten years to a term that matches the regulatory control period (typically five years)
- applying a linear glide-path from the RBA's forecasts of inflation for year 2 to the mid-point of the inflation target band (2.5 per cent) in year 5.

The key reasons for these changes are:¹¹

- there was a mismatch between our estimate of expected inflation over a 10 year term, and our roll forward of the RAB, which is done over a 5 year term. We consider that shortening the inflation term to match the regulatory control period, although creating a mismatch with the term of the rate of return, is the more critical mismatch to resolve. This is because of the sustained decline in the required rate of return and the increased difference between 5 and 10 year inflation expectations due to short-term fluctuations in inflation expectations
- applying a glide-path acknowledges that it is likely to take longer than previously for inflation to revert to the mid-point of the RBA's target band following periods of sustained low or high inflation.

We considered that these changes will provide service providers a reasonable opportunity to more accurately recover their efficient costs in an increasingly changing market to better serve consumers with the energy services they want in the long term. Broadly, this was because we take out what we expect to put back into the RAB through our regulatory models.

3.3 Capital raising costs

In addition to compensating for the required rate of return on debt and equity, we provide an allowance for the transaction costs associated with raising debt and equity. We include debt raising costs in the operating expenditure (opex) forecast because these are regular and ongoing costs which are likely to be incurred each time service providers refinance their debt.

On the other hand, we include equity raising costs in the capital expenditure (capex) forecast because these costs are only incurred once and would be associated with funding the particular capital investments. Our draft decision forecasts for debt and equity raising costs are included in the opex and capex attachments, respectively. In this section, we set out our assessment approach and the reasons for those forecasts.

3.3.1 Equity raising costs

Equity raising costs are transaction costs incurred when a service provider raises new equity. We provide an allowance to recover an efficient amount of equity raising costs.

¹⁰ AER, *Final position, Regulatory treatment of inflation*, December 2020, p. 6.

¹¹ AER, *Final position, Regulatory treatment of inflation*, December 2020, p. 6.

We apply an established benchmark approach for estimating equity raising costs. This approach estimates the costs of two means by which a service provider could raise equity—dividend reinvestment plans and seasoned equity offerings. It considers where a service provider's capex forecast is large enough to require an external equity injection to maintain the benchmark gearing of 60 per cent.¹²

Our benchmark approach was initially based on 2007 advice from Allen Consulting Group (ACG).¹³ We amended this method in our 2009 decisions for the ACT, NSW and Tasmanian electricity service providers.¹⁴ We further refined this approach in our 2012 Powerlink decision.¹⁵

Our benchmark approach requires an estimate of the dividend distribution rate (sometimes called the payout ratio) as an input into calculating equity raising costs. The dividend distribution rate is also estimated when we estimate the value of imputation credits. We consider that a consistent dividend distribution rate should be used when estimating both the value of imputation credits and equity raising costs. AusNet Services has proposed to adopt our approach for estimating equity raising costs, and used a distribution rate of 0.9 (set in the 2018 instrument).¹⁶

AusNet Services' revised proposal maintained its initial proposal position to adopt our approach for estimating equity raising costs.¹⁷ We have updated our estimate for this regulatory control period based on the benchmark approach using updated inputs.

3.3.2 Debt raising costs

Debt raising costs are the transaction costs incurred each time debt is raised or refinanced as well as the costs for maintaining the debt facility. These costs may include underwriting fees, legal fees, company credit rating fees and other transaction costs. We provide an allowance in opex to recover an efficient amount of debt raising costs.

Current assessment

Our current approach to forecasting debt raising costs is based on the approach in a report from the ACG, commissioned by the Australian Competition and Consumer Commission in 2004.¹⁸ This approach compensates for the direct cost of raising debt.

¹² AER, *Final decision Amendment Electricity distribution network service providers, Post-tax revenue model handbook*, 29 January 2015, pp. 15, 16 & 33. The approach is discussed in AER, *Final decision, Powerlink Transmission determination 2012–13 to 2016–17*, April 2012, pp. 151–152.

¹³ ACG, *Estimation of Powerlink's SEO transaction cost allowance-Memorandum*, 5 February 2007.

¹⁴ For example, see: AER, *Final decision, ACT distribution determination 2009–10 to 2013–14*, April 2009, appendix H.

¹⁵ AER, *Final decision, Powerlink Transmission determination 2012–13 to 2016–17*, April 2012, pp. 151–152.

¹⁶ AusNet Services, *Revenue Proposal 2023–27*, 29 October 2020, p. 216.

¹⁷ AusNet Services, *Transmission revenue review 2023–27, Revised revenue proposal*, September 2021, p. 127.

¹⁸ PricewaterhouseCoopers, *Energy Networks Association: Debt financing costs*, June 2013.

It uses a five year window of bond data to reflect the market conditions at that time. Our estimates were updated in 2013 (based on a report by PricewaterhouseCoopers (PwC), which used data over 2008–2013) and most recently in 2019 by Chairmont.¹⁹

The ACG method involves calculating the benchmark bond size, and the number of bond issues required to rollover the benchmark debt share (60 per cent) of the RAB. This approach looks at how many bonds a regulated service provider may need to issue to refinance its debt over a 10 year period. Our standard approach is to amortise the upfront costs that are incurred in raising the bonds using the service provider's nominal vanilla weighted average cost of capital (WACC) over a 10 year amortisation period. This is then expressed in basis points per annum (bppa) as an input into the post-tax revenue model (PTRM).

This rate is multiplied by the debt component of the service provider's projected RAB to determine the debt raising cost allowance in dollar terms. Our approach recognises that part of the debt raising transaction costs such as credit rating costs and bond master program fees can be spread across multiple bond issues, which lowers the benchmark allowance (as expressed in bppa) as the number of bond issues increases.

Proposal

AusNet Services accepted our draft decision which proposed debt raising costs of 8.0 bppa.²⁰

Conclusion on debt raising costs

Our final decision is to apply an annual total debt raising cost of 8.0 bppa in line with AusNet Services' revised proposal.

We apply the approach from our final decision for SA Power Networks.²¹ That is, we use updated Bloomberg data to inform the 'arrangement fee' component of debt raising costs and Chairmont's updated estimates for the remaining components.

We use this method because regulated businesses have previously raised concerns with Chairmont's 2019 update with the key focus being Chairmont's estimate of 'arrangement fee'.²²

After assessing these submissions, we recognised that Bloomberg is likely to be the most suitable source of information for the 'arrangement fee' at this time because it is the only published source of data known to us and was previously used to estimate the 'arrangement fee'. In a separate regulatory process, Powerlink submitted a report by

¹⁹ Chairmont, *Debt Raising Costs*, 29 June 2019.

²⁰ AusNet Services, *Transmission revenue review 2023–27, Revised revenue proposal*, September 2021, pp. 127–128.

²¹ AER, *Final Decision SA Power Networks Distribution Determinations 2020 to 2025 Attachment 3 Rate of Return*, June 2020.

²² SA Power Networks, *Revised Regulatory Proposal 2020–25: Attachment 3 Rate of Return*, 10 December 2019, pp. 20–21; CEG, *The cost of arranging debt issues*, November 2019, p. 3.

Incenta which supported the use of Bloomberg data for estimating the arrangement fee.²³

We have updated the 'arrangement fee' using Bloomberg data and the selection criteria consistent with the PwC report. This led to an annual total debt raising cost of 8.0 bppa.

Review of debt raising costs approach

Since late 2019 we have been reviewing our approach to setting benchmark debt raising costs, informed by actual debt raising costs data obtained from relevant regulated businesses.

The initial response to our information request showed that each business has its own system for reporting cost categories with the number and naming of categories differing between businesses. This makes it difficult to aggregate costs across businesses in order to arrive at an accurate estimate.

We have considered whether to continue with further investigation of the industry data. This would entail significant further work and would require regulated businesses to work with each other, as well as us to reconcile costs to mutually agreed categories. Audit assurance would also need to be considered to ensure that costs have been correctly reconciled and allocated.

Further, we have had regard to the overall magnitude of the debt raising costs (that is, a small proportion of overall opex) and the level of imprecision in our current approach. Based on these considerations, we do not think the benefits of further investigation outweigh the costs.

Therefore, we have used our current approach for assessing benchmark debt raising costs—that is, using Bloomberg estimates for the 'arrangement fee' and Chairmont's 2019 estimates for the remaining debt raising costs.

In our 2020 Energy Network Debt Data paper, we proposed to collect the data used for the Energy Infrastructure Credit Spread Index using regulatory information notices (RIN).²⁴ As part of developing this RIN, we proposed that it would also collect direct debt raising costs that is not compensated for in either our existing allowance or the opex allowance. Regulated businesses would also need to pay these costs directly to the lender of the debt instrument.

²³ Incenta, *Benchmark debt and equity raising costs*, November 2020.

²⁴ AER, *Energy network debt data final working paper*, November 2020, p. 5.

Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
bppa	basis points per annum
capex	capital expenditure
CPI	consumer price index
NEL	National Electricity Law
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
RIN	regulatory information notice
RPP	revenue and pricing principles
SMP	Statement of Monetary Policy
WACC	weighted average cost of capital
