FINAL DECISION
Murraylink transmission determination
2018 to 2023

Attachment 2 – Regulatory asset base

April 2018

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ENERGY
REGULATOR

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Note

This attachment forms part of the AER's final decision on Murraylink's transmission determination for 2018–23. It should be read with all other parts of the final decision.

The final decision includes the following documents:

Overview

Murraylink transmission determination 2018–2023

Attachment 1 – Maximum allowed revenue

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 5 – Regulatory depreciation

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Attachment 8 – Corporate income tax

Attachment A – Negotiating framework

Attachment B – Pricing methodology

Contents

Shortened forms

Shortened form	Extended form
AARR	aggregate annual revenue requirement
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ASRR	annual service revenue requirement
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CESS	capital expenditure sharing scheme
CPI	consumer price index
DMIA	demand management innovation allowance
DRP	debt risk premium
EBSS	efficiency benefit sharing scheme
ERP	equity risk premium
MAR	maximum allowed revenue
MRP	market risk premium
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules
NSP	network service provider
NTSC	negotiated transmission service criteria
opex	operating expenditure
PPI	partial performance indicators
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
repex	replacement expenditure
RFM	roll forward model
RIN	regulatory information notice

Shortened form	Extended form
RPP	revenue and pricing principles
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
TNSP	transmission network service provider
TUoS	transmission use of system
WACC	weighted average cost of capital

2 Regulatory asset base

Our revenue determination includes Murraylink's opening regulatory asset base (RAB) value as at 1 July 2018 and projected RAB value for the 2018–23 regulatory control period.[1] The value of the RAB substantially impacts Murraylink's revenue requirement and the price consumers ultimately pay. Other things being equal, a higher RAB would increase both the return on capital and depreciation (return of capital) components of the revenue determination.[2]

2.1 Final decision

Opening RAB as at 1 July 2018

Our final decision is to determine an opening RAB value of $112.8 million ($nominal) as at 1 July 2018 for Murraylink. This amount is $0.1 million (or 0.1 per cent) lower than Murraylink's revised proposal of $112.9 million ($nominal). It reflects the update to the roll forward model (RFM) for 2017–18 actual inflation that is now available. We also corrected the actual capex inputs for 2012–13 and 2013–14 to be consistent with the draft decision and regulatory accounts. This final decision is 1.4 per cent ($1.5 million) lower than our draft decision value for Murraylink's opening RAB of $114.3 million ($nominal).

To determine the opening RAB as at 1 July 2018, we have rolled forward the RAB over the 2013–18 regulatory control period to determine a closing RAB value at 30 June 2018. This roll forward includes an adjustment at the end of the 2013–18 regulatory control period to account for the difference between actual 2012–13 capex and the estimate approved at the 2013–18 determination.[3]

In the draft decision, we increased Murraylink's proposed opening RAB as at 1 July 2018 because we made several amendments to the inputs of Murraylink's proposed RFM.[4] We also updated the actual 2016–17 CPI in the RFM. The roll forward of Murraylink's RAB included estimated capex for 2016–17 and 2017–18 and estimated inflation for 2017–18 because these actual values were not yet available.

In its revised proposal, Murraylink adopted all aspects of our draft decision.[5] However, Murraylink has changed the name of the asset class 'Ancillary 7 - pressure vessel

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1 NER, cl. 6A.4.2 (3A) and (4)

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

3 The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2013–18 determination.

4 AER, *Draft Decision: Murraylink transmission determination 2018–23, Attachment 2, Regulatory asset base*, September 2017, p. 6.

5 Murraylink, *Revised revenue proposal*, December 2017, p. 143.

testing and inspection' to 'Inspection and test equipment' in the RFM.[6] We do not accept the proposed name change to this asset class. In the draft decision, we did not accept Murraylink's proposal to apply a standard asset life of 10 years to the separate 'Test equipment' asset class because this standard asset life was not approved in our 2013 final decision for Murraylink's 2013–18 regulatory control period. In its revised proposal, Murraylink stated that:[7]

> This determination [for 2018–23] in effect has limited asset classes to those that were contained in the AER's final determination for the current regulatory control period. Murraylink hopes that the AER applies this approach consistently across revenue determinations.

We consider that our decision for Murraylink is consistent with the requirements of the NER[8] and our previous decisions. We note that the depreciation values used for establishing Murraylink's opening RAB as at 1 July 2018 should be based on the rates and methods allowed in the transmission determination for the 2013–18 regulatory control period.[9] In our recent decision for the Roma to Brisbane Pipeline (RBP), we accepted its proposal to re-categorise the approved asset classes into new asset classes for the purposes of rolling forward the RAB.[10] However, in that decision RBP did not propose to change the asset lives from those approved in our previous access arrangement for RBP. Further, our 2013 decision for Murraylink did not approve a standard asset life for a 'Test equipment' asset class because Murraylink did not have any forecast capex for this asset class. Therefore, for this decision, we could not retrospectively approve Murraylink's proposal to apply a standard asset life of 10 years to the 'Test equipment' asset class for RAB roll forward purposes over the 2013–18 regulatory control period.

We have reallocated the actual capex to the 'Ancillary 7 - pressure vessel testing and inspection' asset class which has a standard asset life of seven years. This approach allows the actual depreciation value to be based on the standard asset lives approved in the 2013 final decision. However, this does not mean that we have retrospectively approved a standard asset life of seven years for test equipment. Therefore, we do not accept Murraylink's proposal to change the name of the asset class 'Ancillary 7 - pressure vessel testing and inspection' to 'Inspection and test equipment' in the RFM. If Murraylink were to incur forecast test equipment costs over the 2018–23 regulatory control, we would consider the appropriate standard asset life to apply. For the reasons discussed in attachment 5, we are not required to do so because no such costs are forecast to be incurred by Murraylink for the 2018–23 regulatory control period.

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6 Murraylink, *Revised revenue proposal,* December 2017, p. 49.

7 Murraylink, *Revised revenue proposal*, December 2017, p. 14.

8 NER, S6A.2.1(f)(5).

9 NER, S6A.2.1(f)(5).

10 AER, *Access arrangement final decision, Roma to Brisbane Pipeline 2017 to 2022 - Attachment 5 Regulatory depreciation*, November 2012.

In its revised proposal, Murraylink has also updated 2016–17 estimated capex with actuals and revised the 2017–18 estimate capex with more up to date figures in the RFM.[11] We reviewed Murraylink's 2016–17 actual capex inputs to see if they reconciled with the values presented in Murraylink's regulatory accounts for that year and identified a small discrepancy.[12] We raised this discrepancy with Murraylink and it acknowledged that there was an error in its 2016–17 regulatory accounts.[13] Murraylink subsequently provided an update to its previously filed regulatory account reflecting the correction that now reconciles with the revised proposed RFM.[14] We therefore accept Murraylink's update to the actual capex for 2016–17 in the RAB roll forward. We also accept Murraylink's revision to the 2017–18 net capex estimate of $12.5 million ($nominal). This amount is higher than the value proposed in the initial proposal, reflecting more up-to-date data. We note that the financial impact of any difference between actual and estimated capex for 2017–18 will be accounted for at the next reset. Our final decision also updates the 2017–18 inflation input in the RFM with actual CPI for this year, which became available after Murraylink submitted its revised proposal.

Further, we have corrected some input errors relating to the actual capex inputs in Murraylink's revised proposed RFM. We note that the revised 2012–13 and 2013–14 actual capex inputs for the 'Other operating assets' and 'Office machines' asset classes are not consistent with the draft decision RFM and regulatory accounts. We have therefore corrected these inputs to be consistent with our draft decision and the regulatory accounts. We have clarified these input errors with Murraylink, and it agreed with our amendments.[15]

We also consider the extent to which our roll forward of the RAB to 1 July 2018 contributes to the achievement of the capital expenditure incentive objective.[16] As discussed in the draft decision, the review period for this transmission determination is limited to 2014–15 and 2015–16 capex.[17] Consistent with our draft decision, the overspending requirement for an efficiency review of past capex is not satisfied.[18] Accordingly, the capex incurred in those years are regarded as prudent and efficient, and included in the RAB—this is discussed further in attachment 6 of our draft decision.

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11 Murraylink, *Revised revenue proposal*, December 2017, p. 143; Murraylink, *Roll Forward Model - 1 December 2017,* December 2017.

12 This related to $0.2m allocated to the asset class for 'Other operating assets'.

13 Murraylink, *Response to information request # 013*, 20 February 2018.

14 Murraylink, *Response to information request # 015*, 15 March 2018. Murraylink stated that the updated 2016–17 actual capex would be reflected in its 2017–18 regulatory accounts.

15 Murraylink, *Response to information request # 013*, 20 February 2018.

16 NER, cl. 6A.14.2(b).

17 AER, *Draft Decision: Murraylink transmission determination 2018–23, Attachment 2, Regulatory asset base*, September 2017, pp. 15.

18 Murraylink's actual capex incurred in 2014–15 and 2015–16 are below the forecast allowance set at the previous transmission determination; NER, cl. S6A.2.2A(c).

For the purposes of this final decision, we have included Murraylink's actual capex for 2016–17 and estimated capex for 2017–18 in the RAB roll forward to 1 July 2018. At the next reset, the 2016–17 and 2017–18 capex will form part of the review period for whether past capex should be excluded for inefficiency reasons.[19] Our RAB roll forward applies the incentive framework approved in the previous transmission determination, which included the use an actual depreciation approach.[20] As such, we consider that the 2013–18 RAB roll forward contributes to an opening RAB (as at 1 July 2018) that includes capex that reflects prudent and efficient costs, in accordance with the capital expenditure criteria.[21]

Table 2. sets out our final decision on the roll forward of Murraylink's RAB for the 2013–18 regulatory control period.

Table 2.1 AER's final decision on Murraylink's RAB for the 2013–18 regulatory control period ($million, nominal)

	2013–14	2014–15	2015–16	2016–17	2017–18 [a]
Opening RAB	106.7	106.7	105.3	103.9	103.2
Capital expenditure [b]	0.3	0.7	0.9	0.9	12.9
Inflation indexation on opening RAB	3.1	1.4	1.4	2.2	2.0
Less: straight-line depreciation [c]	3.4	3.6	3.7	3.8	3.9
Closing RAB	106.7	105.3	103.9	103.2	114.2
Difference between estimated and actual capex in 2012–13					–1.0
Return on difference for 2012–13 capex					–0.4
Closing RAB as at 30 June 2018					**112.8**

Source: AER analysis.

(a) Based on estimated capex provided by Murraylink.

(b) As incurred, net of disposals, and adjusted for actual CPI.

(c) Adjusted for actual CPI. Based on as-commissioned capex.

Forecast closing RAB as at 30 June 2023

Once we have determined the opening RAB as at 1 July 2018, we roll forward that RAB by adding forecast capex and inflation, and reducing the RAB by depreciation to

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[19] Here, 'inefficiency' of past capex refers to three specific assessments (labelled the overspending, margin and capitalisation requirements) detailed in NER, cl. S6A.2.2A. The details of our ex post assessment approach for capex are set out in AER, *Capital expenditure incentive guideline*, November 2013, pp. 12–20.

[20] The use of actual depreciation is consistent with the depreciation approach established in the 2013–18 transmission determination for Murraylink, which reflected the rules at the time.

[21] NER, cll. 6A.5A(a), 6A.6.7(a), 6A.6.7(c) and 6A.14.2(b).

arrive at a forecast closing value for the RAB at the end of the 2018–23 regulatory control period.

For this final decision, we determine a forecast closing RAB as at 30 June 2023 of $123.7 million for Murraylink. This is $0.1 million (or 0.1 per cent) lower than Murraylink's revised proposal of $123.8 million ($nominal). Our final decision on the forecast closing RAB reflects the amended opening RAB as at 1 July 2018 and our final decisions on the expected inflation rate (section 2.3 of the Overview) and forecast depreciation (attachment 5).

Table 2. sets out our final decision on the forecast RAB for Murraylink over the 2018–23 regulatory control period.

Table 2.2 AER's final decision on Murraylink's RAB for the 2018–23 regulatory control period ($million, nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23
Opening RAB	112.8	113.8	123.0	129.9	128.6
Capital expenditure [a]	4.5	12.8	10.6	2.4	0.9
Inflation indexation on opening RAB	2.8	2.8	3.0	3.2	3.2
Less: straight-line depreciation [b]	6.2	6.4	6.6	6.9	9.0
Closing RAB	**113.8**	**123.0**	**129.9**	**128.6**	**123.7**

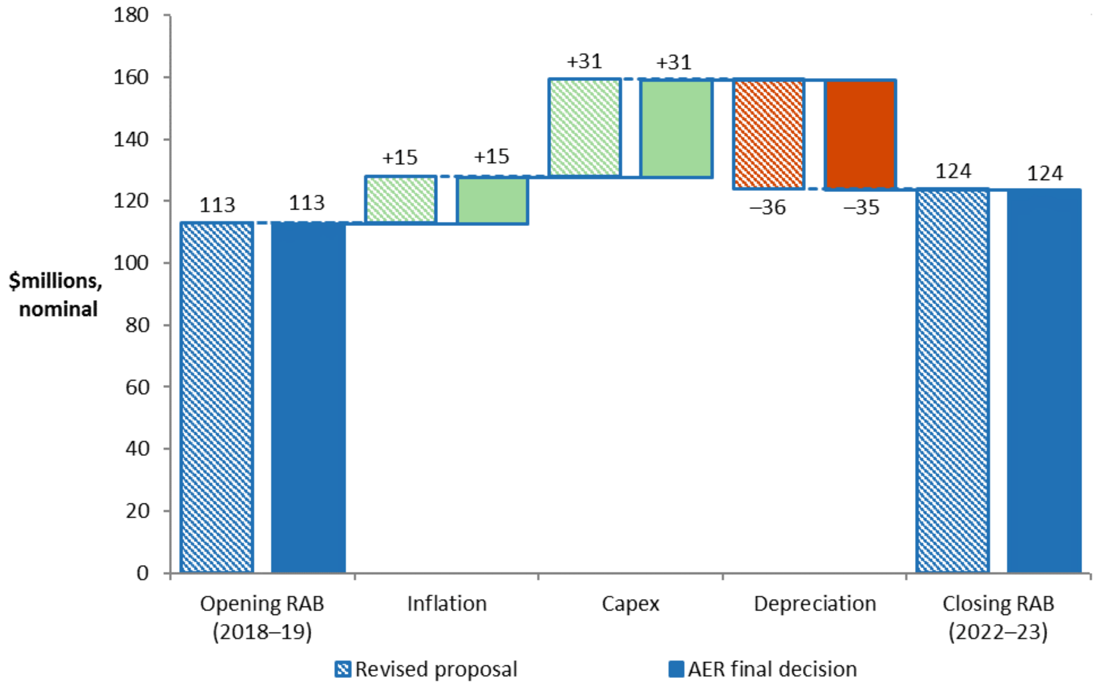
Source: AER analysis.

(a) As incurred and net of forecast disposals. In accordance with the timing assumptions of the post-tax revenue model (PTRM), the capex includes a half-WACC allowance to compensate for the six month period before capex is added to the RAB for revenue modelling.

(b) Based on as-commissioned capex.

Figure 2.1 shows the key drivers of the change in Murraylink's RAB over the 2018–23 regulatory control period for this final decision. Overall, the closing RAB at the end of the 2018–23 regulatory control period is forecast to be 9.7 per cent higher than the opening RAB at the start of that period, in nominal terms. The approved forecast net capex increases the RAB by 27.7 per cent while expected inflation increases it by 13.2 per cent. Forecast depreciation, on the other hand, reduces the RAB by 31.2 per cent.

Figure 2.1 Key drivers of changes in the RAB ($million, nominal)



Source: AER analysis.

Application of depreciation approach in RAB roll forward for next reset

When we roll forward Murraylink's RAB for the 2018–23 regulatory control period at the next reset, we must adjust for depreciation. For this final decision, we determine that the depreciation approach to be applied to establish the RAB at the commencement of the 2023–28 regulatory control period will be based on the depreciation schedules (straight-line) using forecast capex at the asset class level approved for the 2018–23 regulatory control period. We consider this approach will provide sufficient incentives for Murraylink to achieve capex efficiency gains over the 2018–23 regulatory control period.

As discussed in the overview to this final decision, we will apply the CESS to Murraylink over the 2018–23 regulatory control period. We consider that the CESS will provide sufficient incentives for Murraylink to achieve capex efficiency gains over that period. We are satisfied that the use of a forecast depreciation approach in combination with the application of the CESS and our other ex post capex measures are sufficient to achieve the capex incentive objective.[22] Further, this approach is consistent with our draft decision and the *Framework and approach*.[23]

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22 Our ex post capex measures are set out in the capex incentives guideline, AER, *Capital expenditure incentive guideline for electricity network service providers*, November 2013, pp. 13–19 and 20–21. The guideline also sets out how all our capex incentive measures are consistent with the capex incentive objective.

23 AER, *Draft decision – Attachment 2 – Regulatory asset base*, p. 17; AER, *Final decision: Framework and approach for Murraylink*, July 2016, pp. 24–26.

2.2 Assessment approach

We did not change our assessment approach for the RAB from our draft decision. Attachment 2 section 2.3 of our draft decision details that approach.