FINAL DECISION
Murraylink transmission determination
2018 to 2023

Attachment 1 – Maximum allowed revenue

April 2018

© Commonwealth of Australia 2018

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: (03) 9290 1444
Fax: (03) 9290 1457

Email: AERInquiry@aer.gov.au

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

Attachment 6 – Capital expenditure

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

1 Maximum allowed revenue

This attachment sets out our final decision on Murraylink's maximum allowed revenue (MAR) for the provision of prescribed transmission services over the 2018–23 regulatory control period. Specifically, we set out our final decision on:[1]

- the estimated total revenue cap, which is the sum of the annual expected MAR
- the annual building block revenue requirement
- the annual expected MAR
- the X factor.

We determine Murraylink's annual building block revenue requirement using a building block approach. We determine the X factors by smoothing the annual building block revenue requirement over the regulatory control period. The X factor is used in the CPI–X methodology to determine the annual expected MAR (smoothed).

1.1 Final decision

We do not accept Murraylink's revised proposed annual building block revenue requirement, annual expected MAR and total revenue cap. This is because we have not accepted all the building block costs that Murraylink proposed in its revised proposal. We have calculated the X factor and the annual expected MAR (smoothed) to reflect our final decision on Murraylink's annual building block revenue requirement.

We determine a total annual building block revenue requirement for Murraylink of $81.4 million ($nominal) for the 2018–23 regulatory control period. This is a reduction of $7.6 million ($nominal) or 8.6 per cent to Murraylink’s revised proposal and reflects the impact of our final decisions on the various building block costs.

We determine the annual expected MAR and X factor for each regulatory year of the 2018–23 regulatory control period by smoothing the annual building block revenue requirement. Our final decision is to approve an estimated total revenue cap of $81.4 million ($nominal) for Murraylink for the 2018–23 regulatory control period. Our approved X factor for 2019–21 is –3.86 per cent per annum and for 2021–23 it is –4.40 per cent per annum.[2]

Table 1.1 sets out our final decision on Murraylink’s annual building block revenue requirement, the X factor, the annual expected MAR and the estimated total revenue cap for the 2018–23 regulatory control period.

[1] NER, cll. 6A.4.2(a)(1)–(3), 6A.5.3(c) and 6A.6.8.

[2] Murraylink is not required to apply an X factor for 2018–19 because we set the 2018–19 MAR in this decision.

Table 1.1 AER's final decision on Murraylink's annual building block revenue requirement, annual expected MAR, estimated total revenue cap and X factor ($million, nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Return on capital	6.4	6.5	7.0	7.4	7.3	34.6
Regulatory depreciation [a]	3.4	3.6	3.6	3.7	5.8	20.2
Operating expenditure [b]	4.5	4.6	4.8	4.8	5.1	23.8
Revenue adjustments [c]	–0.2	–0.2	0.5	0.0	0.1	0.2
Net tax allowance	0.4	0.4	0.5	0.5	0.6	2.5
Annual building block revenue requirement (unsmoothed)	14.6	14.9	16.4	16.5	19.0	81.4
Annual expected MAR (smoothed)	**14.3**	**15.2**	**16.2**	**17.3**	**18.5**	**81.4** [d]
X factor (%) [e]	n/a [f]	–3.86%	–3.86%	–4.40%	–4.40%	n/a

Source: AER analysis.

(a) Regulatory depreciation is straight-line depreciation net of the inflation indexation on the opening RAB.

(b) Operating expenditure includes debt raising costs.

(c) Includes revenue adjustment from the efficiency benefit sharing scheme (EBSS).

(d) The estimated total revenue cap is equal to the total annual expected MAR.

(e) The X factors will be revised to reflect the annual return on debt update. Under the CPI–X framework, the X factor measures the real rate of change in annual expected revenue from one year to the next. A negative X factor represents a real increase in revenue. Conversely, a positive X factor represents a real decrease in revenue.

(f) Murraylink is not required to apply an X factor for 2018–19 because we set the 2018–19 MAR in this decision. The MAR for 2018–19 is around 3.9 per cent higher than the approved MAR for 2017–18 in real terms, or 6.4 per cent higher in nominal terms.

1.2 Murraylink’s revised proposal

Murraylink's revised proposal included a total (smoothed) revenue cap of $89.2 million ($nominal) for the 2018–23 regulatory control period.

Table 1.2 sets out Murraylink’s revised proposed annual building block revenue requirement, the X factor, the annual expected MAR and the estimated total revenue cap.

Table 1.2 Murraylink's revised proposed annual building block revenue requirement, annual expected MAR, estimated total revenue cap and X factor ($million, nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Return on capital	7.2	7.3	7.9	8.3	8.2	38.8
Regulatory depreciation [a]	3.5	3.7	3.6	3.8	5.9	20.4
Operating expenditure [b]	4.5	4.6	4.8	4.8	5.1	23.8
Revenue adjustments [c]	–0.2	–0.2	0.5	0.0	0.1	0.2
Net tax allowance	1.1	1.1	1.1	1.2	1.2	5.7
Annual building block revenue requirement (unsmoothed)	16.1	16.4	17.8	18.1	20.6	89.0
Annual expected MAR (smoothed)	**15.1**	**16.4**	**17.8**	**19.2**	**20.6**	**89.2** [d]
X factor (%)	n/a	–6.06%	–5.59%	–5.15%	–4.75%	n/a

Source: Murraylink, *Revised revenue proposal*, December 2017, p. 53.

(a) Regulatory depreciation is straight-line depreciation net of the inflation indexation on the opening RAB.

(b) Operating expenditure includes debt raising costs.

(c) Includes revenue adjustment from EBSS.

(d) The estimated total revenue cap is equal to the total annual expected MAR.

1.3 Assessment approach

We did not change our assessment approach for the MAR from our draft decision. Attachment 1 section 1.3 of our draft decision details that approach.[3]

1.4 Reasons for final decision

For this final decision, we determine a total annual building block revenue requirement of $84.1 million ($nominal) for Murraylink for the 2018–23 regulatory control period. This compares to Murraylink's revised proposed total annual building block revenue requirement of $89.0 million ($nominal) for this period.

Figure 1.1 shows the building block components from our final determination that make up the annual building block revenue requirement for Murraylink, and the corresponding components from its revised proposal and our draft decision.

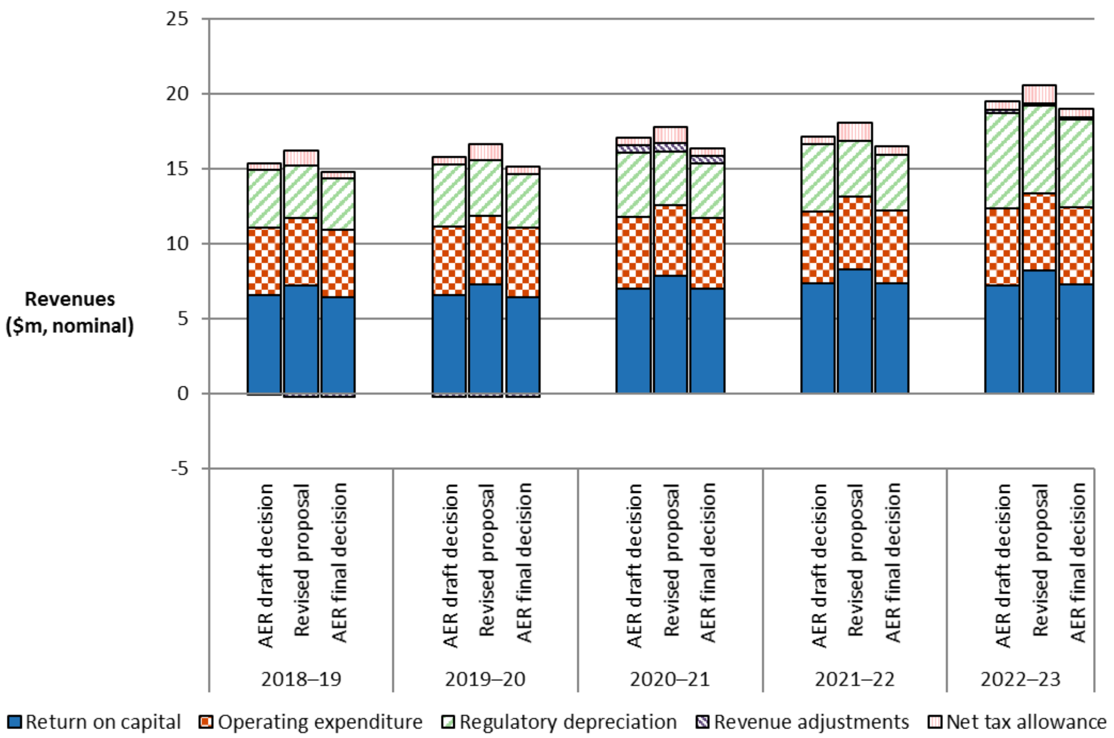
The most significant changes to Murraylink's revised proposal ($nominal) include:

- a reduction in the return on capital allowance of 10.9 per cent (attachment 3)
- a reduction in the regulatory depreciation allowance of 0.8 per cent (attachment 5)

[3] AER, *Murraylink Draft decision, Attachment 1 - Maximum allowed revenue*, pp. 1-8 to 1-14, September 2017.

- a reduction in the cost of corporate income tax allowance of 56.0 per cent (attachment 8).

Figure 1.1 AER's final decision and Murraylink's revised proposed annual building block revenue requirement ($million, nominal)



Source: AER analysis.

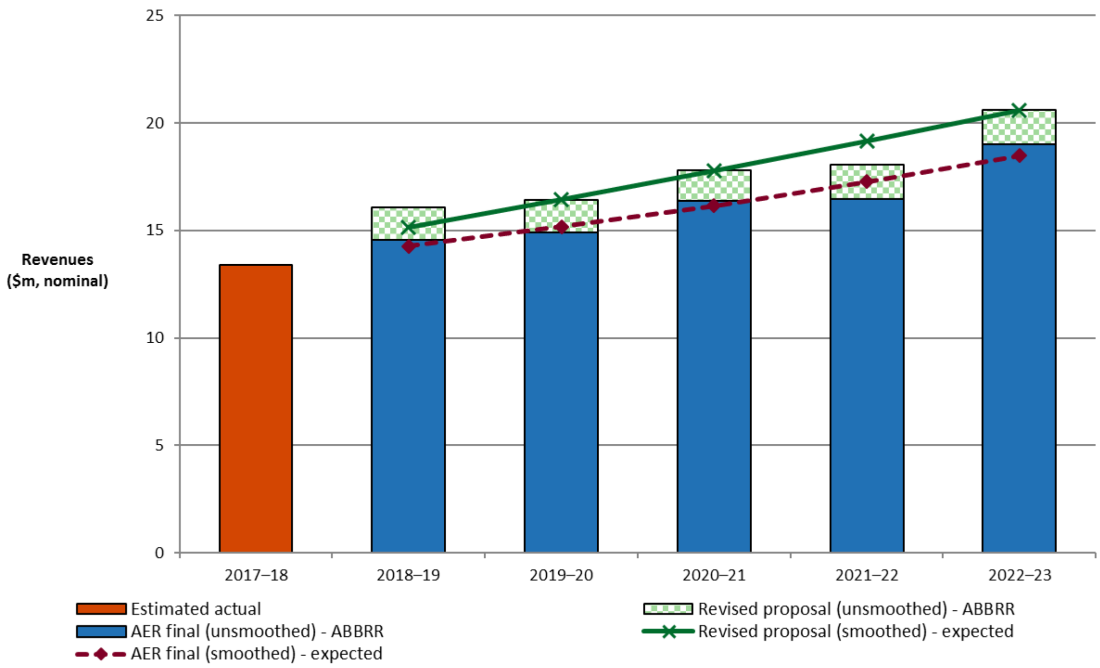
1.4.1 X factor, annual expected MAR and estimated total revenue cap

For this final decision, we determine X factors for Murraylink of –3.86 per cent per annum for 2019–21, and –4.40 per cent for 2021–23 over the 2018–23 regulatory control period.[4] The net present value (NPV) of the annual building block revenue requirement is $68.6 million ($nominal) as at 1 July 2018. Based on this NPV and applying the CPI–X method, we determine that the annual expected MAR (smoothed) for Murraylink is $14.3 million in 2018–19 increasing to $18.5 million in 2022–23 ($nominal). The resulting estimated total revenue cap for Murraylink is $81.4 million for the 2018–23 regulatory control period.

[4] Murraylink is not required to apply an X factor for 2018–19 because we set the 2018–19 MAR in this decision.

Figure 1.2 shows our final decision on Murraylink's annual expected MAR (smoothed revenue) and the annual building block revenue requirement (unsmoothed revenue) for the 2018–23 regulatory control period.

Figure 1.2 AER's final decision on Murraylink's annual expected MAR (smoothed) and annual building block revenue requirement (unsmoothed) ($million, nominal)



Source: AER analysis.

To determine the expected MAR for Murraylink, we have set the MAR for the first regulatory year at $14.3 million ($nominal) which is $0.3 million lower than the annual building block revenue requirement. We then applied expected inflation of 2.45 per cent per annum and an X factor of –3.86 per cent per annum to determine the expected MAR in the next two subsequent years. We have set the X factor at –4.40 per cent per annum for the final two years of the regulatory control period.[5] We consider that our profile of X factors results in an expected MAR in the last year of the regulatory control period that is as close as reasonably possible to the annual building block revenue requirement for that year.[6]

---

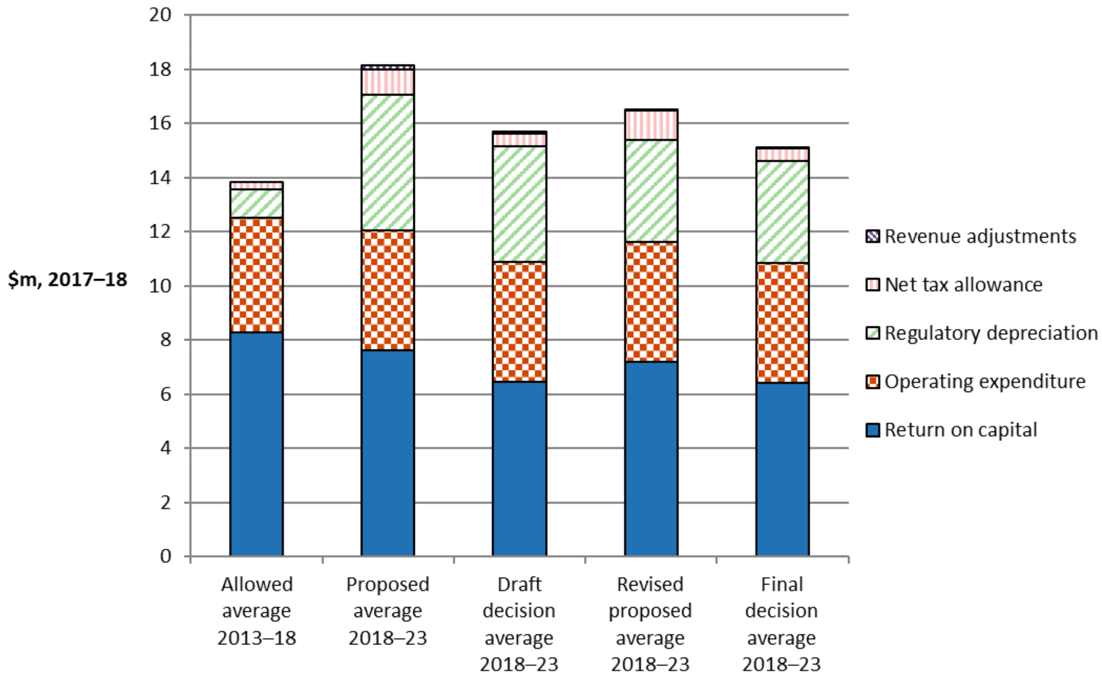
5 NER, cl. 6A.5.3(c)(3).

6 NER, cl. 6A.6.8(c)(2). We consider a divergence of up to 3 per cent between the expected MAR and annual building block revenue requirement for the last year of the regulatory control period is appropriate, if this can achieve smoother price changes for users over the regulatory control period. In the present circumstances, based on the X factors we have determined for Murraylink, this divergence is around 2.9 per cent.

The average annual increase in our approved expected MAR is 6.6 per cent per annum ($nominal) over the 2018–23 regulatory control period.[7] This consists of an initial increase of 6.4 per cent from 2017–18 to 2018–19, followed by average annual increases of 6.4 per cent for the following two years, then increases of 7.0 per cent for the final two years of the 2018–23 regulatory control period.[8] Our final decision results in an increase of 9.4 per cent in real terms ($2017–18) to Murraylink's average annual allowed revenue relative to that in the 2013–18 regulatory control period. This is primarily because we have determined a higher regulatory depreciation which is somewhat offset by the lower rate of return on capital in this final decision for the 2018–23 regulatory control period than those approved in the 2013–18 determination.

Figure 1.3 compares our final decision building blocks for Murraylink's 2018–23 regulatory control period with Murraylink's revised proposed revenue requirement for the same period, and the approved revenue for the 2013–18 regulatory control period.

Figure 1.3 Annual average of revenue by building block components ($million, 2017–18)



Source: AER analysis.

1.4.2 Shared assets

---

7 In real 2017–18 dollar terms, the average increase in our approved expected MAR for Murraylink is 4.1 per cent per annum over the 2018–23 regulatory control period.

8 In real 2017–18 dollar terms, this consists an initial increase of 3.9 per cent from 2017–18 to 2018–19, followed by average annual increases of 3.9 per cent for the following two years, then increases of 4.4 per cent for the final two years of the 2018–23 regulatory control period.

Service providers such as Murraylink may use assets to provide both prescribed transmission services, which we regulate, and unregulated services. These assets are called 'shared assets'.[9] If the revenue from shared assets is material, ten per cent of the unregulated revenues that a service provider earns from shared assets will be used to reduce the service provider's revenue for prescribed transmission services.[10]

As noted in the draft decision, Murraylink does not have any shared assets. We therefore confirm our acceptance in this final decision that Murraylink does not provide any unregulated services and hence does not earn unregulated revenue.

1.4.3 Indicative transmission charges and impact on electricity bills

Our final decision on Murraylink's expected MAR ultimately has some effects on the annual electricity bills paid by customers in South Australia and Victoria. Murraylink is a small component of the transmission network that serves South Australia and Victoria. The South Australian portion of Murraylink's annual expected MAR is 45 per cent.[11] ElectraNet is the main transmission network service provider for South Australia. We have finalised our assessment of its revenue proposal for the 2018–23 regulatory control period, which coincides with Murraylink's period.[12]

We have therefore provided an estimate of the combined effect of our final decisions for the ElectraNet and Murraylink transmission determinations on forecast average transmission charges and electricity bills in South Australia over the 2018–23 regulatory control period. This is discussed in our final decision for ElectraNet, which has been published at the same time as this Murraylink final decision.[13]

---

9 NER, cl. 6A.5.5.

10 AER, *Shared asset guideline*, November 2013, p. 15.

11 ElectraNet, as coordinating network service provider for South Australia, takes the portion of Murraylink's expected MAR for developing the applicable transmission charges to apply to customers; Murraylink, *Revenue proposal 2018–23—Attachment 12.1—Pricing Methodology*, January 2017, pp. 5 and 6.

12 AusNet Services is the main transmission network service provider for Victoria. Its transmission determination for the 2017–22 regulatory control period was completed earlier in April 2017 and does not align with Murraylink's period. As a result, the bill impacts for Victorian customers in AusNet Services' transmission determination do not incorporate this final decision for Murraylink.

13 AER, *Final decision ElectraNet transmission determination 2018 to 2023*, April 2018.