Murraylink transmission determination 2018–23

April 2018

AUSTRALIAN ENERGY REGULATOR

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: 1300 585 165
Email: AERInquiry@aer.gov.au

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Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
CESS	capital expenditure sharing scheme
EBSS	efficiency benefit sharing scheme
MAR	maximum allowed revenue
NER	National Electricity Rules
NSP	network service provider
NTSC	negotiated transmission service criteria
opex	operating expenditure
PTRM	post tax revenue model
RAB	regulatory asset base
STPIS	service target performance incentive scheme
TNSP	transmission network service provider

Summary

The Australian Energy Regulator (AER) makes a transmission determination for each transmission network service provider (TNSP) in accordance with chapter 6A of the National Electricity Rules (NER).[1]

This document is our transmission determination for Murraylink for the regulatory control period 1 July 2018 to 30 June 2023. Our reasons are included in the AER's final decision on Murraylink's transmission determination (April 2018) which should be read in conjunction with this document.

Our transmission determination for Murraylink consists of:[2]

- a revenue determination in respect of the provision by Murraylink of prescribed transmission services (section 1)
- a determination relating to Murraylink's negotiating framework (section 2)
- a determination that specifies the negotiated transmission service criteria (NTSC) that apply to Murraylink (section 3)
- a determination that specifies the pricing methodology that applies to Murraylink (section 4)
- a determination that specifies pass through events that will apply to this determination in addition to those specified in the NER (section 5).

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[1] NER, cl. 6A.2.1.

[2] NER, cl. 6A.2.2; 6A.7.3(a1).

1 Revenue

We calculate the amount of revenue that Murraylink requires each year of the regulatory control period in accordance with a building block approach.[3] This is referred to as the *annual building block revenue requirement*. The annual building block revenue is then used to calculate the expected *maximum allowed revenue* (MAR) for each year of the 2018–23 regulatory control period. The annual MAR that Murraylink may earn from providing prescribed transmission services is subject to adjustments to account for factors such as inflation, approved pass through costs and annual performance rewards or penalties.

Our revenue determination specifies the following matters:[4]

- the amount of the estimated total revenue cap for the regulatory control period and the method of calculating that amount
- the annual building block revenue requirement for each regulatory year of the regulatory control period
- the amount of the MAR for each regulatory year of the regulatory control period or the method of calculating that amount
- the regulatory asset base (RAB) as at the commencement of the regulatory control period
- the methodology that will be used for the indexation of the RAB
- the values that are to be attributed to the performance incentive scheme parameters for the purposes of the application to Murraylink of the service target performance incentive scheme (STPIS) that applies in respect of the regulatory control period
- the values that are to be attributed to the efficiency benefit sharing scheme parameters for the purposes of the application to Murraylink of the efficiency benefit sharing scheme (EBSS) that applies in respect of the regulatory control period
- how the capital expenditure sharing scheme (CESS) is to apply to Murraylink
- the commencement and length of the regulatory control period covered by this determination
- that depreciation for establishing the RAB as at the commencement of the following regulatory control period is to be based on forecast capital expenditure.

1.1 Method for calculating estimated total revenue cap

3 NER, cl. 6A.5.4.

4 NER, cl. 6A.4.2.

We determine an estimated total MAR of $81.4 million ($nominal) for Murraylink for the 2018–23 regulatory control period as shown in Table 1-1. The estimated total MAR is also known as the total revenue cap. It is the sum of the expected MAR for each regulatory year.[5]

Table 1-1 AER's final determination on Murraylink's annual expected maximum allowed revenue ($million, nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Annual expected MAR (smoothed)	14.3	15.2	16.2	17.3	18.5	81.4
X factor (%)[a]	n/a[b]	–3.86%	–3.86%	–4.40%	–4.40%	n/a

Source: AER analysis.

(a) 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.

(b) Murraylink is not required to apply an X factor for 2018–19 because we set the 2018–19 MAR in this transmission determination. 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.

We determine the annual expected MAR by using the X factors to smooth the annual building block revenue requirement as set out below.

1.2 Annual building block revenue requirement

We determine the annual building block revenue requirement for Murraylink as shown in Table 1-2.

Table 1-2 AER's final determination on Murraylink's annual building block revenue requirement ($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	3.4	3.6	3.6	3.7	5.8	20.2
Operating expenditure	4.5	4.6	4.8	4.8	5.1	23.8
Revenue adjustments	–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

5 NER, cl. 6A.5.3.

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Annual building block revenue requirement (unsmoothed)	**14.6**	**14.9**	**16.4**	**16.5**	**19.0**	**81.4**

Source: AER analysis.

1.3 Method for calculating maximum allowed revenue

We use an expected inflation rate in our post-tax revenue model (PTRM) to calculate the expected MAR (as shown in Table 1-2) in nominal dollar terms. Therefore, the calculation of the actual annual MAR will require an adjustment for actual inflation. The MAR is also subject to adjustments for updating the return on debt annually, a revenue increment or decrement determined in accordance with the STPIS, and any approved pass through amounts. This section sets out the method of this annual adjustment process.

We determine that the method for calculating Murraylink's MAR for each year of the 2018–23 period will be the sum of its allowed revenue (AR) for that year and adjustments arising from the STPIS and any approved pass through amounts.

We determine the 2018–19 AR of $14.3 million for Murraylink. Murraylink then applies an annual adjustment to determine its AR for each subsequent year of the 2018–23 period, based on the previous year's AR and using the CPI–X methodology. That is, the subsequent year's AR is determined by adjusting the previous year's AR for actual inflation and the X factor determined after the annual return on debt update:

$$AR_t = AR_{t-1} \times (1 + \Delta CPI) \times (1 - X_t)$$

where:

AR = the allowed revenue

t = time period/financial year (for t = 2, (2019–20), 3 (2020–21), 4 (2021–22), 5 (2022–23))

ΔCPI = the annual percentage change in the Australian Bureau of Statistics' (ABS) consumer price index (CPI) all groups, weighted average of eight capital cities from December in year $t-2$ to December in year $t-1$[6]

[6] In the transmission determination for Murraylink's 2013–18 regulatory control period, the CPI required for the annual MAR adjustment process reflects the March quarter CPI, which is typically published by the ABS in late April each year. For this transmission determination we require Murraylink to use the December quarter of the previous calendar year CPI for the annual MAR adjustment for its 2018–23 regulatory control period. December quarter CPI is typically released by the ABS towards the end of January of the following year. As the same set of CPI will be used for the RAB roll forward at the next reset for Murraylink in 2023, this change will allow us to update the actual CPI for RAB roll forward purposes well before the publication date of the AER's final decision at the next reset. There will be an overlapping issue of the March quarter CPI when the transition to the December

X = the smoothing factor determined in accordance with the PTRM as approved in the AER's final decision, and annually revised for the return on debt update in accordance with the formula specified in the return on debt appendix calculated for the relevant year.

The MAR is determined annually in accordance with the NER by adding to (or deducting from) the AR:

- the service target performance incentive scheme revenue increment (or revenue decrement)[7]
- any approved pass through amounts.[8]

The annual MAR is established according to the following formula:

MAR_t = (allowed revenue) + (performance incentive) + (pass through)

$$= AR_t + \left(\frac{(AR_{t-1} + AR_{t-2})}{2} \times S_{ct}\right) + P_t$$

where:

MAR = the maximum allowed revenue

AR = the allowed revenue

S = the revenue increment or decrement determined in accordance with the STPIS

P = the pass through amount (positive or negative) that the AER has determined in accordance with clauses 6A.7.2 and 6A.7.3 of the NER

t = time period/financial year (for *t* = 2 (2019–20), 3 (2020–21), 4 (2021–22), 5 (2022–23))

ct = time period/calendar year (for *t* = 2 (2018), 3 (2019), 4 (2020), 5 (2021)).

Murraylink may also adjust the MAR for under or over-recovery amounts.[9] That is, if the revenue amounts earned from providing prescribed transmission services in previous regulatory years are higher or lower than the sum of the approved MAR for those years, the difference could be included in the subsequent year's MAR. In the case of an under-recovery, the amount is added to the subsequent year's MAR. In the case of an over-recovery, the amount is subtracted from the subsequent year's MAR.

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quarter CPI occurs (this will be in the year 2018–19 for Murraylink). This is because the CPI for March quarter 2018 will be reflected in both 2017–18 and 2018–19. However, we consider this is only a transitional issue and unlikely to have a material impact on the revenue to be recovered by Murraylink.

7 NER, cl. 6A.7.4.

8 NER, cll. 6A.7.2 and 6A.7.3.

9 NER, cll. 6A.23.3(e)(5) and 6A.24.4(c).

Table 1-3 sets out the timing of the annual calculation of the AR and performance incentive.

Table 1-3 Timing of the calculation of allowed revenues and the performance incentive for Murraylink

t	Allowed revenue (financial year)	*ct*	Performance incentive (calendar year)
2	1 July 2019–30 June 2020	2	1 January 2018–31 December 2018
3	1 July 2020–30 June 2021	3	1 January 2019–31 December 2019
4	1 July 2021–30 June 2022	4	1 January 2020–31 December 2020
5	1 July 2022–30 June 2023	5	1 January 2021–31 December 2021

Note: The performance incentive for 1 January 2017–31 December 2017 is to be applied to the AR determined for 2018–19 (AR_1).

1.4 Regulatory asset base

We determine an opening RAB value of $112.8 million as at the commencement of the 2018–23 regulatory control period for Murraylink.

1.5 Method for indexation of the regulatory asset base

The method for indexing Murraylink's RAB for each year of the 2018–23 regulatory control period will be the same as that used to escalate its AR for that relevant year—that is, to apply the annual percentage change in the published ABS CPI all groups, weighted average of eight capital cities.[10] For Murraylink, this will be the December quarter CPI. This method will be used as part of the roll forward of Murraylink's opening RAB for the purposes of the AER's transmission revenue determination for the regulatory control period commencing on 1 July 2023.

1.6 Performance incentive scheme parameters

All components of version 5 of the STPIS will apply to Murraylink for the 2018–23 regulatory control period. The parameters applicable to Murraylink are set out in the tables below. Our final decision calculated the performance targets for Murraylink using its latest performance data including data for 2017.

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[10] ABS, *Catalogue number 6401.0, Consumer price index*, Australia.

Table 1-4 Final decision — Service Component Caps, floors and targets for 2018–2023

Parameter	Cap	Target	Floor
Unplanned outage circuit event rate:			
Circuit event rate – fault	0%	200%	500%
Circuit event rate - forced	0%	200%	500%
Proper operation of equipment (number of events):			
Failure of protection system [a]	0	1	4
Material failure of SCADA [a]	0	0	2

(a) These measures are weighted at zero percent in terms of reward and penalty under STPIS.

Source: AER analysis

Table 1-5 Final decision —MIC parameter values for 2018–2023

Parameter values - MIC	
Performance target	372
Unplanned outage event limit	63
Dollar per dispatch interval	$374

Source: AER analysis

1.7 Efficiency benefit sharing scheme parameters

The values for the efficiency benefit sharing scheme (EBSS) parameters that are to apply to Murraylink in the 2018–23 period, subject to adjustments required by the EBSS, are set out in Table 1-6.

Table 1-6 AER's decision on Murraylink's forecast opex for the EBSS ($million, 2017–18)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Forecast opex	4.39	4.37	4.42	4.37	4.54	22.11
less debt raising costs	–0.01	–0.01	–0.01	–0.01	–0.01	–0.03
less network support costs	–	–	–	–	–	–
Forecast opex for EBSS purposes	**4.39**	**4.37**	**4.41**	**4.37**	**4.54**	**22.07**

Source: AER analysis.

In calculating EBSS carryover amounts, the AER will exclude the following costs from the EBSS:

- debt raising costs
- network support costs.

In addition to these excluded cost categories we will also:

- adjust forecast opex to add (subtract) any approved revenue increments (decrements) made after the 2018–23 regulatory determination. This may include approved pass through amounts.
- adjust actual opex to add capitalised opex that has been excluded from the RAB
- exclude categories of opex not forecast using a single year revealed cost approach for the regulatory control period beginning in 2023 where doing so better achieves the requirements of clause 6A.6.5 of the NER.

When calculating actual opex under the EBSS we will adjust reported actual opex for the 2018–23 period to reverse any movements in provisions.

1.8 Application of the capital expenditure sharing scheme

We will apply version 1 of the CESS as set out in the capital expenditure incentives guideline to Murraylink's 2018−23 regulatory control period.[11] The guideline provides for the exclusion from the CESS of capex the service provider incurs in delivering a priority project approved under the network capability component of the STPIS.[12]

1.9 Commencement and length of the regulatory control period

The regulatory control period will be five years, commencing on 1 July 2018 and ending on 30 June 2023.

1.10 Depreciation for establishing the regulatory asset base as at the commencement of the next regulatory control period

The depreciation approach to be applied to establish Murraylink's RAB at the commencement of the 2023–28 regulatory control period will be based on the depreciation schedules (straight-line) using forecast capital expenditure at the asset class level approved for the 2018–23 regulatory control period.

[11] AER, *Capex incentive guideline*, November 2013, pp. 5–9; NER, cl. 6A.6.5A(e).

[12] AER, *Capex incentive guideline*, November 2013, p. 6.

2 Negotiating framework

Murraylink must comply with its negotiating framework and its NTSC (see section 3 of this determination) when it is negotiating the terms and conditions of access for negotiated transmission services to be provided to a person.[13]

Murraylink's negotiating framework sets out the procedure to be followed during negotiations between Murraylink and any person who wishes to receive a negotiated transmission service from Murraylink, as to the terms and conditions of access for provision of the service.[14]

Our approved negotiating framework for Murraylink is set out in attachment A to this determination.

In May 2017, the AEMC made a rule change to amend those aspects of the NER relating to the arrangements for transmission connections.[15] The rule change removes the requirement, on and from 1 July 2018, for TNSPs to develop individual negotiating frameworks for approval by the AER and for the AER to specify the NTSC that apply to TNSPs. Instead, the rule change elevates what is in the existing approved negotiating frameworks and NTSC into the NER, and expands the existing negotiating principles in the NER.[16]

As a result of the AEMC’s rule change, all negotiating framework determinations the AER has made prior to 1 July 2018 will cease to apply. After this date, any parties seeking connection to the transmission network will do so under the new rules.

Given that our final transmission determination for Murraylink is to be made by 30 April 2018 which is before the 1 July 2018 commencement date, we will still need to comply with our obligations under the NER and include a negotiating framework determination in Murraylink’s final transmission determination. However, in light of the AEMC final rule, this negotiating framework determination will cease to apply from 1 July 2018.

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13 NER, cl. 6A.9.2(a); 6A.9.3. Murraylink must also comply with chapters 4, 5 and 6A of the NER.

14 NER, cl. 6A.9.5(a).

15 AEMC, National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017 No. 4, 23 May 2017. In addition to transmission connections, the rule change also relates to transmission planning.

16 AEMC, Rule Determination, National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017, p. 66.

3 Negotiated transmission service criteria (NTSC)

Murraylink must comply with its negotiating framework (see section 2 of this determination) and its NTSC when it is negotiating the terms and conditions of access for negotiated transmission services to be provided to a person.[17]

Murraylink's NTSC set out the criteria that are to be applied:[18]

- by Murraylink in negotiating:
    - the terms and conditions of access for negotiated transmission services, including the prices that are to be charged for the provision of those services by Murraylink for the regulatory control period
    - any access charges which are negotiated by Murraylink during the regulatory control period
- by a commercial arbitrator in resolving any dispute, between Murraylink and a person who wishes to receive a negotiated transmission service, in relation to:
    - the terms and conditions of access for the negotiated transmission service, including the price that is to be charged for the provision of that service by Murraylink
    - any access charges that are to be paid to or by Murraylink.

The following NTSC will apply to Murraylink for the regulatory control period covered by this determination.

National Electricity Objective

1. The terms and conditions of access for a negotiated transmission service, including the price that is to be charged for the provision of that service and any access charges, should promote the achievement of the National Electricity Objective.

Criteria for terms and conditions of access

Terms and conditions of access

2. The terms and conditions of access for a negotiated transmission service must be fair, reasonable and consistent with the safe and reliable operation of the power system in accordance with the NER.

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17 NER, cl.6A.9.2(a); 6A.9.3. Murraylink must also comply with chapters 4, 5 and 6A of the NER.

18 NER, cl. 6A.9.4.

3. The terms and conditions of access for negotiated transmission services, particularly any exclusions and limitations of liability and indemnities, must not be unreasonably onerous. Relevant considerations include the allocation of risk between Murraylink and the other party, the price for the negotiated transmission service and the cost to the TNSP of providing the negotiated service.
4. The terms and conditions of access for a negotiated transmission service must take into account the need for the service to be provided in a manner that does not adversely affect the safe and reliable operation of the power system in accordance with the NER.

Price of services

5. The price of a negotiated transmission service must reflect the cost that Murraylink has incurred or incurs in providing that service, and must be determined in accordance with the principles and policies set out in Murraylink's Cost Allocation Methodology.
6. Subject to criteria 7 and 8, the price for a negotiated transmission service must be at least equal to the avoided cost of providing that service but no more than the cost of providing it on a stand-alone basis.
7. If the negotiated transmission service is a shared transmission service that:
   (a) exceeds any network performance requirements which it is required to meet under any relevant electricity legislation; or
   (b) exceeds the network performance requirements set out in schedule 5.1a and 5.1 of the NER

   then the difference between the price for that service and the price for the shared transmission service which meets network performance requirements must reflect Murraylink's incremental cost of providing that service (as appropriate).
8. For shared transmission services, the difference in price between a negotiated transmission service that does not meet or exceed network performance requirements and a service that meets those requirements should reflect Murraylink's avoided costs. Schedule 5.1a and 5.1 of the NER or any relevant electricity legislation must be considered in determining whether any network service performance requirements have not been met or exceeded.
9. The price for a negotiated transmission service must be the same for all Transmission Network Users. The exception is if there is a material difference in the costs of providing the negotiated transmission service to different Transmission Network Users or classes of Transmission Network Users.
10. The price for a negotiated transmission service must be subject to adjustment over time to the extent that the assets used to provide that service are subsequently used to provide services to another person. In such cases the adjustment must reflect the extent to which the costs of that asset are being recovered through charges to that other person.

11. The price for a negotiated transmission service must be such as to enable the TNSP to recover the efficient costs of complying with all regulatory obligations associated with the provision of the negotiated transmission service.

Criteria for access charges

Access charges

12. Any access charges must be based on the costs reasonably incurred by Murraylink in providing Transmission Network User access. This includes the compensation for forgone revenue referred to in clause 5.4A(h) to (j) of the NER and the costs that are likely to be incurred by a person referred to in clause 5.4A(h) to (j) of the NER (as appropriate).

4 Pricing methodology

The pricing methodology that will apply to Murraylink for the period of this determination is set out in Attachment B.

The role of Murraylink's pricing methodology is to answer the question 'who should pay how much'[19] in order for Murraylink to recover its costs. Murraylink's pricing methodology provides a 'formula, process or approach'[20] that when applied:

- allocates the aggregate annual revenue requirement to the categories of prescribed transmission services that a transmission business provides and to the connection points of network users[21]
- determines the structure of prices that a transmission business may charge for each category of prescribed transmission services.[22]

Murraylink's pricing methodology relates to prescribed transmission services only.

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19 AEMC, *Rule determination: National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 No. 22*, 21 December 2006, p. 1.

20 NER, cl. 6A.24.1(b).

21 NER, cl. 6A.24.1(b)(1).

22 NER, cl. 6A.24.1(b)(2).

5 Pass through events

A pass through event is one which entails Murraylink incurring materially lower or higher costs in providing prescribed transmission services than it would have incurred but for that event (a negative or positive change event, respectively).[23] Where a pass through event occurs Murraylink may seek our approval to, or we may require Murraylink to pass those cost changes through to its users.[24]

Under the NER any of the following is a pass through event for this transmission determination:[25]

- a regulatory change event
- a service standard event
- a tax change event
- an insurance event
- any other event specified in this transmission determination as a pass through event for this determination.

The first four of these pass through events are prescribed by, and defined in, the NER.[26] In addition, the following nominated pass through event will apply:

Table 5-1 Approved nominated pass through event

Event	Definition
Connection cost event	An event where the connection charge levied by AusNet Services and ElectraNet is different from that incurred in the 2016 base year[27]

23 NER, Chapter 10 Glossary.

24 NER, cl. 6A.7.3(a), (b).

25 NER, cl. 6A.7.3(1a).

26 NER, Chapter 10 Glossary.

27 Murraylink Transmission Company Pty Ltd, *Murraylink Revenue Proposal (Public) Effective July 2018 to June 2023*, January 2017, p. 120.