FINAL DECISION
Directlink transmission determination
2015−16 to 2019−20

Attachment 1 − Maximum allowed revenue

April 2015

AUSTRALIAN
ENERGY
REGULATOR

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Note

This attachment forms part of the AER's final decision on Directlink's revenue proposal 2015–20. It should be read with other parts of the final decision.

The final decision includes the following documents:

Overview

Attachment 1 – maximum allowed revenue

Attachment 2 – regulatory asset 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 benefit sharing scheme

Attachment 10 – capital expenditure sharing scheme

Attachment 11 – service target performance incentive scheme

Attachment 12 – pricing methodology and negotiated services

Attachment 13 – pass through events

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
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

Shortened form	Extended form
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
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 the AER's final decision on the maximum allowed revenue (MAR) for the provision of prescribed transmission services for each year of Directlink's 2015–20 regulatory control period. Specifically, the attachment addresses:[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 the TNSP'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 Directlink's revised proposed annual building block revenue requirement, annual expected MAR and total revenue cap. This is because we have not accepted the building block costs that Directlink proposed in its revised proposal. We have calculated the X factor and the annual expected MAR (smoothed) to reflect our final decisions on Directlink's annual building block revenue requirement.

We determine a total annual building block revenue requirement for Directlink of $68.7 million ($ nominal) for the 2015–20 regulatory control period. As a result of our smoothing of the annual building block revenue requirement, we approve an estimated total revenue cap of $68.7 million ($ nominal) for Directlink for the 2015–20 regulatory control period. Our approved X factor is zero per cent per annum for 2016–17 to 2019–20.

Table 1-1 sets out our final decision on Directlink's annual building block revenue requirement, the X factor, the annual expected MAR and the estimated total revenue cap for the 2015–20 regulatory control period.

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

Table 1-1 AER's final decision on Directlink's annual building block revenue requirement, annual expected MAR, estimated total revenue cap and X factor ($ million, nominal)

	2015–16	2016–17	2017–18	2018–19	2019–20	Total
Return on capital	7.1	7.4	7.4	7.3	7.4	36.5
Regulatory depreciation[a]	1.7	1.9	2.1	2.4	2.6	10.7
Operating expenditure	4.3	3.6	3.8	3.8	4.0	19.5
Net tax allowance	0.3	0.4	0.4	0.4	0.5	2.1
Annual building block revenue requirement (unsmoothed)	13.3	13.3	13.7	14.0	14.4	68.7
Annual expected MAR (smoothed)	**13.1**	**13.4**	**13.7**	**14.1**	**14.4**	**68.7**[b]
X factor (%)[c]	n/a[d]	0.0%	0.0%	0.0%	0.0%	n/a

Source: AER analysis.

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

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

(c) The X factor from 2016–17 to 2019–20 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.

(d) Directlink is not required to apply an X factor for 2015–16 because the MAR is set in this decision. The MAR for 2015–16 is around 10.1 per cent lower than the approved MAR ($14.2 million) in the final year of the 2005–15 regulatory control period (2014–15) in real terms, or 7.8 per cent lower in nominal terms.

1.2 Directlink's revised proposal

Directlink's revised proposal included a total (smoothed) revenue cap of $78.5 million ($ nominal) for the 2015–20 regulatory control period.

Table 1-2 sets out Directlink's revised proposed annual building block revenue requirement, the X factor, the annual expected MAR and the estimated total revenue cap.

Table 1-2 Directlink's revised proposed annual building block revenue requirement, annual expected MAR, estimated total revenue cap and X factor ($ million, nominal)

	2015–16	2016–17	2017–18	2018–19	2019–20	Total
Return on capital	8.1	8.7	8.9	9.0	9.1	43.8
Regulatory depreciation[a]	1.7	2.01	2.3	2.5	2.8	11.3
Operating expenditure	4.5	3.8	4.0	4.0	4.1	20.4
Net tax allowance	0.5	0.6	0.6	0.7	0.7	3.2
Annual building block revenue requirement (unsmoothed)	14.8	15.1	15.7	16.2	16.8	78.6
Annual expected MAR (smoothed)	**14.9**	**15.3**	**15.7**	**16.1**	**16.5**	**78.5**[b]
X factor (%)	n/a[a]	0.0%	0.0%	0.0%	0.0%	n/a

Source: Directlink, *Revised proposed post-tax revenue model*, January 2015.

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

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

1.3 AER's assessment approach

We did not change our assessment approach for the MAR from our draft decision. Section 1.3 of our draft decision details that approach.

1.4 Reasons for final decision

We determine a total annual building block revenue requirement of $68.7 million ($ nominal) for Directlink for the 2015–20 regulatory control period. This compares to Directlink's revised proposed total annual building block revenue requirement of $78.6 million ($ nominal) for this period.

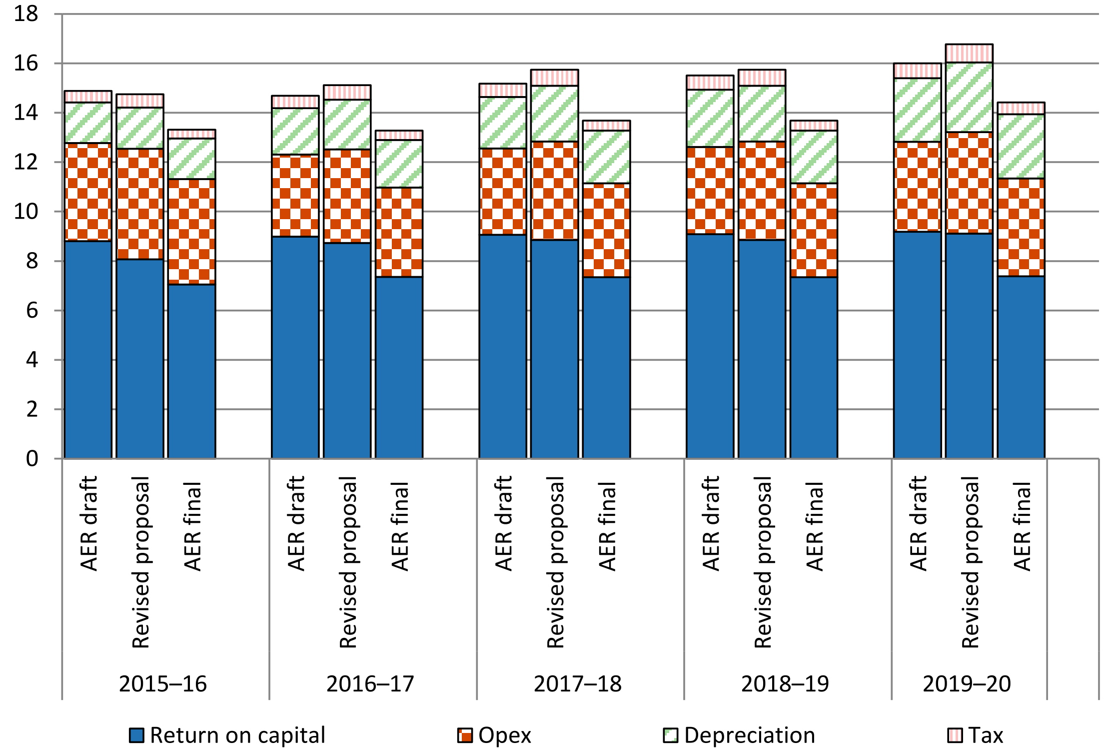
Figure 1-1 shows the building block components from our determination that make up the annual building block revenue requirement for Directlink, and the corresponding components from its revised proposal.

We have calculated the annual building block revenue requirement for Directlink based on our final decision on each of these building block components. The revenues are affected by our changes to Directlink's revised proposed building blocks. These changes include:

- forecast operating expenditure (attachment 7)
- the rate of return (attachment 3)
- the opening RAB (attachment 2) and forecast capital expenditure (attachment 6)
- forecast regulatory depreciation (attachment 5)

- the estimated cost of corporate income tax (attachment 8).

Figure 1-1 AER's final decision and Directlink's revised proposed annual building block revenue requirement ($ million, nominal)



Source: AER analysis.

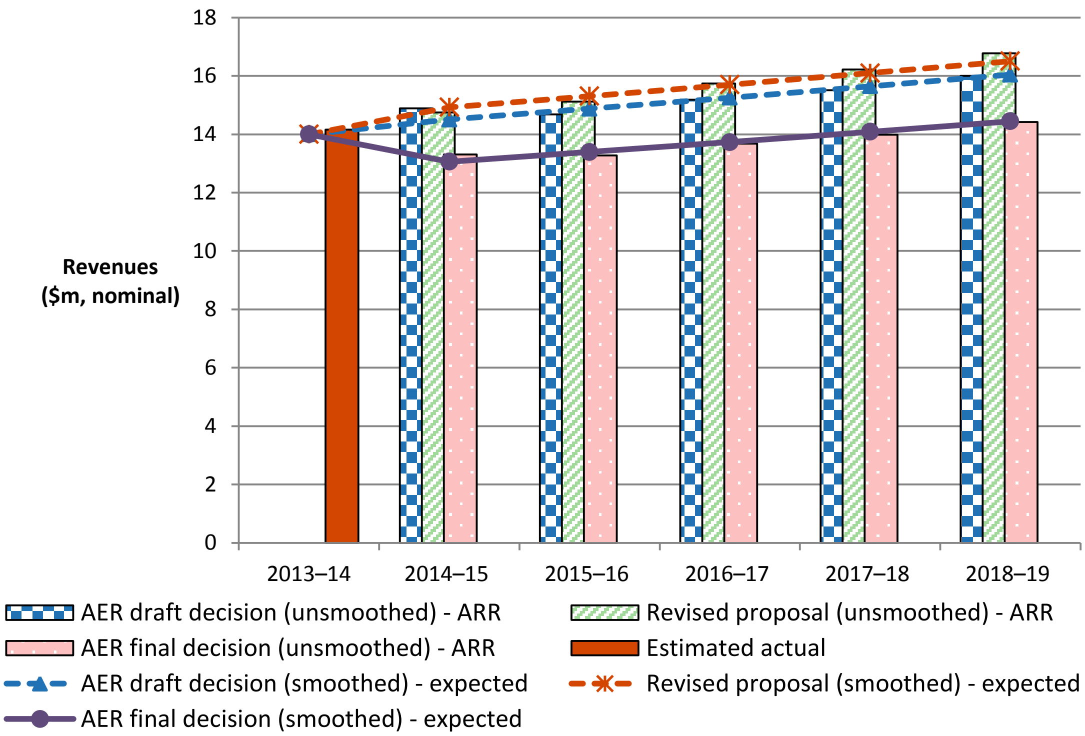
1.4.1 X factor, annual expected MAR and estimated total revenue cap

For this final decision, we determine an X factor of zero per cent per annum for the years 2016–17 to 2019–20 for Directlink.[2] The net present value (NPV) of the annual building block revenue requirement is $58.6 million ($ nominal) as at 1 July 2015. Based on this NPV and applying the CPI–X method, we determine that the annual expected MAR (smoothed) for Directlink increases from $13.1 million in 2015–16 to $14.4 million in 2019–20 ($ nominal). The resulting estimated total revenue cap for Directlink is $68.7 million ($ nominal) for the 2015–20 regulatory control period.

Figure 1-2 shows our final decision on Directlink's annual expected MAR (smoothed revenue) and the annual building block revenue requirement (unsmoothed revenue) for the 2015–20 regulatory control period.

2 The X factors represent the rate of change in the real revenue path over the 2015–20 regulatory control period under the CPI–X framework. They must equalise (in net present value terms) the total expected MAR to be earned by the service provider with the total building block revenue requirement for that period.

Figure 1-2 AER's final decision on Directlink's annual expected MAR (smoothed) and annual building block revenue requirement (unsmoothed) ($ million, nominal)



Source: AER analysis.

To determine the expected MAR for Directlink, we have set the MAR for the first regulatory year at $13.1 million ($ nominal) which is $0.3 million lower than the annual building block revenue requirement. We then applied an X factor of zero per cent per annum to determine the expected MAR in subsequent years.[3] 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 as required under the NER.[4]

The average increase in our approved expected MAR is 2.6 per cent per annum ($ nominal) over the 2015–20 regulatory control period.[5] Our final decision results in a

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3 NER, clause 6A.5.3(c)(3).

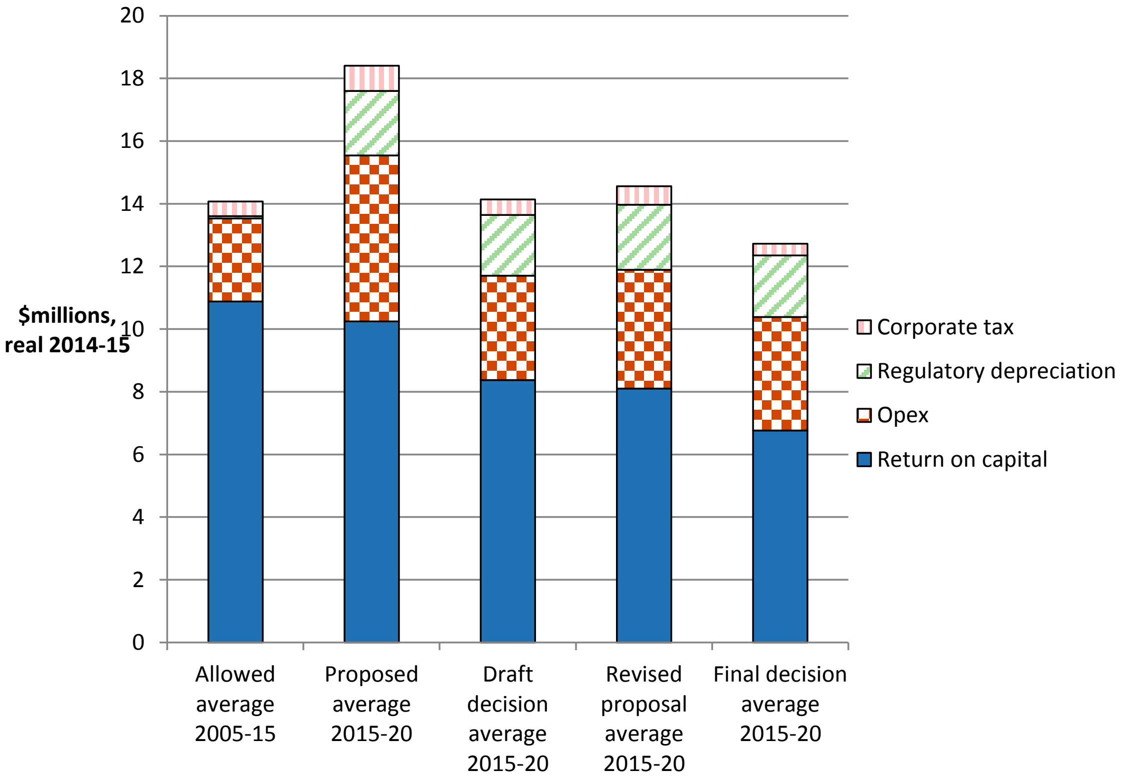
4 NER, clause 6A.6.8(c)(2). We consider a divergence of up to 3 per cent between the expected MAR and annual building block revenue requirement for the last year of the regulatory control period is appropriate, if this can achieve smoother price changes for users over the regulatory control period. In the present circumstances, based on the X factors we have determined for Directlink, this divergence is around 0.2 per cent.

5 In real dollar terms, the average change in our approved expected MAR for Directlink is zero per cent per annum over the 2015–20 regulatory control period.

decrease of 9.5 per cent in real terms ($2014–15) to Directlink's average annual revenue relative to that in the 2005–15 regulatory control period.[6]

Figure 1-3 compares our final and draft decision building blocks for Directlink's 2015–20 regulatory control period with Directlink's proposed and revised revenue requirement for that same period, and the approved revenue for the 2005–15 regulatory control period.

Figure 1-3 Annual average of AER's final and draft decision building blocks compared to Directlink's proposed and revised revenue requirement, and approved revenue for 2005–15 ($ million, 2014–15)



Source: AER analysis.

1.4.2 Shared assets

In the draft decision, we noted Directlink expects not to earn unregulated revenues with regulated assets.[7] As such, we did not apply shared assets revenue adjustment to

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6 Because the regulatory control periods compared are of different lengths, we calculated the annual average revenues for the relevant regulatory control periods for comparison.

7 AER, *Draft decision, Directlink transmission determination 2015–16 to 2019–20, Attachment 1: Maximum allowed revenue*, November 2014, p. 1-17.

Directlink for the 2015–20 regulatory control period. We continue to maintain this view. Our final decision is therefore consistent with our draft decision.

1.4.3 Indicative average transmission charges

The NER does not require an estimate of transmission charges for a revenue determination of a TNSP. Nonetheless, we typically provide some indicative transmission price impacts flowing from the revenue determination.

Our final decision on Directlink's expected MAR ultimately affects the prices consumers pay for electricity. However, Directlink's expected MAR do not directly translate to changes in annual electricity bills, principally because Directlink is a small component of the broader transmission network that serves NSW and the ACT. TransGrid is the main transmission network service provider in this region, and is designated the coordinating TNSP. Our final decision on TransGrid's expected MAR is the principal determinant of the estimated transmission charges, and therefore the estimated impact of this component on annual electricity bills. Further, the transmission charges in NSW/ACT are also affected by the revenue determinations for Ausgrid and ActewAGL's transmission assets.[8] Directlink, just like Ausgrid and ActewAGL, collects its transmission revenues from TransGrid.

We therefore estimate the forecast average transmission charges in NSW/ACT by:

- taking the sum of TransGrid and Directlink's annual expected MAR determined respectively in our final decisions and the expected revenues for Ausgrid and ActewAGL's transmission assets for 2014–18[9]
- dividing it by the forecast annual energy delivered in NSW/ACT as published by AEMO.[10]

Our final decision for TransGrid presents this analysis.[11]

[8] While Ausgrid and ActewAGL are predominantly electricity distribution businesses, they also own and operate some transmission assets. These assets operate in parallel and support TransGrid's transmission network to provide transmission network services to NSW and ACT.

[9] We made final decisions on Ausgrid and ActewAGL's proposed annual expected MAR for the 2014–19 period. Our final decisions for Ausgrid and ActewAGL can be found on our website at www.aer.gov.au. For this analysis, we used Ausgrid's and ActewAGL's 2014–15 to 2017–18 transmission revenues from our final decisions to be consistent with TransGrid's 2014–18 period.

[10] AEMO, *National electricity forecasting report for the national electricity market*, June 2014, table 6, Medium.

[11] AER *Final decision, TransGrid transmission determination 2015-18*, April 2015, Overview section 7.2: http://www.aer.gov.au/node/23137.