DRAFT DECISION

Directlink
Transmission Determination
2020 to 2025

Attachment 1
Maximum allowed revenue

October 2019

AUSTRALIAN ENERGY REGULATOR

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Note

This attachment forms part of the AER's draft decision on Directlink's 2020–25 transmission determination. It should be read with all other parts of the draft decision.

The draft 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 11 – Pricing methodology

Attachment 12 – Pass through events

Contents

Shortened forms

Shortened form	Extended form
ABS	Australian Bureau of Statistics
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AR	allowed revenue
capex	capital expenditure
CESS	capital expenditure sharing scheme
CPI	consumer price index
EBSS	efficiency benefit sharing scheme
MAR	maximum allowed revenue
NER	national electricity rules
NPV	net present value
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RIN	regulatory information notice
SL	straight-line
TNSP	transmission network service provider

1 Maximum allowed revenue

This attachment sets out our draft decision on Directlink's maximum allowed revenue (MAR) for the provision of prescribed transmission services over the 2020–25 regulatory control period. Specifically, it sets out our draft 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 Directlink'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.

1.1 Draft decision

We determine a total annual building block revenue requirement of $79.3 million ($nominal, unsmoothed) for Directlink for the 2020–25 regulatory control period. Our determination represents a reduction of $10.5 million ($nominal) or 11.7 per cent to Directlink's proposal and reflects the impact of our draft decisions on the various building block costs. For the reasons discussed in the attachments to this draft determination, our decisions on Directlink's proposed building block costs have a consequential impact on its annual building block revenue requirement.

We determine the annual expected MAR (smoothed) and X factor for each regulatory year of the 2020–25 regulatory control period by smoothing the annual building block revenue requirement. Our draft decision is to approve an estimated total revenue cap of $79.2 million ($nominal) for Directlink for the 2020–25 regulatory control period. Our approved X factor for 2021–22 to 2024–25 is –1.3 per cent per annum.[2]

Table 1-1 sets out our draft decision on Directlink's annual building block revenue requirement, the X factor, the annual expected MAR and the estimated total revenue cap for the 2020–25 regulatory control period.

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

2 Directlink is not required to apply an X factor for 2020–21 because we set the 2020–21 MAR in this decision.

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

	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Return on capital	6.8	7.0	7.1	7.0	6.9	34.8
Regulatory depreciation[a]	3.4	3.9	4.3	4.7	5.2	21.5
Operating expenditure[b]	4.7	4.9	5.1	5.2	5.4	25.3
Revenue adjustments[c]	–0.7	–1.4	–0.5	–0.1	–0.1	–2.8
Net tax allowance	0.2	0.1	0.1	0.1	0.1	0.6
Annual building block revenue requirement (unsmoothed)	14.3	14.5	16.0	16.9	17.6	79.3
Annual expected MAR (smoothed)	**14.7**	**15.2**	**15.8**	**16.4**	**17.0**	**79.2**[d]
X factor (%)[e]	n/a[f]	–1.30%	–1.30%	–1.30%	–1.30%	n/a

Source: AER analysis.

(a) Regulatory depreciation is SL depreciation net of the inflation indexation on the opening RAB.

(b) Includes debt raising costs.

(c) Includes revenue adjustments from the efficiency benefit sharing scheme (EBSS) and the capital expenditure sharing scheme (CESS).

(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) Directlink is not required to apply an X factor for 2020–21 because we set the 2020–21 MAR in this decision. The MAR for 2020–21 is around 2.1 per cent lower than the approved MAR for 2019–20 in real terms, or 0.3 per cent higher in nominal terms.

1.2 Directlink's proposal

Directlink proposed a total (smoothed) revenue cap of $89.8 million ($nominal) for the 2020–25 regulatory control period.

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

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

	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Return on capital	7.7	8.1	8.4	8.5	8.8	41.4
Regulatory depreciation[a]	3.5	4.1	4.6	5.1	5.7	22.9
Operating expenditure[b]	5.0	5.1	5.3	5.5	5.6	26.5

Revenue adjustments[c]	–1.0	–1.1	–0.5	–0.2	0.1	–2.8
Net tax allowance	0.3	0.3	0.3	0.4	0.4	1.7
Annual building block revenue requirement (unsmoothed)	15.5	16.5	18.0	19.2	20.5	89.8
Annual expected MAR (smoothed)	**15.5**	**16.6**	**17.9**	**19.2**	**20.6**	**89.8**[d]
X factor (%)	n/a[e]	–4.93%	–4.93%	–4.93%	–4.93%	n/a

Source: Directlink, *Revenue proposal 2020-25*, 31 January 2019, p. 92.

(a) Regulatory depreciation is SL depreciation net of the inflation indexation on the opening RAB.

(b) Includes debt raising costs.

(c) Includes revenue adjustments from EBSS and CESS.

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

(e) Directlink is not required to apply an X factor for 2020–21 because we set the 2020–21 MAR in this decision.

1.3 Assessment approach

In this section, we describe the building block approach used to determine Directlink's expected MAR. We also set out the annual revenue adjustment to be applied to Directlink's MAR over the 2020–25 regulatory control period.

1.3.1 The building block approach

The MAR is calculated using the post-tax revenue model (PTRM).[3] The PTRM must be such that the expected MAR for each year of the regulatory control period is equal to the net present value (NPV) of the annual building block revenue requirement.[4] The total revenue cap is the sum of the MARs for the period.[5] In turn, the annual building block revenue requirement must be determined using a building block approach.[6] Therefore, we adopt a building block approach when making our decision on Directlink's total revenue cap and expected MAR for each regulatory year of the regulatory control period. Under this approach we determine the value of the building block costs that make up the annual building block revenue requirement for each regulatory year. These building block costs are set out in section 1.3.2.

We developed the PTRM, which brings together the various building block costs and calculates the annual building block revenue requirement for each year of the regulatory control period.[7] The PTRM also calculates the X factors required under the CPI–X methodology which is used to escalate the MAR for each year (other than the first year) of the regulatory control period.[8] Using the X factors and annual building

[3] NER, cll. 6A.5.1 and 6A.5.3.

[4] NER, cl. 6A.5.3(c)(1).

[5] NER, cl. 6A.5.3(c)(4).

[6] NER, cl. 6A.5.4.

[7] NER, cl. 6A.5.

[8] NER, cll. 6A.5.3 and 6A.6.8.

block revenue requirement, the annual expected MAR (smoothed) is forecast for each year of the regulatory control period. Directlink's revenue proposal must be prepared using our PTRM.[9]

The annual building block revenue requirement can be lumpy over the regulatory control period. To minimise price shocks, revenues are smoothed within a regulatory control period while maintaining the principle of cost recovery under the building block approach. Smoothing requires diverting some of the cost recovery to adjacent years within the regulatory control period so that the NPV of the annual expected MAR (smoothed revenues) is equal to the NPV of the annual building block revenue requirement (unsmoothed revenues). That is, a smoothed profile of the expected MAR is determined for the regulatory control period under the CPI–X methodology.

The expected MAR for the first year is generally set equal to the annual building block revenue requirement for the first year of the regulatory control period. It may be appropriate to set the expected MAR for the first year to align with the MAR from the last year of the previous regulatory control period to avoid any large revenue variation between periods (or P_0):[10]

$MAR_1 = AR_1$ or MAR_L

where:

MAR_1 = the maximum allowed revenue for year 1 of the regulatory control period

AR_1 = the annual building block revenue requirement for year 1 of the regulatory control period

MAR_L ~ the maximum allowed revenue for the last year of the previous regulatory control period.

To enable the formula for the annual revenue adjustment process (discussed below in section 1.3.3) to operate correctly, we will refer to the MAR determined in this decision using the building block costs as the allowed revenue (AR). This is because the expected MAR determined using the building block costs do not incorporate performance incentive scheme revenue adjustments and pass through amounts that may apply to each regulatory year.

In this determination for Directlink, we first calculate annual building block revenue requirements for each year of the 2020–25 regulatory control period. To do this we consider the various costs facing Directlink and the trade-offs and interactions between

[9] NER, cl. 6A.5.1(a).

[10] The MAR for year 1 of the next regulatory control period may include adjustment for the performance incentive that applied during the previous regulatory control period, and under or over recovery adjustments from previous regulatory years.

these costs, service quality and across years. This reflects our holistic assessment of Directlink's proposal.

We understand the trade-offs that occur between building block costs and test the sensitivity of these costs to their various driver elements. These trade-offs are discussed in the interrelationships section of the various attachments to this draft decision and are reflected in the calculations made in the PTRM.[11] Such understanding allows us to exercise judgement in determining the final inputs into the PTRM and the annual building block revenue requirements that result from this modelling.

Having determined the total annual building block revenue requirement for the 2020–25 regulatory control period, we smooth the annual building block revenue requirements for each regulatory year across that period. This step reduces revenue variations between years, and calculates the expected MAR and X factor for each year.[12] The X factors equalise (in NPV terms) the total expected revenue cap to be earned by Directlink with the total building block revenue requirement for the 2020–25 regulatory control period.[13] They must minimise, as far as reasonably possible, the variance between the expected MAR and annual building block revenue requirement for the last regulatory year of the period.[14] By minimising this divergence, it helps to manage the prospect of a significant revenue change (and consequently prices) between the last year of the 2020–25 regulatory control period, and first year of the following 2025–30 regulatory control period. 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 reasonable, if this can promote smoother price changes over the regulatory control period.

The building block costs (and the elements that drive those costs) used to determine the unsmoothed annual building block revenue requirements are set out in section 1.3.2.

1.3.2 The building block costs

The efficient costs to be recovered by Directlink can be thought of as being made up of various building block costs. Our draft decision assesses each of the building block costs and the elements that drive these costs. The building block costs are approved reflecting trade-offs and interactions between the cost elements, service quality and across years.

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11 There are trade-offs that are not modelled in the PTRM but are reflected in the inputs to the PTRM. For example, service quality is not explicitly modelled in the PTRM, but the trade-offs between service quality and price are reflected in the forecast capex and opex inputs to the model. Other trade-offs are obvious from the calculations in the PTRM. For example, while it may be expected that a lower regulatory asset base would also lower revenues, the PTRM shows that this will not occur if the reduction in the regulatory asset base is due solely to an increase in the depreciation rate. In such circumstances, revenues increase as the increased depreciation allowance more than offsets the reduction in the return on capital caused by the lower regulatory asset base.

12 NER, cl. 6A.6.8(a).

13 NER, cl. 6A.6.8(c)(1).

14 NER, cl. 6A.6.8(c)(2).

Table 1-3 shows the building block costs that form the annual building block revenue requirement for each year and where discussion on the elements that drive these costs can be found within this draft decision.

Table 1-3 Building block costs

Building block costs	Attachments where elements are discussed
Return on capital	Regulatory asset base (attachment 2)
	Rate of return (attachment 3)
	Capital expenditure (attachment 5)
Regulatory depreciation (return of capital)	Regulatory asset base (attachment 2)
	Regulatory depreciation (attachment 4)
	Capital expenditure (attachment 5)
Operating expenditure	Operating expenditure (attachment 6)
Estimated cost of corporate tax	Corporate income tax (attachment 7)
Other revenue adjustments	
Adjustment for shared assets	Maximum allowed revenue (attachment 1)
Operating efficiency benefits/penalties	Efficiency benefit sharing scheme (attachment 8)
Capital efficiency benefits/penalties	Capital expenditure sharing scheme (attachment 9)

1.3.3 Annual revenue adjustment process

The PTRM incorporates an expected inflation rate to calculate the expected MAR (excluding performance incentive scheme revenue adjustments and pass through amount that may apply to each regulatory year) in nominal dollar terms, whereas the actual MAR from the second year onwards is adjusted for actual inflation. As discussed in the *Rate of return instrument*, we will update Directlink's return on debt annually.[15] This means the actual MAR for each year will also be adjusted for revised X factors after the annual return on debt update. This annual revenue adjustment process is set out below.

The MAR for the subsequent year of the regulatory control period requires an annual adjustment based on the previous year's allowed revenue.[16] That is, the subsequent year's allowed revenue is determined by adjusting the previous year's allowed revenue 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:

[15] AER, *Rate of return instrument*, December 2018, note 29.

[16] In the case of making the annual adjustment for year 2, the previous year's AR would be the same as the approved smoothed revenue for year 1 as contained in the PTRM.

AR	=	the allowed revenue
t	=	time period/financial year (for t = 2 (2021–22), 3 (2022–23), 4 (2023–24), 5 (2024–25))
ΔCPI	=	the annual percentage change in the ABS Consumer price index all groups, weighted average of eight capital cities from December in year t – 2 to December in year t – 1
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 *Rate of return instrument* calculated for the relevant year.[17]

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

- the service target performance incentive scheme revenue increment (or revenue decrement)[18]
- any approved pass through amounts.[19]

Table 1-4 sets out the timing of the annual calculation of the AR and performance incentive:

MAR_t	=	(allowed revenue) + (performance incentive) + (pass through)
	=	$AR_t + \left(\left(AR_{t-2} \times \frac{1}{2}\right) + \left(AR_{t-1} \times \frac{1}{2}\right)\right) \times S_{ct} + P_t$

where:

MAR	=	the maximum allowed revenue
AR	=	the allowed revenue
S	=	the revenue increment or decrement determined in accordance with the service target performance incentive scheme

17 AER, *Rate of return instrument*, December 2018, cl. 9.

18 NER, cl. 6A.7.4.

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

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 (2021–22), 3 (2022–23), 4 (2023–24), 5 (2024–25))
ct	=	time period/calendar year (for *ct* = 2 (2020), 3 (2021), 4 (2022), 5 (2023)).

Directlink may also adjust the MAR for under or over-recovery amounts.[20] 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 can 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.

Table 1-4 Timing of the calculation of allowed revenues and the performance incentive for Directlink

t	Allowed revenue (financial year)	*ct*	Performance incentive (calendar year)
2	1 July 2021–30 June 2022	2	1 January 2020–31 December 2020
3	1 July 2022–30 June 2023	3	1 January 2021–31 December 2021
4	1 July 2023–30 June 2024	4	1 January 2022–31 December 2022
5	1 July 2024–30 June 2025	5	1 January 2023–31 December 2023

Note: The performance incentive for 1 January 2019–31 December 2019 is to be applied to the AR determined for 2020–21 (AR_1).

1.3.4 Average transmission charges

We are not required to determine the transmission charges in this transmission determination for Directlink. Nonetheless, we provide the indicative transmission charges (and the resulting impact on annual electricity bills) that flow from the revenue determination as discussed in section 1.4.3. Although we assess Directlink's proposed pricing methodology as part of this determination, actual transmission charges established at particular connection points are not determined by us. TransGrid, as coordinating transmission network service provider for NSW, includes Directlink's revenue requirements to establish the transmission charges in accordance with the approved pricing methodology and the NER.[21]

[20] NER, cl. 6A.23.3(e)(5).

[21] NER, cl. 6A.24.1(d).

1.4 Reasons for draft decision

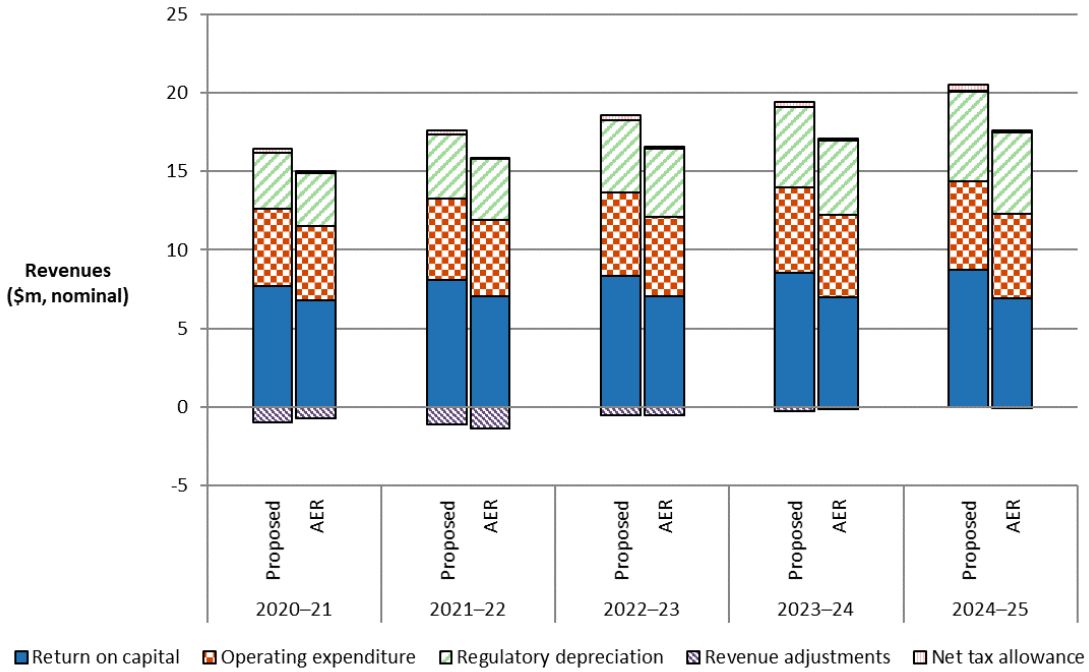
We determine a total annual building block revenue requirement of $79.3 million ($nominal) for Directlink for the 2020–25 regulatory control period. This is a reduction of $10.5 million ($nominal) or 11.7 per cent to Directlink's proposed total annual building block revenue requirement of $89.8 million ($nominal) for this period. This reflects the impact of our draft decision on the various building block costs.

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 proposal.

The changes we made to Directlink's proposed building blocks include (in nominal terms):

- a reduction in the return on capital allowance of $6.6 million or 16.0 per cent (attachments 2, 3 and 5)
- a reduction in the regulatory depreciation allowance of $1.5 million or 6.5 per cent (attachment 4)
- a reduction in the operating expenditure (opex) allowance of $1.3 million or 4.9 per cent (attachment 6)
- a reduction in the cost of corporate income tax allowance of $1 million or 61.2 per cent (attachment 7)
- a reduction in the revenue adjustments of $0.05 million or 1.7 per cent (attachments 8 and 9).

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



Source: Directlink, *Revenue proposal 2020-25, Attachment 12-1 - Post Tax Revenue Model,* 31 January 2019; AER analysis.

Note: Revenue adjustments include EBSS and CESS amounts. Opex includes debt raising costs.

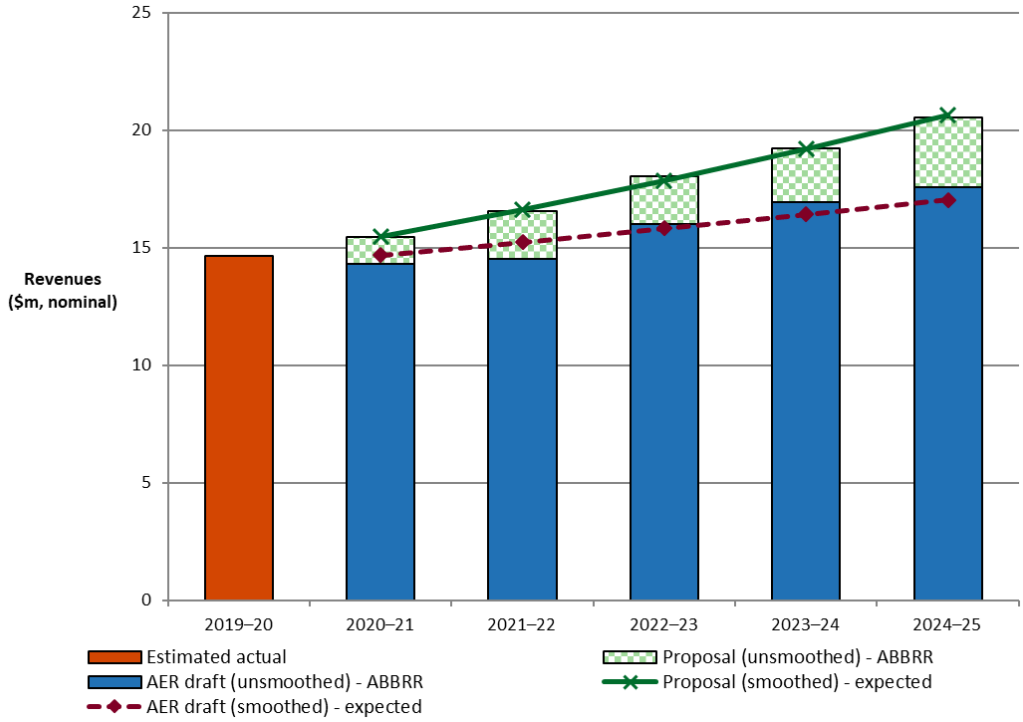
1.4.1 X factor, annual expected MAR and estimated total revenue cap

For this draft decision, we determine an X factor for Directlink of –1.3 per cent per annum for the four years of the regulatory control period from 2021–22 to 2024–25.[22] The NPV of the annual building block revenue requirement is $69.1 million ($nominal) as at 1 July 2020. Based on this NPV and applying the CPI–X method, we determine that the annual expected MAR (smoothed) for Directlink is $14.7 million in 2020–21 increasing to $17.0 million in 2024–25 ($nominal). The resulting estimated total revenue cap for Directlink is $79.2 million for the 2020–25 regulatory control period.

Figure 1-2 shows our draft decision on Directlink's annual expected MAR (smoothed revenue) and the annual building block revenue requirement (unsmoothed revenue) for the 2020–25 regulatory control period.

[22] Directlink is not required to apply an X factor for 2020–21 because we set the 2020–21 MAR in this decision.

Figure 1-2 AER's draft decision on Directlink's revenue for the 2020–25 regulatory control period ($million, nominal)



Source: AER analysis.

Note: Annual building block revenue requirement (ABBRR).

To determine the expected MAR for Directlink, we have set the MAR for the first regulatory year at $14.7 million ($nominal) which is $0.4 million higher than the annual building block revenue requirement. We then apply an expected inflation rate of 2.45 per cent per annum and an X factor of –1.3 per cent per annum to determine the expected MAR in subsequent years.[23] 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.[24]

Our draft decision results in an average increase of 3.1 per cent per annum ($nominal) in the expected MAR over the 2020–25 regulatory control period.[25] This consists of an initial increase of 0.3 per cent from 2019–20 to 2020–21, followed by average annual increases of 3.8 per cent during the remainder of the 2020–25 regulatory control

[23] NER, cl. 6A.5.3(c)(3).

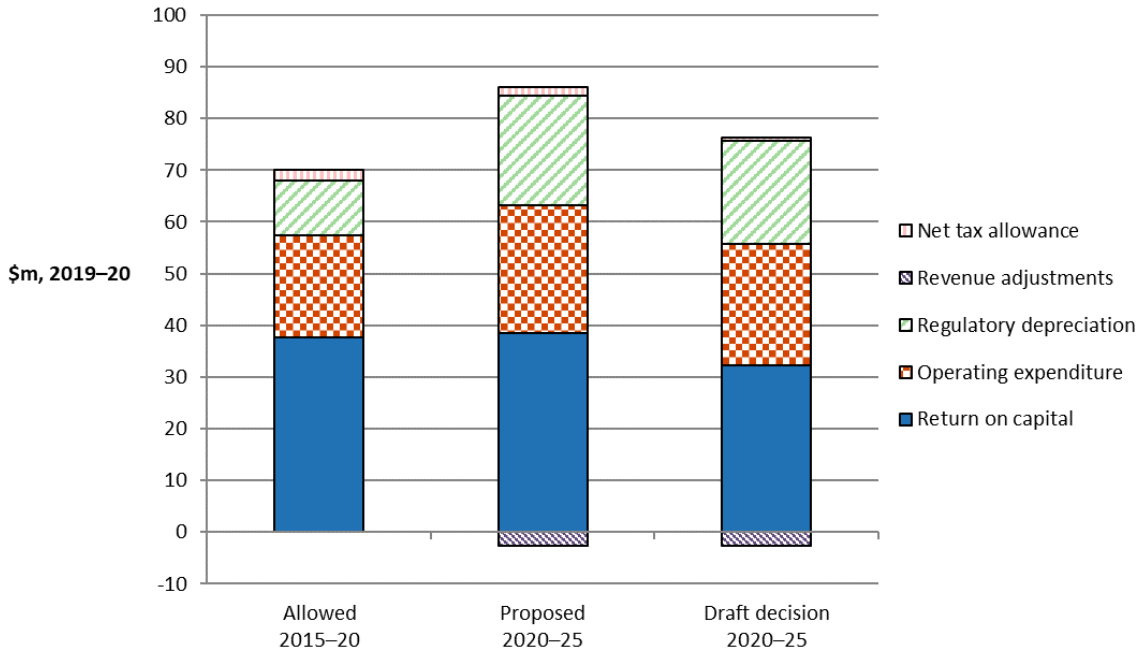
[24] NER, cl. 6A.6.8(c)(2). We consider a divergence of up to 3.0 per cent between the expected MAR and annual building block revenue requirement for the last year of the regulatory control period is appropriate, if this can achieve smoother price changes for users over the regulatory control period. In the present circumstances, based on the X factors we have determined for Directlink, this divergence is around 3.0 per cent.

[25] In real 2019–20 dollar terms, our approved expected MAR for Directlink results in an average increase of 0.6 per cent per annum over the 2020–25 regulatory control period.

period.[26] Our draft decision also results in an increase of 4.9 per cent in real terms ($2019–20) to Directlink's average annual allowed revenue relative to that in the 2015–20 regulatory control period. This is primarily because we have determined a higher capex allowance in this draft decision for the 2020–25 regulatory control period than that approved in the 2015–20 determination.

Figure 1-3 compares our draft decision building blocks for Directlink's 2020–25 regulatory control period with Directlink's proposed revenue requirement for the same period, and the approved revenue for the 2015–20 regulatory control period.

Figure 1-3 Total revenue by building block components ($million, 2019–20)



Source: AER analysis.

1.4.2 Shared assets

Service providers, such as Directlink, may use assets to provide both prescribed transmission services we regulate and unregulated services. These assets are called 'shared assets'.[27] 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.[28]

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[26] In real 2019–20 dollar terms, this consists an initial decrease of 2.1 per cent from 2019–20 to 2020–21, followed by annual average increases of 1.3 per cent during the remainder of the 2020–25 regulatory control period.

[27] NER, cl. 6A.5.5.

[28] AER, *Shared asset guideline*, November 2013, p. 15.

The shared asset principles establish that use of share assets should be material before cost reductions are applied.[29] The NER does not define materiality in this context. Our approach to what constitutes a material use of shared assets is that unregulated use of shared assets in a specific regulatory year is material when a service provider's annual average unregulated revenue from shared assets is expected to be greater than one per cent of its MAR for that regulatory year.[30]

Directlink forecasts zero unregulated shared asset revenues in each regulatory year of the 2020–25 regulatory control period.[31] We note that unregulated revenues from shared assets may in future become material. We will monitor Directlink's shared asset unregulated revenues.

1.4.3 Indicative average transmission charges

Our draft decision on Directlink's expected MAR ultimately affects the prices consumers pay for electricity. However, the adjustments we have made to 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 transmission network service provider (TNSP). Our 2018–23 transmission determination on TransGrid's expected MAR is the principal determinant of the estimated transmission charges, and therefore the estimated impact of transmission charges on annual electricity bills. Further, the transmission charges in NSW/ACT are also affected by the 2019–24 revenue determinations for Ausgrid and Evoenergy's transmission assets.[32] Directlink, just like Ausgrid and ActewAGL, collects its transmission revenues from TransGrid.

Transmission charges make up around 11 per cent of a typical total electricity bill in NSW[33] and Directlink's revenue accounts for approximately 1.7 per cent of total NSW transmission revenues.[34] Therefore, Directlink's revenue would be expected to account for 0.2 per cent of the total electricity bill in NSW.

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

- taking Directlink's annual expected MAR determined in this draft decision, and

29 NER, cl. 6A.5.5(c)(3).

30 AER, *Shared asset guideline*, November 2013, p. 8.

31 Directlink, *Reset RIN final template 1 - Revenue determination transmission*, January 2019.

32 While Ausgrid and Evoenergy 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.

33 Transmission proportion of total electricity bill as per AEMC's 2018 price trend report.

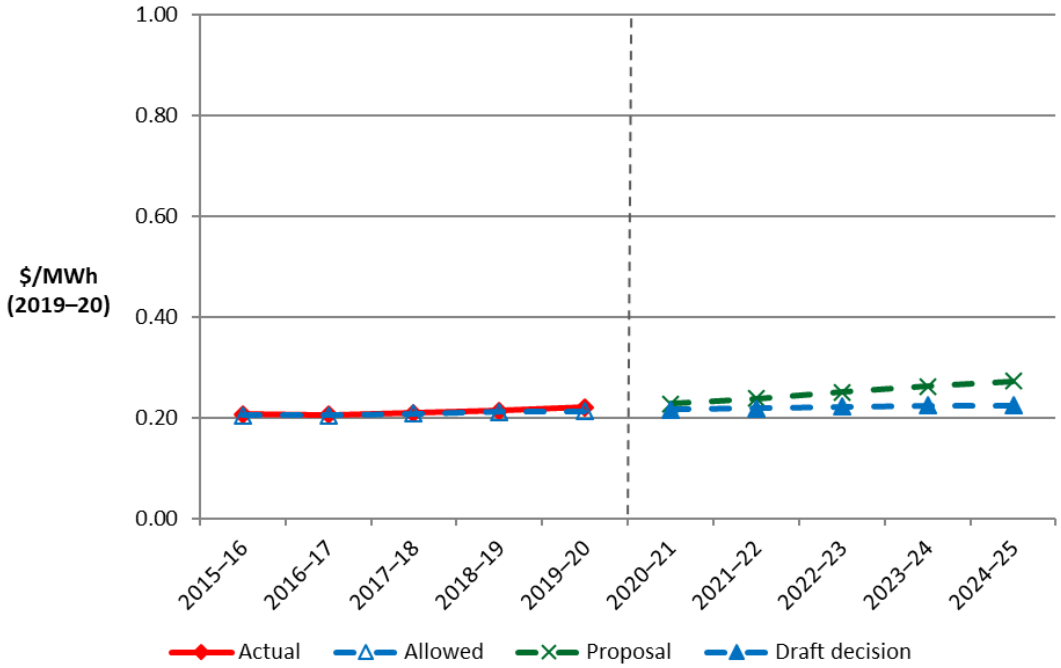
34 This represents Directlink's proportion of total transmission revenues in NSW, which consists of revenues from TransGrid, Ausgrid transmission, Evoenergy transmission and Directlink.

- dividing it by the forecast annual energy delivered in NSW/ACT as published by AEMO.[35]

Based on this approach, we estimate that this draft decision will result in a negligible increase in annual average transmission charges from 2019–20 to 2024–25.[36]

Figure 1-4 shows the indicative average transmission charges over the period 2015–16 to 2024–25 in real 2019–20 dollar terms based on the expected revenues established in our draft decision compared to Directlink's proposed revenue requirement. The average transmission charges are expected to increase from around $0.21 per MWh in 2019–20 to $0.22 per MWh in 2024–25.

Figure 1-4 Indicative transmission price path for Directlink ($/MWh, $2019–20)



Source: AER analysis.

Notes: The price path plots for the transmission network are based on actual and forecast energy throughput amounts for TransGrid's transmission network across NSW and ACT. This reflects that Directlink provides a small incremental transmission service to the broader TransGrid transmission network services.

[35] AEMO, *National Electricity and Gas forecasting - 2018 Electricity Statement of Opportunities*, http://forecasting.aemo.com.au/Electricity/AnnualConsumption/Operational, accessed on 27 February 2019.

[36] On average, the draft decision transmission revenues will increase by 3.1 per cent ($nominal) per annum from 2019–20 to 2024–25. The forecast energy delivered in NSW will increase by an average of 0.2 per cent per annum across that period. As a result, the indicative transmission charge will increase by 2.8 per cent ($nominal) per annum from 2019–20 to 2024–25.

1.4.4 Expected impact of combined decisions on electricity bills

The annual electricity bill for customers in NSW reflects the combined cost of all the electricity supply chain components—wholesale energy generation, transmission, distribution, metering, and retail costs. This draft decision primarily relates to the transmission charges for Directlink's prescribed transmission services, which represent approximately 0.2 per cent on average for residential customers' and small business customers' annual electricity bill in NSW.

We estimate the expected bill impact by varying Directlink's transmission charges in accordance with our draft decision, while holding all other components constant. This approach isolates the effect of our draft decision on the core transmission charges for Directlink only. However, this does not imply that other components will remain unchanged across the regulatory control period.[37]

Based on this approach in our draft decision, we expect that the transmission component of the average annual residential electricity bill in 2024–25 will increase by about $0.5 ($nominal) from the 2019–20 total bill level.[38] By comparison, had we accepted Directlink's proposal, the expected transmission component of the average annual residential electricity bill in 2024–25 would increase by about $1.2 ($nominal) from the 2019–20 total bill level.[39]

Similarly, for an average small business customer in NSW, we expect the transmission component of the average annual small business electricity bill in 2024–25 to increase by about $2.0 ($nominal) from the 2019–20 total bill level.[40] By comparison, had we accepted Directlink's proposal, the expected transmission component of the average small business customer's electricity bill in 2024–25 would increase by about $5.4 ($nominal) from the 2019–20 total bill level.[41]

Our estimated impact is based on an average annual electricity usage of around 4350 kWh per annum for residential households[42] and 20000 kWh per annum for small businesses.[43] Therefore, customers with different usage will experience different changes in their bills. We also note that there are other factors, such as metering, wholesale and retail costs, which affect electricity bills.

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37 It also assumes that actual energy consumption will equal the forecast adopted in our draft decision. Since Directlink operates under a revenue cap, changes in energy consumption will also affect annual electricity bills across the 2020–25 regulatory control period.

38 This equates to a 0.03 per cent increase in the average residential customer's total electricity bill over five years.

39 This equates to a 0.07 per cent increase in the average residential customer's total electricity bill over five years.

40 This equates to a 0.03 per cent increase in the average small business customer's total electricity bill over five years.

41 This equates to a 0.07 per cent increase in the average small business customer's total electricity bill over five years.

42 AER, *Final determination, Default Market Offer Prices 2019-20*, April 2019, p. 8. This is a weighted average of the typical electricity consumption for residential customers in the Ausgrid, Endeavour and Essential networks, with the weights being the number of residential customers on each network.

43 AER, *Final determination, Default Market Offer Prices 2019-20*, April 2019, p. 8. This is an average of the typical electricity consumption for small business customers in the Ausgrid, Endeavour and Essential networks.