

FINAL DECISION

Directlink Transmission Determination 2020 to 2025

Overview

June 2020



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About our decision

The Australian Energy Regulator (AER) works to make all Australian energy consumers better off, now and in the future. We regulate energy networks in all jurisdictions except Western Australia. We set a maximum revenue that network businesses are allowed to recover from customers in providing network services.

The Directlink interconnector is a 59 kilometre, 180 MW high voltage direct current cable between the NSW and Queensland wholesale electricity markets. It is a point to point transmission line rather than a network. Its cables are laid primarily underground, and partly above ground in a galvanised steel tray, running between Mullumbimby and Bungalora in NSW.

Our final decision is the product of a long consultation process. This was initiated by consultation on the Framework and Approach in November 2017. We published Directlink's initial proposal on our website and called for submissions. In March 2019 we published an issues paper on Directlink's proposal and hosted a public forum in April 2019. We made our draft decision in October 2019² prior to Directlink submitting its revised proposal on 10 December 2019. The revised proposal sets out the revenue Directlink proposes to recover from its electricity customers through transmission charges for the period 2020–25.4

The revenue proposal was submitted by Energy Infrastructure Investments Pty Ltd on behalf of the Directlink Joint Venture. Directlink is managed by the APA Group.

https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/directlink-determination-2020-25/draft-decision.

https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/directlink-determination-2020-25/revised-proposal.

This includes a pricing methodology which allocates the regulated revenue associated with its transmission network and determines the structure of prices that Directlink may charge for its transmission services.

Note

This Overview forms part of our final decision on Directlink's 2020–25 transmission determination. It should be read together with all other parts of the final decision. Our final decision includes this Overview and the following attachments:

Directlink's transmission determination 2020–2025

Attachment 1 - Maximum allowed revenue

Attachment 2 - Regulatory asset base

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 - Operating expenditure

Attachment 7 – Corporate income tax

Attachment A – Pricing methodology

As many issues were settled at the draft decision stage or required only minor updates, we have not prepared all attachments. For ease of reference, the above attachments have been numbered consistently with the attachments in our draft decision. For those attachments not listed above, our draft decision reasons form the respective part of this final decision.

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Executive summary

Our final decision allows Directlink to recover \$77.3 million from its customers over the five years from 1 July 2020 to 30 June 2025. This outcome is \$5.1 million lower than Directlink's revised proposal.

Directlink's revenue accounts for about 0.1 per cent of customers' total electricity bills.⁵ Although Directlink has a small impact on the overall end price that customers pay, it is our role to review Directlink's spending proposal to ensure that it covers only what is needed and is reasonable.

Directlink has responded positively to our draft decision. Its revised proposal accepted most aspects of our draft decision, including our concerns regarding its proposed capital expenditure (capex) program. Our final decision is to accept nearly all parts of its revised proposal, including Directlink's capex proposal of \$25.7 million (2019–20). However, having assessed Directlink's revised proposal, we consider a lower amount of revenue should be recovered from customers using its network.

The key difference between Directlink's revised proposal and our final determination is that we have not included all of Directlink's proposed operating expenditure (opex). Directlink proposed that \$4.6 million (2019–20) be put away now, with further sums of money in subsequent periods, to fund future land restoration once it ceases to operate in 20 years' time. We consider there is too much uncertainty regarding the likelihood and timing of these costs incurring that far into the future.

Safe and reliable network

Our role is to assess whether the proposal is a reasonable and realistic forecast of what is needed to provide safe and reliable operation of the network over the regulatory control period.

The Directlink interconnector has a finite technical life with the asset to be fully depreciated by 2041. It is now half way through its intended asset life, with assets making up the interconnector in need of replacement or refurbishment, due to age or obsolescence. Our final decision recognises that Directlink will need to incur additional asset replacement in the next regulatory control period to enable the continued operation of a reliable and secure supply across the interconnector.

We had regard to a range of material provided by Directlink, including the regulatory proposal, the revised proposal, submissions received and additional analysis undertaken by us. We are satisfied that the revenue we have determined Directlink can recover from its consumers for the 2020–25 regulatory control period is in the long-term interests of consumers and that its consumers are paying no more than they should for safe and reliable electricity.

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⁵ The estimated bill impact is set out in section 1.3 below and Attachment 1 of our final decision for Directlink.

Engaging consumers

The long term interests of consumers are at the centre of our decisions. Consumers ultimately pay for network services so their input is important. Consumers need to be provided with a genuine opportunity to collaborate, inform and influence Directlink's regulatory proposal.

Directlink took some steps to engage with consumers. In comparison to previous regulatory proposals, Directlink's approach is a welcome acknowledgement of the value of stakeholder engagement and the need for a change in practice for Directlink and the APA Group more broadly. As highlighted in our draft decision,⁶ we encouraged Directlink to continue to work with stakeholders during the course of the regulatory determination and beyond to ensure that stakeholder views are reflected in its proposals to the AER.

The key concern with Directlink's engagement was that it occurred at the last minute and there was no attempt to reflect stakeholder views in the proposal before it was submitted to us. This was highlighted in the submission from the Public Advocacy Interest Group (PIAC) on Directlink's initial proposal. PIAC acknowledged some improvements in Directlink's approach to developing its revised proposal, such as seeking feedback on their revised proposal but considered that this does not make up for the lack of early engagement on the initial proposal.

We continue to highlight the importance of consumer and stakeholder engagement as an ongoing process. We are encouraged to see Directlink's renewed approach to consumer engagement and support its decision to implement a program. However, we iterate our view that stakeholder engagement should occur well in advance of a revenue proposal and not be simply left to the regulatory determination process. We expect to see improvements in the engagement strategies adopted by the APA Group in future regulatory determinations.

Effect of COVID-19 on this final decision

Although the full effect of the COVID 19 pandemic on Directlink is uncertain at this point in time, we consider that the final decision revenue we have determined for Directlink for the 2020–25 period provides it with a reasonable opportunity to recover at least its efficient costs.

We have based our final decision on current information and forecasts that can reasonably be made at the time of our decision. We consider the available information is both sufficient and appropriate for us to make a decision at this point in time that meets the requirements of the NEL and NER. Our forecasts are based

⁶ AER, Draft decision, Directlink transmission determination 2020 to 2025, Overview, October 2019, pp. 15–16.

Public Advocacy Interest Centre, Submission to Directlink 2020–25 revenue proposal, 16 March 2019, pp. 2–3.

Public Advocacy Interest Centre, Submission to Directlink 2020–25 revised revenue proposal, 15 January 2020, p. 2.

on well established methodologies and appropriate input data, and are the best forecasts that can reasonably be made in all the circumstances.

We recognise that COVID 19 may have a material impact on Directlink's business operations and costs in the 2020–25 period and that there may be a case to re open elements of our determination in future.

At this stage, feedback from network businesses is mixed and suggests that, while it is too early to determine COVID 19 impacts on businesses' operations, the overall impacts may not be material in terms of costs. The network businesses have begun to gather data to aid any future impact assessment. Until all the data is available, we cannot determine the extent and direction of COVID 19 impacts on network businesses, or whether the impacts are material.

As set out in our 27 March 2020 *Statement of Expectations on energy businesses*, energy is an essential service which has an important role to play in protecting and supporting businesses and the community through the COVID 19 pandemic and our recovery.⁹ Our Statement also recognises that COVID 19 may add to the risks and costs facing energy businesses.

Under our regulatory framework, network businesses must be provided with a reasonable opportunity to recover at least their efficient costs. We recognise that some costs are not within a business' control and/or some risks if borne out could lead to a material impact on the revenues we approve. Consequently, the regulatory framework allows for defined events ('pass through events') that allow us to reopen a determination and either increase or decrease revenues. However, none of the network businesses we regulate have a pass through event that allows us to re open a determination for COVID 19 impacts.

Going forward, if it becomes clear that our revenue determinations would have been materially different due to the impacts of COVID 19, then a rule change would be required so that we can re open existing revenue determinations. We are consulting with stakeholders to assess whether a rule change is warranted.

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AER, Statement of Expectations of energy businesses: Protecting consumers and the energy market during COVID-19, 27 March 2020.

1 Our final decision

In this section we briefly outline what is driving Directlink's revenue, key differences between our final decision revenue of \$77.3 million (\$nominal, smoothed) compared to Directlink's revised proposed \$82.5 million (\$nominal, smoothed) and what the potential bill impacts on customers are likely to be.

1.1 What is driving revenue

The changing impact of inflation over time makes it difficult to compare revenue from one period to the next on a like for like basis. To do this, we use 'real' values based on a common year (in this case, 2019–20), which have been adjusted for the impact of inflation.

In real terms, the total revenue allowance in this 2020–25 final decision is 3.1 per cent higher than the allowed revenue in our 2015–20 final decision. Figure 1 shows real revenues decreasing from 2019–20 levels by 4.4 per cent in 2020–21, followed by increases of 1.6 per annum over the remaining years.

Total revenue (\$m, 2019-20)

8

6

4

2

7

Actual

Ac

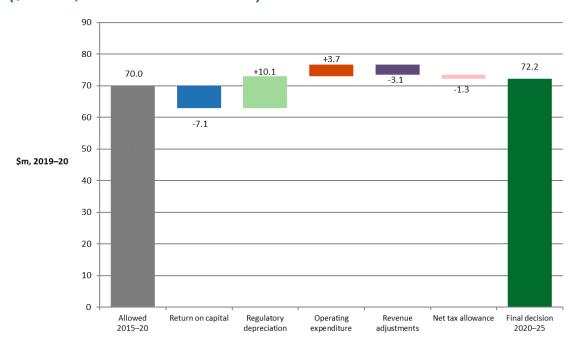
Figure 1 Changes in transmission revenue over time (\$million, 2019–20)

Source: AER Final decision PTRM for 2006–15 and 2015–20 regulatory periods; Directlink Regulatory and Revised Proposal PTRM 2020–25 regulatory period; AER draft and final decision PTRM for 2020–25 regulatory period.

Figure 2 highlights the key drivers of the increase in Directlink's revenue that would result from this decision, by reference to the revenue 'building blocks' that form the basis of our assessment. This figure compares our decision against the allowance for the previous regulatory control period. Key drivers are:

- return on capital, which includes capex and its financing cost (see Figure 6 below). This has reduced largely due to a lower capex forecast and lower rate of return being applied in the next regulatory control period
- regulatory depreciation has increased largely due to the reductions to Directlink's standard and remaining asset lives (see attachment 4)
- opex has increased due to increases in insurance costs, which is a reasonable proportion of Directlink's opex
- revenue adjustments have led to a reduction in revenue due to a negative
 efficiency benefit sharing scheme (EBSS) carryover and a penalty to Directlink
 resulting from the application of the capital expenditure sharing scheme (CESS)
 (see section 2.6). This is the first time the CESS adjustment has been calculated
 for Directlink
- the net tax allowance has fallen predominately as a result of lower return on equity, higher gamma, and our new regulatory tax approach following the 2018 tax review.

Figure 2 Change in transmission revenue from 2015–20 to 2020–25 (\$million, 2019–20 - unsmoothed)

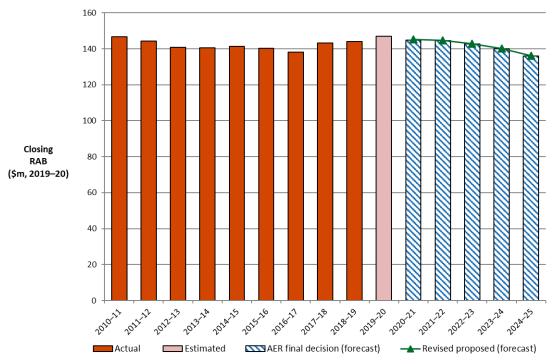


Source: AER Final decision PTRM for 2015–20 regulatory period; AER final decision PTRM for 2020–25 regulatory period.

Figure 3 shows the value of Directlink's regulatory asset base (RAB) overtime. RAB growth is a key issue for many stakeholders because the value of the RAB substantially impacts Directlink's revenue requirement, and the price consumers ultimately pay. Other things being equal, a higher RAB would increase both the return on capital and depreciation (return of capital) components of the revenue determination.

As can be seen from Figure 3, our final decision results in a declining RAB over the 2020–25 regulatory control period and also provides the lowest closing RAB value compared to the previous two regulatory control period.

Figure 3 Value of Directlink's RAB over time - actual RAB, proposed forecast RAB and AER final decision (\$million, 2019–20)



Source: AER Final decision PTRM and RFM for 2015–20 regulatory period; Directlink Revised Proposal PTRM for 2020–25 regulatory period; AER final decision PTRM and RFM for 2020–25 regulatory period.

1.2 Key differences between our final decision and Directlink's proposal

Our final decision does not reflect the full \$82.5 million in revenue (\$nominal, smoothed) proposed by Directlink for its network services and instead allows a lower total revenue of \$77.3 million, a reduction of 6.2 per cent. The key difference is the opex allowance. We consider the information provided has not justified the opex expenditure proposed by Directlink in their revised proposal.

The difference in revenue includes a \$5.0 million nominal reduction in the opex allowance (Section 2.5).

1.3 Expected impact of our final decision on electricity bills

Directlink's revenue is recovered from NSW customers through TransGrid who is the main TNSP for the NSW and ACT region. This revenue does 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.

Transmission charges make up around 7 per cent of a typical total electricity bill in NSW¹⁰ and Directlink's revenue accounts for approximately 1.7 per cent of total NSW transmission revenues. Therefore, Directlink's revenue would be expected to account for 0.1 per cent of the total electricity bill in NSW.

The transmission network tariffs that will be set by reference to our final decision are only one contributor to electricity bills, other components of the electricity bill include environmental policy costs, wholesale electricity costs, distribution network costs and retail costs. Figure 4 illustrates the different components of the electricity supply chain. Each of these costs contributes to the retail prices charged to customers by their chosen electricity retailer.

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

Generators Produce electricity from sources including coal, gas, solar, water, wind, biomass Transmission networks Convert low-voltage electricity to high voltage for efficient transport over long distances Some larger industrial consumers take their supply directly from the transmission lines Distribution networks Convert high-voltage electricity to low-voltage and transport It to customers Energy retail interface Alternative energy providers ergy retalle Buy energy from authorised retailers and Install solar panels or other small-scale generators at a Buy electricity from customer's premises and sell output to the customer or other customers generators and sell to onsell to customers In Energy customers May sell excess energy e.g. Apartment buildings, back to their retailer caravan parks

Figure 4 Electricity supply chain

Source: AER, State of the Energy Market, December 2018, p. 28.

Transmission charges

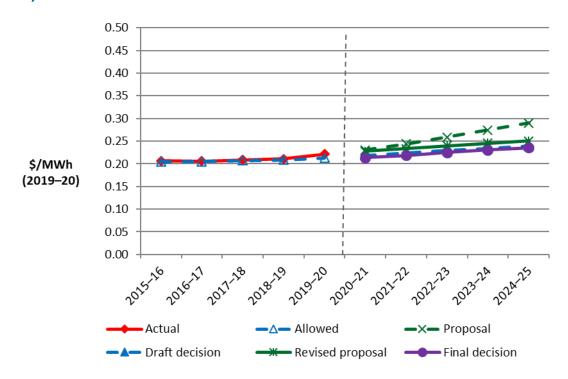
Figure 5 below shows the indicative average transmission charges over the period 2015–16 to 2024–25 in real 2019–20 dollar terms. These amounts are an approximation of transmission charges (measured in MWh).¹¹ Based on this

We estimate the forecast average transmission charge by taking the sum of TransGrid (and Ausgrid and Evoenergy's for transmission assets) and Directlink's expected revenue and dividing it by the forecast annual energy delivered in NSW and ACT as published by AEMO.

approach, we estimate that this final decision will result in a negligible increase in annual average transmission charges over the next regulatory control period.

The average transmission charges for Directlink are expected to increase from around \$0.21/MWh for the 2015–20 regulatory control period¹² to \$0.22/MWh for the 2020–25 regulatory period, in real 2019–20 terms.

Figure 5 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 services to the broader TransGrid transmission network services.

Potential bill impact

We expect that the transmission component of the average annual residential electricity bill in 2024–25 will have increased by about \$0.40 (\$nominal) from the 2019–20 total bill level. By comparison, had we accepted Directlink's revised proposal, the expected transmission component of the average annual residential electricity bill in 2024–25 would have increased by about \$0.50 (\$nominal) from the 2019–20 total bill level.

Transmission charges for 2015–16 to 2018–19 are based on actual revenue, while 2019–20 transmission charges are based on estimated revenue.

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 will have increased by about \$1.70 (\$nominal) from the 2019–20 total bill level. By comparison, had we accepted Directlink's proposal, the expected transmission component of the average small business customer electricity bill in 2024–25 would have increased by about \$2.40 (\$nominal) from the 2019–20 total bill level.

Further details regarding the calculation of Directlink's revenue and the impact on network charges are set out in attachment 1.

1.4 Directlink's consumer engagement

Directlink took some steps to engage with consumers. Directlink's approach, in comparison to previous regulatory proposals, is a welcome acknowledgement of the value of stakeholder engagement and the need for a change in practice for Directlink and the APA Group more broadly. As highlighted in our draft decision, ¹³ we encouraged Directlink to continue to work with stakeholders during the course of the regulatory determination and beyond to ensure that stakeholder views are reflected in its proposals to the AER.

Stakeholders are increasing looking for early and more frequent engagement and for opportunities to respond to preliminary revenue proposals. As a regulated business, Directlink needs to undertake good consumer engagement. The AER's consumer engagement guidelines¹⁴ identify the best practise principles for engagement. The NER also requires us to have regard to the extent to which the proposed expenditure addresses consumers' relevant concerns identified during the network service provider's engagement with consumers.¹⁵

Good consumer engagement also means talking to customers on an ongoing manner. This increases the likelihood of customers' views being heard. It is important to consult with a range of customers and others to understand their needs now and in the future.

Beyond regulatory proposals, there is a consistent view that Directlink, and the APA Group more broadly, should engage on an on-going, business-as-usual basis with its stakeholders. ¹⁶ We recognise that Directlink is a modest asset compared to other TNSPs and that this should factor into what is considered to be a reasonable targeted and low cost engagement program, but it does not absolve Directlink of engagement responsibility. This is consistent with the submission received from PIAC who submitted that:

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¹³ AER, Draft decision, Directlink transmission determination 2020 to 2025, Overview, October 2019, pp. 15–16.

AER, Better Regulation: Consumer engagement guideline for network service providers, November 2013.

¹⁵ NER, cl. 6A.10.1(g)(2) and cl. 6A.13.1(1a)(1).

Newgate Research, *Stakeholder expectations for engagement on APA's interconnectors*, 27 November 2018, p. 15.

We have seen improvements in Directlink's approach to developing its revised proposal, such as sharing briefing material on the AER's draft determination and seeking feedback on their revised proposal. However, this does not make up for the lack of early engagement prior to the original proposal itself. Given that APA Group, the entity managing Directlink, also owns and manages other regulated assets, we expect that the lessons learnt here and from other NSP engagement strategies will be applied to future regulatory determinations such as for the Murraylink interconnector.¹⁷

We are encouraged to see Directlink's renewed approach to consumer engagement and support its decision to implement a program. However, we iterate our view that stakeholder engagement should occur well in advance of a revenue proposal and not be simply left to the regulatory determination process.

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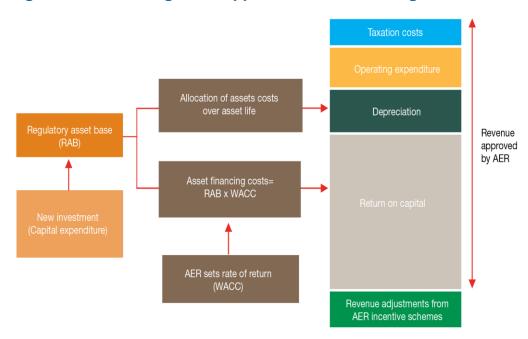
Public Advocacy Interest Centre, Submission to Directlink 2020–25 revised revenue proposal, 15 January 2020, p. 2.

2 Key components of our final decision on revenue

The total revenue Directlink has proposed reflects its forecast of the efficient cost of providing its transmission network services over the 2020–25 regulatory control period. Directlink's proposal, and our assessment of it under the NEL and NER, are based on a 'building block' approach to determine a total revenue allowance (see Figure 6) which looks at six cost components:

- a return on the RAB (or return on capital, to compensate investors for the opportunity cost of funds invested in this business) (section 2.2)
- depreciation of the RAB (or return of capital, to return the initial investment to investors over time) (section 2.3)
- capex—the capital costs and expenditure incurred in the provision of network services—mostly relates to assets with long lives, the costs of which are recovered over several regulatory control periods. The forecast capex approved in our decisions directly affects the size of the RAB and therefore the revenue generated from the return on capital and depreciation building blocks (section 2.4)
- forecast opex the operating, maintenance and other non-capital expenses, incurred in the provision of network services (section 2.5)
- revenue increments or decrements carried over from the previous regulatory control period, including the application of the incentive schemes, such as the EBSS and CESS (section 2.6)
- the estimated cost of corporate income tax (section 2.7).

Figure 6 The building block approach for determining total revenue



We use an incentive approach where revenues, once regulated, are set for a five year period and networks who keep actual costs below the regulatory forecast of costs retain part of the benefit. This benchmark incentive framework is a foundation of the regulatory framework which aims to promote the NEO. Service providers have an incentive to become more efficient over time, as they retain part of the financial benefit from improved efficiency. Consumers also benefit when efficient costs are revealed and a lower cost benchmark is set in subsequent regulatory periods.

Our final decision on Directlink's transmission revenues for the 2020–25 regulatory control period is set out in Table 2.1.

Table 2.1 AER's final decision on Directlink's transmission 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	6.6	6.6	6.5	6.4	6.3	32.4
Regulatory depreciation ^a	3.6	4.0	4.5	4.9	5.4	22.4
Operating expenditure ^b	4.7	4.8	5.0	5.2	5.3	25.0
Revenue adjustments ^c	-0.8	-1.5	-0.7	-0.3	0.0	-3.3
Net tax allowance	0.2	0.2	0.1	0.1	0.2	0.8
Annual building block revenue requirement (unsmoothed)	14.3	14.1	15.5	16.4	17.2	77.4
Annual expected MAR (smoothed)	14.3	14.9	15.4	16.0	16.7	77.3 ^d
X factor (%) ^e	n/a ^f	-1.57%	-1.57%	-1.57%	-1.57%	n/a

Source: AER analysis.

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

- (c) Includes revenue adjustments from EBSS and 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 4.4 per cent lower than the approved MAR for 2019–20 in real terms, or 2.3 per cent lower in nominal terms.

In the sections below, we discuss each component of our decision on Directlink's revenue for 2020–25 in turn. Incentive schemes, including the EBSS, CESS and service target performance incentive scheme (STPIS) are discussed in section 3.

⁽b) Includes debt raising costs.

2.1 Regulatory asset base

The RAB is the value of the assets used by Directlink to provide regulated transmission services. The size of the RAB—and therefore the revenue generated from the return on capital and return of capital building blocks—is directly affected by our assessment of capex. Directlink's transmission proposal calculated its opening RAB as at 1 July 2020 and its closing RAB at 30 June 2025 in accordance with our roll forward model (RFM).

Our final decision is to determine an opening RAB value as at 1 July 2020 of \$146.9 million (\$nominal). This value is \$0.2 million (or 0.2 per cent) lower than Directlink's revised proposed opening RAB of \$147.1 million (\$nominal) as at 1 July 2020.¹⁸ While we largely accept the revised proposed opening RAB, we updated the RFM for 2019–20 actual CPI as it has become available since Directlink submitted its revised proposal.

Table 2.2 sets out our final decision on the forecast RAB values for Directlink's network over the 2020–25 regulatory control period.

Table 2.2 AER's final decision on Directlink's RAB for the 2020–25 regulatory control period (\$million, nominal)

	2020–21	2021–22	2022–23	2023–24	2024–25
Opening RAB	146.9	148.3	151.2	152.6	153.2
Capital expenditure ^a	5.0	6.9	5.9	5.5	4.4
Inflation indexation on opening RAB	3.3	3.4	3.4	3.5	3.5
Less: straight-line depreciation ^b	7.0	7.4	7.9	8.4	8.8
Closing RAB	148.3	151.2	152.6	153.2	152.2

Source: AER analysis.

Further detail regarding the roll forward of Directlink's RAB is set out in attachment 2.

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

⁽b) Based on as commissioned capex.

Directlink, Revised revenue proposal 2020–25, 10 December 2019, p. 23. This RAB value is based on asincurred capex.

2.2 Rate of return, expected inflation and value of imputation credits

The return each business is to receive on its RAB (the 'return on capital') continues to be a key driver of proposed revenues. We calculate the regulated return on capital by applying a rate of return to the value of the RAB.

This means we combine the returns from the two sources of funds for investment: equity and debt.

This allowed rate of return provides the businesses with a return on capital to service the interest on its loans and give a return on equity to investors. An accurate estimate of the rate of return is necessary to promote efficient prices in the long-term interests of consumers. If the rate of return is set too low, the network business may not be able to attract sufficient funds to be able to make the required investments in the network and reliability may decline. Conversely, if the rate of return is set too high, the network business may seek to spend too much and consumers will pay inefficiently high tariffs.

As required under the NEL, we apply the 2018 Rate of Return Instrument (2018 Instrument) to estimate the rate of return for Directlink.¹⁹

This leads to a rate of return of 4.53 per cent (nominal vanilla) for this final decision. This is 0.15 percentage points lower than our draft decision placeholder estimate of 4.68 per cent (nominal vanilla).²⁰

This rate of return, in Table 2.3, will apply to the first year of the 2020–25 regulatory control period. A different rate of return will apply for the remaining regulatory years of the period. This is because we will update the return on debt component of the rate of return each year in accordance with the 2018 Instrument, which uses a 10-year trailing average portfolio return on debt that is rolled-forward each year. Hence, only 10 per cent of the return on debt is calculated from the most recent averaging period with 90 per cent from prior periods.

We also note that Directlink's proposed risk free rate²¹ and debt averaging periods have been (and will be) used to estimate its rate of return because they complied with conditions set out in the 2018 Instrument.²² We specify these periods in a confidential appendix.²³

¹⁹ AER, *Rate of return instrument*, December 2018. See https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/rate-of-return-guideline-2018/final-decision.

²⁰ AER, Draft Decision, Directlink Transmission Determination 2020-25, October 2019, Overview, p. 21.

This is also known as the return on equity averaging period.

²² AER, Rate of return instrument, December 2018, clauses 7–8, 23–25, 36.

²³ AER, Final decision, Directlink transmission determination 2020–25, Rate of return, Confidential Appendix: Equity and debt averaging periods, June 2020. This is provided to Directlink and not made public.

Table 2.3 Final decision on Directlink's rate of return (% nominal)

	AER draft decision (2020-25)	Directlink's Revised Proposal (2020-25)	AER final decision (2020-25)	Allowed return over regulatory control period
Nominal risk free rate	1.32% ^a	1.05%	1.05% ^b	
Market risk premium	6.1%	6.1%	6.1%	
Equity beta	0.6	0.6	0.6	
Return on equity (nominal post-tax)	4.98%	4.71%	4.71%	Constant (%)
Return on debt (nominal pre-tax)	4.47%	4.44%	4.41% ^c	Updated annually
Gearing	60%	60%	60%	Constant (60%)
Nominal vanilla WACC	4.68%	4.54%	4.53%	Updated annually for return on debt
Expected inflation	2.45%	2.34%	2.27%	Constant (%)

Source: AER analysis; Directlink, Revised transmission determination proposal 2020-25, 10 December 2019, p. 28.

- (a) Calculated using a placeholder averaging period of 20 business days ending 31 July 2019.
- (b) Calculated using an averaging period of 20 business days ending 17 February 2020.
- (c) We use the proposed debt averaging period. The return on debt has been updated for this averaging period.

Expected inflation

Our estimate of expected inflation is 2.27 per cent. It is an estimate of the average annual rate of inflation expected over a ten year period. We estimate expected inflation over this 10-year term to align with the term of the rate of return. Our estimate of expected inflation is estimated in accordance with the method set out in the post-tax revenue model (PTRM). The NER set out how we are to apply the PTRM and the expected inflation estimation method in the model in our electricity determinations.²⁴

Directlink adopted our method for estimating expected inflation.²⁵ Our expected inflation is estimated as the geometric average of 10 annual expected inflation rates. We use the RBA's forecasts of inflation for the first two years of Directlink's 2020–25 regulatory control period as the first two annual rates. We then use the mid-point of the RBA's inflation target band as the remaining eight annual rates.

²⁴ NER, r. 6.4.2(a) and (b)(1).

²⁵ Directlink, *Revised revenue proposal 2020–25*, 10 December 2019, p. 28.

While Directlink did not make submissions on our approach to estimating expected inflation, other network service providers made a number of recent submissions to us on inflation, and in particular the inflation approach that would be applied to final decisions for Energex, Ergon Energy, SA Power Networks and Jemena Gas Networks (prior to the completion of a current inflation review).

For this final decision, we estimate expected inflation in a manner that is consistent with the method specified in the PTRM. In applying this method we have made two adjustments to our usual practice, which we have applied consistently across all of our June 2020 final decisions:

- we use inflation forecasts from the most recent Reserve Bank of Australia's (RBA) Statement on Monetary Policy (SMP) released on 8 May 2020. The SMP is released quarterly. Our usual approach is to use the RBA's February SMP in the PTRM in April final decisions for NSPs with regulatory years starting 1 July (that is, the regulatory period is based on financial years).²⁶ However, we delayed our decision to allow us to use the May forecasts as we expected they would be a more accurate reflection of the economic circumstances expected for the next regulatory control period
- we use the RBA's trimmed mean inflation (TMI) forecasts for the first two
 regulatory years (year-to-June 2021, and year-to-June 2022).²⁷ Our usual
 implementation is to use the (headline) consumer price index (CPI) forecasts for
 these periods.²⁸ In the current circumstances of COVID-19, we consider that the
 TMI series better reflects expectations of core inflation as set out in the RBA's
 SMP. Further, the TMI smooths the transient volatility in the CPI forecasts in the
 RBA's May SMP
- we ran a short consultation process on the proposal to delay our final decision and use the May forecasts. Directlink did not raise any concerns with the proposal.

After the release of the 8 May 2020 SMP, a number of network service providers made further submissions, stating that we should use the year-to-December CPI forecasts, rather than the year-to-June CPI.²⁹ They submitted that the series date needed to align with the series used to index the RAB,³⁰ and the year-to-June 2021 CPI forecast was 'distorted' by the Federal Government's short-term childcare subsidy.

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²⁶ The PTRM method specifies that we will use the *latest available* RBA SMP.

We have consistently used the TMI inflation forecasts from the RBA's May SMP in other related areas of our decision, in particular our opex assessment (see attachment 6).

The PTRM method specifies that we will use RBA SMP inflation forecasts for the first two years, but does not specify the series used.

Energy Queensland, Jemena Gas Networks and SA Power Networks. See e.g. SA Power Networks, Inflation forecast for SA Power Networks 2020-25 revenue determination, 11 May 2020.

This occurs in the roll forward model at the commencement of the following regulatory control period (2025-30), using lagged actual CPI.

We do not consider that it is appropriate to use year-to-December CPI because:

- the expected inflation estimate should align with the regulatory control period, which is on a financial year basis. In particular, the estimate of expected inflation should not include forecasts from the six months prior to 1 July 2020, as this period does not fall in the regulatory period.
- the regulatory asset base (RAB) is indexed for actual inflation outcomes. We do this by consistently using a lagged series of CPI outcomes through time. The consistent use of this lagged series means that all past movements in CPI are captured in the RAB. By contrast, switching to a year-to-December 2019 or yearto-December 2020 forecast would mean we would either skip a six month period included in the RAB roll forward or double count a six month period. In either case, such a switch would introduce a material inconsistency.
- our decision to use the TMI series addresses network service providers' concern about transient volatility affecting CPI forecasts.

Debt and equity raising costs

In addition to compensating for the required rate of return on debt and equity, we provide an allowance for the transaction costs associated with raising debt and equity. We include debt raising costs in the operating expenditure (opex) forecast because these are regular and ongoing costs which are likely to be incurred each time service providers refinance their debt.

On the other hand, we include equity raising costs in the capital expenditure (capex) forecast because these costs are only incurred once and would be associated with funding the particular capital investments.

Our final decision forecasts for debt and equity raising costs are included in the Attachment 6 (opex) and Attachment 5 (capex), respectively.³¹ In the sections below, we set out our assessment approach and the reasons for those forecasts.

Directlink's revised proposal calculated debt raising costs using an annual rate of 8.20 basis points in the PTRM.³² We have updated our estimate to determine debt raising costs for this transmission determination based on the benchmark approach using an annual rate of 9.39 basis points per annum. This leads to total debt raising costs of \$0.41 million (\$2019-20) which is not materially different to the estimate proposed by Directlink.³³ On this basis we accept the annual rate proposed by Directlink.

Directlink's revised proposal calculated equity raising costs using our benchmark approach in the PTRM. Using this approach Directlink forecast zero equity raising

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See, Attachment 5 for capex and Attachment 6 for opex of this final decision.

Directlink, Attachment 8–1 – Directlink – PTRM - 10 December 2019.

³³ See section 2.5 for our final decision on opex.(which encompasses debt raising costs).

costs.³⁴ Therefore, we have updated our estimate for this transmission determination based on the benchmark approach using updated inputs. This results in zero equity raising costs.

Imputation credits

Our final decision applies a value of imputation credits (gamma) of 0.585 as set out in the binding 2018 Instrument.³⁵ This was the result of extensive analysis and consultation conducted as part of the 2018 rate of return review.³⁶ Directlink's revised proposal has adopted the value of gamma set out in the 2018 instrument.³⁷

2.3 Regulatory depreciation (return of capital)

In our final decision, we include an allowance for the depreciation of Directlink's asset base (otherwise referred to as return of capital). Regulated service providers invest in large sunk assets to provide electricity services to customers. While some of the cost of such assets may be recovered from customers upfront, a greater proportion is recovered over time. The depreciation allowance is used for this purpose.

- regulatory depreciation consists of two components:straight-line depreciation, less
- the indexation of the RAB.

In deciding whether to approve the regulatory depreciation allowance proposed by Directlink, we make determinations on the indexation of the RAB and depreciation building blocks for Directlink's 2020–25 regulatory control period.³⁸

Our final decision approves a regulatory depreciation allowance of \$22.4 million (\$nominal) for the 2020–25 regulatory control period. This is \$0.4 million (1.8 per cent) higher than Directlink's revised proposed value of \$22.0 million (\$nominal).

This increase occurs primarily due to a lower expected inflation rate (section 2.2) which subsequently leads to a lower indexation of the RAB offsetting straight-line depreciation. Our determination on Directlink's opening RAB as at 1 July 2020 (section 2.1) also affects the forecast regulatory depreciation allowance.

Our final decision on other aspects of Directlink's regulatory depreciation is that:

 we accept Directlink's proposed straight-line depreciation method used to calculate the regulatory depreciation allowance

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Directlink, Attachment 8–1 – Directlink – PTRM - 10 December 2019.

³⁵ AER, Rate of return instrument, December 2018, clause 27.

³⁶ AER, Rate of return instrument explanatory statement, December 2018, pp. 307–382.

Directlink, Attachment 8-1, PTRM, December 2019. See https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/directlink-determination-2020-25/revised-proposal.

³⁸ NER, cll. 6A.5.4.

- we accept Directlink's proposed asset classes and standard asset lives
- we accept Directlink's proposal to decrease the remaining asset life to 21.2 years as at 1 July 2020 for depreciating its existing assets. This is because the remaining asset life reflects the remaining technical life of Directlink. This approach is the same as that approved in our previous 2015–20 determination.

Table 2.4 shows our final decision on Directlink's depreciation allowance for the 2020–25 regulatory control period.

Table 2.4 AER's final decision on Directlink's depreciation allowance for the 2020–25 regulatory control period (\$million, nominal)

	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Straight-line depreciation	7.0	7.4	7.9	8.4	8.8	39.5
Less: inflation indexation on opening RAB	3.3	3.4	3.4	3.5	3.5	17.1
Regulatory depreciation	3.6	4.0	4.5	4.9	5.4	22.4

Source: AER analysis.

Further detail on our final decision regarding depreciation is set out in attachment 4.

2.4 Capital expenditure

Capital expenditure (capex) refers to the investment in assets to provide services. This investment mostly relates to assets with long lives and these costs are recovered over several regulatory periods. On an annual basis, however, the financing cost and depreciation associated with these assets are recovered (return on and of capital) as part of the building blocks that form part of Directlink's total revenue requirement.

Our final decision is to accept a total capex forecast of \$25.7 million (\$2019–20) as set out in We accept Directlink's revised proposal capex of \$25.8 million (\$2019–20) but in modelling this final decision, we have updated the estimate of forecast inflation used by Directlink in its capex model, resulting in a minor adjustment to Directlink's total forecast capex.

Table 2.5. We accept Directlink's revised proposal capex of \$25.8 million (\$2019–20) but in modelling this final decision, we have updated the estimate of forecast inflation used by Directlink in its capex model, resulting in a minor adjustment to Directlink's total forecast capex.

Table 2.5 AER final decision - total forecast capex (\$million, 2019–20)

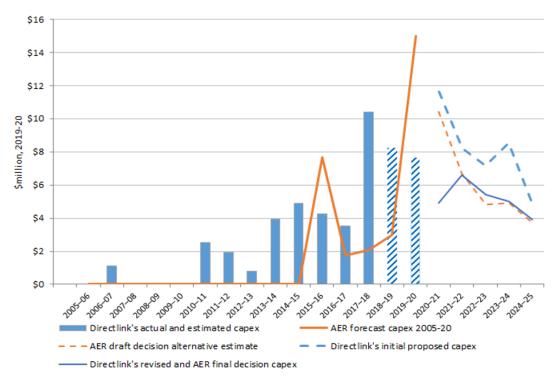
	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Total capex	4.9	6.6	5.4	5.0	3.9	25.7

Source: AER analysis.

Note: Numbers may not total due to rounding.

In its revised proposal, Directlink proposed total forecast capex of \$25.8 million (\$2019–20) for the 2020–25 regulatory control period.³⁹ The proposed capex is \$8.3 million (or 24 per cent) lower than the actual/estimated capex over the 2015–20 regulatory control period.⁴⁰ Figure 7 shows our transmission capex final decision compared to Directlink's revised proposal, past allowances and past actual expenditure.

Figure 7 AER final decision - capex and historical capex (\$million, 2019–20)



Source: Directlink, Revised revenue proposal 2020–25, 10 December 2019, p. 12; AER analysis.

Note:

The volatility of the AER forecast capex reflects the single asset nature of Directlink with lumpy capital expenditure requirements rather than a mature 'steady state' system with recurrent capital expenditure programs. Directlink could therefore expect to have significant year to year variations in capex. For example, in the current regulatory control period 2015–20 there were a number of large forecast projects including a fire suppression system in 2016 and a converter station computer control system upgrade in 2018. There was no allowance for capital expenditure approved for Directlink for the 2006-15 regulatory control period.⁴¹

In our draft decision we did not accept elements of Directlink's initial proposal including the Rail Trail project and the installation of a Variable Speed Drive. Directlink accepted our draft decision on these projects but changed the timing and scope of a number of other projects. As a result of these changes, Directlink's forecast capex in this final decision is lower than our draft decision.

Directlink, Revised revenue proposal 2020–25, 10 December 2019, p. 12.

Directlink, Revised revenue proposal 2020–25, 10 December 2019, p. 12 and AER analysis.

⁴¹ AER, Directlink Joint Venturers' Application for Conversion and Revenue Cap Decision, 3 March 2006, p. v.

The full detail on our final decision regarding capex is set out in attachment 5.

2.5 Operating expenditure

Operating expenditure (opex) is the forecast of operating, maintenance and other non-capital costs incurred in the provision of prescribed transmission services and distribution standard control services. Forecast opex is one of the building blocks we use to determine Directlink's total regulated revenue requirement.

Our final decision is to include total forecast opex of \$23.4 million (\$2019–20) in Directlink's revenue for the 2020–25 regulatory control period. This is our alternative estimate⁴² of Directlink's total opex, which is materially different from Directlink's total forecast opex of \$28.0 million (\$2019-20) in their revised proposal.⁴³

We have assessed Directlink's updated opex forecast by comparing it with our alternative estimate of total opex.⁴⁴ We used our standard 'base-step-trend' approach to develop our estimate.⁴⁵ Our alternative estimate does not include Directlink's proposed land restoration costs which total \$4.6 million (\$2019–2020). This is the main difference between Directlink's revised proposal for opex and our estimate.

While land restoration may be a legitimate operating cost for Directlink, at this time we do not consider there is enough certainty around the likelihood and timing of the costs being incurred. Because of this, we do not consider it to be prudent for Directlink to recover these costs starting from the next regulatory control period. We anticipate the need, timing and quantum of the land restoration costs will become more certain closer to the time the costs are expected to be incurred.

The details of our alternative estimate compared to Directlink's revised proposal are set out in

Table 2.6.

Table 2.6 AER alternative estimate opex compared to Directlink's revised proposal (\$million, 2019–20)

	Directlink revised proposal	Our alternative estimate	Difference
Based on reported opex in 2017-18	22.3	22.2	-0.1

Our alternative estimate uses the most recent inflation forecast published in the RBA's May 2020 SMP. Our usual approach is to use the (headline) CPI forecast for the year ending June 2020 In the current COVID circumstances, we consider that the trimmed mean forecast better reflects core expectations of inflation as set out in the RBA's SMP. Further, the trimmed mean smooths the transient volatility in the CPI forecasts in the May SMP.

Directlink, Attachment 3-4 – Directlink – Operating expenditure model, December 2019.

Including debt raising costs.

⁴⁵ AER, Expenditure Forecast Assessment Guideline for Electricity Transmission, November 2013.

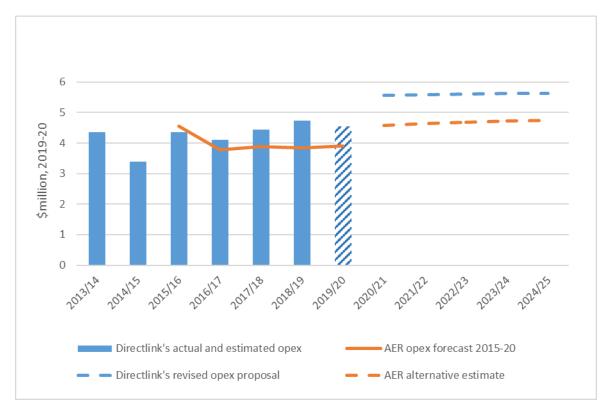
Efficiency adjustment	0.0	0.0	0.0
Remove insurance from final year estimate	-2.1	-2.1	0.0
2017-18 to 2019-20 increment	0.0	-0.2	-0.2
Output growth	0.0	0.0	0.0
Price growth	0.2	0.4	0.2
Productivity growth	0.0	0.0	0.0
Step changes	4.6	0.0	-4.6
Insurance	2.8	2.7	0.0
Debt raising costs	0.4	0.4	0.0
Total opex	28.0	23.4	-4.6

Source: Directlink, Operating expenditure model, 10 December 2019; AER analysis.

Note: Numbers may not add up to total due to rounding.

Figure 8 shows Directlink's updated opex forecast, its past actual opex, our previous regulatory decision and our alternative estimate.

Figure 8 Historical and forecast opex (\$million, 2019–20)



Source: Directlink, Regulatory accounts 2013–14 to 2017–18, Directlink, Operating expenditure model, 10

December 2019; AER analysis.

Note: Includes debt raising costs.

Further detail on our final decision regarding opex is set out in attachment 6.

2.6 Revenue adjustments

Our final decision on Directlink's total revenue includes a number of adjustments:

- EBSS Directlink accrued a negative EBSS carryover amount totalling \$1.8 million (\$2019–20).⁴⁶ The EBSS is intended to provide a continuous incentive for Directlink to pursue efficiency improvements in opex, and provide for a fair sharing of these between the business and its users. Consumers benefit from improved efficiencies through lower regulated prices. Further detail on our final decision regarding the EBSS is set out in section 3.1 below
- CESS Directlink has accrued a penalty under the CESS, which we applied in the current 2015–20 regulatory control period to incentive Directlink to undertake efficient capex throughout the period. The CESS rewards efficiency gains and penalises efficiency losses, each measured by reference to the difference between forecast and actual capex. In the 2015–20 period, Directlink overspent against our capex forecast, and our final decision is to approve a CESS revenue decrement amount of \$1.3 million (\$2019–20). Further detail on our final decision regarding the CESS is set out in section 3.2 below.

2.7 Corporate income tax

Our final decision includes a decision on the estimated cost of corporate income tax for Directlink's 2020–25 regulatory control period as part of our revenue determination.⁴⁷ It enables Directlink to recover the costs associated with the estimated corporate income tax payable during the regulatory control period.

We determined an estimated cost of corporate income tax of \$0.8 million (\$nominal) for Directlink over the 2020–25 regulatory control period. This is approximately equal to Directlink's revised proposed value.⁴⁸

We have also accepted Directlink's revised proposed opening tax asset base (TAB) value as at 1 July 2020 of \$111.2 million. This is because we have accepted Directlink's revised estimate of 2019–20 capex.

We also accept Directlink's proposal to assign the remaining tax asset life of its existing asset class and standard tax asset life of its forecast capex for the 2020–25 regulatory period to align with the remaining technical life of Directlink, which is 21.2 years. This approach is the same as that approved in our previous determination.⁴⁹

The EBSS carryover amount has been calculated using the most recent inflation forecast published in the RBA's May 2020 SMP. Our usual approach is to use the (headline) CPI forecast for the year ending June 2020. In the current COVID circumstances, we consider that the trimmed mean forecast better reflects core expectations of inflation as set out in the RBA's SMP. Further, the trimmed mean smooths the transient volatility in the CPI forecasts in the May 2020 SMP.

⁴⁷ NER, cl. 6A.6.4.

Directlink, Attachment 12-1 - Post Tax Revenue Model, 30 January 2019.

⁴⁹ AER, Final decision, Directlink transmission determination 2015-16 to 2019-20, Attachment 8: Corporate income tax, April 2015, p. 9.

Our adjustments to the return on capital (sections 2.1, 2.2 and 2.4) and the regulatory depreciation (section 2.3) building blocks affect revenues, which in turn impacts the tax calculation. For this final decision, these adjustments have not materially affected Directlink's revised proposed corporate income tax allowance.

Table 2.7 shows our final decision on Directlink's corporate income tax allowance for the 2020–25 regulatory control period.

Table 2.7 AER's final decision Directlink's cost of corporate income tax for the 2020–25 regulatory control period (\$million, nominal)

	2020–21	2021–22	2022–23	2023–24	2024–25	Total
Tax payable	0.4	0.4	0.4	0.4	0.4	1.9
Less: value of imputation credits	0.2	0.2	0.2	0.2	0.2	1.1
Net corporate income tax allowance	0.2	0.2	0.1	0.1	0.2	0.8

Source: AER analysis.

Further detail regarding corporate income tax is set out in attachment 7 to the final decision.

3 Incentive schemes to apply for 2020–25

Incentive schemes are a component of incentive based regulation and complement our approach to assessing efficient costs.

The incentive schemes that will apply to Directlink are:

- the opex efficiency benefit sharing scheme (EBSS)
- the capital expenditure sharing scheme (CESS)
- the service target performance incentive scheme (STPIS).

Our incentive schemes work together to encourage network businesses to make efficient decisions. They give network businesses an incentive to pursue efficiency improvements in opex and capex, and to share them with consumers. Incentives for opex and capex are balanced with the incentives under our STPIS. The incentive schemes encourage businesses to make efficient decisions on when and what type of expenditure to incur, and meet service reliability targets. Ultimately, the intention of our incentive schemes is to provide customers with better value for money through either improving network performance or lowering electricity bills.

Directlink has accepted our approach to each incentive scheme. Our final decision is that each of the EBSS, CESS and STPIS, should apply to Directlink for the 2020–25 regulatory control period.

3.1 EBSS

The EBSS provides a continuous incentive for service providers to pursue efficiency improvements in opex, and provides for a fair sharing of these between network businesses and network users. Consumers benefit from improved efficiencies through lower opex forecasts in future regulatory control periods.

As noted earlier, our final decision is to approve EBSS carryover amounts totalling – \$1.8 million (\$2019–20) for the 2015–20 regulatory control period. We have updated our carryover amounts to reflect actual opex for 2018–19 and the RBA's latest forecast of inflation in the year to June 2020, as set out in the RBA's latest *Statement on monetary policy.*⁵⁰ Our final decision is consistent with the amount included in Directlink's revised proposal.

Table 3.1 sets out our final decision on the EBSS carryover amounts Directlink accrued during the 2015–20 regulatory control period.

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Reserve Bank of Australia, *Statement on Monetary Policy*, May 2020. Our usual approach is to use the (headline) CPI forecast for the year ending June 2020. In the current COVID circumstances, we consider that the trimmed mean forecast better reflects core expectations of inflation as set out in the RBA's *SMP*. Further, the trimmed mean smooths the transient volatility in the CPI forecasts in the May *SMP*.

Table 3.1 Final decision on carryover amounts (\$million, 2019–20)

	2015–16	2016–17	2017–18	2018–19	2019–20	Total
AER final decision	-0.6	-1.2	-0.4	_	0.3	-1.8

Source: Directlink, Revised revenue proposal 2020-25, PTRM, 10 December 2019; AER analysis.

Note: Numbers may not add up due to rounding.

Our final decision is to apply version two of the EBSS to Directlink for the 2020–25 regulatory control period.⁵¹ This is consistent with our draft decision and Directlink's revised proposal. When we apply the EBSS, we will:

- exclude debt-raising costs from the EBSS as a pre-defined 'excluded category'
- adjust forecast opex to add (subtract) any approved revenue increments (decrements) made after the initial regulatory determination, such as approved pass through amounts or opex for contingent projects.
- adjust actual opex to add capitalised opex that has been excluded from the regulatory asset base⁵²
- adjust forecast opex and actual opex for inflation⁵³
- adjust actual opex to reverse any movements in provisions
- exclude categories of opex not forecast using a single year revealed cost approach for the regulatory control period beginning in 1 July 2025 where doing so better achieves the requirements of clause 6A.6.5 of the NER.

Table 3.2 sets out the opex forecasts we will use to calculate efficiency gains in the 2020–25 regulatory control period, subject to further adjustments permitted by the EBSS and assuming that insurance costs will not be forecast using a single year revealed cost approach for the 2025–30 regulatory control period.

⁵¹ AER, Efficiency benefit sharing scheme for electricity network service providers, November 2013.

NER, cl. 6A.6.5(b)(3) requires us to have regard to any incentives that transmission network service providers may have to inappropriately capitalise operating expenditure.

⁵³ AER, Efficiency benefit sharing scheme for electricity network service providers, November 2013, p. 7.

Table 3.2 Forecast total opex for the EBSS (\$million, 2019–20)

	2017–18	2018–19	2019–20	2020–21	2021–22	2022–23	2023–24	2024–25
Forecast total opex	3.8	3.8	3.8	4.6	4.6	4.7	4.7	4.8
Less debt raising costs	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Less insurance costs	-0.3	-0.3	-0.3	-0.5	-0.5	-0.6	-0.6	-0.6
Forecast total opex for the EBSS	3.5	3.4	3.4	4.0	4.0	4.1	4.1	4.1

Source: AER, Directlink final decision—Post tax revenue model, May 2020; AER analysis.

Note: Numbers, including the total may not add up due to rounding.

3.2 CESS

The CESS provides financial rewards for network service providers whose capex becomes more efficient and financial penalties for those that become less efficient. Consumers benefit from improved efficiency through lower regulated prices. We first applied the CESS to Directlink in the 2015–20 regulatory control period.

Our final decision is to apply a CESS revenue decrement amount of \$1.32 million (\$2019–20) in the 2020–25 regulatory control period. This results from an overspend in capex against the forecast for the 2015–20 regulatory control period.

Directlink accepted our draft decision on the CESS carryover.⁵⁴ Our final decision on the revenue impact of the application of the CESS in the 2015–20 regulatory control period is summarised in Table 3.3.

Table 3.3 AER's final decision on Directlink's CESS revenue decrement (\$million, 2019–20)

	2020–21	2021–22	2022–23	2023–24	2024–25	Total
AER final decision	-0.26	-0.26	-0.26	-0.26	-0.26	-1.32

Source: Directlink, Revised revenue proposal 2020–25, attachment 10-2 - CESS model (Public), 10 December 2019 and AER analysis.

We will also apply the CESS as set out in version 1 of the capital expenditure incentives guideline to Directlink in the 2020–25 regulatory control period.

⁵⁴ Directlink, Revised revenue proposal 2020–25, attachment 10-2 - CESS model (Public), 10 December 2019.

3.3 STPIS

The STPIS is intended to balance a business's incentive to reduce expenditure with the need to maintain or improve service quality. In simple terms, it penalises networks for cutting costs at the expense of the reliability of their network. It achieves this by providing financial incentives to businesses to maintain and improve service performance where customers are willing to pay for these improvements.

Businesses can only retain their rewards for sustained and continuous improvements to the reliability of supply for customers. Once improvements are made, the benchmark performance targets will be tightened in future years.

Directlink accepted our draft decision on the application of STPIS.⁵⁵ Our final decision is to apply all relevant components of version 5 of the STPIS to Directlink for the 2020–25 regulatory control period. Under this version of the scheme, the network capability component does not apply to Directlink.⁵⁶ We have also updated Directlink's performance targets to include its latest audited performance data for 2019 for this final decision.

The STPIS parameters for our final decision are set out in section 1.6 of the transmission determination.

Directlink, *Revised revenue proposal 2020–25*, 10 December 2019, p. 34.

⁵⁶ AER, Final – Service Target Performance Incentive Scheme, October 2015, cl. 2.2(d).

4 Other price terms and conditions

In this section, we consider the other aspects of our determination. These may be described as the terms and conditions of our determination that cover how Directlink must set its prices, including the conditions under which we may grant Directlink additional revenues to cover unforeseen circumstances.

4.1 Pass through events

In our draft decision, we approved Directlink's nominated pass through events.⁵⁷ Directlink's revised proposal accepted our draft decision.⁵⁸

Our final decision is to approve Directlink's nominated pass through events and associated definitions as set out in Table 4.1 below. These will apply to Directlink throughout the regulatory control period in addition to the pass through events which are prescribed by the NER.

Table 4.1 Approved nominated pass through events

Pass through event	Definition
Insurer's creditor risk	An insurer's credit risk event occurs if:
	 A nominated insurer of Directlink becomes insolvent, and as a result, in respect of an existing or potential claim for a risk that was insured by the insolvent insurer, Directlink:
	 Is subject to a higher or lower claim limit, or a higher or lower deductable than would have otherwise applied under the insolvent insurer's policy; or
	 Incurs additional costs associated with funding an insurance claim, which otherwise would have been covered by the insolvent insurer.
	Note: In assessing an insurer's credit risk event pass through application, the AER will have regard to, amongst other things:
	 Directlink's attempts to mitigate and prevent the event from occurring by reviewing and considering the insurer's track record, size, credit rating and reputation.
	 In the event that a claim would have been made after the insurance provider became insolvent, whether Directlink had reasonable opportunity to insure the risk with a different provider.

AER, Draft Decision - Directlink transmission determination 2020-25 Attachment 12, October 2019, p. 6.

Directlink, Revised revenue proposal 2020–25, 10 December 2019.

A terrorism event occurs if:

An act (including, but not limited to, the use of force or violence or the threat of force or violence) of any person or group of persons (whether acting alone or on behalf of or in connection with any organisation or government), which from its nature or context is done for, or in connection with, political, religious, ideological, ethnic or similar purposes or reasons (including the intention to influence or intimidate any government and/or put the public, or any sections of the public, in fear) and which increases the costs to Directlink in providing prescribed transmission services.

Terrorism

Note in assessing a terrorism event pass through application, the AER will have regard to, amongst other things:

- Whether Directlink has insurance against the event;
- The level of insurance that an efficient and prudent NSP would obtain in respect of the event, and
- Whether a declaration has been made by a relevant government authority that a terrorism event has occurred.

4.2 Pricing methodology

The role of Directlink's pricing methodology is to answer the question 'who should pay how much'⁵⁹ in order for Directlink to recover its costs. Directlink's pricing methodology provides a 'formula, process or approach'⁶⁰ 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 users⁶¹
- determines the structure of prices that a transmission business may charge for each category of prescribed transmission services.⁶²

In our draft decision, we approved Directlink's pricing methodology subject to some minor edits. Directlink's revised proposal incorporated these edits. Our final decision is to approve Directlink's pricing methodology.

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

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

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

⁶⁰ NER, cl. 6A.24.1(b).

⁶¹ NER, cl. 6A.24.1(b)(1).

⁶² NER, cl. 6A.24.1(b)(4).

5 The National Electricity Law and Rules

The NEL and NER provide the regulatory framework governing electricity networks. Our work under this framework is guided by the National Electricity Objective (NEO):⁶³

- "...to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to—
- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system."

The NEL requires us to make our decision in a manner that contributes, or is likely to contribute, to achieving the NEO.⁶⁴ The focus of the NEO is on promoting efficient investment in, and operation and use of, electricity services (rather than assets) in the long term interests of consumers.⁶⁵ This is not delivered by any one of the NEO's factors in isolation, but rather by balancing them in reaching a regulatory decision.⁶⁶

Electricity determinations are complex decisions. In most cases, the provisions of the NER do not point to a single answer, either for our decision as a whole or in respect of particular components. They require us to exercise our regulatory judgement. Where there are choices to be made among several plausible alternatives, we have selected what we are satisfied would result in an overall decision that contributes to the achievement of the NEO to the greatest degree. ⁶⁷

Our determinations are predicated on a number of constituent decisions that we are required to make. These are set out in appendix A and the relevant attachments. In coming to a decision that contributes to the achievement of the NEO, we have considered interrelationships of the constituent components of our draft decision in the relevant attachments. Examples include:

 underlying drivers and context which are likely to affect many constituent components of our decision. For example, forecast demand affects the efficient levels of capex and opex in the regulatory control period (see attachment 5 and 6)

⁶³ NEL, s. 7.

⁶⁴ NEL, section 16(1)(a).

This is also the view of the Australian Energy Markets Commission (the AEMC). See, for example, the AEMC, 'Applying the Energy Objectives: A guide for stakeholders', 1 December 2016, p. 5.

Hansard, SA House of Assembly, 26 September 2013, p. 7173. See also the AEMC, 'Applying the Energy Objectives: A guide for stakeholders', 1 December 2016, pp. 7–8.

⁶⁷ NEL, s. 16(1)(d).

⁶⁸ NER, cl. 6A.14.1.

- direct mathematical links between different components of a decision. For
 example, the level of gamma has an impact on the appropriate tax allowance;
 the benchmark efficient entity's debt to equity ratio has a direct effect on the cost
 of equity, the cost of debt, and the overall vanilla rate of return (see attachments
 3 and 7)
- trade-offs between different components of revenue. For example, undertaking a
 particular capex project may affect the need for opex or vice versa (see
 attachments 5 and 6).

In general, we consider that the long-term interests of consumers are best served where consumers receive a reasonable level of safe and reliable service that they value at least cost in the long run.⁶⁹ A decision that places too much emphasis on short term considerations may not lead to the best overall outcomes for consumers once the longer term implications of that decision are taken into account. ⁷⁰

There may be a range of economically efficient decisions that we could make in a revenue determination, each with different implications for the long term interests of consumers. A particular economically efficient outcome may nevertheless not be in the long term interests of consumers, depending on how prices are structured and risks allocated within the market. There are also a range of outcomes that are unlikely to advance the NEO, or advance the NEO to the degree than others would. For example, we consider that:

- the long term interests of consumers would not be advanced if we encourage overinvestment which results in prices so high that consumers are unwilling or unable to efficiently use the network⁷³
- equally, the long-term interests of consumers would not be advanced if allowed revenues result in prices so low that investors do not invest to sufficiently maintain the appropriate quality and level of service, and where customers are making more use of the network than is sustainable leading to safety, security and reliability concerns.⁷⁴

Hansard, SA House of Assembly, 9 February 2005, p. 1452.

See, for example, the AEMC, 'Applying the Energy Objectives: A guide for stakeholders', 1 December 2016, pp. 6–7.

⁷¹ Re Michael: Ex parte Epic Energy [2002] WASCA 231 at [143].

See, for example, the AEMC, 'Applying the Energy Objectives: A guide for stakeholders', 1 December 2016, p. 5

⁷³ NEL, s. 7A(7).

⁷⁴ NEL, s. 7A(6).

A Constituent decisions

Our final decision on Directlink's transmission determination includes the following constituent components:

Constituent component

In accordance with clause 6A.14.1(1)(i) of the NER, the AER's final decision is not to approve the total revenue cap set out in Directlink's building block proposal. Our final decision on Directlink's total revenue cap is \$77.3 million (\$nominal) for the 2020–25 regulatory control period. This decision is discussed in Attachment 1 of this final decision.

In accordance with clause 6A.14.1(1)(ii) of the NER, the AER's final decision is not to approve the maximum allowed revenue (MAR) for each regulatory year of the regulatory control period set out in Directlink's building block proposal. Our decision on Directlink's MAR for each year of the 2020–25 regulatory control period is set out in Attachment 1 of this final decision.

In accordance with clause 6A.14.1(1)(iii) of the NER, the AER's final decision is to apply the service component and market impact component of version 5 of the service target performance incentive scheme (STPIS) to Directlink for the 2020–25 regulatory control period. The values and parameters of the STPIS that are approved by the AER are set out in section 1.6 of the transmission determination.

In accordance with clause 6A.14.1(1)(iv) of the NER, the AER's final decision on the values that are to be attributed to the parameters for the efficiency benefit sharing scheme (EBSS) that will apply to Directlink in respect of the 2020–25 regulatory control period are set out in section 3.1 of this final decision overview.

In accordance with clause 6A.14.1(1)(v) of the NER, the AER's final decision is to approve the commencement and length of the regulatory control period as Directlink proposed in its revenue proposal. The regulatory control period will commence on 1 July 2020 and the length of this period is five years, expiring on 30 June 2025.

In accordance with clause 6A.14.1(2)(i) of the NER and acting in accordance with clause 6A.6.7(c), the AER has accepted Directlink's total forecast capital expenditure, adjusted for our updated estimate of inflation, of \$25.7 million (\$2019–20). The reasons for our final decision are set out in Attachment 5 of this final decision.

In accordance with clause 6A.14.1(3)(ii) of the NER and acting in accordance with clause 6A.6.6(d), the AER's final decision is to not accept Directlink's proposed total forecast operating expenditure inclusive of debt raising costs of \$28.0 million (\$2019–20). Our final decision therefore includes a substitute estimate of Directlink's total forecast opex for the 2020–25 regulatory control period of \$23.4 million (\$2019–20). The reasons for our final decision are set out in Attachment 6 of this final decision.

In respect of clause 6A.14.1(4) of the NER, Directlink did not propose any contingent projects.

In accordance with clause 6A.14.1(5A) of the NER, the AER's final decision is that version 1 of the capital expenditure sharing scheme (CESS) as set out the Capital Expenditure Incentives Guideline will apply to Directlink in the 2020–25 regulatory control period. This is discussed in section 3.2 of this final decision overview.

In accordance with clause 6A.14.1(5B) and 6A.6.2 of the NER, the AER's final decision is that the allowed rate of return for the 2020–21 regulatory year is 4.53 per cent (nominal vanilla), as set out in section 2.2 of this final decision overview. The rate of return for the remaining regulatory years 2021–25 will be updated annually because our decision is to apply a trailing average portfolio approach to estimating debt which incorporates annual updating of the allowed return on debt.

In accordance with clause 6A.14.1(5C) of the NER, the AER's final decision is that the value of imputation credits as referred to in clause 6A.6.4 is 0.585. This is set out in section 2.2 of this final decision overview.

In accordance with clause 6A.14.1(5D) of the NER, the AER's final decision, in accordance with clause 6A.6.1 and schedule 6A.2, is that the opening regulatory asset base (RAB) as at the commencement of the 2020–25 regulatory control period, being 1 July 2020, is \$146.9 million (\$nominal). This is discussed in Attachment 2 of this final decision.

In accordance with clause 6A.14.1(5E) of the NER, the AER's final decision is that the depreciation approach based on forecast capex (forecast depreciation) is to be used to establish the RAB at the commencement of Directlink's regulatory control period as at 1 July 2025. This is discussed in Attachment 2 of this final decision.

In accordance with clause 6A.14.1(8) of the NER, the AER's final decision is to approve Directlink's proposed pricing methodology. This is set out in Attachment A of this final decision.

In accordance with clause 6A.14.1(9) of the NER, the AER's final decision is to apply the following nominated pass through events to apply to Directlink for the 2020–25 regulatory control period in accordance with clause 6A.6.9:

- Insurer's creditor risk event
- Terrorism event

These events have the definitions set out in section 4.1 of this final decision overview.

B List of submissions

We received one submission in response to our draft decision and Directlink's revised revenue proposal. This is listed below.

Submission from	Date received
Public Interest Advocacy Centre	15 January 2020

Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
augex	augmentation expenditure
capex	capital expenditure
CESS	capital expenditure sharing scheme
CPI	consumer price index
EBSS	efficiency benefit sharing scheme
MAR	maximum allowed revenue
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RFM	roll forward model
STPIS	service target performance incentive scheme
TNSP	transmission network service provider
WACC	weighted average cost of capital