

DRAFT DECISION

Directlink Transmission Determination 2020 to 2025

Attachment 10 Service target performance incentive scheme

October 2019



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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

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Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
capex	capital expenditure
CESS	capital expenditure sharing scheme
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
RIN	regulatory information notice
STPIS	service target performance incentive scheme
TNSP	transmission network service provider
MIC	market impact component

10Service target performance incentive scheme

The service target performance incentive scheme (STPIS) provides a financial incentive to transmission network services providers (TNSPs) to maintain and improve service performance. We will apply current version 5 of the STPIS to Directlink for the 2020–25 regulatory control period. Under this version of the scheme, only the service component and the market impact component are applicable for Directlink.¹

The service component provides a reward or penalty of +/- 1.25 per cent of the maximum allowed revenue (MAR) to improve network reliability by focussing on unplanned outages. The service component is designed to encourage TNSPs to seek to reduce the number of unplanned network outages and to promptly restore the network in the event of unplanned outages that result in supply interruptions. This component is also designed to indicate potential reliability issues.

The market impact component (MIC) provides an incentive to TNSPs to minimise the impact of transmission outages that can affect wholesale market outcomes. The MIC measures performance against the market impact parameter, which is the number of dispatch intervals where an outage on the TNSP's network results in a network outage constraint with a marginal value greater than \$10/MWh (MIC count).²

Each TNSP's annual MIC count is measured against its target, where the target is calculated by averaging the median five of the last seven years of performance data.³ Further, the dollars per dispatch interval (\$/DI) associated with the reward/penalty for each count can be directly calculated for the regulatory control period from the MIC target, and the MAR. Both the target and the \$/DI are fixed for the regulatory control period.

TNSPs receive a reward or penalty of up to +/- 1 per cent of the MAR for the relevant calendar year. Under clause 4.2(a), a TNSP must submit 7 calendar years of data to calculate the target as noted above.

10.1 Draft decision

We will apply the service and market impact 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.⁴

The draft decision components are outlined in the tables below. Our draft decision is based on the relevant data for 2015–18. We require Directlink to submit its 2019 data under version 5 of the STPIS with its revised regulatory proposal for the final decision.

¹ AER, *Final* – Service Target Performance Incentive Scheme, October 2015, cl. 2.2(a).

² AER, *Final – Service Target Performance Incentive Scheme*, October 2015, Appendix C.

³ The target will be calculated from the average of the five values remaining from the last seven years of data excluding the largest and smallest annual values.

⁴ AER, *Final* – Service Target Performance Incentive Scheme, October 2015, cl. 2.2(d).

Table 10-1Draft decision — service component caps, floors and targetsfor 2020–25

Parameter	Floor	Target	Сар	Weighting (% of MAR)
Unplanned outage circuit event rate:				1.25
Circuit event rate – fault	1261%	867%	571%	0.75
Circuit event rate – forced	277%	158%	15%	0.50
Proper operation of equipment (number of events):				
Failure of protection system ^a	5	3	0	0.00

^a These measures are weighted at zero percent in terms of reward and penalty under the STPIS. Source: AER analysis.

Table 10-2 Draft decision — MIC parameter values for 2020–25

MIC parameter values	
Performance target (Placeholder)	1095
Unplanned outage event limit	382
Dollar per dispatch interval (\$/DI)	130.9

Source: AER analysis.

10.2 Directlink's proposal

Directlink has proposed applying the AER's latest version 5 of the STPIS in setting service component targets for the 2020–25 regulatory period.⁵

For the market impact component, Directlink has proposed a target based on the annual average of the past four years from the commencement of the STPIS scheme.⁶

10.3 Assessment approach

A revenue determination for a TNSP is to specify, amongst other things, the annual building block revenue requirement for each regulatory year of the regulatory control period.⁷ In turn, the annual building block revenue requirement must be determined using a building blocks approach, under which, one of the building blocks is the revenue increments or decrements (if any) for that year arising from the application of

⁵ Directlink, *Revenue Proposal 2020–25*, January 2019, p. 96.

⁶ Directlink, *Revenue Proposal 2020–25*, January 2019, p. 97.

⁷ NER, cl. 6A.4.2(a)(2).

any STPIS (and other schemes).⁸ We have assessed Directlink's revenue proposal against the requirements of version 5 of the STPIS.

10.3.1 Service component

We assessed whether Directlink's proposed performance targets, caps and floors comply with the STPIS requirements.

Under the STIPS, we must accept Directlink's proposed parameter values if they comply with the requirements of the STPIS. We may reject them if they are inconsistent with the objectives of the STPIS.⁹ We measure actual performance for the 'average circuit outage rate' and 'average outage duration' parameters on a two calendar year rolling average in accordance with Appendix E of the STPIS.

We assessed Directlink's service component proposal against the requirements of the STPIS-that is, whether:

- Directlink's data recording systems and processes produce accurate and reliable data and whether the data is recorded consistently based on the parameter definitions under the STPIS¹⁰
- the proposed performance targets were equal to the average of the most recent five years of performance data¹¹
- any adjustments to the proposed targets are warranted and reasonable¹²
- Directlink applied a sound methodology, with reference to the performance targets, to calculate the proposed caps and floors¹³
- any adjustment to a performance target was applied to the cap and floor of that parameter.¹⁴

10.3.2 Market impact component

We assessed Directlink's market impact component proposal against the requirements of the STPIS-that is, whether:

- data used to calculate the market impact parameter is accurate and reliable, and consistently recorded based on the parameter definition in Appendix C¹⁵
- the proposed performance target was calculated in accordance with the requirements of clause 4.2(f) in version 5 of the STPIS

⁸ NER, cll. 6A.5.4(a)(5), 6A.5.4(b)(5) and 6A.7.4.

⁹ AER, Final – Service Target Performance Incentive Scheme, October 2015, cl. 3.2(l).

¹⁰ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 3.2(d).

¹¹ AER, Final – Service Target Performance Incentive Scheme, October 2015, cl. 3.2(g).

¹² AER, *Final* – Service Target Performance Incentive Scheme, October 2015, cl. 3.2(j).

¹³ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 3.2(e).

¹⁴ AER, *Final* – Service Target Performance Incentive Scheme, October 2015, cl. 3.2(e).

¹⁵ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 4.2(c).

- the proposed unplanned outage event limit has been calculated in accordance with the requirements of clause 4.2(h) in version 5 of the STPIS
- the proposed dollar per dispatch interval has been calculated in accordance with clause 4.2(j) in version 5 of the STPIS.

Where Directlink's proposed values for the market impact parameter do not comply with the requirements of the STPIS or is otherwise inconsistent with the objectives of the scheme,¹⁶ we will reject the proposed values and provide substitute values which comply with the STPIS.

10.4 Interrelationships

The STPIS takes into account any other incentives provided for in the NER that TNSPs have to minimise capital or operating expenditure. One of the objectives of the STPIS is to assist in the setting of efficient capital and operating expenditure allowances by balancing the incentive to reduce actual expenditure with the need to maintain and improve reliability for customers and reduce the market impact of transmission congestion.

The STPIS will interact with the capital expenditure sharing scheme (CESS) and the opex efficiency benefit sharing scheme (EBSS). The STPIS allows us to adjust the performance targets of the service component for the expected effects on the TNSP's performance from any increases or decreases in the volume of capital works planned during the regulatory control period. In conjunction with CESS and EBSS, the STPIS will ensure that:

- any additional investments to improve service quality are based on prudent economic decisions
- reductions in capex and opex are achieved efficiently, rather than at the expense of service levels to the network users.

10.5 Reasons for draft decision

We will apply version 5 of the STPIS to Directlink. The reasons for our draft decision are outlined below.

Under the scheme, performance targets must be based on the actual performance outcomes of the previous five years—that is, the outcomes for 2015—19. Directlink only provided the performance data for 2015—18, that is, four years of data. Therefore, for this draft decision, we have used the past four years of data plus the "average of the immediate past four years of data" as a placeholder for the 2019 performance outcome, to calculate Directlink's performance targets.

The final performance targets for the 2020-25 regulatory control period will require 2019 data, which is currently not available. This will be taken into account when we

¹⁶ AER, *Final* – Service Target Performance Incentive Scheme, October 2015, cl 4.2(d).

make our final decision. We require Directlink to submit its 2019 data with its revised revenue proposal for our assessment of the service and MIC components for the final decision.

10.5.1 Service component

Performance targets must equal the TNSP's average performance history over the past five years unless they are subject to an adjustment under clause 3.2(i) or (j) of the STPIS.¹⁷ We have determined performance targets that are the arithmetic mean of the past five years of performance data. The placeholder performance targets are shown in Table 10-1.

Caps and floors

Proposed caps and floors must be calculated with reference to the proposed performance targets using a sound methodology.¹⁸

We do not accept Directlink's proposed cap and floor values because Directlink has not provided any details on its methodology and calculations. We assessed Directlink's cap and floor values using our @risk model.¹⁹ Our approach used five years of performance data to determine a statistical distribution that best fits that data—with the caps and floors set at the 5th and 95th percentiles. This is consistent with our other transmission determinations.

Our approved cap and floor values for Directlink are set out in Table 10-3.

Parameter	Distribution	Floor (5th percentile)	Cap (95th percentile)
Average circuit outage rate			
Circuit event rate – fault	Loglogistic	1261%	571%
Circuit event rate – forced	Uniform	277%	15%
Proper operation of equipment (number of events):			
Failure of protection system	Poisson	5	0

Table 10-3 Draft decision — caps and floors and targets for 2020–25

Source: AER analysis.

¹⁷ AER, Final – Service Target Performance Incentive Scheme, October 2015, cl. 3.2.

¹⁸ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 3.2(e).

¹⁹ Our @risk model has been used to set the cap and floor range in most of our recent determinations.

10.5.2 Market impact component

Performance target

For reasons explained below, we do not accept Directlink's proposed performance target for the market impact parameter. Instead, our draft decision is to substitute the proposed value of 1205 dispatch intervals with 1095 dispatch intervals.

As version 5 of the STPIS is being applied to Directlink for the first time, the performance target is to be calculated in accordance with clause 4.2(f) of version 5 of the STPIS. Under this methodology, the performance target is calculated by:

- calculating the raw performance target which is equal to Directlink's average annual performance history against the market impact parameter for the median five out of seven preceding calendar years
- calculating 17 per cent of the raw performance target
- adjusting the annual performance history of Directlink for the seven preceding calendar years by limiting the impact of market impact parameter counts associated with unplanned outages to 17 per cent of the raw performance target
- using the adjusted performance history to calculate the performance target, which is the average adjusted annual performance history of the median five out of seven preceding calendar years.

In accordance with this methodology, and the raw data that Directlink submitted in its revenue proposal, Directlink proposed a performance target of 1205 dispatch intervals based on its 2015–18 performance history.²⁰

However, our assessment of the Directlink's 2015–18 performance history data submission found that a number of the performance history counts were not consistent with the requirements of the STPIS. In addition, we have included 2010–12 performance history data for this draft decision. We have calculated the raw performance target, which is equal to average annual performance history against the market impact parameter, for the median five out of seven preceding calendar years. We have made these adjustments to Directlink's performance history as set out in Table 10-4.

Based on these adjustments, we calculated the MIC target as 1095 dispatch intervals, and the incentive rate per DI, based on our calculated target, is \$130.9/DI.

²⁰ Directlink, *Revenue Proposal 2020–25*, January 2019, p. 97.

Year	Directlink RIN submission	AER draft decision	Comment
2010	na	2836	Approved in 2015-16 to 2019-20 decision
2011	na	1017	Approved in 2015-16 to 2019-20 decision
2012	na	375	Approved in 2015-16 to 2019-20 decision
2013	no data	na	no data due to fire
2014	no data	na	no data due to fire
2015	3193	1055	Adjustment for unplanned outage event limit
2016	1728	889	Adjustment for unplanned outage event limit
2017	7062	741	Adjustment for unplanned outage event limit
2018	2454	1769	Adjustment for unplanned outage event limit
Min	na	375	
Max		2836	
Target (Draft decision, placeholder)	na	1095	
Unplanned outage event limit (17%)		382	
Dollar per dispatch interval (\$/DI)		130.9	

Table 10-4 Draft decision — MIC parameter values for 2020–25

Source: AER analysis.