DRAFT DECISION
AusNet Services transmission determination 2017–18 to 2021–22

Overview

July 2016

AUSTRALIAN ENERGY REGULATOR

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Note

This attachment forms part of the AER's draft decision on AusNet Services' revenue proposal 2017–22. It should be read with other parts of the draft decision.

The draft decision includes the following documents:

Overview

Attachment 1 – maximum allowed revenue

Attachment 2 – regulatory asset base

Attachment 3 – rate of return

Attachment 4 – value of imputation credits

Attachment 5 – regulatory depreciation

Attachment 6 – capital expenditure

Attachment 7 – operating expenditure

Attachment 8 – corporate income tax

Attachment 9 – efficiency benefit sharing scheme

Attachment 10 – capital expenditure sharing scheme

Attachment 11 – service target performance incentive scheme

Attachment 12 – pricing methodology

Attachment 13 – pass through events

Attachment 14 – negotiated services

Contents

Shortened forms

Shortened form	Extended form
AARR	aggregate annual revenue requirement
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ASRR	annual service revenue requirement
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CESS	capital expenditure sharing scheme
CPI	consumer price index
DRP	debt risk premium
EBSS	efficiency benefit sharing scheme
ERP	equity risk premium
MAR	maximum allowed revenue
MRP	market risk premium
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules
NSP	network service provider

Shortened form	Extended form
NTSC	negotiated transmission service criteria
opex	operating expenditure
PPI	partial performance indicators
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
repex	replacement expenditure
RFM	roll forward model
RIN	regulatory information notice
RPP	revenue and pricing principles
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
TNSP	transmission network service provider
TUoS	transmission use of system
WACC	weighted average cost of capital

1 Introduction

We, the Australian Energy Regulator (AER), are responsible for the economic regulation of electricity transmission and distribution systems in all Australian states and territories, with the exception of Western Australia. AusNet Services owns and operates Victoria's electricity transmission network. We regulate the revenues that AusNet Services can recover from its customers.

AusNet Services submitted a revenue proposal for its electricity transmission network on 30 October 2015. The proposal sets out the revenue AusNet Services proposes to recover from electricity consumers through transmission charges for the period 2017–22. This overview, together with its attachments, constitutes our draft decision on AusNet Services' revenue proposal.

The National Electricity Law (NEL) and National Electricity Rules (NER) provide the regulatory framework governing electricity networks. In regulating AusNet Services, we are guided by the National Electricity Objective (NEO), as set out in the NEL. The NEO is:[1]

> 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.

1.1 Structure of overview

This overview provides a summary of our draft decision and its individual components. The remainder is structured as follows:

- Section 2 provides a high level summary of our draft decision
- Section 3 provides a breakdown of our draft decision into its key components
- Section 4 sets out our draft decision on the incentive schemes that will apply to AusNet Services for the 2017–22 regulatory control period
- Section 5 explains our views on the regulatory framework and the NEO
- Section 6 outlines our consultation process in reaching this draft decision and our view of AusNet Services' consumer engagement undertaken in developing its revenue proposal
- Appendix A contains the full list of constituent components that make up AusNet Services' proposal and our draft decision on each of them

[1] NEL, s. 7.

- Appendix B lists the stakeholder submissions received on AusNet Services' revenue proposal.

In our attachments to this decision we set out detailed analysis of the constituent components that make up our draft decision.

1.2 Our process

This draft decision is one of the key steps in reaching our final decision. Our final decision will be released no later than 31 January 2017. Before that, AusNet Services will have the opportunity to submit a revised proposal in response to this draft decision. Stakeholders will also have the opportunity to make submissions to us on our draft decision and AusNet Services' revised proposal.

Following receipt of the revised proposal and submissions, we will then make our final decision taking everything we have heard into account. Table 1.1 lists the key dates and consultation deadlines for the process.

Table 1.1 Key dates and consultation

Task	Date
Revenue proposal submitted to the AER	30 October 2015
AER released Issues paper	11 December 2015
AER held public forum	17 December 2015
Submissions on revenue proposal closed	4 February 2016
AER draft decision published	20 July 2016
AER public forum to explain draft decision	9 August 2016
Submissions due on draft decision	21 September 2016
Revised revenue proposal due to AER	21 September 2016
Further submissions, including on revised proposals	13 October 2016
AER release of final decision	No later than 31 January 2017

1.3 Victorian electricity transmission

In Victoria, two separate organisations are responsible for the electricity transmission network—AusNet Services and the Australian Energy Market Operator (AEMO). Under this model, the transmission network planning functions in Victoria are separated from network ownership and operation.

AusNet Services is the transmission network service provider (TNSP) which owns and operates Victoria's electricity transmission network. It is responsible for transporting

electricity from generation sources into Victoria's five lower–voltage distribution networks.[2]

AEMO is also a designated TNSP and is responsible for planning and procuring the augmentation of the Victorian shared transmission network. Given that AEMO is responsible for augmentation investment and plans, these are not included in AusNet Services' revenue proposal.

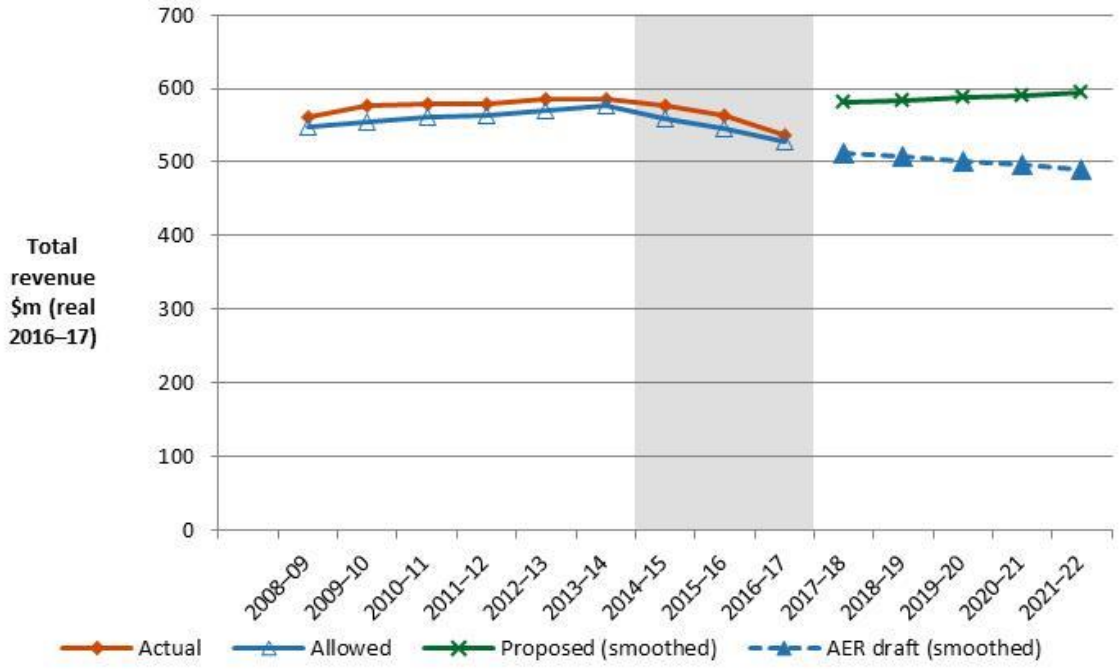
[2] Ausnet Services, Determining electricity transmission revenue (http://www.ausnetservices.com.au/Electricity/Determining+Revenues/Transmission+Network.html), Accessed online 19 May 2016.

2 Summary of draft decision

Our draft decision is that AusNet Services can recover $2695.0 million ($ nominal, smoothed) from consumers over the 2017–22 regulatory control period. This is a 14.7 per cent reduction from AusNet Services' proposed revenue allowance of $3160.5 million ($ nominal).

Figure 2.1 compares our draft decision on AusNet Services' revenue for 2017–22 to its proposed revenue and to the revenue allowed and recovered during the two previous regulatory control periods of 2008–14 and 2014–17. AusNet Services' annual revenue decreased each year from 2014–17 in real dollar terms.

Figure 2.1 AusNet Services' past total revenue, proposed total revenue and AER draft decision total revenue allowance ($million, 2016–17)



Source: AER analysis.

2.1 What is driving allowed revenue?

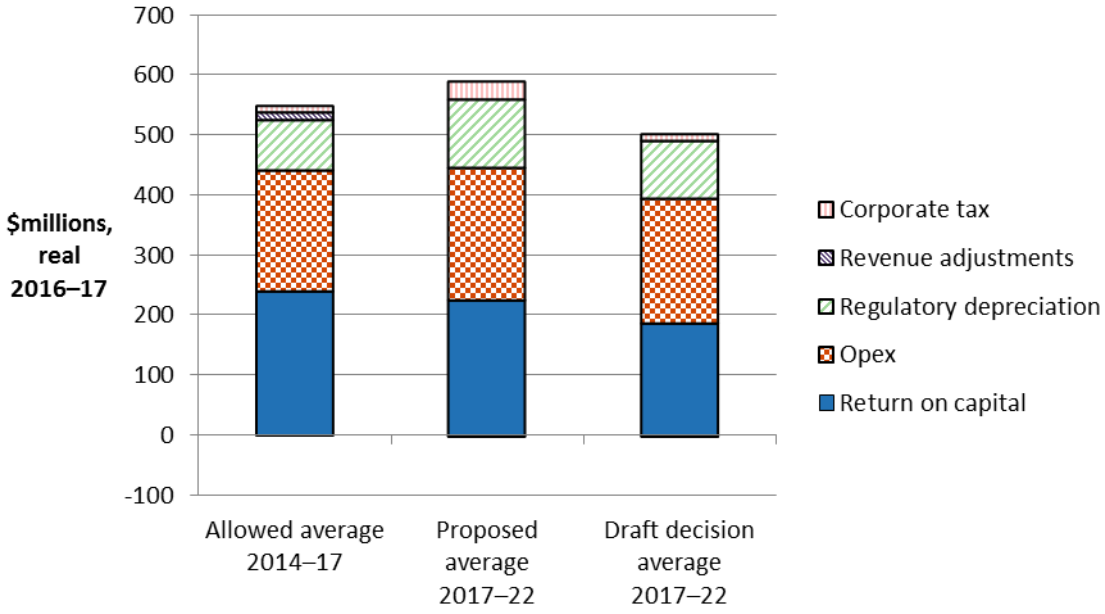
Our draft decision approves average annual revenues for the 2017–22 regulatory control period that are $43.3 million ($ 2016–17)—or 8.0 per cent—lower than was approved in our decision for 2014–17 in real dollar terms.[3] Our draft decision provides

[3] In nominal dollar terms, our draft decision average annual revenues for the 2017–22 regulatory control period is about $5.5 million (or 1.0 per cent) higher than the average annual revenues approved for the 2014–17 regulatory control period.

for 14.7 per cent less revenue than AusNet Services sought to recover through its revenue proposal.

Figure 2.2 compares the average annual building block revenue from our draft decision to that proposed by AusNet Services for the 2017–22 regulatory control period, and to the approved average amount for the 2014–17 regulatory control period.

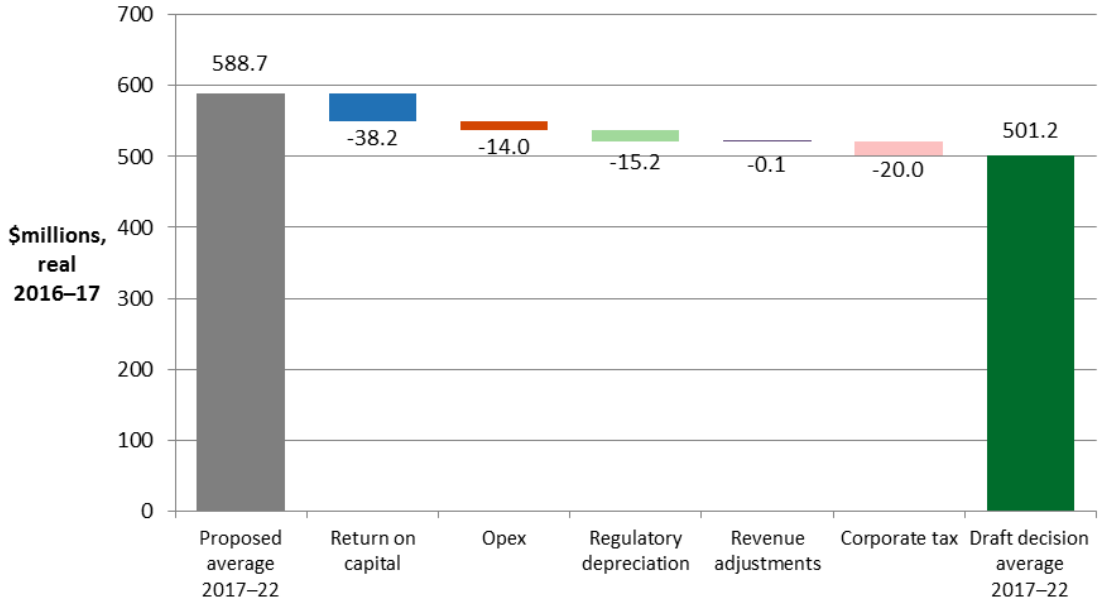
Figure 2.2 AER's draft decision on constituent components of total revenue ($million, 2016–17)



Source: AER analysis.

Figure 2.3 compares our draft decision with AusNet Services' proposal, broken down by the various building block components that make up the forecast revenue allowance.

Figure 2.3 AER's draft decision and AusNet Services' proposed annual building block costs ($million, 2016–17)



Source: AER analysis.

These figures highlight that the allowed rate of return—which feeds into the return on capital—is one of the key difference between our draft decision and AusNet Services' proposal. Our decisions on depreciation and corporate income tax also drive the difference between our draft decision and AusNet Services' proposal.

2.1.1 Allowed rate of return

The allowed rate of return provides AusNet Services with revenue to service the interest on its loans and give a return on equity to its shareholders. It is applied to AusNet Services' capital base to determine the return on capital building block.

Prevailing market conditions for debt and equity heavily influence the rate of return. Financial conditions have changed since our last decision for AusNet Services in January 2014. Interest rates are lower and financial market conditions are more stable. This means that the cost of debt and the returns required to attract equity are lower.

This is reflected in a lower rate of return in this decision. Our draft decision is for a rate of return of 6.16 per cent (for 2017–18)[4]—compared to AusNet Services' proposed 7.22 per cent and the 7.87 per cent set for the 2014–17 regulatory control period.

We set out our approach to determining the rate of return in the Rate of Return Guideline (Guideline) we published in December 2013. We undertook significant

[4] For the remaining years of the regulatory control period, we will update the rate of return annually.

consultation in developing this Guideline. Although it is not binding, the transmission businesses must provide reasons to justify any departure from the Guideline.[5] After considering the information before us in AusNet Services' proposal and in submissions, our draft decision position is to not depart from our approach set out in our Guideline.

2.1.2 Depreciation

Depreciation is the amount that the service provider recovers to pay for the real original cost of the asset over time—typically recovery occurs over the useful life of the asset. AusNet Services proposed to change the depreciation method for all new assets being acquired in the 2017–22 regulatory control period. It proposed using a diminishing value (DV) depreciation method for new assets, while maintaining a straight–line (SL) depreciation method for existing assets.

The DV method results in higher depreciation in the early years of an asset's life and lower depreciation in the latter years. That is, network customers pay off a higher proportion of the initial cost of the asset in the early years compared to the typical straight-line depreciation method.

Our draft decision does not accept AusNet Services proposal to apply the DV method for depreciating new assets as we do not consider that this method results in a depreciation profile that reflects the nature of these assets over their economic lives. Instead we have applied the SL depreciation method for both new and existing assets, resulting in a reduced depreciation allowance over the 2017–22 regulatory control period.

However, we have approved the creation of a new 'Accelerated depreciation' asset class for specific assets that are identified as likely to be no longer used over the 2017–22 regulatory control period. These assets are relatively few in number and will be depreciated over the five years of the 2017–22 regulatory control period.

In reaching our draft decision positions we considered submissions received from the Consumer Challenge Panel (CCP)[6] and the Energy Users Coalition of Victoria (EUCV)[7] in response to AusNet Services' proposal. Both the CCP and the EUCV were opposed to AusNet Services' proposal to use the DV method to calculate depreciation on new assets.

Our draft decision also makes other more minor adjustments which have resulted in further decreasing the depreciation allowance. These are listed in section 3.4 and discussed in detail in attachment 5.

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5 NER, cl. S6A.1.3(4A).

6 Consumer Challenge Panel, *Response to AusNet proposal and AER issues paper for AusNet transmission revenue review 2017-2022*, February 2016, pp. 30–37.

7 Energy Users Coalition of Victoria, *A response to AusNet revenue reset proposal for the 2017-2022 period*, February 2016, pp. 42–44.

2.1.3 Corporate income tax

Our revenue determination includes the estimated cost of corporate income tax for AusNet Services' 2017–22 regulatory control period.[8] This allows AusNet Services to recover the costs associated with the estimated corporate income tax payable during the 2017–22 regulatory control period.

Under the post-tax framework, a corporate income tax allowance is calculated as part of the building block assessment using our post-tax revenue model (PTRM). The reduction between AusNet Services' proposal and our draft decision reflects our amendments to some of AusNet Services' proposed inputs for forecasting the cost of corporate income tax. Changes to building block costs also affect revenues, which in turn impact the tax calculation. This is discussed further in section 3.7 and attachment 8.

2.2 Expected impact of decision on residential electricity bills

Transmission charges account for a relatively small percentage of a residential customers' annual electricity bill. The annual electricity bill for customers in Victoria will reflect the combined cost of all the electricity supply chain components—wholesale energy generation, transmission, distribution, metering, and retail costs. On average, transmission charges account for approximately 5 per cent of a Victorian customer's annual electricity bill. This small percentage largely explains the relatively modest average annual electricity bill impacts arising from our draft decision.

We estimate the expected bill impact by varying the transmission charges in accordance with our draft decision, while holding other components of the bill constant. This approach isolates the effect of our decision on electricity prices, but does not imply that other components will remain unchanged across the regulatory control period.[9]

Based on this approach, we expect that our draft decision will result in the transmission component of the average annual residential electricity bills in Victoria remaining generally constant over the 2017–22 regulatory control period. The transmission component of the average annual residential electricity bill in 2021–22 is expected to be only about $1 above the 2016–17 level.

By comparison, had we accepted AusNet Services' proposal, the expected transmission component of the average annual residential electricity bill in 2021–22 would increase by about $16 ($ nominal) or 1.2 per cent above the 2016–17 level.

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[8] NER, cl. 6A.5.4(a)(4).

[9] It also assumes that actual energy demand will equal the forecast in our draft decision. Since AusNet Services operates under a revenue cap, changes in demand will also affect annual electricity bills across the 2017–22 regulatory control period.

Table 2.1 shows the estimated impact of our draft decision on average residential and small business customers' annual electricity bills in Victoria over the 2017–22 regulatory control period, compared with AusNet Services' proposal. As explained above, these bill impact estimates are indicative only, and individual customers' actual bills will depend on their usage patterns and the structure of their chosen retail tariff offering.

Table 2.1 Estimated impact of draft decision on average Victorian residential and small business customers' electricity bills for 2017–22 period ($nominal)

	2016–17	2017–18	2018–19	2019–20	2020–21	2021–22
AER draft decision						
Residential annual bill	1419[a]	1418	1419	1419	1420	1421
Annual change[d]		–1 (–0.1%)	0 (0%)	0 (0%)	1 (0%)	1 (0.1%)
Small business (flat) annual bill	3332[b]	3330	3331	3331	3333	3335
Annual change[d]		–2 (–0.1%)	1 (0%)	1 (0%)	1 (0%)	2 (0.1%)
Small business (TOU) annual bill	8247[c]	8242	8244	8246	8249	8255
Annual change[d]		–5 (–0.1%)	2 (0%)	2 (0%)	3 (0%)	6 (0.1%)
AusNet Services proposal						
Residential annual bill	1419[a]	1428	1430	1431	1433	1436
Annual change[d]		8 (0.6%)	2 (0.1%)	2 (0.1%)	2 (0.1%)	2 (0.2%)
Small business (flat) annual bill	3332[b]	3348	3351	3354	3358	3363
Annual change[d]		16 (0.5%)	3 (0.1%)	3 (0.1%)	4 (0.1%)	5 (0.1%)
Small business (TOU) annual bill	8247[c]	8286	8295	8303	8312	8323
Annual change[d]		39 (0.5%)	8 (0.1%)	8 (0.1%)	9 (0.1%)	11 (0.1%)

Source: AER analysis; ESCV, *Energy Retailers Comparative Performance Report — Pricing 2014–15*, January 2016, p. XIII; AEMO, *National electricity forecasting report for the national electricity market - Update*, December 2015, table 3, Medium.

(a) Based on weighted average standing offers at June 2016 from Switchon comparison tool for DNSP service areas (postcodes: 3000, 3047, 3134, 3199, 3550) using consumption of 4000 kWh per annum converted to middle of year 2016–17 dollar terms.

(b) Based on weighted average of Victorian bills in ESCV, *Energy Retailers Comparative Performance Report — Pricing 2014–15*, January 2016, converted to middle of year 2016–17 dollar terms.

(c) Based on weighted average of Victorian bills in ESCV, *Energy Retailers Comparative Performance Report — Pricing 2014–15*, January 2016, converted to middle of year 2016–17 dollar terms.

(d) Annual change amounts and percentages are indicative. They are derived by varying the transmission component of 2016–17 bill amounts in proportion to yearly expected revenue divided by AEMO forecast demand (Victoria). Actual bill impacts will vary depending on electricity consumption and tariff class.

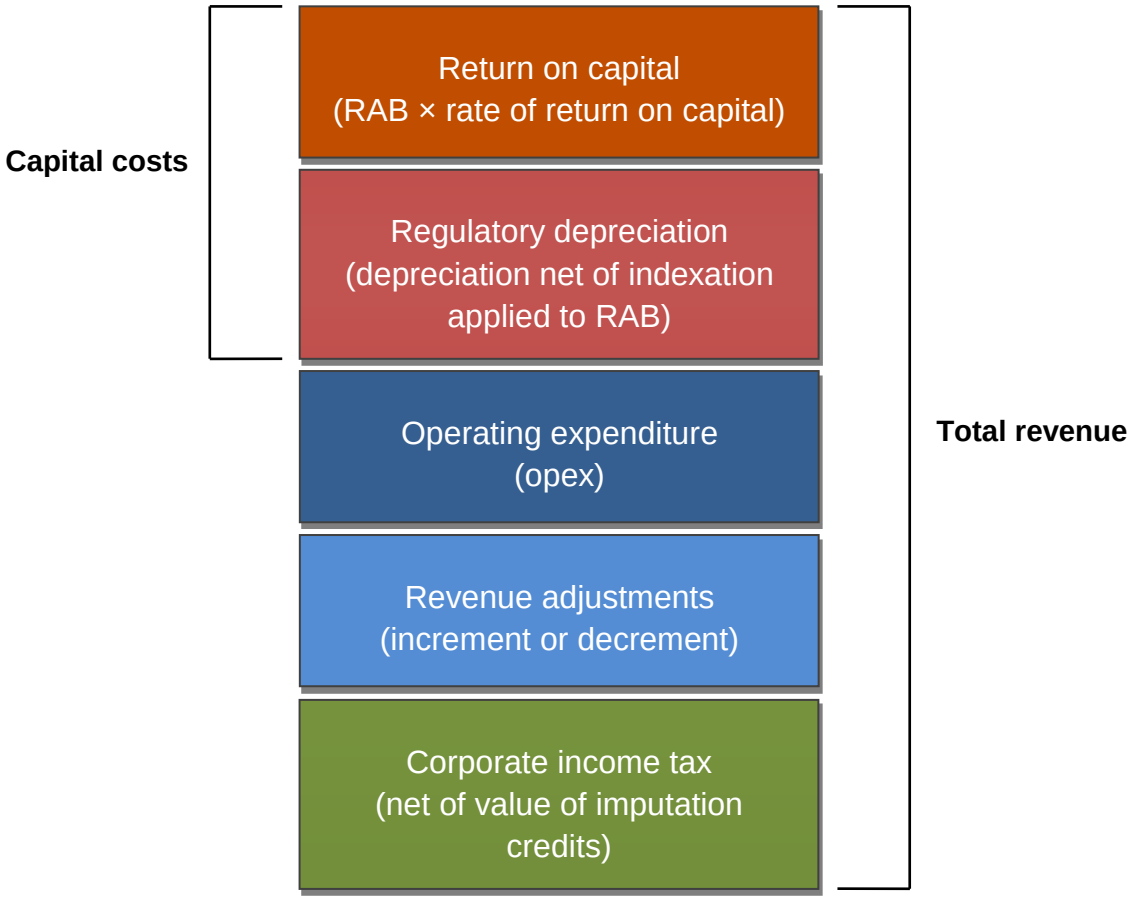
3 Key elements of our draft decision

We use the building block approach to determine AusNet Services' maximum allowed revenue (MAR). The building block approach consists of five costs that a business is allowed to recover through its revenue allowance.

The building block costs are illustrated in Figure 3.1 and include:

- a return on the regulatory asset base (RAB) (or return on capital)
- depreciation of the RAB (or return of capital)
- forecast opex
- revenue increments or decrements resulting from incentive schemes such as the efficiency benefit sharing scheme (EBSS)
- the estimated cost of corporate income tax.

Figure 3.1 The building block approach for determining total revenue



The building block costs are comprised of key elements that we determine through our assessment process. For example, 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.

This section summarises our draft decision on key elements of the building blocks including:

- RAB (section 3.1)
- Rate of return (section 3.2)
- Imputation credits (section 3.3)
- Depreciation allowance (section 3.4)
- Efficient level of capex (section 3.5)
- Efficient level of opex (section 3.6)
- Forecast level of corporate income tax (section 3.7).

Incentive schemes including the EBSS and CESS are covered in section 4. Table 3.1 shows our draft decision on AusNet Services' revenues including the building block components.

Table 3.1 AER's draft decision on AusNet Services' revenues ($million, nominal)

	2017–18	2018–19	2019–20	2020–21	2021–22	Total
Return on capital	196.9	200.7	202.4	202.8	202.7	1005.4
Regulatory depreciation[a]	102.0	102.5	109.4	112.2	95.2	521.3
Operating expenditure[b]	210.8	216.2	221.9	227.7	233.6	1110.2
Revenue adjustments[c]	–0.2	–0.2	–0.3	–1.8	–0.8	–3.3
Net tax allowance	13.4	10.9	12.6	14.3	9.4	60.6
Annual building block revenue requirement (unsmoothed)	523.1	530.0	546.0	555.0	540.2	2694.3
Annual expected MAR (smoothed)	**524.8**	**531.8**	**538.9**	**546.1**	**553.4**	**2695.0**[d]
X factor[e]	n/a[f]	1.08%	1.08%	1.08%	1.08%	n/a

Source: AER analysis.

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

(b) Operating expenditure includes debt raising costs.

(c) Includes efficiency benefit sharing scheme and shared asset amounts.

(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) AusNet Services is not required to apply an X factor for 2017–18 because we set the 2017–18 MAR in this decision. The MAR for 2017–18 is around 3.0 per cent lower than the approved MAR for 2016–17 in real terms, or 0.6 per cent lower in nominal terms.

3.1 Regulatory asset base

We make a decision on AusNet Services' opening regulatory asset base (RAB) at 1 April 2017 as part of our revenue determination. We also make a decision on AusNet Services' projected RAB for the 2017–22 regulatory control period.[10]

The RAB roll forward accounts for the value of AusNet Services' regulated assets over the regulatory control period. The size of the RAB substantially impacts AusNet Services' revenue and the price consumers ultimately pay. It is an input into the determination of the return on capital and depreciation (return of capital) building blocks.[11] Other things being equal, a higher RAB increases both the return on capital and depreciation allowances. In turn, these increase AusNet Services' revenue, and prices for services.

We determine an opening RAB for AusNet Services of $3194.7 million ($ nominal) as at 1 April 2017. This is $34.1 million (or 1.1 per cent) lower than AusNet Services' proposed value of $3228.7 million. This is because we have amended AusNet Services' proposed roll forward model (RFM) to correct a number of input errors and made other adjustments. These include:

- applying the standard partially-lagged inflation approach for RFM indexation
- adjusting for the movements in capitalised provisions when adding actual capex to the RAB
- amending the asset class allocation of as-commissioned capex for 2013–14 and 2014–15
- accounting for asset disposal values based on gross proceeds.

To determine the opening RAB as at 1 April 2017, we have rolled forward the RAB over the 2014–17 regulatory control period to determine a closing RAB value at 31 March 2017. This roll forward includes an adjustment at the end of the 2014–17 regulatory control period to account for the difference between actual 2013–14 capex and the estimate approved at the 2014–17 determination.[12] The roll forward also includes an adjustment for new assets—labelled 'Group 3 assets'—added to the opening RAB at 1 April 2017 and a true-up for the difference between actual and forecast Group 3 assets rolled in at the 2014–17 determination.[13] Expenditure on

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10 NER, cl. 6A.6.1.

11 The size of the RAB also impacts the benchmark debt raising cost allowance. However, this amount is usually relatively small and therefore not a significant determinant of revenues overall.

12 The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2014–17 determination.

13 During a regulatory control period, AEMO or a distribution business may request AusNet Services to provide augmentations to the transmission network or distribution connection services. While the assets constructed due to these requests provide prescribed transmission services, the forecast capex associated with these assets sit outside of the revenue determination. This is because AusNet Services is not responsible for the planning of these capex. AusNet Services and AEMO refer to the assets that provide these services as ‘Group 3’ assets. Group 3

Group 3 assets occurs throughout the regulatory control period, but this capex is not added to the RAB each year (as is usually the case). Instead, these assets are added to the RAB at the commencement of each regulatory control period.[14]

Table 3.2 summarises our draft decision on the roll forward of AusNet Services' RAB over the 2014–17 regulatory control period.

Table 3.2 AER's draft decision on AusNet Services' RAB for the 2014–17 regulatory control period

	2014–15	2015–16[a]	2016–17[b]
Opening RAB	2876.0	2944.9	2984.7
Capital expenditure[c]	149.0	150.0	182.3
Inflation indexation on opening RAB[d]	66.4	44.3	70.1
Less: straight-line depreciation[e]	146.5	154.5	165.7
Closing RAB	2944.9	2984.7	3071.4
Difference between estimated and actual capex (1 April 2013 to 31 March 2014)			19.4
Return on difference for 2013–14 capex			4.7
Group 3 assets adjustments[f]			99.2
Opening RAB as at 1 April 2017			**3194.7**

Source: AER analysis.

(a) Based on estimated capex. We will update the RAB roll forward for actual capex in the final decision.

(b) Based on estimated capex provided by AusNet Services, adjusted for actual CPI. We expect to update the RAB roll forward for a revised capex estimate in the final decision, and true-up the RAB for actual capex at the next reset.

(c) As incurred, net of disposals, and adjusted for actual CPI.

(d) We will update the RAB roll forward for actual CPI for 2016–17 in the final decision.

(e) Adjusted for actual CPI. Based on as-commissioned capex.

(f) Roll in of Group 3 assets at 1 April 2017, and true-up for difference between actual and forecast Group 3 assets rolled in at the 2014–17 determination.

We determine a forecast closing RAB value at 31 March 2022 of $3295.7 million ($ nominal). This is $145.5 million (or 4.2 per cent) lower than the amount of $3441.2 million ($ nominal) proposed by AusNet Services. Our draft decision on the forecast closing RAB reflects the amended opening RAB as at 1 April 2017, and our

assets sit outside of the RAB and are governed by commercial contracts until such time as they are rolled into the RAB, usually at the next revenue reset. See: AusNet Services, *Revenue proposal*, October 2015, p. 23.

[14] As noted above, this adjustment includes estimated expenditure where actual expenditure is not yet known; so there is an additional true-up required at the next revenue determination.

draft decisions on the expected inflation rate (attachment 3), forecast capex (attachment 6) and forecast depreciation (attachment 5).

Table 3.3 sets out our forecast RAB for AusNet Services in 2017–22.

Table 3.3 AER's draft decision on AusNet Services' RAB for the 2017–22 regulatory control period ($million, nominal)

	2017–18	2018–19	2019–20	2020–21	2021–22
Opening RAB	3194.7	3255.6	3283.2	3289.8	3288.4
Capital expenditure[a]	163.0	130.0	116.1	110.8	102.5
Inflation indexation on opening RAB	78.1	79.6	80.3	80.4	80.4
Less: straight-line depreciation[b]	180.2	182.1	189.7	192.6	175.6
Closing RAB	**3255.6**	**3283.2**	**3289.8**	**3288.4**	**3295.7**

Source: AER analysis.

(a) As incurred and net of disposals. Inclusive of equity raising costs and the half-WACC to account for the timing assumptions in the PTRM.

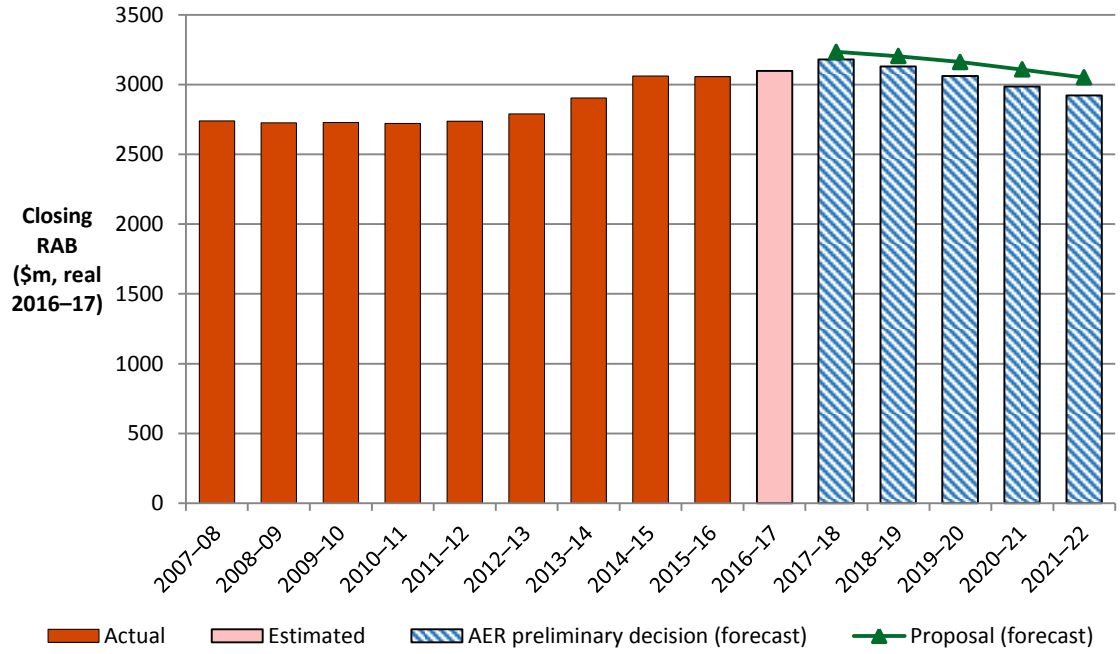
(b) Based on as-commissioned capex.

We accept AusNet Services' proposal that the forecast depreciation approach (instead of an actual depreciation approach) is to be used to establish the opening RAB at the commencement of the 2022–27 regulatory control period.[15] We consider this approach will provide sufficient incentives for AusNet Services to achieve capex efficiency improvements over the 2017–22 regulatory control period. AusNet Services is not currently subject to a capital expenditure sharing scheme (CESS). As explained in section 4.2 and attachment 10, we will apply the CESS to AusNet Services for the 2017–22 regulatory control period.

Figure 3.2 compares our draft decision on AusNet Services' forecast RAB to AusNet Services' proposal and actual RAB in real dollar terms. The forecast RAB does not include any Group 3 assets (augmentation capex), which may be commissioned during the 2017–22 regulatory control period. These assets would be added to the RAB at the next reset.

[15] NER, cl. S6A.2.2B(a).

Figure 3.2 AusNet Services' actual RAB, proposed forecast RAB and AER draft decision forecast RAB ($ million, 2016–17)



Source: AER analysis.

Further detail on our draft decision in regards to AusNet Services' RAB is set out in attachment 2.

3.2 Rate of return (return on capital)

The allowed rate of return provides a TNSP a return on capital to service the interest on its loans and give a return on equity to investors. The return on capital building block is calculated as a product of the rate of return and the value of the RAB.

We are satisfied that the allowed rate of return of 6.16 per cent (nominal vanilla) we determined contributes to the achievement of the NEO, and achieves the allowed rate of return objective (ARORO) set out in the NER.[16] That is, we are satisfied that this allowed rate of return is commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to AusNet Services in providing prescribed transmission services.[17]

We are not satisfied that AusNet Services' proposed (indicative) 7.22 per cent rate of return for 2017–18 will achieve the ARORO.[18] In reaching our draft decision position we took account of information provided in submissions from the CCP, EUCV and

[16] NER, cl. 6A.6.2(b).
[17] NER, cl. 6A.6.2(c).
[18] AusNet Services, *Transmission Revenue Review 2017–2022 regulatory proposal*, 30 October 2015, p. 191.

other stakeholders. The CCP and EUCV raised concerns that the rate of return proposed by AusNet Services will provide excessive returns.[19]

Table 3.4 sets out our rate of return and AusNet Services' proposed rate of return.

Table 3.4 AER draft decision on AusNet Services' rate of return (% nominal)

	AER previous decision (2014–17)	AusNet Services proposal (2017–18)	AER draft decision (2017–18)	Allowed return over 2017–22 regulatory control period
Return on equity (nominal post–tax)	9.51	10	7.1	Constant (7.1%)
Return on debt (nominal pre–tax)	6.79	5.37	5.54	Updated annually
Gearing	60	60	60	Constant (60%)
Nominal vanilla WACC	7.87	7.22	6.16	Updated annually for return on debt
Forecast inflation	2.45	2.35	2.44	Constant (2.44%)

Source: AER analysis; AusNet Services, *Transmission Revenue Review 2017–2022 regulatory proposal*, 30 October 2015; AER, *Final Decision: SP AusNet Transmission determination 2014-2017*, January 2014.

Our return on equity estimate for this draft decision is 7.1 per cent. We derived this estimate by applying the same approach we applied to determine the allowed return on equity in our most recent decisions.[20] The Australian Competition Tribunal (Tribunal) recently upheld this approach, referred to in the Guideline as the foundation model approach.[21] This is a six step process, where we have regard to a considerable amount of relevant information, including various equity models.

Our return on equity point estimate and the parameter inputs are set out in Table 3.5. AusNet Services proposed departing from the approach in the Guideline. We are not satisfied that doing so would result in an outcome that better achieves the ARORO.[22] We do not agree with AusNet Services that our method outlined in the Guideline will result in a return on equity which is inconsistent with the ARORO.[23]

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19 EUCV, *Submission in response to AusNet Services' 2017–22 transmission determination proposal*, February 2016, pp. 40–42; Consumer Challenge Panel (Panel 5), *Submission on AusNet Services' transmission revenue review 2017-2022*, 8 February 2016, pp. 41–43.

20 For example, see AER, *Final decision: AusNet Services determination 2015 -16 to 2019–20, Attachment 3—Rate of return*, May 2016.

21 For example, see Australian Competition Tribunal, *Applications by Public Interest Advocacy Centre Ltd and Ausgrid [2016] ACompT 1*, 26 February 2016, para 813; AER, *Better regulation: Rate of Return Guideline,* December 2013.

22 NER, cl. 6.2.8(c); cl.6A.2.3(c).

23 AusNet Services, *Transmission Revenue Review 2017–2022 regulatory proposal*, 30 October 2015, pp. 191-195.

Table 3.5 AER draft decision on AusNet Services' return on equity (nominal)

	AER previous decision (2014–17)	AusNet Services proposal (2017-22)[a)]	AER draft decision (2017–22)
Nominal risk free rate (return on equity only)	4.31%	3.02%	2.57%
Equity risk premium	5.20%	7.24%	4.55%
Market risk premium	6.50%	8.17%	6.50%
Equity beta	0.8	0.886	0.7
Nominal post–tax return on equity	9.51%	10%	7.1%

Source: AER analysis; AusNet Services, *Transmission Revenue Review 2017–2022 regulatory proposal*, 30 October 2015; AER, *Final Decision: SP AusNet Transmission determination 2014-2017*, January 2014.

(a) AusNet Services used a multi-model approach to estimate return on equity and calculated with an indicative averaging period of 20 business days to 17 July 2015. The market risk premium shown in this table is the market return less the indicative risk free rate used in AusNet Services' estimated SLCAPM. The equity beta is an 'implied beta' calculated as the proposed equity risk premium divided by the market risk premium. AusNet Services, *Transmission Revenue Review 2017–2022 regulatory proposal*, 30 October 2015.

Our draft decision on the return on debt approach is to:

- estimate the return on debt using an on-the-day approach (that is, based on prevailing market conditions near the commencement of the regulatory control period) in 2017–18 of the 2017–22 regulatory control period, and
- gradually transition this approach into a trailing average approach (that is, a moving historical average) over 10 years.[24]

This gradual transition will occur through updating 10 per cent of the entire return on debt each year to reflect prevailing market conditions in that year (a full transition).[25] This approach is consistent with the approach we proposed in the Guideline and adopted in this draft decision. Our draft decision is to estimate the return on debt in each regulatory year by reference to:

- a benchmark credit rating of BBB+
- a benchmark term of debt of 10 years

[24] This draft decision determines the return on debt methodology for the 2017-22 regulatory control period. This period covers the first five years of the 10 year transition period. This decision also sets out our intended return on debt methodology for the remaining five years. However, we do not have the power to determine in this decision the return on debt methodology for those years. Under the NER, the return on debt methodology must be determined in future decisions that relate to that period.

[25] By entire return on debt, we mean 100% of the base rate and debt risk premium (DRP) components of the allowed return on debt.

- independent third party data series—specifically, a simple average of the broad BBB rated debt data series published by the Reserve Bank of Australia (RBA) and Bloomberg, adjusted to reflect a 10 year estimate and other adjustments[26]
- an averaging period for each regulatory year of between 10 business days and 12 months (nominated by the service provider), with that period being consistent with certain conditions that we proposed in the Guideline.[27]

It is worth noting that the Tribunal recently reviewed several aspects of our approach to estimating the allowed return on debt in recent decisions for ActewAGL, Jemena Gas Networks and Networks NSW. Specifically, the Tribunal was asked to review:

- Whether a benchmark efficient entity would have a credit rating of BBB rather than BBB+. It upheld our decision to define a benchmark credit rating as a BBB+ credit rating.[28]
- Whether we should estimate the allowed return on debt using the RBA data series alone or a simple average of the RBA and Bloomberg data series. It upheld our decision and found that, 'averaging of the two curves was an acceptable measure of the DRP'. [29]
- Whether we should transition all of the return on debt[30] from an on-the-day approach in the first regulatory year to a trailing average by updating 10 per cent of the debt portfolio over 10 years (a full transition). It remitted the determination back to us to make a constituent decision on introducing the trailing average approach in accordance with several reasons outlined in its decision.[31]

In the Guideline, we proposed to use one or more third party data series to estimate the return on debt.[32] At that time, however, we had not formed a view on which data series to use. Our April 2014 issues paper outlined how we would make this choice and sought submissions from service providers.[33] In this draft decision, we adopted a simple average of the RBA and Bloomberg data series.

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[26] For the RBA curve, our draft decision is to interpolate the monthly data points to produce daily estimates, to extrapolate the curve to an effective term of 10 years, and to convert it to an effective annual rate. For the Bloomberg curve, our draft decision is to extrapolate it to 10 years using the spread between the extrapolated RBA seven and 10 year curves (where Bloomberg has not published a 10 year estimate), and to convert it to an effective annual rate. While we do not propose estimating the return on debt by reference to the Reuters curve, we do not rule out including doing so in future determinations following a proper period of consultation.

[27] AER, *Rate of return guideline*, December 2013, pp. 21–2; AER, *Explanatory statement—Rate of return guideline*, December 2013, p. 126.

[28] For example, see Australian Competition Tribunal, *Applications by Public Interest Advocacy Centre Ltd and Ausgrid [2016] ACompT 1*, 26 February 2016, para 993.

[29] For example, see Australian Competition Tribunal, *Applications by Public Interest Advocacy Centre Ltd and Ausgrid [2016] ACompT 1*, 26 February 2016, para 983.

[30] For clarity, that is 100% of the base rate and DRP components of the allowed return on debt.

[31] For example, see Australian Competition Tribunal, *Applications by Public Interest Advocacy Centre Ltd and Ausgrid [2016] ACompT 1*, 26 February 2016, para 1,227. The Tribunal's reasons are set out in paras 870 to 940.

[32] AER, *Explanatory statement—Rate of return guideline*, December 2013, pp. 23–24.

[33] AER, *Issues Paper - Return on debt: Choice of third party data service provider*, April 2014.

We estimated expected inflation using the RBA's short term inflation forecasts and the mid-point of the RBA's inflation targeting band. This is consistent with the approach we have applied since 2008. This differs from the approach AusNet Services applied in its regulatory proposal, which entailed estimating the expected inflation rate implied from comparing inflation-indexed and nominal government bonds.

The estimate of expected inflation in our draft decision is nine basis points higher than the estimate provided in AusNet Services' regulatory proposal. A higher estimate of expected inflation results in an increase to the indexation of the capital base component over the regulatory control period, causing a net decrease in the regulatory depreciation allowance.

Further detail on our draft decision in regards to AusNet Services' allowed rate of return is set out in attachment 3.

3.3 Value of imputation credits (gamma)

Under the Australian imputation tax system, investors can receive an imputation credit for income tax paid at the company level.[34] These are received after company income tax is paid, but before personal income tax is paid. For eligible investors, this credit offsets their Australian income tax liabilities. If the amount of imputation credits received exceeds an investor's tax liability, that investor can receive a cash refund for the balance. Imputation credits are therefore valuable to investors and are a benefit to investors in addition to any cash dividend or capital gains they receive from owning shares.

However, the estimation of the return on equity does not take imputation credits into account. Therefore, an adjustment for the value of imputation credits is required. This adjustment could take the form of a decrease in the estimated return on equity itself. An alternative but equivalent form of adjustment, which is employed under the NER, is via the revenue granted to a service provider to cover its expected tax liability. Specifically, the NER requires that the estimated cost of corporate income tax be determined in accordance with a formula that reduces the estimated cost of corporate tax by the 'value of imputation credits' (represented by the Greek letter, γ, 'gamma'). This form of adjustment recognises that it is the payment of corporate tax which is the source of the imputation credit return to investors.

Our draft decision does not accept AusNet Services' proposed value of imputation credits (or gamma) of 0.25. Instead, we adopt a value of imputation credits of 0.4. We consider that the use of a value for imputation credits of 0.4 will result in equity investors in the benchmark efficient entity receiving an ex ante total return (inclusive of the value of imputation credits) commensurate with the efficient equity financing costs of a benchmark efficient entity.

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[34] *Income Tax Assessment Act 1997,* parts 3–6.

Estimating the value of imputation credits is a complex and imprecise task. There is no consensus among experts on the appropriate value or estimation techniques to use. Further, with each estimation technique there are often a number of ways these may be applied resulting in different outcomes. Conceptually, the value of imputation credits must be between 0 and 1, and the range of expert views on the value of imputation credits is almost this wide.[35]

In coming to a value of imputation credits of 0.4:

- we adopt a conceptual approach consistent with the Officer framework, which we consider best promotes the objectives and requirements of the NER/NGR. This approach considers the value of imputation credits is a post-company tax value before the impact of personal taxes (and personal costs). As such, we view the value of imputation credits as the proportion of company tax returned to investors through the utilisation of imputation credits.[36]
- we consider our conceptual approach allows for the value of imputation credits to be estimated on a consistent basis with the allowed rate of return and allowed revenues under the post-tax framework in the NER/NGR.[37]
- we use the widely accepted approach of estimating the value of imputation credits as the product of two sub-parameters: the 'distribution rate' and the 'utilisation rate'.

Overall, the evidence suggests a range of estimates for the value of imputation credits might be reasonable. With regard to the merits of the evidence before us, we choose a value of imputation credits of 0.4 from within a range of 0.3 to 0.5.

In considering the evidence on the distribution and utilisation rates, we have broadly maintained the approach set out in the Rate of Return Guideline (the Guideline), but have re-examined the relevant evidence and estimates. This re-examination, and new evidence and advice considered since the Guideline, led us to depart from the 0.5 value of imputation credits we proposed in the Guideline.

Further detail on our draft decision in regards to the value of AusNet Services' imputation credits is set out in attachment 4.

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35 The value of imputation credits must be between 0 and 1 because receiving an imputation credit cannot make an investor worse off, nor would an investor value an imputation credit more than its face value.

36 This means one dollar of claimed imputation credits has a post (company) tax value of one dollar to investors before personal taxes and personal transaction costs.

37 In finance, the consistency principle requires that the definition of the cash flows in the numerator of a net present value (NPV) calculation must match the definition of the discount rate (or rate of return / cost of capital) in the denominator of the calculation (see Peirson, Brown, Easton, Howard, Pinder, *Business Finance*, McGraw-Hill, Ed. 10, 2009, p. 427). By maintaining this consistency principle, we provide a benchmark efficient entity with an ex ante total return (inclusive of the value of imputation credits) commensurate with the efficient financing costs of a benchmark efficient entity.

3.4 Regulatory depreciation (return of capital)

Depreciation is the allowance provided so capital investors recover their investment over the economic life of the asset (return of capital). In deciding whether to approve the depreciation schedules submitted by AusNet Services, we make determinations on the indexation of the regulatory asset base (RAB) and depreciation building blocks for AusNet Services' 2017–22 regulatory control period.[38] The regulatory depreciation allowance is the net total of the RAB depreciation less the inflation indexation adjustment of the RAB.

Box 1: What is depreciation?

Regulated service providers invest in large sunk assets to provide electricity transmission services to customers. While some of the cost of such assets may be recovered from customers upfront, a greater proportion is recovered over time. A depreciation charge is used for this purpose. This is particularly important for long-lived assets, since it spreads the cost across the current and future customers who benefit from the use of the asset.

Depreciation reflects the use of an asset each year and accounts for its loss of value due to wear and tear over its useful life.[39] Some assets, such as land, are not depreciated as they have an unlimited useful life.[40]

For assets that do depreciate, there are several methods that can be employed to calculate the annual depreciation amount. Under a 'straight-line approach', the asset is reduced by a constant amount each period. That is, the asset value is depreciated evenly over its useful life. Alternatively, under a 'diminishing value approach', a constant percentage is applied to the asset value to work out the annual depreciation amount.[41] Applying a constant percentage leads to a reducing annual depreciation amount over time as the asset value declines.

Our draft decision approves a regulatory depreciation allowance of $521.3 million ($ nominal) for the 2017–22 regulatory control period. This is $81.4 million (13.5 per cent) lower than AusNet Services' proposed value of $602.8 million ($ nominal).

Table 3.8 shows our draft decision on AusNet Services' depreciation allowance for the 2017–22 regulatory control period.

38 NER, cll. 6A.5.4(a)(1) and (3).

39 NER, cl. 6A.6.3(b).

40 For example, see Australian Accounting Standards Board, *AASB 116, Property, plant and equipment*, December 2015, paragraph 58.

41 For example, an asset with 10 year life could have a depreciation percentage of 10 per cent (i.e. 1/10) applied to the remaining asset value each year. This percentage may also have a multiple applied. For example, tax law may allow the 10 per cent to be doubled to 20 per cent for certain assets. The higher the multiple applied, the greater the decrease in the value of the asset early in its life due to faster depreciation.

Table 3.6 AER's draft decision on AusNet Services' depreciation allowance for the 2017–22 period ($million, nominal)

	2017–18	2018–19	2019–20	2020–21	2021–22	Total
Straight-line depreciation	180.2	182.1	189.7	192.6	175.6	920.1
Less: inflation indexation on opening RAB	78.1	79.6	80.3	80.4	80.4	398.8
Regulatory depreciation	**102.0**	**102.5**	**109.4**	**112.2**	**95.2**	**521.3**

Source: AER analysis.

The key reasons for the difference between our regulatory depreciation allowance and the allowance proposed by AusNet Services' are:

- We accept the continuation of AusNet Services' year-by-year tracking approach to calculate the straight-line depreciation of existing assets. However, we have applied an adjustment to AusNet Services' proposed depreciation calculations to ensure the profiles meet the requirements of the NER.
- As discussed in section 2.1.2, we do not accept the proposed use of the DV method for depreciating new assets (which would have effectively accelerated depreciation of these assets) reflects the nature of these assets over their economic lives.[42] We have substituted the SL depreciation method for these assets consistent with that applying to existing assets.
- We made determinations on other components of AusNet Services' proposal that also affect the forecast regulatory depreciation allowance—for example, the expected inflation rate (attachment 3) and forecast capex (attachment 6).

Further detail on our draft decision in regards to depreciation is set out in attachment 5.

3.5 Capital expenditure

Capital expenditure (capex) refers to the capital expenses incurred in the provision of network services. The return on and return of forecast capex are two of the building blocks we use to determine a TNSPs total revenue requirement.

Our draft decision approves $573.1 million ($2016–17) total net forecast capex for the 2017–22 regulatory control period. This is $172.5 million (or 23 per cent) lower than AusNet Services' proposed value of $745.6 million. Table 3.7 shows our decision compared to AusNet Services' forecast.

[42] NER, cl. 6A.6.3(b).

Table 3.7 AER draft decision on total net capex ($million, 2016–17)

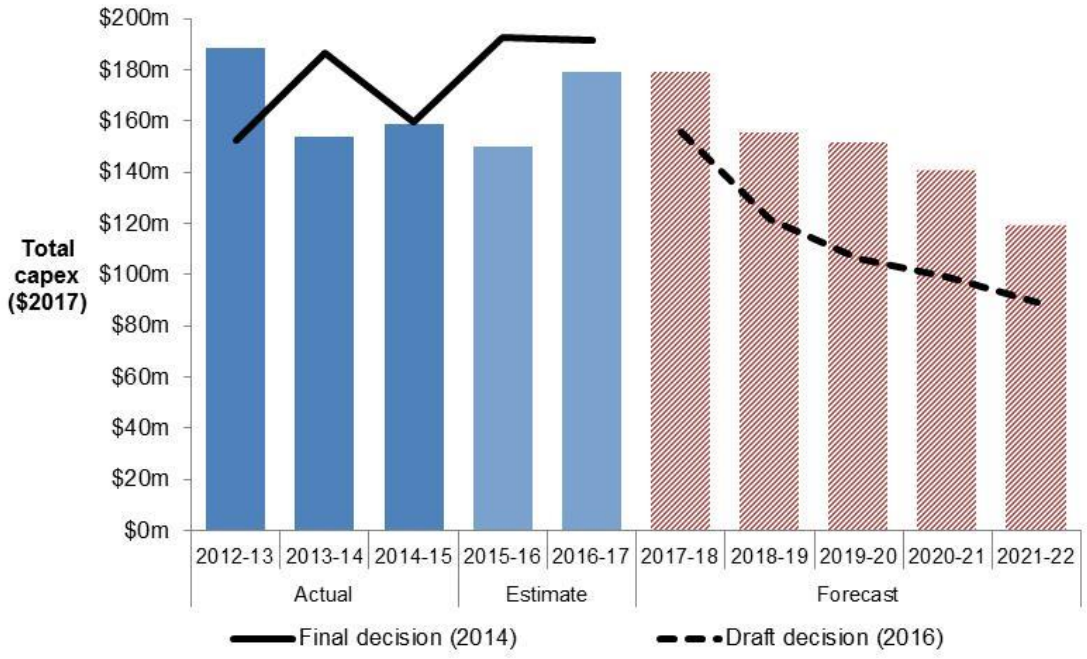
	2017–18	2018–19	2019–20	2020–21	2021–22	Total
AusNet Services' proposal	178.9	155.3	151.6	140.5	119.3	745.6
AER draft decision	156.5	121.9	106.3	99.0	89.4	573.1
Difference	-22.4	-33.4	-45.3	-41.5	-29.8	-172.5
Percentage difference (%)	-13	-22	-30	-30	-25	-23

Source: AusNet Services, *Revenue Proposal,* October 2015, p. 81; AER analysis

Note: Numbers may not total due to rounding.

Figure 3.3 shows our capex decision compared to AusNet Services' proposal, its past allowances and past actual expenditure.

Figure 3.3 AusNet Services total actual and forecast capex 2014–2022



The key components of our draft decision include:

- reductions in capex related to estimated safety risks ($99.0 million), based on a more realistic assumption of the probability of safety related outcomes
- reductions in capex related to reliability risk ($44.1 million) driven by updated forecasts of transmission connection point demand and adoption of the AEMO forecasts
- reductions in project cost estimates ($13.5 million) to ensure the forecast is unbiased
- reductions resulting from the application of updated CPI figures ($13.3 million)

- reductions in information and communication technology (ICT) expenditure ($4.6 million), where this expenditure has not been supported by business cases or where no supporting information was provided.

In reaching our draft decision we considered submissions received from the CCP and the EUCV on AusNet Services' proposed capex. The CCP and EUCV expressed concerns over the level of capex forecast over the 2017–22 regulatory control period and its contribution to continuing growth in AusNet Services' RAB.[43]

Further detail on our draft decision in regards to capex is set out in attachment 6.

3.6 Operating expenditure

Operating expenditure (opex) is the forecast of operating, maintenance and other non–capital costs incurred in the provision of prescribed transmission services.

Our draft decision approves $1024.1 million ($2016–17) total forecast opex for the 2017–22 regulatory control period. This is $61.0 million (5.6 per cent) lower than AusNet Services' proposed value of $1085.0 million ($2016–17). Table 3.8 shows our decision compared to AusNet Services' forecast.

Table 3.8 AER draft decision on total opex ($million, 2016–17)

	2017-18	2018-19	2019-20	2020-21	2021-22	Total
AusNet Services' proposal	218.9	214.0	215.5	217.7	219.0	1085.0
AER draft decision	204.2	204.4	204.8	205.2	205.6	1024.1
Difference	-14.7	-9.6	-10.7	-12.6	-13.4	-61.0

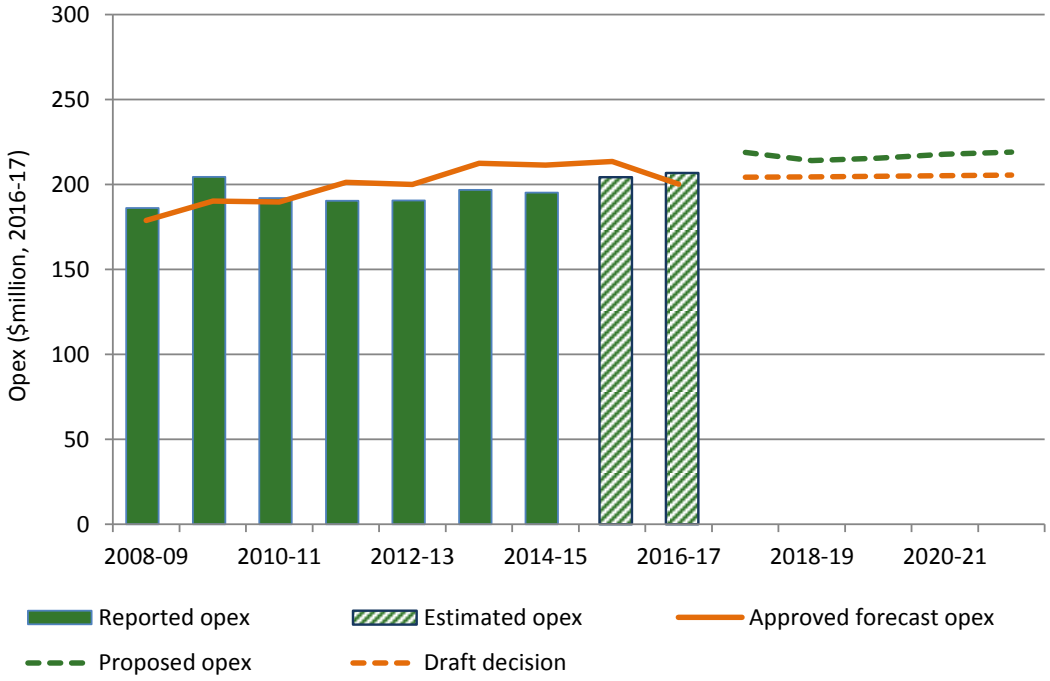
Source: AER analysis.

Note: Excludes debt raising costs.

Figure 3.4 shows our opex decision compared to AusNet Services' proposal, its past allowances and past actual expenditure.

[43] Consumer Challenge Panel (Panel 5), *Submission on AusNet Services' transmission revenue review 2017-2022*, 8 February 2016, p. 19; EUCV, *Submission on AusNet Services' transmission revenue review 2017-2022*, 9 February 2016, pp. 12–26.

Figure 3.4 AER draft decision on total forecast opex ($million, 2016–17)



Source: AusNet Services, *Regulatory accounts 2008–09 to 2014–15*; AusNet Services, *Economic benchmarking - Regulatory information notice response 2006 to 2015*; AER analysis.

The key areas of difference between our estimate of opex and AusNet Services' estimate are:

- our forecast of the overall rate of change used to derive our alternative estimate of opex is lower than AusNet Services' over the forecast period. Our findings are that:
    - AusNet Services' forecast of labour price growth overstates the cost inputs required by a prudent and efficient TNSP in the forecast period
    - AusNet Services' output growth forecast incorrectly assumes that the increase in opex due to output growth that occurs in the 2017–22 regulatory control period will be incurred by AusNet Services. Under existing arrangements, AEMO will fund the operation and maintenance of new augmentation and connection assets during the 2017–22 period
    - AusNet Services' productivity growth relies on outdated forecasts of productivity growth.
- AusNet Services proposed six step changes to its base level of opex, totalling $13.5 million ($2016–17). We have not included these step changes in our draft decision total opex forecast. We are not satisfied that the proposed step changes above the base level opex (escalated by the rate of change) are required in order to arrive at a forecast of total opex that reflects the opex criteria.

In reaching our draft decision we considered submissions received from the CCP and the EUCV in response to AusNet Services' proposal. Both were concerned about the increase in AusNet Services' proposed opex for the 2017–22 regulatory control period

compared to historical levels. The issues raised in these submissions included concerns over the output growth proposed by AusNet Services, as well as forecast labour costs. [44]

The CCP also considered that AusNet Services overstated the extent of step changes that are required. It argued for the removal of step changes related to the establishment of an IT security team, the costs of a new WMTS mobile switchboard, and the synchronous condenser decommissioning associated with the shutdown of the Morwell power station.[45]

Further detail on our draft decision in regards to opex is set out in attachment 7.

3.7 Corporate income tax

We make a decision on the estimated cost of corporate income tax for AusNet Services' 2017–22 regulatory control period as part of our revenue determination.[46] It enables AusNet Services to recover the costs associated with the estimated corporate income tax payable during the regulatory control period.

Our draft decision includes an estimated cost of corporate income tax of $60.6 million ($ nominal) for AusNet Services over the 2017–22 regulatory control period. This is $107.3 million (or 63.9 per cent) lower than AusNet Services' proposed value of $167.9 million. Table 3.9 shows our draft decision on AusNet Services' corporate income tax allowance for the 2017–22 regulatory control period.

Table 3.9 AER's draft decision on corporate income tax allowance for AusNet Services ($million, nominal)

	2017–18	2018–19	2019–20	2020–21	2021–22	Total
Tax payable	22.4	18.1	21.0	23.8	15.7	101.0
Less: value of imputation credits	9.0	7.2	8.4	9.5	6.3	40.4
Net corporate income tax allowance	**13.4**	**10.9**	**12.6**	**14.3**	**9.4**	**60.6**

Source: AER analysis.

The reduction reflects our amendments to some of AusNet Services' proposed inputs for forecasting the cost of corporate income tax such as the opening tax asset base, and the remaining tax asset lives. It also reflects a change to the proposed tax treatment of revenue adjustments associated with the efficiency benefit sharing

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44 EUCV, *Submission in response to AusNet Services' 2017–22 transmission determination proposal*, February 2016, pp. 27–32; CCP (subpanel 5), *Submission in response to AusNet Services' 2017–22 transmission determination proposal*, February 2016, p. 29.

45 CCP (subpanel 5), *Submission in response to AusNet Services' 2017–22 transmission determination proposal*, February 2016, pp. 25–29.

46 NER, cl. 6A.6.4.

scheme, and our draft decision on the value of imputation credits—gamma (attachment 4). Changes to building block costs also affect revenues, which in turn impact the tax calculation. The changes affecting revenues are discussed in attachment 1.

Further detail on our draft decision in regards to corporate income tax is set out in attachment 8.

4 Incentive schemes

Incentive schemes are a component of incentive–based regulation and complement our approach to assessing efficient costs. The incentive schemes that will apply to AusNet Services are:

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

Our incentive schemes 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.

4.1 Efficiency benefit sharing scheme (EBSS)

The EBSS provides an incentive for service providers to pursue efficiency improvements in opex.

As opex is largely recurrent and predictable, opex in one period is often a good indicator of opex in the next period.[47] Where a service provider is relatively efficient, we use the actual opex it occurred in a chosen base year of the regulatory control period to forecast opex for the next regulatory control period. We call this the 'revealed cost approach'.

However, using a network business' past information to set future targets can reduce the incentives of the business to reduce its costs—since the business knows that any cut in its expenditure will decrease its revenue allowance in the future.

To encourage a business to become more efficient it is allowed to keep any difference between its approved forecast and its actual opex during a regulatory control period. This is supplemented by the EBSS which allows the business to retain efficiency savings and losses for a longer period of time. In this way, the EBSS can provide businesses with an additional reward for reductions in opex and additional penalties for increases in opex.

Under the EBSS, a business gets to keep the benefits of any efficiency gains for a full five year period, but after that all the gains are passed on to consumers in the form of lower network charges. Efficiency gains made in year 1 or 2 of the regulatory period benefit the business as much as efficiency gains made in year 4 or 5. This ensures the

[47] Step changes provide for increases/decreases where this is not the case.

business faces a continuous incentive to pursue efficiency gains over the regulatory control period. The EBSS also discourages a service provider from inflating its base year opex in order to receive a higher opex allowance in the following regulatory control period.[48]

Our draft decision is to approve a positive EBSS carryover amount of $5.1 million ($2016–17) from the application of the EBSS in the 2014–17 regulatory control period. However we will update our calculation using AusNet Services' actual expenditure for 2015–16 in our final decision. Our draft decision for the carryover amounts from the application of the EBSS in the 2014–17 regulatory period is outlined in Table 4.1.

Table 4.1 AER's draft decision on AusNet Services EBSS carryover amounts ($million, 2016–17)

	2017-18	2018-19	2019-20	2020-21	2021-22	Total
AusNet Services' proposed carryover	1.7	1.7	1.7	0.5	-	5.6
Draft decision	1.3	1.3	1.3	0.0	1.1	5.1

Source: AusNet Services, Regulatory proposal, October 2015, p. 169; AER analysis.

Our draft decision is to apply version two of the EBSS to AusNet Services in the 2017–22 regulatory control period. This is consistent with our Final framework and approach paper[49] and AusNet Services' proposal.

Further detail on our draft decision in regards to the application of the EBSS, including proposed expenditure items to be excluded, is set out in attachment 9.

4.2 Capital expenditure sharing scheme (CESS)

The CESS provides an incentive for service providers to pursue efficiency improvements in capex. Similar to the EBSS, the CESS provides a network service provider with the same reward for an efficiency saving and the same penalty for an efficiency loss regardless of which year they make the saving or loss.

Under the CESS a service provider retains 30 per cent of the benefit or cost of an underspend or overspend, while consumers retain 70 per cent of the benefit or cost of an underspend or overspend. This means that for a one dollar saving in capex the service provider keeps 30 cents of the benefit while consumers keep 70 cents of the benefit. Conversely, in the case of an overspend, the service provider pays for 30 cents of the cost while consumers bear 70 cents of the cost.

We will apply the CESS as set out in version 1 of the capital expenditure incentives guideline to AusNet Services in the 2017–22 regulatory control period.[50] The guideline

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[48] These concepts are explained more fully in the explanatory statement to the EBSS; AER, *Efficiency benefit sharing scheme for electricity network service providers – explanatory statement,* November 2013.

[49] AER, *Final framework and approach for AusNet Services transmission determination 2017–22,* April 2015, p. 16.

provides for the exclusion from the CESS of capex the service provider incurs in delivering a priority project approved under the network capability component of the STPIS for transmission network service providers. This is consistent with the proposed approach we set out in our framework and approach paper.[51]

4.3 Service target performance incentive scheme (STPIS)

The STPIS is intended to balance a business' incentive to reduce expenditure with the need to maintain or improve service quality. 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.

Our draft decision is to apply all components of version 5 of the STPIS to AusNet Services for the 2017–22 regulatory control period. The STPIS parameters applied in our draft decision are set out in attachment 11.

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50 AER, *Capex incentive guideline*, November 2013, pp. 5–9.

51 AER, *Final framework and approach for AusNet Services transmission determination 2017–22,* April 2015, p. 23.

5 Understanding the NEO

The NEO is the central feature of the regulatory framework. The NEO is 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.[52]

Energy Ministers have provided us with a substantial body of explanatory material that guides our understanding of the NEO.[53] The long term interests of consumers are not delivered by any one of the NEO's factors in isolation, but rather by balancing them in reaching a regulatory decision.[54]

In general, we consider that we will achieve this balance and, therefore, contribute to the achievement of the NEO, where consumers are provided a reasonable level of safe and reliable service that they value at least cost in the long run.[55] We have also considered the quality and reliability of services provided to consumers. For example, opex allowances have been set so AusNet Services may meet existing and new regulatory requirements. Replacement expenditure (repex) allowances take into account the age and condition of assets. Our capex allowance is based on a contemporary estimate of the value of customer reliability. And the STPIS encourages maintenance, and indeed improvement of, service quality.

The nature of decisions under the NER is such that there may be a range of economically efficient decisions, with different implications for the long term interests of consumers.[56] At the same time, however, there are a range of outcomes that are unlikely to advance the NEO, or advance the NEO to the degree that others would.

For example, we do not consider that the NEO would be advanced if allowed revenues encourage overinvestment and result in prices so high that consumers are unwilling or unable to efficiently use the network.[57] This could have significant longer term pricing implications for those consumers who continue to use network services.

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52 NEL, section 7.

53 Hansard, *SA House of Assembly,* 9 February 2005, pp. 1451–1460; Hansard, *SA House of Assembly,* 27 September 2007, pp. 963–972; Hansard, *SA House of Assembly,* 26 September 2013, pp. 7171–7176.

54 Hansard, *SA House of Assembly,* 26 September 2013, p. 7173.

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

56 Re Michael: Ex parte Epic Energy [2002] WASCA 231 at [143].
Energy Ministers also accept this view – see Hansard, *SA House of Assembly,* 26 September 2013, p. 7172.
AEMC*, Rule determination, National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 No. 18*, 16 November 2006, p. 50.

57 NEL, s. 7A(7).

Equally, we do not consider the NEO would be advanced if allowed revenues result in prices so low that investors are unwilling to invest as required to adequately maintain the appropriate quality and level of service, and where customers are making more use of the network than is sustainable. This could create longer term problems in the network[58] and could have adverse consequences for safety, security and reliability of the network.

The NEL also includes the revenue and pricing principles (RPP),[59] which support the NEO. As the NEL requires,[60] we have taken the RPPs into account throughout our analysis.

> The RPPs are:
>
> A regulated network service provider should be provided with a reasonable opportunity to recover at least the efficient costs the operator incurs in—
>
> – providing direct control network services; and
>
> – complying with a regulatory obligation or requirement or making a regulatory payment.
>
> A regulated network service provider should be provided with effective incentives in order to promote economic efficiency with respect to direct control network services the operator provides. The economic efficiency that should be promoted includes—
>
> – efficient investment in a distribution system or transmission system with which the operator provides direct control network services; and
>
> – the efficient provision of electricity network services; and
>
> – the efficient use of the distribution system or transmission system with which the operator provides direct control network services.
>
> Regard should be had to the regulatory asset base with respect to a distribution system or transmission system adopted—
>
> – in any previous—
>
> – as the case requires, distribution determination or transmission determination; or
>
> – determination or decision under the National Electricity Code or jurisdictional electricity legislation regulating the revenue earned, or prices charged, by a person providing services by means of that distribution system or transmission system; or

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58 NEL, s. 7A(6).

59 NEL, s. 7A.

60 NEL, s. 16(2).

– in the Rules.

A price or charge for the provision of a direct control network service should allow for a return commensurate with the regulatory and commercial risks involved in providing the direct control network service to which that price or charge relates.

Regard should be had to the economic costs and risks of the potential for under and over investment by a regulated network service provider in, as the case requires, a distribution system or transmission system with which the operator provides direct control network services.

Regard should be had to the economic costs and risks of the potential for under and over utilisation of a distribution system or transmission system with which a regulated network service provider provides direct control network services.

Consistent with Energy Ministers' views, we set revenue allowances to balance all elements of the NEO and consider each of the RPPs.[61] For example:

- In determining forecast opex and capex that reasonably reflects the opex and capex criteria, we take into account the revenue and pricing principle that should provide AusNet Services with a reasonable opportunity to recover at least efficient costs. (Refer to capex attachment 6 and opex attachment 7).
- We take into account the economic costs and risks of the potential for under and over investment by a network service provider in our assessment of AusNet Services' forecast capex and opex proposals. (Refer to capex attachment 6 and opex attachment 7).
- We consider the economic costs and risks of the potential for under and over utilisation of AusNet Services' transmission system in our demand forecasting (Refer to capex attachment 6).
- Our application of the EBSS, CESS, and STPIS in this determination provide AusNet Services with effective incentives which we consider will promote economic efficiency with respect to the direct control services that AusNet Services provides throughout the regulatory control period. (Refer to attachments 9, 10 and 11).
- We have determined AusNet Services' opening RAB taking into account the RAB adopted in the previous transmission determination. (Refer to attachment 2, regulatory asset base).
- The allowed rate of return objective reflects the revenue and pricing principle in s. 7A(5) of the NEL. We have determined a rate of return that we consider will provide AusNet Services with a return commensurate with the regulatory and commercial risks involved in providing direct control services. (Refer to attachment 3, rate of return).

[61] Hansard, *SA House of Assembly,* 27 September 2007, p. 965; Hansard, *SA House of Assembly,* 26 September 2013, p. 7173.

- Our financing determinations provide the TNSP with a reasonable opportunity to recover at least the efficient costs of accessing debt and capital. (Refer to attachment 3, rate of return).

In some cases, our approach to a particular component (or part thereof) results in an outcome towards the end of the range of options that may be favourable to the businesses. While it can be difficult to quantify the exact revenue impact of these individual decisions, we have identified where we have done so in our attachments. Some of these decisions include:

- selecting at the top of the range for the equity beta
- setting the return on debt by reference to data for a BBB broad band credit rating, when the benchmark is BBB+
- the cash flow timing assumptions in the post-tax revenue model.

We take into account the RPPs when exercising discretion about an appropriate estimate. This requires a recognition that for the long term interests of consumers, the risk of under compensation for, or underinvestment by, a service provider may be less desirable than the risk of overcompensation or overinvestment. However, the AER is also conscious of the risk of introducing an inherent bias towards higher amounts where estimates throughout the different components of the determination are each set too conservatively.[62] The legislative framework recognises the complexity of this task by providing the AER with significant discretion in many aspects of the decision-making process to make judgements on these matters.

Chapter 6A of the NER provides specifically for the economic regulation of TNSPs. It includes rules about the constituent components of our decisions. These are intended to contribute to the achievement of the NEO.[63]

5.1 Achieving the NEO to the greatest degree

Electricity transmission determinations are complex decisions and must be considered as such. In most instances, 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. For example, chapter 6A of the NER requires us to prepare forecasts, which are predictions about unknown future circumstances. As a result, there will likely always be more than one plausible forecast.[64] There is substantial debate amongst stakeholders about the costs we must forecast, with both sides often supported by expert opinion. As a result, for certain components of our decision there may be several plausible answers or several plausible point estimates.

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62 AEMC, *Rule determination, National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 No. 18*, 16 November 2006, p. 52.

63 NEL, s. 88.

64 AEMC, *Rule Determination: National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006,* (16 November 2006), 52.

When the constituent components of our decision are considered together, this means there will almost always be several potential, overall decisions. More than one of these may contribute to the achievement of the NEO. Where this is the case, our role is to make an overall decision that we are satisfied contributes to the achievement of the NEO to the greatest degree.[65]

We approach this from a practical perspective, accepting that it is not possible to consider every permutation specifically. Where there are choices to be made among several plausible alternatives each of which would result in an overall decision that contributes to the achievement of the NEO, 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. This is our role under the NEO.

In coming to this draft decision we considered AusNet Services' revenue proposal. We have examined each of the building block components of the initial proposal and the incentive mechanisms that would apply across the 2017–22 regulatory control period. We considered the submissions we received in regard to AusNet Services' initial proposal. We conducted our own analysis and engaged expert consultants to help us better understand if and how AusNet Services' initial proposal contributes to the achievement the NEO. We also considered how our constituent decisions relate to each other, the impact that particular constituent decisions have on other constituent components of our decision, and have described these interrelationships in this draft decision. We have undertaken an extensive and consultative regulatory review process to ensure we have canvassed stakeholder issues and made as much of this information publicly available as practicable. We have had regard to and weighed up all the information assembled before us in making this draft decision.

Therefore, we are satisfied that among the options before us our draft decision on AusNet Services' transmission determination for the 2017–22 regulatory control period contributes to the achieving the NEO to the greatest degree.

5.2 Interrelationships between constituent components

Examining constituent components in isolation ignores the importance of the interrelationships between components of the overall decision, and would not contribute to the achievement of the NEO. As outlined by Energy Ministers, considering the elements in isolation has resulted in regulatory failures in the past.[66] Interrelationships can take various forms, including:

- 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 6 and 7).

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[65] NEL, s. 16(1)(d).

[66] SCER, *Regulation impact statement: Limited merits review of decision-making in the electricity and gas regulatory frameworks, Decision paper,* 6 June 2013, p. 6

- 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, 4 and 8).
- 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 6 and 7).
- trade-offs between forecast and actual regulatory measures. The reasons for one part of a proposal may have impacts on other parts of a proposal. For example, an increase in augmentation to the network means the TNSP has more assets to maintain leading to higher opex requirements (see attachments 6 and 7).
- the TNSP's approach to managing its network. The TNSP's governance arrangements and its approach to risk management will influence most aspects of the proposal, including capex/opex trade-offs (see attachment 6).

We have considered interrelationships, including those above, in our analysis of the constituent components of our draft decision. These considerations are explored in the relevant attachments.

6 Consultation

Stakeholder participation is important to informed decision making under the NEL and NER. It allows us to take a range of views into account when considering how a proposal or decision contributes to the NEO. Effective consultation and engagement provide confidence in our processes and are good regulatory practice. This is reflected in the consultation process set out in the NER, under which we have:

- published AusNet Services revenue proposals and supporting material
- published an issues paper identifying preliminary issues with the revenue proposal
- invited written submissions on the revenue proposal
- held a public forum on the revenue proposal
- published this draft decision.

We also sought advice from the AER's Consumer Challenge Panel (CCP) on AusNet Services revenue proposal. Both the CCP and AusNet Services met with the AER Board to discuss this review.

This process builds on consultation we undertook with a broad range of stakeholders as part of the Better Regulation program. Following changes to the NER in 2012, we spent much of 2013 consulting on and refining our assessment methods and approaches to decision making. We referred to this as our Better Regulation program. The Better Regulation program was designed to be an inclusive process that provided an opportunity for all stakeholders to be engaged and provide their input.[67]

This gives us confidence the approaches set out in our various guidelines, which we have applied in this decision, will result in outcomes that will or are likely to contribute to the achievement of the NEO to the greatest degree. Our Better Regulation guidelines are available on our website[68] and include:

- Expenditure forecast assessment guideline
- Expenditure incentives guideline
- Rate of return guideline
- Consumer engagement guideline for network service providers
- Shared assets guideline
- Confidentiality guideline.

The guidelines provide businesses, investors and consumers predictability and transparency of our approach to regulation under the new rules.

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[67] AER, *Overview of the Better Regulation reform package*, April 2014, pp. 4 & 7–13.

[68] www.aer.gov.au/better-regulation-reform-program

6.1 Consumer engagement

Recent changes to the NER provide further support for consumer involvement in the regulatory process, and enable us to engage more productively with energy consumers and businesses.[69] Chapter 6A of the NER was amended to, among other things, require:

- TNSPs to submit an overview with their revenue proposal which describes how they have engaged with consumers and sought to address any relevant concerns identified by that engagement[70]
- the AER to publish an issues paper after receiving the TNSP's revenue proposal.[71] The purpose of the issues paper is to assist consumer representative groups to focus on the key preliminary issues on which they should engage and comment[72]
- the AER, when determining capex and opex allowances, to have regard to the extent to which the forecast includes expenditure to address the concerns of consumers as identified by the TNSP in the course of its engagement with the consumers.[73]

Our Better Regulation Consumer engagement guideline sets out our expectations of how the network businesses should engage with their customers. We expect the network businesses to demonstrate a commitment to ongoing and genuine consumer engagement on issues relevant to consumers. We want to see businesses being more accountable to their consumers.[74] We understand the businesses may need some time to develop and implement robust and comprehensive engagement strategies and approaches.[75]

As set out in the guideline, we monitor consumer engagement activities through the CCP and our ongoing engagement with stakeholders. We may publicly comment in our decisions on any shortcomings that we identify from an expenditure proposal that reflect weaknesses in consumer engagement.[76]

We have considered the material presented in AusNet Services' revenue proposal (section 6.2), and stakeholder views presented to us in submissions (section 6.3) to form a view of its progress in implementing improved engagement strategies and approaches (section 6.4). We have not undertaken a substantive review of AusNet

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69 AEMC, *Rule determination, National Electricity Amendment (Economic Regulation of Network Service Prviders),* Rule 2012.

70 NER, cl. 6A.10.1(g)(2).

71 NER, cl. 6A.11.3(b)(1).

72 AEMC, *Rule determination, National Electricity Amendment (Economic Regulation of Network Service Prviders),* Rule 2012.

73 NER, cll. 6A.6.6(e)(5A) and 6A.6.7(e)(5A).

74 AER, *Better Regulation: Consumer engagement guideline for network service providers,* November 2013, p. 5.

75 AER, *Better Regulation: Consumer engagement guideline for network service providers,* November 2013, p. 12.

76 AER, *Better Regulation: Consumer engagement guideline for network service providers,* November 2013, p. 12.

Services' consumer engagement approaches and strategies against the above best practice principles as part of this process.

6.2 AusNet Services' consumer engagement activities

In its revenue proposal, AusNet Services submitted that with energy markets undergoing rapid changes, it is important that it understands stakeholder views and preferences. While transmission represents a relatively small component of most consumers' electricity bills, a reliable and cost-effective transmission service is a vital part of the electricity network service experienced by all consumers.[77]

AusNet Services submitted that while understanding and responding to stakeholder preferences is critical, there are many other factors that influence AusNet Services' activities, and hence the development of its revenue proposal. These factors include meeting compliance obligations to provide a safe and reliable supply of electricity. AusNet Services' role is to balance these influencing, and sometimes competing, factors. AusNet Services stated that where stakeholder preferences have not been incorporated, a clear explanation has been provided as to why this is the case.[78]

AusNet Services submitted that in developing a stakeholder engagement approach for this review it was guided by the AER's best practice Consumer Engagement Principles as set out in the AER's Consumer Engagement Guideline. AusNet Services also drew upon standards provided by the International Association of Public Participation (IAP2). AusNet Services submitted that the use of the IAP2 guideline emphasised to stakeholders that its engagement program was consistent with AER expectations.[79]

AusNet Services acknowledged that its stakeholder engagement practices are in a developmental phase.[80] Nonetheless, stakeholders provided some positive feedback about AusNet Services' stakeholder engagement activities in the lead-up to submitting its revenue proposal. These activities included conducting stakeholder forums, one-on-one consultation with consumer bodies, and online communication. AusNet Services also published a consultation paper seeking views on its proposed depreciation approach.

AusNet Services provided a summary of typical stakeholder views by topic, along with an outline of how these views were addressed in its revenue proposal.[81] These topics include reliability and capex, opex, and accelerated depreciation.

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77 AusNet Services, *Regulatory proposal 2017–22*, October 2015, pp. 40–44.
78 AusNet Services, *Regulatory proposal 2017–22*, October 2015, pp. 40–44.
79 AusNet Services, *Regulatory proposal 2017–22*, October 2015, pp. 42.
80 AusNet Services, *Regulatory proposal 2017–22*, October 2015, pp. 51–56.
81 AusNet Services, *Regulatory proposal 2017–22*, October 2015, pp. 51–56.

6.2.1 Reliability and capital expenditure

Stakeholder feedback

AusNet Services submitted that the impact on both price and reliability of deferring capital projects was explained at the second stakeholder forum. It noted that some stakeholders asked questions about the expected impacts on reliability at specific terminal stations that supply the Melbourne CBD, such as West Melbourne. Concern was expressed about the impact of a supply interruption in this case.[82]

AusNet Services also submitted that some stakeholders supported the recent lowering of the VCR, but questioned whether the application of the VCR at both the transmission and distribution networks was a duplicative assessment that resulted in excess capacity across the networks.[83]

AusNet Services' response in revenue proposal

AusNet Services submitted that, in its revenue proposal, it applied its economic planning approach to asset replacements, which uses AEMO's VCR to ensure that customer preferences related to the price/reliability trade-offs are robustly reflected. While reliability risk is expected to increase slightly over the period, reflecting the reduction in the VCR, this deterioration is expected to be gradual and will be localised to specific areas where terminal station rebuilds have been deferred.[84]

AusNet Services is comfortable that its application the VCR in its replacement decisions does not result in duplicated or unnecessary redundancies in the electricity supply chain. It submitted that the VCR is used at the connection point level when assessing whether to proceed with transmission asset replacements. AusNet Services works closely with the distributors in undertaking this assessment.[85]

AusNet Services also submitted that the reduction in reliability has also been acknowledged in its STPIS proposal, by adjusting the targets for the loss of supply event frequency parameters to reflect the efficient decline in reliability expected.[86]

6.2.2 Operating expenditure

Stakeholder feedback

AusNet Services submitted that stakeholders queried whether opex step changes could be funded by 'doing less elsewhere'. It also noted that stakeholders expressed interest in the AER's benchmarking analysis, and questioned whether AusNet

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82 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 52.
83 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 52.
84 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 52.
85 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 52.
86 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 52.

Services' benchmarking data included AEMO's costs to present an accurate picture of Victorian transmission costs.[87]

AusNet Services' response in revenue proposal

AusNet Services' revenue proposal explains how step changes in opex can lead to reductions in total cost to customers through savings in capex, either now or in future regulatory periods. AusNet Services identified savings in existing practices which will partially offset the magnitude of additional opex required.[88]

AusNet Services' revenue proposal includes the results of the AER's benchmarking analysis updated to incorporate AEMO's costs. AusNet Services submitted that this helps facilitate a comparison of its efficiency with other TNSPs on a like-for-like basis.[89]

6.2.3 Accelerated depreciation

Stakeholder feedback

AusNet Services submitted that participants were strongly against the application of any type of accelerated depreciation. Specific feedback included questioning why they should bear any risk of asset stranding when, in a competitive environment, this risk is borne by the firms making the investment decisions. It was suggested that the regulated rate of return compensates for asset stranding risk and that accelerating the depreciation allowance is at odds with the notion that assets will be worked harder and made to last longer.[90]

The one exception to this was written feedback provided by another TNSP, ElectraNet, which considered that 'alternative depreciation approaches described in the AusNet Services Consultation report need to be explored further'.[91]

AusNet Services submitted that stakeholders also questioned whether the application of accelerated depreciation to new capital investments would increase the incentive for it to spend inefficiently high levels of capex to maximise the depreciation allowance it receives.[92]

AusNet Services' response in revenue proposal

AusNet Services' proposal explains the intentional separation between the regulatory depreciation allowance and the physical service lives of network assets. Nonetheless, in response to this feedback, AusNet Services has selected an accelerated depreciation approach that does not shorten the regulatory life of the assets. AusNet Services submitted that, while it is in consumers' best interests for the physical lives of

87 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 53.
88 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 53.
89 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 53.
90 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 53.
91 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 53.
92 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 54.

assets to be extended, there are compelling reasons why the regulatory depreciation allowance should be accelerated.[93]

In response to stakeholders concerns about the price impact of accelerating the depreciation allowance, AusNet Services submitted that it applied accelerated depreciation to a subset of assets, rather than the whole transmission network. Specifically, AusNet Services proposed that declining balance depreciation is applied to investments made from 1 April 2017. It proposed that all investments made before this date continue to be depreciated on a straight line basis. AusNet Services submitted that stranding of particular assets at specific locations will continue to be managed to minimise the impact on the wider consumer base.[94]

AusNet Services also submitted that the application of accelerated depreciation to new investments does not increase AusNet Services' incentive to increase investment in the network. The economic assessments undertaken to justify the capex forecast are not impacted by the regulated depreciation allowance, and therefore the capex forecast is independent of the approach to accelerated depreciation.[95]

AusNet Services submitted that its proposal explains that under the NER, the value of the regulatory asset base is insulated from asset stranding. As a result of this, regulated rates of return have been lower historically, which have led to lower prices than would otherwise have been the case. AusNet Services submitted that its proposal explains why the AER's approach to setting the regulated rate of return does not compensate for asset stranding risk.[96]

6.3 Consumer submissions

The CCP considered that AusNet Services has made significant progress in seeking to apply consumer engagement principles. The CCP noted that AusNet Services progress in applying the first two levels of the IAP2 spectrum has been considerable and that it has shown goodwill in seeking engagement.[97]

In applying consumer engagement to this review, the CCP submitted that there has been reasonable responsiveness to some capex and opex views of consumers, including the confidential pass through event. The CCP noted that the major disappointment has been in rejecting strong consumer advice regarding accelerated depreciation.[98]

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93 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 54.

94 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 54.

95 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 54.

96 AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 54.

97 Consumer Challenge Panel (Panel 5), *Submission on AusNet Services' transmission revenue review 2017-2022*, 8 February 2016, p. 7.

98 Consumer Challenge Panel (Panel 5), *Submission on AusNet Services' transmission revenue review 2017-2022*, 8 February 2016, p. 7.

The Energy Users Coalition of Victoria (EUCV) acknowledged the consumer engagement activities undertaken by AusNet Services and noted that it is a 'good step forward'. However the EUCV raised a number of concerns over key areas within the program including:[99]

- the quality and objectivity of all information provided to those participating
- the generality of the topics discussed in the stakeholder forums
- the lack of identifiable consumer input into major decisions throughout this proposal
- low response rate of community participation on key areas of the program, notably, the low response rates within survey's and lack of consumer engagement on the 'one on one' meetings sought with consumers
- the continued use of claims of stakeholder engagement and input to areas of significance within the proposal, despite the lack of evidence to support them
- the lack of effective engagement with consumer advocates who are appropriately versed and understand the issues.

6.4 Our view of AusNet Services' consumer engagement

Overall we consider that AusNet Services has taken important steps to engage with its customers. Stakeholders have commented that AusNet Services has made significant progress and has shown considerable goodwill in seeking consumer engagement. This is very positive. We consider that the consumer engagement undertaken by AusNet Services to date has significantly built on the engagement program undertaken in its previous revenue review.

We accept that there are some concerns from stakeholders, in particular from the EUCV, regarding AusNet Services' approach to stakeholder engagement over the current regulatory control period. We note however that stakeholder engagement is a relatively new aspect undertaken by network service providers and should continue to improve over time. AusNet Services has also acknowledged that its stakeholder engagement practices are in a developmental phase and are a process of continuous improvement.[100]

AusNet Services submitted that it welcomes further feedback on its stakeholder engagement process.[101] We expect that AusNet Services will take into account the issues raised by stakeholders in developing its consumer engagement program going forward.

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[99] EUCV, *Submission in response to AusNet Services' 2017–22 transmission determination proposal*, February 2016, pp. 35–38.

[100] AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 41.

[101] AusNet Services, *Regulatory proposal 2017–22*, October 2015, p. 40.

A Constituent components

Our draft decision on AusNet Services' transmission determination includes the following constituent components:[102]

Constituent component
In accordance with clause 6A.14.1(1)(i) of the NER, the AER does not approve the total revenue cap set out in AusNet Services' revised building block proposal. Our draft decision on AusNet Services' total revenue cap is $2695.0 million ($ nominal) for the 2017–22 regulatory control period. This decision is discussed in Attachment 1 of this draft decision.
In accordance with clause 6A.14.1(1)(ii) of the NER, the AER does not approve the maximum allowed revenue (MAR) for each regulatory year of the regulatory control period set out in AusNet Services' revised building block proposal. Our decision on AusNet Services' MAR for each year of the 2017–22 regulatory control period is set out in Attachment 1 of this draft decision.
In accordance with clause 6A.14.1(1)(iii) of the NER, the AER has decided to apply the service component, network capability component and market impact component of Version 5 of the service target performance incentive scheme (STPIS) to AusNet Services for the 2017–22 regulatory control period. The values and parameters of the STPIS are set out in Attachment 11 of this draft decision.
In accordance with clause 6A.14.1(1)(iv) of the NER, the AER's decision on the values that are to be attributed to the parameters for the efficiency benefit sharing scheme (EBSS) that will apply to AusNet Services in respect of the 2017–22 regulatory control period are set out in Attachment 9 of this draft decision.
In accordance with clause 6A.14.1(1)(v) of the NER, the AER has approved the commencement and length of the regulatory control period as AusNet Services proposed in its revenue proposal. The regulatory control period will commence on 1 April 2017 and the length of this period is five years, expiring on 31 March 2022.
In accordance with clause 6A.14.1(2) and acting in accordance with clause 6A.6.7(d) of the NER, the AER has not accepted AusNet Services' total forecast capital expenditure of $745.6 million ($2016–17). Our substitute estimate of AusNet Services' total forecast capex for the 2017–22 regulatory control period is $573.1 million ($2016–17). This is discussed in Attachment 6 of this draft decision.
In accordance with clause 6A.14.1(3) and acting in accordance with clause 6A.6.6(d) of the NER, the AER has not accepted AusNet Services' total forecast operating expenditure inclusive of debt raising costs of $1085.0 million ($2016–17). Our substitute estimate of AusNet Services' total forecast opex for the 2017–22 regulatory control period is $1031.9 million ($2016–17) including debt raising costs. This is discussed in Attachment 7 of this draft decision.
In accordance with clause 6A.14.1(5A) of the NER, the AER has determined that version 1 of the capital expenditure sharing scheme (CESS) as set out the Capital Expenditure Incentives Guideline will apply to AusNet Services in the 2017–22 regulatory control period. This is discussed in Attachment 10 of this draft decision.
In accordance with clause 6A.14.1(5B) and 6A.6.2 of the NER, the AER has decided that the allowed rate or return for the 2017–18 regulatory year is 6.16 per cent (nominal vanilla), as set out in Attachment 3 of this draft decision. The rate of return for the remaining regulatory years 2018–22 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 has decided that the return on debt is to be estimated using a methodology referred to in clause 6A.6.2(i)(2), and using the formula to be applied in accordance with clause 6A.6.2(l). The methodology and formula are set out in Attachment 3 of this draft decision.
In accordance with clause 6A.14.1(5D) of the NER the AER has decided that the value of imputation credits as referred to in clause 6A.6.4 is 0.4. This is set out in Attachment 4 of this draft decision.
In accordance with clause 6A.14.1(5E) of the NER the AER has decided, in accordance with clause 6A.6.1 and schedule 6A.2, that the opening regulatory asset base (RAB) as at the commencement of the 2017–22 regulatory control period, being 1 April 2017, is $3194.7 million ($ nominal). This is set out in Attachment 2 of this draft decision.

[102] NEL, s. 16(1)(c).

Constituent component
In accordance with clause 6A.14.1(5F) of the NER the AER has decided that the depreciation approach based on forecast capex (forecast depreciation) is to be used to establish the RAB at the commencement of AusNet Services' regulatory control period as at1April 2022. This is discussed in Attachment 2 of this draft decision.
In accordance with clause 6A.14.1(6) of the NER the AER has approved AusNet Services' proposed negotiating framework. This is set out in Attachment 14 of this draft decision.
In accordance with clause 6A.14.1(7) of the NER the AER has specified the negotiated transmission services criteria for AusNet Services. This is set out in Attachment 14 of this draft decision.
In accordance with clause 6A.14.1(8) of the NER the AER has approved AusNet Services' proposed pricing methodology. This is set out in Attachment 12 of this draft decision.
In accordance with clause 6A.14.1(9) of the NER the AER has approved the following nominated pass through events to apply to AusNet Services for the 2017–22 regulatory control period in accordance with clause 6A.6.9: • terrorism event • insurance cap event • natural disaster event • insurer's credit risk event These events have the definitions set out in Attachment 13 of this draft decision.

B List of submissions

We received five submissions in response to AusNet Services' revenue proposal. These are listed below.

Submission from	Date received
AusNet Services	4 February 2016
AusNet Services	7 April 2016
Consumer Challenge Panel	8 February 2016
Energy Users Coalition Victoria (EUCV)	9 February 2016
GreenSync	4 February 2016