DRAFT DECISION

AusNet Services Transmission Determination 2022 to 2027

Attachment 2 Regulatory asset base

June 2021

AUSTRALIAN ENERGY REGULATOR

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: 1300 585 165
Email: AERInquiry@aer.gov.au

AER reference: 65242

Note

This attachment forms part of the AER's draft decision on AusNet Services' 2022–27 transmission determination. It should be read with all other parts of the draft decision.

The draft decision includes the following attachments:

Overview

Attachment 1 – Maximum allowed revenue

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Efficiency benefit sharing scheme

Attachment 9 – Capital expenditure sharing scheme

Attachment 10 – Service target performance incentive scheme

Attachment 11 – Demand management innovation allowance mechanism

Attachment 12 – Pricing methodology

Attachment 13 – Pass through events

Attachment 14 – Negotiating framework

Contents

2 Regulatory asset base

The regulatory asset base (RAB) is the value of the assets used by AusNet Services to provide prescribed transmission services.[1] Our revenue determination specifies the RAB as at the commencement of the regulatory control period and the appropriate method for the indexation of the RAB.[2] The indexation of the RAB is one of the building blocks that form the annual building block revenue requirement for each year of the 2022–27 regulatory control period.[3] We set the RAB as the foundation for determining a transmission network service provider's (TNSP's) revenue requirements, and use the opening RAB for each regulatory year to determine the return on capital and return of capital (regulatory depreciation) building blocks.[4]

This attachment presents our draft decision on the opening RAB value as at 1 April 2022 for AusNet Services and our forecast of its RAB values over the 2022–27 regulatory control period. It also presents our draft decision for establishing the RAB as at the commencement of the 2027–32 regulatory control period using depreciation that is based on forecast capital expenditure (capex).[5]

2.1 Draft decision

We determine an opening RAB value of $3545.9 million ($nominal) as at 1 April 2022 for AusNet Services. This value is $35.9 million (or 1.0 per cent) lower than AusNet Services proposed opening RAB of $3581.9 million ($nominal) as at 1 April 2022.[6] While we largely accept the proposed method for calculating the opening RAB, we made the following revisions to AusNet Services' proposed inputs to the roll forward model (RFM):

- corrected a number of minor cell referencing errors in relation to the inputs for the final year asset adjustments. This included recording the residual values of the proposed capitalised leases as at 30 March 2022 (end of current period)
- updated the proposed value of the ‘growth assets’ to be rolled into the RAB based on additional information provided by AusNet Services
- updated inputs to the RFM as newer information has become available since AusNet Services submitted its proposal. These updates include:
    - actual consumer price index (CPI) input for 2020–21
    - forecast inputs for nominal weighted average cost of capital (WACC) and depreciation for 2020–21 and 2021–22 following the most recent return on

1 National Electricity Rules (NER), cl. 6A.6.1(a).

2 NER, cll. 6A.4.2(3A) and (4).

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

4 NER, cll. 6A.5.4(a)(2) and (3).

5 NER, cl. 6A.14.1(5E).

6 AusNet Services, *Revenue Proposal 2023–27, Post Tax Revenue Model - Revised*, 18 February 2021.

debt update and approved cost past through in the 2017–22 post-tax revenue model (PTRM).

To determine the opening RAB as at 1 April 2022, we have rolled forward the RAB over the 2017–22 regulatory control period to determine a closing RAB value at 31 March 2022 in accordance with our RFM.[7] This roll forward process includes an adjustment at the end of the 2017–22 regulatory control period to account for the difference between actual 2016–17 capex and the estimate approved in the 2017–22 determination.[8] All other adjustments are applied as part of the final year adjustments at 31 March 2022 to establish the opening RAB value at 1 April 2022.[9] The roll forward also includes an adjustment for new assets—labelled 'growth assets'—added to the opening RAB at 1 April 2022 and a true-up for the difference between actual and forecast 'growth assets' rolled in at the 2017–22 determination.[10] Expenditure on growth 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.[11]

Table 2.1 sets out our draft decision on the roll forward of AusNet Services' RAB over the 2017–22 regulatory control period.

---

7 AER, *Electricity transmission network service providers: Roll forward model (version 4)*, 7 April 2020.

8 The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2017–22 determination.

9 This includes adjustment for capitalised leases, and reallocation for accelerated depreciation purposes associated with insulators and instrumental transformers assets. Our draft decision on the latter is set out in section 4.4.2 of attachment 4 of this draft decision.

10 The growth assets are capital expenditure works done by AusNet Services during a regulatory control period as a result of requests from Australian Energy Market Operator (AEMO) or distribution network service providers. 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 expenditures. These growth assets sit outside of the RAB and are governed by commercial contracts until such time as they are rolled into the RAB at the subsequent revenue determination. That is, the residual value of the capex amounts are rolled into the RAB at the start of the next regulatory control period. AusNet Services has proposed and the AER has accepted the inclusion of growth assets into the RAB in previous regulatory control periods, which at the time the assets were labelled as 'group 3 assets'.

11 This adjustment may include estimated expenditure where actual expenditure is not yet known; so there is an additional true-up required at the next revenue determination.

Table 2.1 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 [a]	2021–22 [b]
Opening RAB	3170.0	3188.1	3221.4	3249.2	3231.0
Capital expenditure[c]	131.0	147.6	156.5	145.4	134.4
Inflation indexation on opening RAB[d]	58.0	60.1	53.9	22.5	60.6
Less: straight-line depreciation[e]	170.9	174.3	182.7	186.1	167.9
Interim closing RAB	3188.1	3221.4	3249.2	3231.0	3258.1
Difference between estimated and actual capex in 2016–17					–45.5
Return on difference for 2016–17 capex					–12.3
Final year asset adjustment (excluding growth assets)[f]					49.4
Growth assets adjustments[g]					296.3
Closing RAB as at 31 March 2022					**3545.9**

Source: AER analysis.

(a) Based on estimated capex provided by AusNet Services. We will update the RAB roll forward with actual capex in the final decision.

(b) Based on estimated capex provided by AusNet Services. We expect to update the RAB roll forward with 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 and half-year WACC.

(d) We will update the RAB roll forward for actual CPI for 2021–22 in the final decision.

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

(f) Includes final year asset adjustment of $51.2 million for the residual value of capitalised leases and –$1.9 million adjustment for revaluation of inventories.

(g) Roll-in of 'growth assets' at 1 April 2022, and true-up for difference between actual and estimated growth assets rolled in at the 2017–22 determination.

We determine a forecast closing RAB value at 31 March 2027 of $3791.0 million ($nominal). This is $101.2 million (or 2.6 per cent) lower than the amount of $3892.2 million ($nominal) proposed by AusNet Services. Our draft decision on the forecast closing RAB reflects the amended opening RAB as at 1 April 2022, and our draft decisions on the expected inflation rate (attachment 3), forecast depreciation (attachment 4) and forecast capex (attachment 5).[12]

Table 2.2 sets out our draft decision on the forecast RAB values for AusNet Services over the 2022–27 regulatory control period.

[12] Capex enters the RAB net of forecast disposals. It includes equity raising costs (where relevant) and the half-year WACC to account for the timing assumptions in the PTRM. Therefore, our draft decision on the forecast RAB also reflects our amendments to the rate of return for the 2022–27 regulatory control period (attachment 3).

Table 2.2 AER's draft decision on AusNet Services' RAB for the 2022–27 regulatory control period ($million, nominal)

	2022–23	2023–24	2024–25	2025–26	2026–27
Opening RAB	3545.9	3597.2	3678.9	3756.7	3793.1
Capital expenditure[a]	165.6	179.5	185.0	153.2	122.0
Inflation indexation on opening RAB	70.9	71.9	73.6	75.1	75.8
Less: straight-line depreciation[b]	185.2	169.8	180.8	192.0	199.9
Closing RAB	**3597.2**	**3678.9**	**3756.7**	**3793.1**	**3791.0**

Source: AER analysis.

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

(b) Based on as-commissioned capex.

We determine that the forecast depreciation approach is to be used to establish the opening RAB at the commencement of the 2027–32 regulatory control period for AusNet Services.[13] We consider this approach is consistent with the capital expenditure incentive objective in that it will provide sufficient incentives for AusNet Services to achieve capex efficiency gains over the 2022–27 regulatory control period. This approach is also consistent with our *Framework and approach* paper.[14]

2.2 AusNet Services' proposal

AusNet Services used our RFM to establish an opening RAB as at 1 April 2022 and version 4 of our PTRM to roll forward the RAB over the 2022–27 regulatory control period.[15]

AusNet Services proposed an opening RAB value as at 1 April 2017 of $3170.0 million ($nominal). Rolling forward this RAB and using depreciation based on forecast capex (approved for the 2017–22 regulatory control period), AusNet Services proposed a closing RAB as at 31 March 2022 of $3581.9 million ($nominal).[16]

Other than the actual/estimated capex for the list of asset classes approved in the 2017–22 transmission determination, AusNet Services also proposed to include the actual/estimated capex associated with three new asset classes: 'Lease L&B 2019-20 < 20 years rem life', 'Lease L&B 2019-20 > 20 years rem life' and 'Lease L&B 2020-21'

13 AER, *Final framework and approach for AusNet Services 2022–27*, 24 April 2020, p. 20.

14 AER, *Final framework and approach for AusNet Services 2022–27*, 24 April 2020, p. 20.

15 We have released a new version of the PTRM (version 5) in April 2021 after AusNet Services submitted its regulatory proposal. Our draft decision uses this updated version 5 PTRM.

16 AusNet Services, *Regulatory Proposal 2023–27,* 29 October 2020, p. 185.

in the RAB roll forward process.[17] AusNet Services noted that the addition of the new asset classes is due to a change in the accounting reporting standard. The new reporting standard requires expenditures associated with leasehold land and building, which was previously categorised as operating expenditure (opex) for providing prescribed services in the 2017–22 regulatory determination, to be capitalised and reported as capex starting from 1 April 2019.[18] AusNet Services proposed to include $24.4 million ($nominal), $19.9 million ($nominal) and $8.4 million ($nominal) of actual/estimated capex under the three asset classes for 2019–20 and 2020–21 respectively.[19]

For the final year (end of period) asset adjustments,[20] AusNet Services proposed to roll-in $294.2 million of 'growth assets' into the RAB as at 1 April 2022. The true-up for the difference between actual and forecast growth assets rolled in at the 2017–22 determination reduced this roll-in amount to $293.0 million. AusNet Services proposed to further reduce the end of period value of the 'Inventory adjustment (Other non-network)' asset class by $1.9 million due a revaluation of inventories. Other than the above two adjustments, AusNet Services also proposed to transfer the value of some insulators and instrument transformers from their existing asset classes to new asset classes for accelerated depreciation purposes. The transfer of these assets changes the value within each affected asset class but does not change the overall value of the opening RAB as at 1 April 2022.[21]

Table 2.3 sets out AusNet Services proposed roll forward of its RAB during the 2017–22 regulatory control period.

---

17 AusNet Services also proposed to include a new asset class labelled 'Lease L&B 2021-22'. We consider this asset class is redundant at this stage as the proposal did not assign any opening value or forecast capex to it.

18 AusNet Services, *Regulatory Proposal 2023–27,* 29 October 2020, p. 188. AusNet Services stated that the capitalised leases amounts are calculated based on the full amount of a lease, where AusNet Services is the lessee, capitalised up-front when it is first entered into, or renewed, and amortised over its lease term. AusNet Services stated that from a cash-flow perspective there is no change with this treatment.

19 AusNet Services, *Regulatory Proposal 2023–27 - Roll Forward Model* – 29 October 2020.

20 The final year asset adjustments section in the RFM is primarily for recording asset adjustments at the end of the current regulatory control period. This section is used when the TNSP needs to adjust its closing RAB by removing or adding assets (such as for a change in service classification) in the final year of the regulatory control period.

21 AusNet Services, *Regulatory Proposal 2023–27,* 29 October 2020, p. 187.

Table 2.3 AusNet Services' proposed RAB for the 2017–22 regulatory control period ($million, nominal)

	2017–18	2018–19	2019-20	2020–21[a]	2021–22[a]
Opening RAB	3170.0	3188.1	3221.4	3290.1	3322.1
Capital expenditure[b]	131.0	147.6	197.4	154.9	134.5
CPI indexation on opening RAB	58.0	60.1	53.9	63.1	62.3
Less: straight-line depreciation[c]	170.9	174.3	182.7	186.0	169.5
Interim closing RAB	3188.1	3221.4	3290.1	3322.1	3349.4
Difference between estimated and actual capex in 2016–17					–45.5
Return on difference for 2016–17 capex					–13.1
Final year asset adjustment (excluding growth assets)					–1.9
Growth assets adjustments[e]					293.0
Closing RAB as at 31 March 2022					**3581.9**

Source: AusNet Services, *Regulatory Proposal 2023–27*, 29 October 2020, p. 185.

(a) Based on estimated capex.

(b) As-incurred, net of disposals, and adjusted for actual CPI and half-year WACC.

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

(d) This relates to an adjustment for revaluation of inventories.

(e) Roll-in of 'growth assets' at 1 April 2022, and true-up for difference between actual and estimated growth assets rolled in at the 2017–22 determination.

AusNet Services proposed a forecast closing RAB as at 31 March 2027 of $3892.2 million ($nominal). This value reflects its proposed opening RAB, forecast capex, expected inflation, and depreciation (based on forecast capex) over the 2022–27 regulatory control period. Its projected RAB over the 2022–27 regulatory control period is shown in Table 2.4.

Table 2.4 AusNet Services' proposed RAB for the 2022–27 regulatory control period ($million, nominal)

	2022–23	2023–24	2024–25	2025–26	2026–27
Opening RAB	3581.9	3655.3	3751.9	3840.8	3885.6
Capital expenditure[a]	183.0	190.8	193.2	159.4	129.0
Inflation indexation on opening RAB	80.5	82.2	84.4	86.4	87.4
Less: straight-line depreciation[b]	190.2	176.4	188.6	201.0	209.8
Closing RAB	**3655.3**	**3751.9**	**3840.8**	**3885.6**	**3892.2**

Source: AusNet Services, *Revenue Proposal 2023–27, Post Tax Revenue Model - Revised*, 18 February 2021.

(a) As-incurred, and net of forecast disposals. Inclusive of the half-year WACC to account for the timing assumptions in the PTRM.

(b) Based on as-commissioned capex.

2.3 Assessment approach

We roll forward AusNet Services' RAB during the 2017–22 regulatory control period to establish the opening RAB at 1 April 2022. This value can be adjusted for any differences in estimated and actual capex.[22] It may also be adjusted to reflect any changes in the use of the assets. We may remove assets from the RAB in appropriate circumstances where they are no longer contributing to the provision of prescribed transmission services.[23]

To determine the opening RAB, we developed an asset base RFM that a TNSP must use in preparing its revenue proposal.[24] We used the RFM to roll forward AusNet Services RAB from the beginning of the final year of the 2014–17 regulatory control period,[25] through the 2017–2022 regulatory control period, to the beginning of the 2022–27 regulatory control period.

The roll forward for each year of the above period occurs by:

- adding actual inflation (indexation) adjustment to the opening RAB for the relevant year. This adjustment is consistent with the inflation factor used in the annual indexation of the maximum allowed revenue[26]
- adding actual or estimated capex to the RAB for the relevant year.[27] We review a TNSP's past capex and may exclude past capex from being rolled into the RAB where total capex exceeds the regulatory allowance.[28] The details of our assessment approach for capex overspend are set out in the *Capital expenditure incentive guideline*. We note that our review of past capex does not include the last two years of the 2017–22 regulatory control period—these will instead be reviewed at the next reset.[29] We check actual capex amounts against audited regulatory accounts data and generally accept the capex reported in those accounts in rolling forward the RAB.[30] However, there may be instances where adjustments are required to the annual regulatory accounts data[31]

---

22 NER, cll. S6A.2.1(f)(3).

23 NER, cll. S6A.2.1(f)(7)–(8) and S6A.2.3.

24 NER, cll. 6A.6.1(b), 6A.6.1(e) and S6A.1.3(5).

25 The roll forward commences in the final year of the 2014–17 regulatory control period to allow us to adjust for the difference between actual 2016–17 capex and the estimated 2016–17 capex used in our 2014–17 transmission determination. This adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved in the 2014–17 determination. See NER, cl. S6A.2.1(f)(3).

26 NER, cl. 6A.6.1(e)(3).

27 NER, cl. S6A.2.1(f)(4).

28 NER, cl. S6A.2.2A. Under the NER, cl S6A.2.2A(b), the exclusion of inefficient capex could only come from three areas: overspend in capex, margin paid to third party and inappropriate capitalisation of opex as defined in cll. S6A.2.2A (c), (d) and (e) of the NER.

29 NER, cl. S6A.2.2A(a1). The two year lag ensures that actual capex (instead of estimated capex) is available when the review of past capex commences.

30 We will update any estimated capex with actual capex at the time of the next reset.

31 For example, we make adjustment for movements in provisions if the actual capex amounts reported in the regulatory accounts include capitalised provisions.

- subtracting depreciation from the RAB for the relevant year, calculated in accordance with the rates and methodologies allowed (if any) in the transmission determination for AusNet Services' 2017–22 regulatory control period.[32] Depreciation based on forecast or actual capex can be used to roll forward the RAB.[33] For this draft decision, we use depreciation based on forecast capex for rolling forward the RAB for AusNet Services' 2017–22 regulatory control period.[34] Depreciation based on forecast capex will also be used for the 2022–27 regulatory control period RAB roll forward at the next reset[35]
- subtracting any gross proceeds for asset disposals for the relevant year from capex to be added to the RAB.[36] We check these amounts against audited regulatory accounts data.

These annual adjustments give the closing RAB for any particular year, which then becomes the opening RAB for the following year. Through this process, the RFM rolls forward the RAB to the end of the 2017–22 regulatory control period.[37] The PTRM used to calculate the annual building block revenue requirement for the 2022–27 regulatory control period generally adopts the same RAB roll forward approach as the RFM although the adjustments to the RAB are based on forecasts, rather than actual amounts.[38]

The opening RAB for the 2027–32 regulatory control period can be determined using depreciation based either on forecast or actual capex incurred during the 2022–27 regulatory control period.[39] To roll forward the RAB using depreciation based on forecast capex, we would use the forecast depreciation contained in the PTRM for the 2022–27 regulatory control period, adjusted for actual inflation. If the approach to roll forward the RAB using depreciation based on actual capex was adopted, we would recalculate the depreciation based on actual capex incurred during the 2022–27 regulatory control period.

Our decision on whether to use actual or forecast depreciation must be consistent with the capex incentive objective. This objective is to ensure that increases to the RAB through capex only occur where that capex reasonably reflects the capital expenditure criteria.[40] In deciding between actual and forecast depreciation, we have regard to:[41]

---

32 NER, cl. S6A.2.1(f)(5).

33 NER, cl. 6A 4.2(a1).

34 The use of forecast depreciation is consistent with the depreciation approach established in the transmission determination for the 2017–22 regulatory control period for AusNet Services. See AER, *AusNet Services transmission determination 2017–22, attachment 2*, April 2017, p. 14.

35 Refer to section 2.4.3 for the reasons.

36 NER, cl. S6A.2.1(f)(6).

37 Any adjustments to the closing RAB at the end of the current regulatory control period for asset movements will be recorded under the final year asset adjustments section in the RFM.

38 NER, cl. S6A.2.4(c).

39 NER, cl. S6A.2.2B(a).

40 NER, cl 6A.5A(a).

41 NER, cl. S6A.2.2B(b) and (c).

- the incentives the service provider has to undertake efficient capex
- substitution possibilities between assets with different lives and the relative benefits of each
- the extent of overspending and inefficient overspending relative to the allowed forecast
- the capex incentive guideline
- the capital expenditure factors.

2.3.1 Interrelationships

The RAB is an input into the determination of the return on capital and depreciation (return of capital) building block amounts.[42] Factors that influence the RAB will therefore flow through to these building block components and the annual building block revenue requirement. Other things being equal, a higher RAB increases both the return on capital and depreciation amounts.

The RAB is determined by various factors, including:

- the opening RAB (meaning the value of existing assets at the beginning of the regulatory control period)
- net capex[43]
- depreciation
- indexation adjustment – so the RAB is presented in nominal terms, consistent with the rate of return.

The opening RAB depends on the value of existing assets and will depend on actual net capex, actual inflation outcomes and depreciation in the past.

The RAB when projected to the end of the regulatory control period increases due to both forecast new capex and the indexation adjustment. The size of the indexation adjustment depends on expected inflation (which also affects the nominal rate of return or WACC) and the size of the RAB at the start of each year.

Depreciation reduces the RAB. The depreciation allowance depends on the size of the opening RAB, the forecast net capex and depreciation schedules applied to the assets. By convention, the indexation adjustment is also offset against depreciation to prevent double counting of inflation in the RAB and WACC, which are both presented in

---

[42] 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. It should be noted that the return of capital is calculated based on the RAB measured on an as incurred basis while depreciation (return of capital) is calculated based on the RAB measured on an as commissioned basis.

[43] Net capex is gross capex less disposals. The rate of return or WACC also influences the size of the capex. This is because capex is not depreciated in the year it is first incurred, but added to the RAB at the end of the year. Instead, the capex amount is escalated by half-year WACC to arrive at an end of year value. It then begins depreciating the following year.

nominal terms. This reduces the depreciation building block that feeds into the annual building block revenue requirement.

We maintain the RAB in real terms by indexing for inflation.[44] A nominal rate of return (WACC) is multiplied by the opening RAB to produce the return on capital building block.[45] To prevent the double counting of inflation through the nominal WACC and indexed RAB,[46] the regulatory depreciation building block has an offsetting reduction for indexation of the RAB.[47] Indexation of the RAB and the offsetting adjustment made to depreciation results in smoother revenue recovery profile over the life of an asset than if the RAB was un-indexed. If the RAB was un-indexed, there would be no need for an offsetting adjustment to the depreciation calculation of total revenue. This alternative approach provides for overall revenues being higher early in the asset's life (as a result of more depreciation being returned to the TNSP) and lower in the future—producing a steeper downward sloping profile of total revenue.[48] The implications of an un-indexed RAB are discussed further in attachment 4.

Figure 2.1 shows the key drivers of the changes in the RAB over the 2022–27 regulatory control period as proposed by AusNet Services. Overall, the closing RAB at the end of the 2022–27 regulatory control period would be 9 per cent higher than the opening RAB at the start of that period based on the proposal, in nominal terms. The proposed forecast net capex increases the RAB by 24 per cent, while expected inflation increases it by 12 per cent. Forecast depreciation, on the other hand, reduces the RAB by 27 per cent.

---

44 NER, cll. 6A.5.4(b)(1) and 6A.6.1(e)(3).

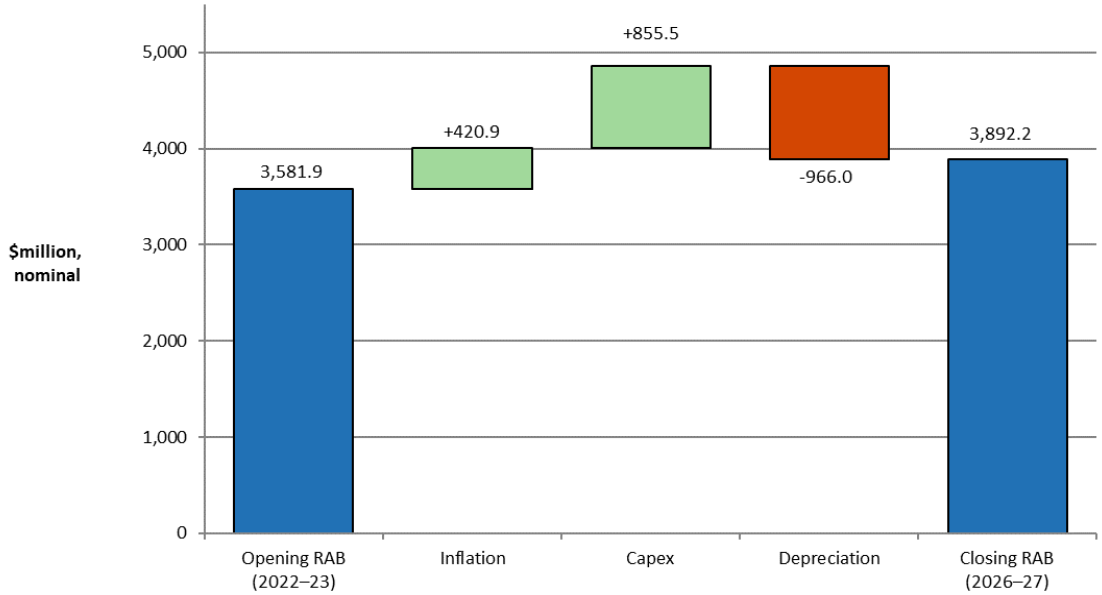
45 AER, *Rate of return instrument*, cl. 1, cl. 3(a), cl. 36(c), December 2018.

46 NER, cl. 6A.5.4(b)(1)(ii).

47 If the asset lives are extremely long, such that the RAB depreciation rate is lower than the inflation rate, then negative regulatory depreciation can emerge. The indexation adjustment is greater than the RAB depreciation in such circumstances. Please also refer to section 4.3.1 of attachment 4 of this draft decision for further explanation of the offsetting adjustment to the depreciation.

48 A change of approach from an indexed RAB to an un-indexed RAB would result in an initial step change increase in revenues to preserve net present value neutrality.

Figure 2.1 Key drivers of changes in the RAB ($million, nominal)



Source: AusNet Services, *Revenue Proposal 2023–27, Post Tax Revenue Model - Revised*, 18 February 2021.

Note: Capex is net of forecast disposals. It is Inclusive of the half-year WACC to account for the timing assumptions in the PTRM.

AusNet Services' proposed forecast depreciation for the 2022–27 regulatory control period is $966.0 million ($nominal). We have accepted many aspect of AusNet Services' depreciation proposal subject to some input updates and modelling amendments as it satisfies the requirements of the NER in terms of the assigned asset lives. However, we have reduced the proposed amount of accelerated depreciation for insulators and instrument transformers to $103 million ($2021–22) from $442 million. This is discussed further in attachment 4. The depreciation amount largely depends on the proposed level of accelerated depreciation and opening RAB, which in turn depends on capex in the past.[49] Depreciation associated with forecast capex is a relatively smaller amount.

However, we do have concerns with the size of the forecast capex proposed by AusNet Services. It is the largest driver of the increase in the RAB over the 2022–27 regulatory control period. In this draft decision, we have reduced AusNet Services' proposed forecast capex by $44.0 million ($2021–22), or 5.5 per cent over the 2022–27 regulatory control period.[50] Our review of AusNet Services' forecast capex is set out in attachment 5 of this draft decision.

A 10 per cent increase in the opening RAB causes revenues to increase by about 1.3 per cent. However, the impact on revenues of the annual change in RAB depends on

[49] At the time of this draft decision, the roll forward of AusNet Services' RAB includes estimated capex values for 2020–21 and 2021–22. We expect to update the 2020–21 estimated capex with actuals in the final decision. We may also update the 2021–22 estimated capex with a revised estimate in the final decision.

[50] This amount is net of asset disposals and excludes half-year WACC adjustment.

the source of the RAB change, as some drivers affect more than one building block cost.[51]

2.4 Reasons for draft decision

We determine an opening RAB value for AusNet Services of $3545.9 million ($nominal) as at 1 April 2022, a reduction of $35.9 million ($nominal) or 1.0 per cent from the proposed value. We forecast a closing RAB value of $3791.0 million by 31 March 2027. This represents a reduction of $101.2 million, or 2.6 per cent compared with AusNet Services' proposal. The reasons for our draft decision are discussed below.

2.4.1 Opening RAB at 1 April 2022

We determine an opening RAB value of $3545.9 million ($nominal) as at 1 April 2022 for AusNet Services. This value is $35.9 million (or 1.0 per cent) lower than AusNet Services' proposed opening RAB of $3581.9 million ($nominal) as at 1 April 2022.[52]

To determine the opening RAB for AusNet Services as at 1 April 2022 we have rolled forward the RAB over the 2017–2022 regulatory control period to determine a closing RAB value as at 31 March 2022. In doing so, we reviewed the key inputs of AusNet Services' proposed RFM, such as actual inflation, rate of return, gross capex values, asset disposal values, forecast depreciation amounts and asset lives. We found these were generally correct and they reconcile with relevant data sources such as Australian Bureau of Statistics (ABS) data, regulatory accounts and the 2017–22 decision models.[53] However, we identified some of the proposed inputs for 2019–20 and 2020–21 capex required corrections. We also consider some of AusNet Services' proposed RFM inputs require updating with newly available data.

Therefore, we have made the following amendments to AusNet Services' proposed RFM inputs:

- updated the forecast straight-line depreciation inputs for 2020–21 and 2021–22 to be consistent with values calculated in our 2021–22 return on debt update and approved cost pass through in the 2017–22 PTRM
- updated the estimated inflation input for 2020–21 of 1.92 per cent using the actual September 2021 CPI of 0.69 per cent published by the ABS[54]

---

51 If capex causes the RAB increase—return on capital, depreciation, and debt raising costs all increase too. If a reduction in depreciation causes the RAB increase, revenue could increase or decrease. In this case, the higher return on capital is offset (perhaps more than offset) by the reduction in depreciation allowance. Inflation naturally increases the RAB in nominal terms.

52 AusNet Services, *Regulatory Proposal 2023–27*, 29 October 2020, p. 185.

53 At the time of this draft decision, the roll forward of AusNet Services' RAB includes estimated capex values for 2020–21 and 2021–22. We expect to update the 2020–21 estimated capex with actuals in the final decision. We may also update the 2021–22 estimated capex with a revised estimate in the final decision.

54 All else equal, a lower CPI will result in a lower inflation indexation for the RAB and therefore lower the value of the RAB. Our draft decision uses actual CPI from 2017–18 to 2020–21, and estimated CPI for 2021–22 to calculate

- updated the 2021–22 WACC input following the return on debt and cost pass through update for that year in the 2017–22 PTRM.

We also amended the proposed final year (end of period) adjustment amount to reflect our draft decision on the proposed value of capitalised leases and growth assets. The reasons for our decision is set out below.

We accept AusNet Services' proposal to capitalise the value of its existing leases due to a change in the accounting reporting standard. We have assessed AusNet Services' calculation of the capitalised value and are satisfied that it reflects the present value of future lease payments over the remaining contract terms. We note this calculation method is consistent with the requirements set out in the Australian accounting standard.[55]

However, we do not consider new asset classes relating to capitalised leases should be added in the RFM for the purpose of recording historical capex over the 2017–22 period as part of the RAB roll forward process. The RFM for the 2017–22 regulatory control period should only include capex entries for the approved asset classes as set out in the 2017–22 transmission determination. For this reason, we have removed the proposed capex entries in the RFM associated with the capitalised leases and recorded them as end of period adjustments under the final year asset adjustments section of the RFM at 31 March 2022.[56] This approach is consistent with our recent determination for AusNet Services' distribution network.[57] This change has no dollar impact on the value of opening RAB 1 April 2022 because the removal of the proposed historical capex associated with capitalised leases is balanced out by the same amount of increase to the final year asset adjustment. In its response to our information request, AusNet Services agreed with this amendment.[58]

AusNet Services proposed to roll-in $294 million of 'growth assets' into the RAB as at 1 April 2022. The growth assets are capital expenditure (non-contestable) works done by AusNet Services during a regulatory control period as a result of requests from AEMO or distribution network service providers. 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 expenditures. These growth assets sit outside of the RAB and are governed by commercial contracts until such time as they are rolled into the RAB at the subsequent revenue determination. That is,

---

the opening RAB at 1 April 2022. In our final decision, we will update the estimate for 2021–22 expected inflation with actual CPI.

55 Australian Accounting Standard Board, *Accounting Standard AASB 16 Lease,* February 2016: https://www.aasb.gov.au/admin/file/content105/c9/AASB16_02-16.pdf.

56 We also amended the calculation of the residual value of 2019–20 capitalised leases to account for asset disposals on an as-commissioned basis. This reduced the opening value as at 1 April 2022 for this asset class on an as commissioned basis by $4.7 million. In its response to our information request, AusNet Services agreed with this amendment. AusNet Services, *email response to AER Information request #006*, 19 January 2021.

57 AER, Final decision, *AusNet Services Distribution Determination 2021 to 2026, Attachment 2 - Regulatory asset base*, April 2021, p. 5.

58 AusNet Services, *email response to AER Information request #006*, 19 January 2021.

the residual value of the capex amounts are rolled into the RAB at the start of the next regulatory control period instead of added to the RAB each year (as is usually the case for capex).

In order to verify the proposed roll-in value of the growth assets, we requested AusNet Services to provide the contracts for a list of these projects.[59] In its response, AusNet Services provided the projects contracts and a revised value of the proposed 'growth assets'. The revision resulted in a $2 million increase to the total value of growth assets to be rolled into the RAB to $296 million from $294 million.[60] This is due to correcting for the discrepancies between the proposed roll-in value of the assets and the expenditure figures recorded in the contracts for a few projects.[61] Based on our review of the additional information provided by AusNet Services, we are satisfied that the revised value of the growth assets is consistent with the expenditure figures recorded in the contracts. We are also satisfied that the method applied by AusNet Services to calculate the roll-in value of these assets is consistent with that approved in our previous determinations. Accordingly, our draft decision is to accept that the proposed $296 million of growth assets is the correct amount to be rolled into the RAB as at 1 April 2022.[62]

We have amended the proposed end of period reallocation for the 'Insulators' and the 'Instrument transformers' asset classes.[63] This does not change the overall value of the opening RAB as at 1 April 2022 as the amendment only changes the allocation of the value of these assets between asset classes.

We also consider the extent to which our roll forward of the RAB to 1 April 2022 contributes to the achievement of the capital expenditure incentive objective.[64] In the 2017–22 transmission determination, we noted that the 2015–16 and 2016–17 capex would form part of the review period for whether past capex should be excluded for inefficiency reasons in this transmission determination. The capex for 2017–2020 also forms part of the review period. Consistent with the requirements of the NER, we have excluded the last two years of the 2017–22 regulatory control period from the review of past capex for this transmission determination.[65] This approach ensures that actual capex (instead of estimated capex) is available when the review of past capex commences.

---

59 These projects cover approximately 95 per cent of the total value of the proposed growth assets.

60 This increase also incorporates our adjustment to the proposed true-up value for the difference between actual and forecast growth assets rolled in at the 2017–22 determination due to our draft decision update to the 2010–21 actual inflation and 2021–22 WACC.

61 AusNet Services, *Response to AER IR#010*, 22 February 2021.

62 Any difference between the estimated and the actual value of the growth asset rolled in for the 2022–27 regulatory control period will be trued-up at the next 2027–32 determination.

63 This relates to the accelerated depreciation of insulators and instrument transformer assets and our detailed reasons for this amendment are set out in section 4.4.2 of Attachment 4 of this draft decision.

64 NER, cll. 6A.14.2(b) and 6A.5A(a).

65 NER, cl. S6A.2.2A(a1).

AusNet Services' aggregated actual capex incurred from 2015–16 to 2019–20 is below the forecast allowance set at the previous transmission determinations. Therefore, the overspending requirement for an efficiency review of past capex is not satisfied.[66] For the reasons discussed in attachment 5, we consider the capex incurred in those years is consistent with the capital expenditure criteria and can therefore be included in the RAB.[67]

Further, for the purposes of this draft decision, we have included estimated capex for 2020–21 and 2021–22 in the RAB roll forward to 1 April 2022. At the next reset, the 2020–21 and 2021–22 capex will form part of the review period for assessing whether past capex should be excluded for inefficiency reasons.[68] Our RAB roll forward applies the incentive framework approved in the previous transmission determination, which included the use of a forecast depreciation approach in combination with the application of the capital expenditure sharing scheme (CESS).[69] As such, we consider that the 2017–22 RAB roll forward contributes to an opening RAB (as at 1 April 2022) that includes capex that reflects prudent and efficient costs, in accordance with the capital expenditure criteria.[70]

2.4.2 Forecast closing RAB at 31 March 2027

We forecast a closing RAB value of $3791.0 million by 31 March 2027 for AusNet Services, which represents a reduction of $101.2 million (or 2.6 per cent) to AusNet Services' proposal. This reduction reflects our draft decision on the inputs for determining the forecast RAB in the PTRM. Our draft decision used version 5 of the PTRM to forecast the closing RAB by 31 March 2027.[71] This new version of the PTRM was published after AusNet Services submitted its revenue proposal and gives effect to the changes set out in the AER's final position paper on the treatment of inflation in its regulatory framework.[72]

The change in the size of the RAB over the 2022–27 regulatory control period depends on our assessment of its various components including forecast capex (attachment 5), expected inflation (attachment 3) and forecast depreciation (attachment 4). Inflation and capex increase the RAB, while depreciation and disposals reduce it.

To determine the forecast RAB value for AusNet Services, we amended the following PTRM inputs:

---

66 NER, cl. S6A.2.2A(c).

67 NER, cl. S6A.2.2A(c).

68 Here, 'inefficiency' of past capex refers to three specific assessments (labelled the overspending, margin and capitalisation requirements) detailed in NER, cl. S6A.2.2A. The details of our ex post assessment approach for capex are set out in AER, *Capital expenditure incentive guideline*, November 2013, pp. 12–20.

69 AER, *AusNet Services transmission determination 2017–22, attachment 2,* April 2017, p. 14.

70 NER, cll. 6A.5A(a), 6A.6.7(c) and 6A.14.2(b).

71 AER, *Electricity transmission network service providers: Post-tax revenue model (version 5)*, 7 April 2021.

72 AER, *Final position: Regulatory treatment of inflation*, 17 December 2020, pp. 6–8.

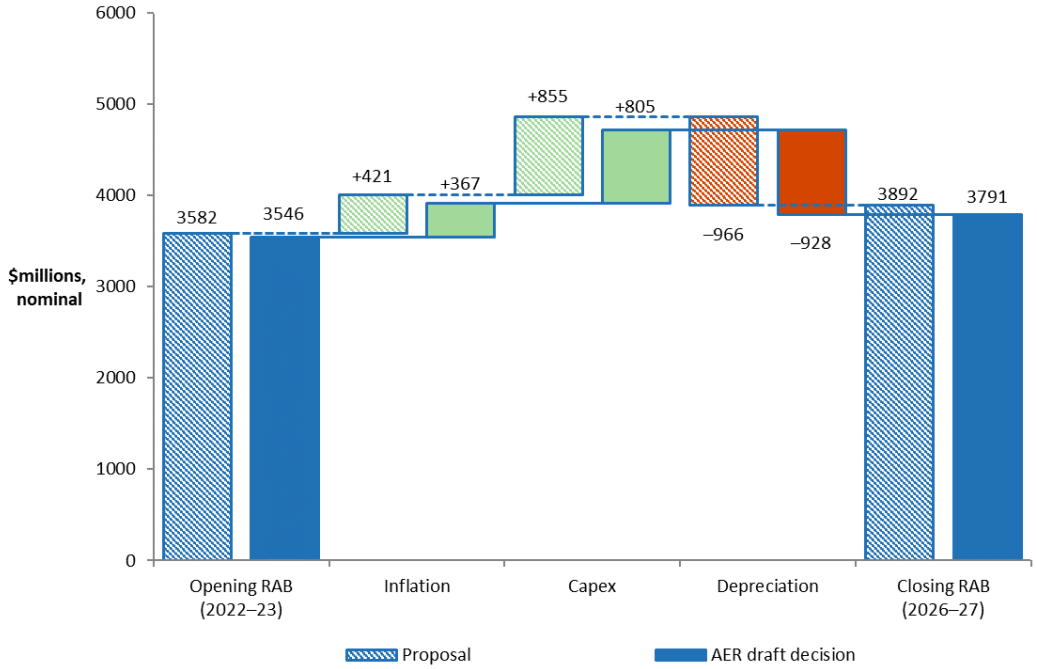
- we reduced AusNet Services' proposed opening RAB as at 1 April 2022 by $35.9 million ($nominal) or 1.0 per cent (section 2.4.1)
- we reduced AusNet Services' proposed forecast capex[73] for the 2022–27 regulatory control period by $50.1 million ($nominal) or 5.9 per cent (attachment 5)
- we updated AusNet Services' proposed expected inflation rate of 2.25 per cent per annum to 2.0 per cent per annum over the 2022–27 regulatory period (attachment 3). This results in a decrease to the indexation of the RAB component for the 2022–27 regulatory control period by $53.5 million or 12.7 per cent ($nominal), all else being equal[74]
- we reduced AusNet Services' proposed forecast straight-line depreciation for the 2022–27 regulatory control period by $38.4 million ($nominal) or 4.0 per cent (attachment 4).

Figure 2.2 shows the key drivers of the change in AusNet Services' RAB over the 2022–27 regulatory control period for this draft decision. Overall, the closing RAB at the end of the 2022–27 regulatory control period is forecast to be 6.9 per cent higher than the opening RAB at the start of that period, in nominal terms. The approved forecast net capex increases the RAB by 22.7 per cent, while expected inflation increases it by 10.4 per cent. Forecast depreciation, on the other hand, reduces the RAB by 26.2 per cent.

[73] As-incurred capex net of disposals and inclusive of half-year WACC adjustment.

[74] Compared to the proposal, our draft decision results in a decrease to the indexation of the RAB by $53.5 million or 12.7 per cent ($nominal). The decrease in the indexation to the RAB is largely due to the decrease in the inflation rate despite the lower opening RAB and lower forecast capex in our draft decision.

Figure 2.2 Key drivers of changes in the RAB – AusNet Services' proposal compared with AER's draft decision ($million, nominal)



Source: AER analysis.

Note: Capex is net of forecast disposals. It is inclusive of the half-year WACC to account for the timing assumptions in the PTRM.

2.4.3 Application of depreciation approach in RAB roll forward for next reset

We determine that the depreciation approach to be applied to establish AusNet Services' opening RAB at the commencement of the 2027–32 regulatory control period will be based on the depreciation schedules (straight-line) using forecast capex at the asset class level approved for the 2022–27 regulatory control period. We consider this approach will provide sufficient incentives for AusNet Services to achieve capex efficiency gains over the 2022–27 regulatory control period.[75]

AusNet Services has not specified in its proposal what depreciation approach to use in the roll forward of the RAB for the commencement of its 2027–32 regulatory control period. However, we consider that the forecast depreciation approach should be used to establish the opening RAB as at 1 April 2027. We note that this approach is consistent with our *Framework and approach*.[76]

[75] NER, cll. 6A.14.1(5E) and S6A.2.2B.

[76] AER, *Final framework and approach for AusNet Services 2022–27*, 24 April 2020, p. 20.

We have used forecast depreciation for this draft decision when rolling forward the opening RAB at the commencement of the 2022–27 regulatory control period (section 2.4.1). The use of forecast depreciation to establish the opening RAB for the commencement of the 2027–32 regulatory control period at the next reset therefore maintains the current approach.

As discussed in attachment 9, AusNet Services is currently subject to the CESS for the 2017–22 regulatory control period. We will continue to apply the CESS to AusNet Services over the 2022–27 regulatory control period. We consider that the CESS will provide sufficient incentives for AusNet Services to achieve capex efficiency gains over that period. We are satisfied that the use of a forecast depreciation approach in combination with the application of the CESS and our other ex post capex measures are sufficient to achieve the capex incentive objective.[77]

[77] Our ex post capex measures are set out in the capex incentives guideline, AER, *Capital expenditure incentive guideline for electricity network service providers*, November 2013, pp. 13–19, 20–21. The guideline also sets out how all our capex incentive measures are consistent with the capex incentive objective.

Shortened forms

Shortened form	Extended form
ABS	Australian Bureau of Statistics
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
capex	capital expenditure
CESS	capital expenditure sharing scheme
CPI	consumer price index
NER	national electricity rules
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RFM	roll forward model
TNSP	transmission network service provider
WACC	weighted average cost of capital