



**DRAFT DECISION**  
**Roma to Brisbane Gas Pipeline**  
**Access Arrangement**  
**2017 to 2022**

**Attachment 5 – Regulatory**  
**depreciation**

July 2017

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## Note

This attachment forms part of the AER's draft decision on the access arrangement for the Roma to Brisbane Gas Pipeline for 2017–22. It should be read with all other parts of the draft decision.

The draft decision includes the following documents:

Overview

Attachment 1 - Services covered by the access arrangement

Attachment 2 - Capital 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 carryover mechanism

Attachment 10 - Reference tariff setting

Attachment 11 - Reference tariff variation mechanism

Attachment 12 - Non-tariff components

Attachment 13 - Demand

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## Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
ATO	Australian Tax Office
capex	capital expenditure
CAPM	capital asset pricing model
CPI	consumer price index
DRP	debt risk premium
ECM	(Opex) Efficiency Carryover Mechanism
ERP	equity risk premium
Expenditure Guideline	Expenditure Forecast Assessment Guideline
gamma	Value of Imputation Credits
MRP	market risk premium
NGL	National Gas Law
NGO	national gas objective
NGR	National Gas Rules
NPV	net present value
opex	operating expenditure
PTRM	post-tax revenue model
RBA	Reserve Bank of Australia
RFM	roll forward model
RIN	regulatory information notice
RPP	revenue and pricing principles
SLCAPM	Sharpe-Lintner capital asset pricing model
STTM	Short Term Trading Market
TAB	Tax asset base
UAFG	Unaccounted for gas
WACC	weighted average cost of capital
WPI	Wage Price Index

## 5 Regulatory depreciation

When determining the total revenue for APTPPL for the Roma to Brisbane Pipeline (RBP), we include an allowance for the depreciation of the projected capital base (otherwise referred to as ‘return of capital’).<sup>1</sup> Regulatory depreciation is used to model the nominal asset values over the 2017–22 access arrangement period and the depreciation allowance in the total revenue requirement.<sup>2</sup>

This attachment outlines our draft decision on APTPPL’s annual regulatory depreciation allowance for the 2017–22 access arrangement period. Our consideration of specific matters that affect the estimate of regulatory depreciation is also outlined in this attachment. These include:

- the standard asset lives for depreciating new assets associated with forecast capex<sup>3</sup>
- the remaining asset lives for depreciating existing assets in the opening capital base.<sup>4</sup>

### 5.1 Draft decision

We accept APTPPL’s proposal to use the real straight-line method to calculate the regulatory depreciation allowance. However, we do not approve APTPPL’s proposed regulatory depreciation allowance of \$18.1 million (\$nominal) for the 2017–22 access arrangement period. This is mainly because of our decision to update APTPPL’s calculation of the remaining asset lives as at 1 July 2017 (section 5.4.3.2) and due to the effect of our determinations on other components of APTPPL’s proposal. Discussed in other attachments, these determinations include the opening capital base (attachment 2) and the forecast capex (attachment 6).

We approve APTPPL’s proposed asset classes and the standard asset lives assigned to each of its asset classes for the 2017–22 access arrangement period. This is because they are consistent with the approved standard asset lives for the 2012–17 access arrangement period. They are also broadly comparable with the standard asset lives approved in our recent decisions for other gas transmission service providers.<sup>5</sup>

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<sup>1</sup> NGR, r. 76(b).

<sup>2</sup> Regulatory depreciation allowance is the net total of the straight-line depreciation (negative) and the annual inflation indexation (positive) on the projected capital base.

<sup>3</sup> The term ‘standard asset life’ may also be referred to as ‘standard economic life’, ‘asset life’, ‘economic asset life’ or ‘economic life’.

<sup>4</sup> The term ‘remaining asset life’ may also be referred to as ‘remaining economic life’ or ‘remaining life’.

<sup>5</sup> For example, *AER: Access arrangement final decision APA GasNet Australia (Operations) Pty Ltd 2013–17 Part 2: Attachments*, March 2013, p. 149; *AER: Final decision Amadeus Gas Pipeline access arrangement attachment 5 — Regulatory depreciation*, May 2016, p. 9.

We accept APTPPL's proposed weighted average method to calculate the remaining asset lives as at 1 July 2017.<sup>6</sup> In accepting the weighted average method, we have updated the proposed remaining asset lives as at 1 July 2017 due to the input changes we made to APTPPL's proposed roll forward model (RFM). These input changes affect the remaining asset lives calculation and are discussed in section 5.4.3.2.

Our draft decision on APTPPL's regulatory depreciation allowance is \$19.9 million (\$nominal) in total for the 2017–22 access arrangement period as set out in table 5.1.

**Table 5.1 AER's draft decision on APTPPL's regulatory depreciation allowance for the 2017–22 access arrangement period (\$million, nominal)**

	2017–18	2018–19	2019–20	2020–21	2021–22	Total
Straight-line depreciation	16.6	17.9	18.7	12.8	10.9	76.9
Less: indexation on capital base	10.9	11.3	11.5	11.5	11.7	57.0
<b>Regulatory depreciation</b>	<b>5.7</b>	<b>6.6</b>	<b>7.1</b>	<b>1.3</b>	<b>-0.8</b>	<b>19.9</b>

Source: AER analysis.

## 5.2 APTPPL's proposal

APTPPL used the AER's post-tax revenue model (PTRM) to calculate the forecast depreciation for the 2017–22 access arrangement period. APTPPL proposed to use the weighted average approach as set out in the AER's roll forward model for calculating the remaining asset lives as at 1 July 2017.

APTPPL proposed to consolidate its asset classes from the previous 25 asset classes to 11 asset classes, which affected the pipelines and compressors asset classes. The previous asset classes were broken down by projects which resulted in multiple classes with similar asset types that were assigned the same standard asset lives. It also proposed to allocate the assets in the 'RBP expansion 8' asset class to the 'Pipelines' and 'Compressors' asset classes.

Table 5.2 shows the mapping of the previous asset classes with the proposed consolidated asset classes.

APTPPL's proposed regulatory depreciation for the 2017–22 access arrangement period is set out in table 5.3.

<sup>6</sup> We note that the capex determined in this draft decision for 2015–16 and 2016–17 are estimates. As part of the final decision, we expect the estimate of capex for 2015–16 to be replaced by actuals and the estimate of capex for 2016–17 may be revised based on more up to date information by RBP in its revised proposal. The capex values are used to calculate the weighted average remaining asset lives. Therefore, we may recalculate RBP's remaining asset lives using the method approved in this draft decision to reflect revisions to the 2015–16 and 2016–17 capex values for the final decision.

**Table 5.2 APTPPL proposed asset class consolidation**

Asset class in previous access arrangement period	Proposed asset class
Original pipeline	Original pipeline (DN250)
Looping 1	
Looping 2	
Looping 3	
Looping 4	
Looping 5	Pipelines
Looping 6	
Lateral	
Lytton lateral	
Pipelines/laterals	
Dalby Compressor	
Kogan compressor	
Oakey compressor	Compressors
Condamine compressor	
Yuleba compressor	
Gatton compressor	
Easements	Easements
Communications	Communications
Other	Other
Capitalised AA costs	Capitalised AA costs
Group IT	Group IT
SIB capex	SIB capex
PMA	PMA
Regulators and meters	Regulators and meters
RBP expansion 8	n/a

Source: APTPPL, *Access arrangement revision submission 2017–22*, September 2016, pp. 116 and 117.

**Table 5.3 APTPPL's proposed regulatory depreciation for the 2017–22 access arrangement period (\$million, nominal)**

	2017–18	2018–19	2019–20	2020–21	2021–22	Total
Straight-line depreciation	15.4	16.7	17.8	11.4	11.8	73.1
Less: indexation on capital base	9.0	9.4	12.0	12.1	12.3	55.0
<b>Regulatory depreciation</b>	<b>6.4</b>	<b>7.3</b>	<b>5.7</b>	<b>-0.7</b>	<b>-0.6</b>	<b>18.1</b>

Source: APTPPL, *Proposed PTRM*, September 2016.



## 5.3 AER's assessment approach

In its access arrangement proposal, APTPPL must provide a forecast of depreciation for the 2017–22 access arrangement period, including a demonstration of how the forecast is derived on the basis of the proposed depreciation method.<sup>7</sup>

The depreciation schedule sets out the basis on which the pipeline assets constituting the capital base are to be depreciated for the purpose of determining a reference tariff. The depreciation schedule may consist of a number of separate schedules, each relating to a particular asset or class of asset.<sup>8</sup> In making a decision on the proposed depreciation schedule, we assess the compliance of the proposed depreciation schedule with the depreciation criteria set out in the NGR.<sup>9</sup> We must also take into account the NGO and the revenue and pricing principles.<sup>10</sup>

Our discretion under the depreciation criteria is limited.<sup>11</sup> The depreciation criteria state that the depreciation schedule should be designed:

- so that reference tariffs will vary, over time, in a way that promotes efficient growth in the market for reference services<sup>12</sup>
- so that each asset or group of assets is depreciated over the economic life of that asset or group of assets<sup>13</sup>
- so as to allow, as far as reasonably practicable, for adjustment reflecting changes in the expected economic life of a particular asset, or a particular group of assets<sup>14</sup>
- so that (subject to the rules about capital redundancy), an asset is depreciated only once<sup>15</sup>
- so as to allow for the service provider's reasonable needs for cash flow to meet financing, non-capital and other costs.<sup>16</sup>

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<sup>7</sup> NGR, r. 72(1)(c)(ii).

<sup>8</sup> NGR, rr. 88(1), 88(2).

<sup>9</sup> NGR, r. 89.

<sup>10</sup> NGL, s 28; NGR r. 100(1). The NGO is set out in NGL, s. 23. The revenue and pricing principles are set out in NGL, s. 24.

<sup>11</sup> NGR, rr. 89(3) and 40(2). The example provided in r. 40(2) states: The AER has limited discretion under r. 89. Rule 89 governs the design of a depreciation schedule. In dealing with a full access arrangement submitted for its approval, the AER cannot, in its draft decision, insist on change to an aspect of a depreciation schedule governed by r. 89 unless the AER considers the change is necessary to correct non-compliance with a provision of the Law or an inconsistency between the depreciation schedule and the applicable criteria. Even though the AER might consider change desirable to achieve more complete conformity between the depreciation schedule and the principles and objectives of the Law, it would not be entitled to give effect to that view in the decision making process.

<sup>12</sup> NGR, r. 89(1)(a).

<sup>13</sup> NGR, r. 89(1)(b).

<sup>14</sup> NGR, r. 89(1)(c).

<sup>15</sup> NGR, r. 89(1)(d).

<sup>16</sup> NGR, r. 89(1)(e).

The depreciation criteria also provide that a substantial amount of depreciation may be deferred.<sup>17</sup>

The rules also require that any forecast must be arrived at on a reasonable basis and must represent the best forecast or estimate possible in the circumstances.<sup>18</sup>

The regulatory depreciation allowance is the net total of the real straight-line depreciation (negative) and the annual inflation indexation (positive) on the projected capital base. Our standard approach is to employ a straight-line method for calculating depreciation. We consider that the straight-line method satisfies the NGR's depreciation criteria.<sup>19</sup> This is because the straight-line method smooths changes in the reference tariffs, promotes efficient growth of the market, allows assets to be depreciated only once and over its economic life, and allows for a service provider's reasonable needs for cash flow.

In assessing APTPPL's proposed regulatory depreciation allowance, we have analysed APTPPL's proposed inputs to the PTRM for calculating depreciation for the 2017–22 access arrangement period. These inputs include:

- the opening capital base as at 1 July 2017
- the forecast net capex in the 2017–22 access arrangement period
- the forecast inflation rate for the 2017–22 access arrangement period
- the standard asset life for each asset class—used for calculating the depreciation of new assets associated with forecast net capex in the 2017–22 access arrangement period
- the remaining asset life for each asset class—used for calculating the depreciation of existing assets associated with the opening capital base as at 1 July 2017.

Our decisions affecting the first three inputs in the above list are discussed elsewhere: opening capital base (attachment 2), forecast inflation (attachment 3) and forecast net capex (attachment 6). Our decision on the required amendments to APTPPL's proposed regulatory depreciation allowance reflects our determinations on these building block components. Our assessment approach on the remaining two inputs in the above list is set out below.

In general, we consider that consistency in the standard asset life for each asset class across access arrangement periods will allow reference tariffs to vary smoothly over time. This will promote efficient growth in the market for reference services.<sup>20</sup> Our standard method for determining the remaining asset lives is the weighted average

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<sup>17</sup> NGR, r. 89(2).

<sup>18</sup> NGR, r. 74(2).

<sup>19</sup> NGR, r. 89.

<sup>20</sup> NGR, r. 89(1)(a).

method.<sup>21</sup> The weighted average method rolls forward the remaining asset life for an asset class from the beginning of the earlier access arrangement period. This method reflects the mix of assets within that asset class. It also reflects when the assets were acquired over that period and the remaining asset lives of existing assets at the end of that period. The remaining values of all assets are used as weights at the end of the period.<sup>22</sup> APTPPL's proposal has adopted the weighted average method to calculate its remaining asset lives at 1 July 2017.

### 5.3.1 Interrelationships

The regulatory depreciation allowance is a building block component of the annual building block revenue requirement.<sup>23</sup> Higher (or quicker) depreciation leads to higher revenues over the access arrangement period. It also causes the capital base to reduce more quickly (assuming no further capex). This reduces the return on capital allowance, although this impact is usually smaller than the increased depreciation allowance in the short to medium term.<sup>24</sup>

Ultimately, however, a service provider can only recover the capex it has incurred on assets once. The depreciation allowance reflects how quickly the capital base is being recovered and is based on the remaining and standard asset lives used in the depreciation calculation. It also depends on the level of the opening capital base and the forecast capex. Any increase in these factors also increases the depreciation allowance.

Our standard approach is to maintain the capital base in real terms, meaning the capital base is indexed for expected inflation. The return on capital building block has to be calculated using a nominal rate of return (WACC) applied to the opening capital base.<sup>25</sup> The total revenue requirement is calculated by adding up the return on capital, depreciation, opex, and tax building blocks. Because inflation on the capital base is accounted for in both the return on capital—based on a nominal rate—and the depreciation calculations—based on an indexed capital base—an adjustment must be made to the revenue requirement to prevent compensating twice for inflation.

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<sup>21</sup> We consider this depreciation method to be a generally superior approach. The reasons are outlined in our decision on the roll forward model for electricity transmission network service providers. See AER, *Explanatory statement, Proposed amendment, Electricity transmission network service providers, Roll forward model*, August 2010, pp. 5–6.

<sup>22</sup> See AER, *Final decision - amended transmission roll forward model*, December 2010, pp. 5–6 for further explanation.

<sup>23</sup> Under our standard approach, the distinction is made between straight-line depreciation and regulatory depreciation. The difference being that regulatory depreciation is the straight-line depreciation minus the indexation adjustment.

<sup>24</sup> This is generally the case because the reduction in the capital base amount feeds into the higher depreciation building block, whereas the reduced return on capital building block is proportionate to the lower capital base multiplied by the WACC.

<sup>25</sup> NGR, cl. 87(4)(b).

To avoid this double compensation, we make an adjustment by subtracting the annual indexation gain on the capital base from the calculation of total revenue. Our approach is to subtract the indexation of the opening capital base—the opening capital base multiplied by the expected inflation for the year—from the capital base depreciation. The net result of this calculation is referred to as regulatory depreciation.<sup>26</sup> Regulatory depreciation is the amount used in the building block calculation of total revenue to ensure that the revenue equation is consistent with the use of a capital base, which is indexed for inflation annually.

This approach produces the same total revenue requirement and capital base as if a real rate of return had been used in combination with an indexed capital base. Under an alternative approach where a nominal rate of return was used in combination with an un-indexed (historical cost) capital base, no adjustment to the depreciation calculation of total revenue would be required. This alternative approach produces a different time path of total revenue compared to our standard approach. In particular, overall revenues would be higher early in the asset's life (as a result of more depreciation being returned to the service provider) and lower in the future—producing a steeper downward sloping profile of total revenue.<sup>27</sup> Under both approaches, the total revenues being recovered are in present value neutral terms—that is, returning the initial cost of the capital base.

Figure 5.1 shows the recovery of revenue under both approaches using a simplified example.<sup>28</sup> Indexation of the capital base and the offsetting adjustment made to depreciation results in smoother revenue recovery profile over the life of an asset than if the capital base was un-indexed.

The relative size of the inflation indexation and straight-line depreciation, and their impact on the capital base using APTPPL's proposal is shown in the capital base attachment 2. A ten per cent increase in the straight-line depreciation causes revenues to increase by about three per cent.

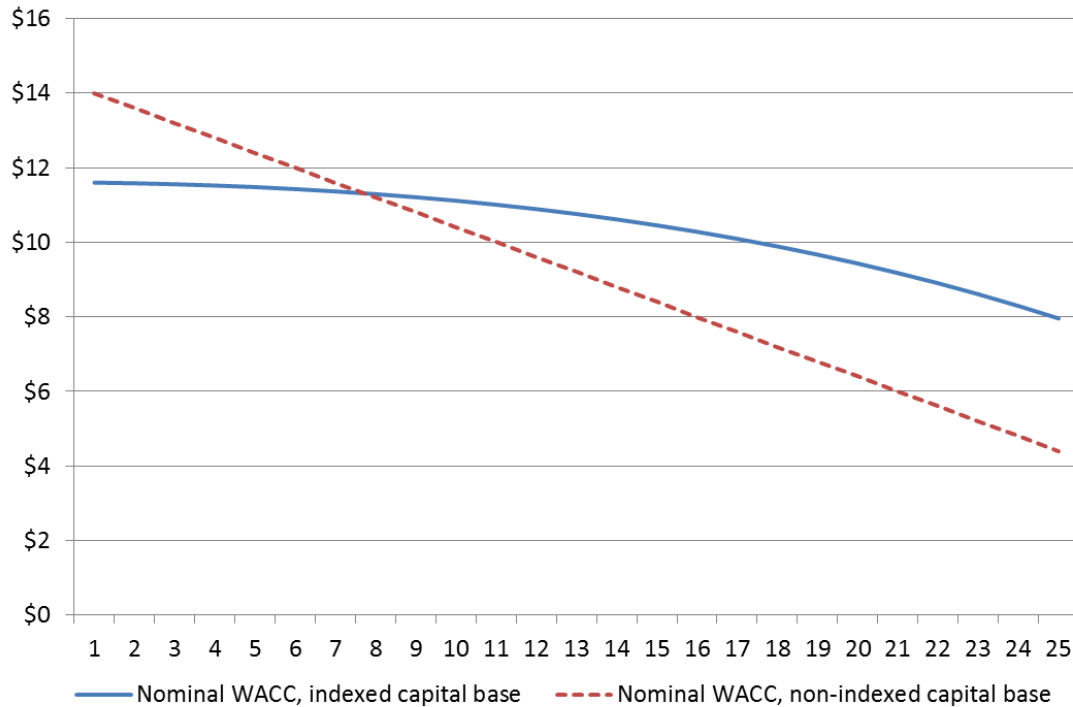
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<sup>26</sup> If the asset lives are extremely long, such that the capital base depreciation rate is lower than the inflation rate, then negative regulatory depreciation can emerge. The indexation adjustment is greater than the capital base depreciation in such circumstances

<sup>27</sup> A change of approach from an indexed capital base to an un-indexed capital base would result in an initial step change increase in revenues to preserve NPV neutrality.

<sup>28</sup> The example is based on the initial cost of an asset of \$100, a standard economic life of 25 years, a real WACC of 7.32%, expected inflation of 2.5% and nominal WACC of 10%. Other building block components such as opex, tax and capex are ignored for simplicity as they would affect both approaches equally.

**Figure 5.1 Revenue path example – indexed vs un-indexed capital base (\$ nominal)**



Source: AER analysis.

## 5.4 Reasons for draft decision

We accept APTPPL's proposed method to calculate the regulatory depreciation allowance which is the straight-line depreciation less the annual inflation indexation on the projected capital base. However, we do not approve APTPPL's proposed regulatory depreciation allowance of \$18.1 million (\$nominal). Our draft decision on APTPPL's regulatory depreciation allowance is \$19.9 million (\$nominal) over the 2017–22 access arrangement period, an increase of \$1.8 million (\$nominal) or 9.8 per cent compared to the proposed amount. This increase is made because of our decision to update APTPPL's calculation of its remaining asset lives (section 5.4.3.2) and also because of our amendments to other components of the proposal.

We accept APTPPL's proposed standard asset lives for its asset classes. We also accept APTPPL's proposed weighted average method to calculate the remaining asset lives as at 1 July 2017. In accepting the weighted average method, we have updated APTPPL's proposed remaining asset lives for each asset class.

Our determinations on other components of APTPPL's proposal also affect the calculation of the regulatory depreciation allowance.<sup>29</sup> These include:

- a reduction to APTPPL's forecast net capex of \$7.2 million (\$2016–17) or 10.7 per cent. Our detailed assessment of the proposed forecast capex allowance is set out in attachment 6.
- a decrease to the opening capital base as at 1 July 2017 of \$7.5 million (\$nominal) or 1.7 per cent. Our detailed assessment of the proposed opening capital base is set out in attachment 2.
- an increase to APTPPL's proposed forecast inflation. Our detailed assessment of the proposed forecast inflation is set out in attachment 3.

Table 5.4 sets out our draft decision on the standard and remaining asset lives as at 1 July 2017 for the RBP.

**Table 5.4 AER's draft decision on RBP's standard and remaining asset lives as at 1 July 2017 (years)**

	Standard asset life	Remaining asset life
Original pipeline (DN250)	n/a	34.3
Pipelines	80	65.2
Compressor	35	30.0
Regulators and meters	40	34.5
Easements	n/a	n/a
Communications	15	5.0
Other	5	n/a
Capitalised AA costs	5	4.9
Group IT	5	3.6
SIB capex	5	3.3
PMA	n/a	3.0
Redundant compressors <sup>a</sup>	n/a	2.9

Source: AER analysis.

n/a Not applicable.

- a. The purpose of this asset class is to fully depreciate the residual value of the redundant compressors over the 2017–22 access arrangement period. We did not assign a standard asset life to this asset class because no new capex will be allocated to this asset class for the 2017–22 access arrangement period.

<sup>29</sup> NGR, rr.88–90.

## 5.4.1 Asset class consolidation

We accept APTPPL's proposal to consolidate its asset classes to number 11 from the previous 25 asset classes. The proposed consolidation involves:

- merging five asset classes relating to compressor assets which were previously categorised based on different projects into one single 'Compressors' asset class
- merging nine asset classes relating to pipeline assets which were previously categorised based on different projects into one single 'Pipelines' asset class
- allocating the residual value of the 'RBP expansion 8 (RBP8)' asset class into the 'Pipelines' and 'Compressors' asset classes.

We consider the proposed consolidation for the multiple compressors and pipelines asset classes is reasonable as it eliminates duplication of asset classes for similar asset types. The proposed consolidation does not require changes to the existing approved standard asset lives for the 2012–17 access arrangement period because the standard asset lives for compressors and pipelines<sup>30</sup> across projects do not differ respectively.

We note that APTPPL has applied the consolidated asset classes from 1 July 2011—the commencement of the capital base roll forward period in the proposed RFM. In general, we consider the asset classes in the RFM should be consistent with the asset classes approved in the last access arrangement review, and any changes to the approved asset classes should be implemented from the start of the forthcoming access arrangement period. However, we note that APTPPL's proposal better aligns with the annual actual capex values for 2012–16 which have been reported under the consolidated asset classes. Our analysis also indicates that the proposal to start the asset class consolidation from 1 July 2011 does not have a material impact on the opening capital base and remaining asset life values as at 1 July 2017. For these reasons, we have allowed the consolidation of the asset classes to be implemented from 1 July 2011 in the RFM. However we have made several amendments in proposed RFM which have a consequential effect to the remaining asset lives as at 1 July 2017 of the consolidated asset classes. We discuss this further in section 5.4.3.2.

Also, we consider APTPPL's proposal to depreciate the residual value of the 'RBP8' asset class by the relevant asset types is reasonable. This is because the RBP8 project has now been completed and commissioned, and therefore there is no need to keep a separate asset class for this project going forward. However, as discussed in attachment 2, we do not agree with APTPPL's proposal to only allocate the residual value of the 'RBP8' asset class to the 'pipeline' and 'compressors' asset classes. This is because the asset types associated with the RBP8 project are related to the 'pipeline', 'compressor' and 'regulators and meters' asset classes as set out in our

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<sup>30</sup> All pipelines related asset classes have a standard asset life of 80 years, except for the 'Original pipeline' asset class which has a standard asset life of 60 years and is kept as a separate asset class with no new capex allocated to it.

2012–17 access arrangement decision. As discussed in attachment 2, we have amended the proposed allocation of the residual value of the 'RBP8' asset class in the RFM accordingly. This amendment also has an impact on the values of the remaining asset lives as at 1 July 2017 for the relevant asset classes.

### 5.4.2 Accelerated depreciation – redundant compressors

APTPPL proposed to accelerate the depreciation of certain redundant compressor assets. It has done so by altering the approved forecast depreciation schedule for the 'Original pipeline (DN250)' asset class, the 'Pipelines' and 'Compressors' asset classes in the capital base roll forward for the 2012–17 access arrangement period. We do not accept this approach because it does not comply with rule 89(1)(b) of the NGR. The proposed approach would allocate less depreciation to the 'Original pipeline (DN250)' and 'Pipelines' asset classes. The outcome of this approach would be to artificially increase the remaining asset lives of those asset classes going forward. We have therefore changed the proposed forecast depreciation allocated to these asset classes to be consistent with the approved amount for each asset class for the 2012–17 access arrangement period.

We consider that the accelerated depreciation of redundant compressors should be achieved in the 2017–22 access arrangement period. Therefore, we have created a separate 'Redundant compressors' asset class for the residual value of \$6.0 million as at 1 July 2017 to be fully depreciated in the 2017–22 access arrangement period. This approach recognises the compressor assets nearing the end of their useful life, and allows the newer compressor assets which have a much longer remaining asset life to be depreciated separately. Therefore, we consider this approach is consistent with the requirement of the NGR because it allows the redundant compressors and the newer compressors to be depreciated over their respective economic lives (as shown in Table 5.4 above).<sup>31</sup>

### 5.4.3 Asset lives

The straight-line depreciation component of regulatory depreciation is calculated by dividing the asset value for each asset class by its standard asset life (for new assets) or remaining asset life (for existing assets). Our draft decision on APTPPL's standard and remaining asset lives follows.

#### 5.4.3.1 Standard asset life

We accept APTPPL's proposed standard asset lives for its asset classes for the 2017–22 access arrangement period, because they are:

- consistent with our approved standard asset lives for the 2012–17 access arrangement period. As discussed in section 5.4.1, APTPPL's proposed asset

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<sup>31</sup> NGR, r. 89(1)(b).



class consolidation does not require any changes to the approved standard asset lives for the 2012–17 access arrangement period

- comparable with the standard asset lives approved in our recent determinations for other gas transmission service providers.<sup>32</sup> Table 5.5 shows that APTPPL's standard asset lives for key gas transmission asset types are comparable with that of APTNT and APA VTS.

Therefore, we are satisfied the proposed standard asset lives reflect the requirements of r. 89(1) of the NGR. Table 5.4 (above) sets out our draft decision on the standard asset lives for APTPPL over the 2017–22 access arrangement period.

**Table 5.5 Comparison of standard asset lives (years)**

	APTPL	APTNT	APA VTS
Pipelines	80	80	55
Compressor	35	30	30
Meters and regulators	40	50	30

Source: AER: *Access arrangement final decision APA GasNet Australia (Operations) Pty Ltd 2013–17 Part 2: Attachments*, March 2013, p.101 and AER: *Final decision Amadeus Gas Pipeline access arrangement attachment 5 — Regulatory depreciation*, May 2016, p. 9.

#### 5.4.3.2 Remaining asset lives

We accept APTPPL's proposed weighted average method to calculate the remaining asset lives as at 1 July 2017 for the RBP.<sup>33</sup> The proposed method is consistent with our preferred approach as discussed in section 5.3. In accepting the weighted average method, we have updated the proposed remaining asset lives as at 1 July 2017 because we made several changes in the proposed RFM which affect the calculation of the weighted average remaining asset lives. As discussed in attachment 2, these changes are:

- adding the opening capital base (as-commissioned) as at 1 July 2011
- reweighting the remaining asset life as at 1 September 2012 for the 'Pipelines', 'Compressors' and 'Regulators and meters' asset classes due to the reallocation of the residual value of the 'RBP8' asset class to these asset classes

<sup>32</sup> For example, AER: *Access arrangement final decision APA GasNet Australia (Operations) Pty Ltd 2013–17 Part 2: Attachments*, March 2013, p.101 and AER: *Final decision Amadeus Gas Pipeline access arrangement attachment 5 — Regulatory depreciation*, May 2016, p. 9.

<sup>33</sup> We note that the capex determined in this draft decision for 2015–16 and 2016–17 are estimates. As part of the final decision, we expect the estimate of capex for 2015–16 to be replaced by actuals and the estimate of capex for 2016–17 may be revised based on more up to date information by RBP in its revised proposal. The capex values are used to calculate the weighted average remaining asset lives. Therefore, we may recalculate RBP's remaining asset lives using the method approved in this draft decision to reflect revisions to the 2015–16 and 2016–17 capex values for the final decision.

- adding the forecast net capex (as-commissioned) and regulatory depreciation for 2011–12
- adding the actual capex (as-commissioned) for 2011–12 for the 'Pipelines' and 'Compressors' asset classes
- changing the proposed forecast depreciation for the compressors and pipelines asset classes to be consistent with the approved amount for these asset classes
- creating a separate asset class for depreciating the residual value of the redundant compressors (section 5.4.2).

Table 5.4 (above) sets out our draft decision on the remaining asset lives as at 1 July 2017 for APTPPL.

## 5.5 Revisions

We require the following revisions to make the access arrangement proposal acceptable:

Revision 5.1 Make all necessary amendments to reflect this draft decision on the regulatory depreciation allowance for the 2017–22 access arrangement period, as set out in Table 5.1.

Revision 5.2 Make all necessary amendments to reflect this draft decision on the remaining asset lives as at 1 July 2017, as set out in Table 5.4.