



# Final Determination

**Australian Rail Track Corporation's compliance with the Hunter Valley Coal Access Undertaking financial model for calendar year 2022**

November 2024

## **Acknowledgement of country**

The ACCC acknowledges the traditional owners and custodians of Country throughout Australia and recognises their continuing connection to the land, sea and community. We pay our respects to them and their cultures; and to their Elders past, present and future.

Australian Competition and Consumer Commission  
23 Marcus Clarke Street, Canberra, Australian Capital Territory, 2601

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# Executive summary

The Hunter Valley Coal Network Access Undertaking (the Undertaking) provides for the Australian Competition and Consumer Commission (ACCC) to undertake an annual assessment of the Australian Rail Track Corporation's (ARTC's) compliance with the financial model set out in the Undertaking.<sup>1</sup>

At its core, the financial model dictates the minimum (floor) and maximum (ceiling) amount of Access revenue ARTC can recover from Access Holders in the Constrained Network (currently Zones 1 and 2 in 2022) and Zone 3 (in 2022).<sup>2</sup> The Undertaking outlines the calculation of the Regulatory Asset Base (RAB) Floor Limit for the Constrained Network and Zone 3.<sup>3</sup> It also stipulates that a separate RAB must be calculated for Zone 3 to account for loss capitalisation.

The Undertaking requires that only Prudent Capital Expenditure is included in the RAB Floor Limit and RAB, and that only Efficient operating expenditure is recovered from Access Holders.<sup>4</sup> The ACCC must assess whether ARTC has undertaken all these calculations correctly in an annual compliance assessment. We must also assess whether ARTC's true up tests for the year (which considers whether there was sufficient capacity on the network to meet contractual requirements) meet the requirements of the Undertaking.

The ACCC has undertaken this assessment for the 2022 calendar year and determined that:

- ARTC incurred net capital expenditure of \$109.2 million in accordance with the Undertaking and this expenditure can be included in the asset bases for the Constrained Network and Zone 3
- ARTC incurred Efficient operating expenditure of \$214.8 million
- ARTC under-recovered revenue of \$17.9 million from Constrained Coal Customers
- the closing Zone 3 loss capitalisation balance at the end of the year was negative \$40.0 million
- ARTC has rolled forward the RAB and RAB Floor Limit in accordance with the Undertaking
- the submitted true up test audit was undertaken in accordance with the Undertaking.<sup>5</sup>

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<sup>1</sup> The Hunter Valley Coal Network Access Undertaking is also referred to as the 'HVAU'. All references to the Undertaking in this determination are to version 8, unless stated otherwise.

<sup>2</sup> All capitalised terms in this determination are defined in version 8 of the Undertaking, unless stated otherwise. Some definitions and explanations are included in footnotes where appropriate.

<sup>3</sup> The RAB Floor Limit in the Undertaking is the more traditional type of asset base used in building block models for other industries, where it is known just as the 'RAB'.

<sup>4</sup> The terms 'Prudent' and 'Efficient' are defined in section 14.1 of the Undertaking.

<sup>5</sup> Values in this determination are in nominal dollars, unless stated otherwise. Historical expenditures for multiple years are shown as real values in \$2022.

# Summary of compliance

Table 1 shows the ACCC’s findings under the Undertaking for the annual compliance assessment, the relevant chapters of this final determination for those requirements and a summary of the ACCC’s assessment for 2022.

**Table 1: Key annual compliance obligations**

Undertaking Section	Obligation	Final Determination Chapter/Section	ACCC assessment for 2022
4J.10(d)(i)	Determine whether ARTC has undertaken the <b>roll forward of the RAB</b> in accordance with the Undertaking (and if ARTC has not undertaken this in accordance with the Undertaking, determine what the closing RAB should be).	Section 5.2 (Zone 3)	ARTC <b>has</b> undertaken the roll forward of the RAB in accordance with the Undertaking.  The closing RAB is: \$703,557,405
4J.10(d)(i)	Determine whether ARTC has undertaken the <b>roll forward of the RAB Floor Limit</b> in accordance with the Undertaking (and if it has not undertaken in accordance with the Undertaking, determine what the closing RAB Floor Limit should be).	Section 4.1 (Constrained Network)  Section 5.1 (Zone 3)	ARTC <b>has</b> undertaken the roll forward of the RAB Floor Limit in accordance with the Undertaking, resulting in closing values of:  Constrained Network: \$1,532,470,800  Zone 3: \$743,578,468
4J.10(d)(ii)	Determine whether ARTC has <b>undertaken calculations relevant to reconciliation of Access revenue with the applicable Ceiling Limit</b> in accordance with the Undertaking.	Section 4.2	ARTC <b>has</b> calculated the reconciliation of Access revenue and the applicable Ceiling Limit for the Constrained Network in accordance with the Undertaking.  Access revenue: \$252,651,180  Applicable Ceiling Limit: \$270,537,604
4J.10(d)(ii)	Determine whether ARTC has <b>undertaken calculations of any allocation of the total unders and overs amount</b> in accordance with the Undertaking (and where calculations are not in accordance with the Undertaking, determine what the total unders and overs amount allocation should be).	Section 4.3	ARTC <b>has</b> calculated the allocation of the total unders amount for the Constrained Network for 2022 in accordance with the Undertaking.  <b>Under recovery</b> from Constrained Network Access Holders: \$17,886,424

4.34J.10(d)(iii)	In determining <b>whether ARTC has complied with the provisions of section 4J.4 in rolling forward the RAB and RAB Floor Limit</b> , the ACCC may have regard to industry submissions. If Capital Expenditure or Capital Allocations have been endorsed by the Rail Capacity Group, then the ACCC will not consider whether the Capital Expenditure is Prudent or review the Capital Allocations.	Chapter 2	ARTC <b>has</b> incorporated Capital Expenditure and/or Capital Allocations into the roll forward of the RAB and RAB Floor Limit in accordance with the Undertaking.  Net capital expenditure: \$109,227,665
4J.10(e)	Determine whether ARTC has <b>incurred Efficient costs and Efficient operating expenditure</b> , in accordance with section 4J.5(b), and determine the change (if any) to the total unders and overs amount and the closing RAB and RAB Floor Limit in section 4J.4, that results from Economic Cost under section 4J.5(a) only including Efficient costs and Efficient operating expenditure determined in accordance with section 4J.5(b).	Chapter 3	ARTC <b>has</b> incurred Efficient costs and Efficient operating expenditure in accordance with section 4J.5(b) for 2022. No change is required for the total unders and overs amount or allocation and the closing RAB and RAB Floor Limit.  Efficient operating expenditure:  Constrained Network: \$139,882,253 Zone 3: \$67,795,582
4.10A(k)	Review the <b>final audit report</b> for the annual true up test undertaken by an independent auditor.  Decide, and notify ARTC of, <b>any amounts of underpayment of rebates</b> that are owing to Access Holders or amounts of overpayment of rebates ARTC is entitled to recover.	Chapter 6	The annual true up test <b>was</b> undertaken by an independent auditor (Grant Thornton).  There was no underpayment or overpayment of rebates.

# 1. Introduction

This determination relates to ARTC's compliance with the financial requirements set out in the Undertaking for the 2022 calendar year. The Undertaking is a voluntary access undertaking given to the ACCC by ARTC, pursuant to Part IIIA of the *Competition and Consumer Act 2010* (Cth) (the Act). It provides for the regulation of access and pricing for ARTC's Hunter Valley rail network.

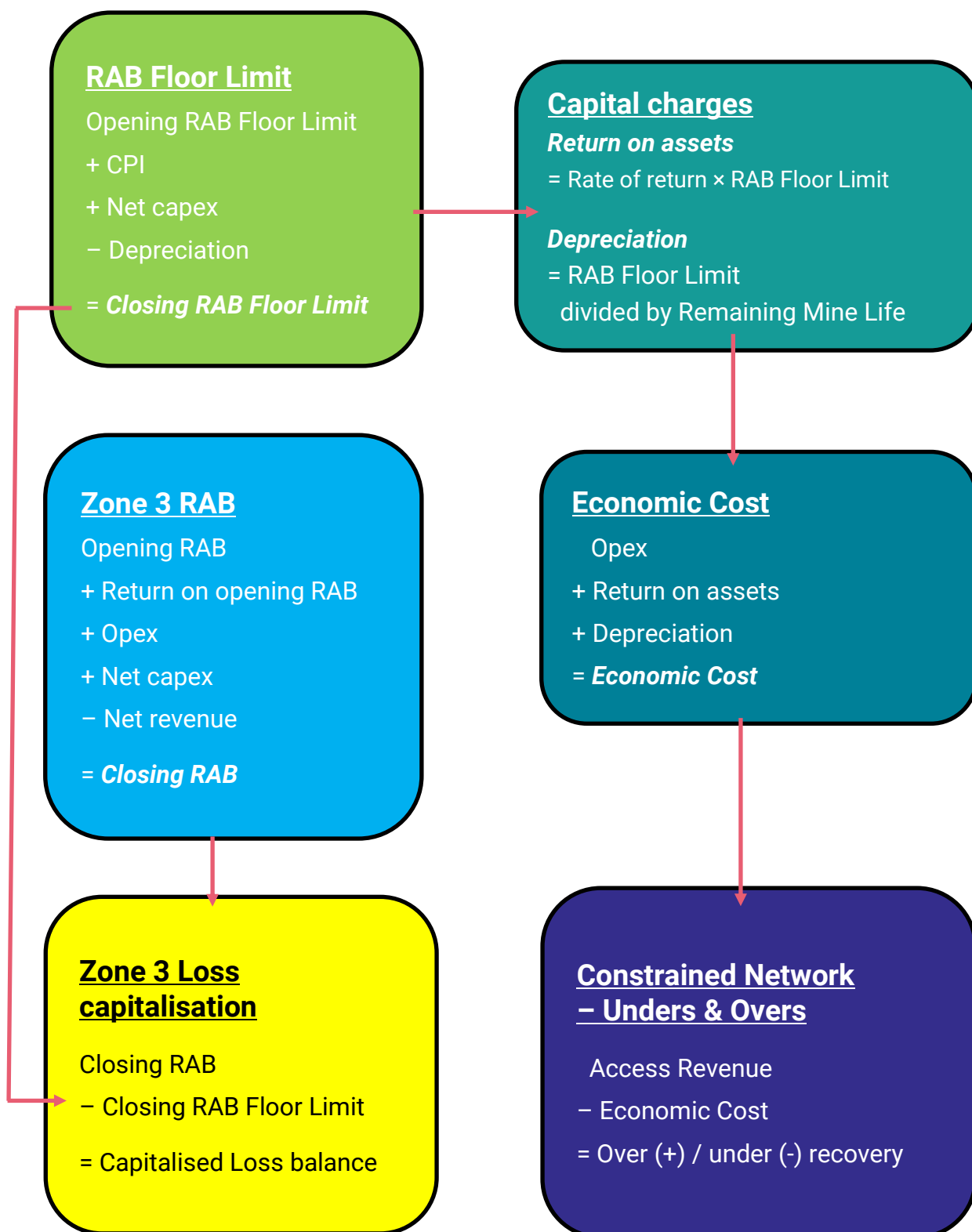
## 1.1. Financial model

Section 4J, which is contained in Schedule J of the Undertaking, sets out the Access Pricing Principles for 2022 and prescribes key requirements for ARTC's financial model for customers covered by the Undertaking. It includes requirements for how ARTC's allowable revenue and charges are calculated and reconciled to recover the Efficient costs of providing its rail services. Figure 1 (see overleaf) provides an overview of the relationships between the main variables in the financial model.

A full explanation of the financial model is provided in chapter 2 of the accompanying *Hunter Valley Coal Network Access Undertaking annual compliance – Background and ACCC approach* document (Background Document).



Figure 1: Financial model – relationship between components



## 1.2. ARTC's 2022 compliance submission

### 1.2.1. Consultation

On 21 May 2024 the ACCC published a consultation paper inviting comments from interested parties on ARTC's 2022 annual compliance documentation. The ACCC received one submission, from the Hunter Rail Access Task Force (the Task Force),<sup>6</sup> which we published on our website on 18 July 2024. The Task Force's submission can be found [here](#).

During our assessment, we issued 3 information request questions to ARTC. ARTC provided public responses to all of our questions, which are available [here](#).

### 1.2.2. Transparency of financial models

ARTC submitted its financial model and its overhead cost allocation model to the ACCC on a confidential basis, as it has done for previous compliance processes. The financial model details the calculations of costs and revenue, and outcomes for the unders and overs and loss capitalisation processes.

The Task Force has previously raised concerns about the lack of transparency over the model in the 2018 to 2020 annual compliance processes.

In its submission to the 2022 annual compliance process, the Task Force considered that lack of access to ARTC's financial model is constraining its ability to participate in the annual compliance process. The Task Force noted:

*In particular, the HRATF is limited in its ability test the efficiency and prudence of ARTC's expenditure, and the appropriateness of its cost allocation methods. This is part due to limitations on the information and modelling that can be shared by ARTC with users. The industry therefore remains substantially reliant upon the ACCC to test prudence and efficiency of operating expenditure in particular, and compliance with the financial model more generally.<sup>7</sup>*

Although the ARTC offers workshops to users to increase transparency, they are not as comprehensive as providing the financial models in full to users. The ACCC considers that disclosing the full models, on an appropriately anonymised basis, would enable users to fully engage with the process. We note that it is now the norm in several other regulated industries to publish such models, including in gas distribution and broadband.

The ACCC will be engaging ARTC with a view to providing customers and access holders with further transparency of its operating expenditure and revenue models, including the potential for greater publication.

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<sup>6</sup> The Task Force is the representative body for coal producers in the Hunter Valley.

<sup>7</sup> <https://www.accc.gov.au/by-industry/rail-shipping-and-ports/hunter-valley-rail-network-access-undertaking/hunter-valley-rail-network-annual-compliance-assessment-2022/accc-consultation-paper>

## 2. Prudence of Capital Expenditure

ARTC's net capital expenditure for the Hunter Valley network is the sum of Expansion Capital (major capital), Sustaining Capital (minor/corridor capital) and interest incurred during construction, less the written down value of disposals.

If the ACCC determines that ARTC has incurred net capital expenditure in accordance with the Undertaking, then this expenditure is included in the RAB Floor Limit for the Constrained Network and the RAB and RAB Floor Limit for Zone 3. Further, the Incremental Capital Cost portion of Capital Expenditure is included in the Floor Contribution for each Pricing Zone. Further information on the ACCC's approach to assessing ARTC's Capital Expenditure can be found in chapter 3 of the Background Document.

ARTC reported net capital expenditure of \$109.2 million for 2022, derived from:

- Sustaining Capital expenditure totalling \$120.3 million
- no Expansion Capital
- no interest during construction
- written down value of disposals of \$11.0 million.

The ACCC is satisfied that the Rail Capacity Group (RCG) endorsed ARTC's Sustaining Capital expenditure for 2022 and it is appropriate for ARTC to include:

- its net capital expenditure for the Constrained Network of \$83 million in the RAB Floor Limit for the Constrained Network
- its net capital expenditure for Zone 3 of \$24.5 million in the RAB and RAB Floor Limit for Zone 3.<sup>8</sup>

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<sup>8</sup> The inclusion of net capital expenditure for the Constrained Network and Zone 3 is shown in Chapters 4 and 5 respectively.

## 2.1. Net capital expenditure

Table 2 shows that ARTC’s net capital expenditure for the Hunter Valley network was \$109.2 million in 2022 (compared to \$59.4 million in 2021).

**Table 2: Net capital expenditure (nominal \$), 2021, 2022**

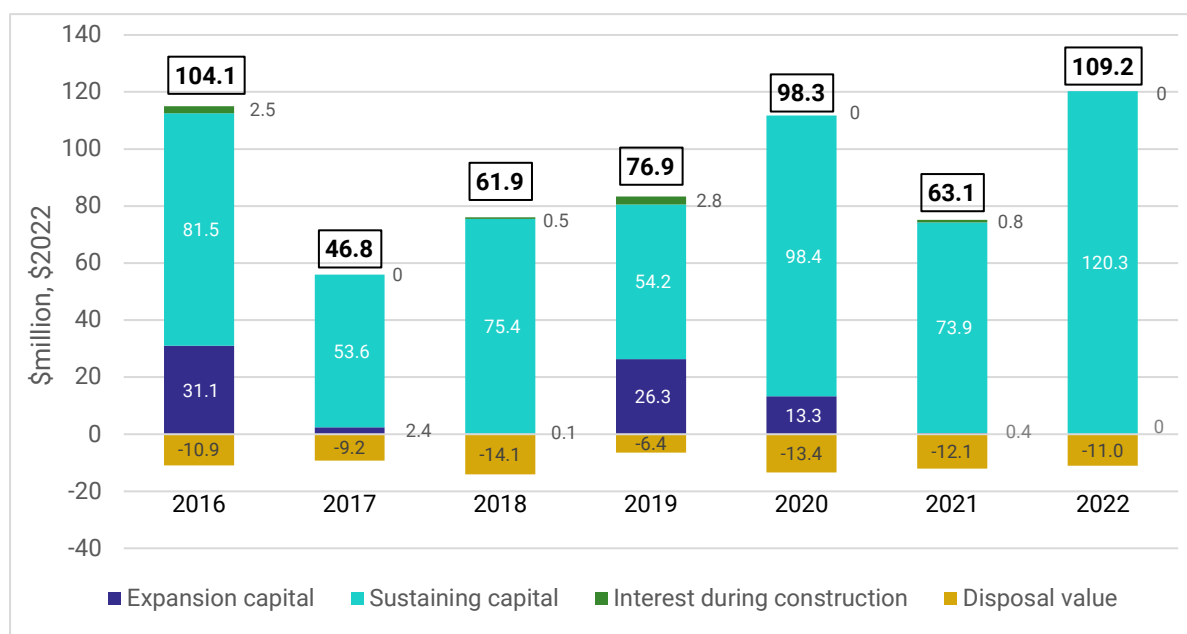
Category	2021	2022
Expansion Capital	0.4	-
Sustaining Capital	69.6	120.3
Interest during construction	0.8	-
Disposal value	(11.4)	(11.0)
<b>Net capital expenditure</b>	<b>59.4</b>	<b>109.2</b>

Source: ARTC, Hunter Valley Coal Network Access Undertaking – 2022 Compliance Assessment Submission (2022 Main Submission), 27 March 2024, p 15.

Notes: In this determination, numbers in brackets denote negative values. Rounding may also affect totals.

From 2016 to 2022 the majority of ARTC’s net capital expenditure comprised Sustaining Capital (see Figure 1). This reflects users’ interest in optimising existing network infrastructure rather than expanding the network. As shown in Figure 2, in 2022 net capital expenditure reached its highest annual level in real terms since 2015.

**Figure 2: Net capital expenditure by component (real \$2022), 2016 to 2022**



Source: ACCC calculations based on ACCC, Final Determination, 2016 to 2021; Australian Bureau of Statistics (ABS) Consumer Price Index (CPI) data; ARTC, Submission – Main Submission, 27 March 2024, pp 15, confidential models for 2022.

Note: The number in the box above each bar represents total net capital expenditure for the year.

ARTC reported that the significant increase in expenditure in 2022 can be attributed to the commissioning of the Muscle Creek and Hunter River Bridge at a cost of \$41.1 million.<sup>9</sup>

## 2.2. Expansion Capital

Expansion Capital relates to Projects that create Additional Capacity in the Network. ARTC did not submit any expansion capital projects in 2022.

## 2.3. Sustaining Capital

The Undertaking defines Sustaining Capital as Capital Expenditure that is not Expansion Capital. Sustaining Capital typically relates to ongoing annual programs for asset replacement, cost reduction or safety-related projects.<sup>10</sup> Sustaining capital comprises mostly minor projects but may also include major asset renewals.<sup>11</sup>

Pursuant to section 9.1(e)(ii) of the Undertaking, where ARTC considers a project is minor in scope or cost, it will consult on the group of minor projects, rather than each project individually. ARTC submits a program of Sustaining Capital projects to the RCG for review and endorsement, generally for a range of purposes in a particular zone or a particular activity, such as re-railing. ARTC adopts this approach because the Sustaining Capital program is typically subject to a greater degree of variation at the project level than the Expansion Capital program.<sup>12</sup>

ARTC submitted Sustaining Capital expenditure of \$120.3 million in 2022 (compared to \$69.6 million in 2021). Key Sustaining Capital projects that were commissioned in 2022 included:

- Muscle Creek and Hunter River Bridge (the second part of the Muswellbrook Bridge Replacement Project in Zone 1) - \$41.1 million, with an additional \$1.3 million post-commissioning expenditure on the Bridge Street Bridge commissioned in 2021. RCG endorsed the project in 2019 to improve network reliability of the three ageing bridges.<sup>13</sup>
- Singleton Yard Track Formation Project - \$5.1 million
- Watermark Track Reconstruction Project - \$5.0 million
- Murrulla Creek Bridge Replacement Project - \$4.4 million.<sup>14</sup>

Expenditure on many of the individual Sustaining Capital projects exceeded their original budget estimate. This was partly due to unexpected increases in tendering package costs, which averaged 14-19% across 2022.<sup>15</sup> Common reasons for overspending were inflationary pressure on input prices, wet weather causing deferrals and additional closedowns, and revisions of scope following on-site reassessment.

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<sup>9</sup> ARTC, Hunter Valley Coal Network Access Undertaking 2022 Annual Compliance Assessment, Attachment 2: Capital consultation (2022 Submission – Att. 2: Capital consultation), 27 March 2024, p. 7.

<sup>10</sup> Section 9.1(b) of the Undertaking.

<sup>11</sup> ARTC, 2022 Submission – Att. 2: Capital consultation, p. 5.

<sup>12</sup> ARTC, 2022 Submission – Att. 2: Capital consultation, p. 3.

<sup>13</sup> ARTC, 2022 Submission – Att. 2: Capital consultation, p. 7; ARTC, 2022 Main Submission, Appendix C, p. 41.

<sup>14</sup> ARTC capital expenditure documents (confidential).

<sup>15</sup> ARTC, 2022 Submission – Att. 2: Capital consultation, p. 2.

ARTC adapted to the increased costs by reforecasting its 2022 program and obtaining endorsement for increased budgets. Following a reassessment of its programs, ARTC cancelled several projects during the year, amounting to a reduction in expenditure of \$15.5 million.<sup>16</sup> One minor over-spend of \$68,000 relating to turnout renewal at Sandy Hollow was not specifically endorsed by the RCG. However, the ACCC sees no reason this expenditure would not be Prudent in the context of the overall project cost, particularly given the RCG had previously endorsed a relatively much larger increase in that project's cost.

Overall, the overspends were more than offset by underspends on other projects in each zone's program. ARTC informed the RCG and obtained RCG endorsement for variations to accommodate extra spending, keeping expenditure at a program level within revised budgets.

The ACCC is satisfied that ARTC's sustaining capital expenditure included in its 2022 submission was within the revised budgets and endorsed by the RCG.<sup>17</sup> Accordingly the Undertaking provides that the ACCC does not consider whether the Sustaining Capital expenditure is Prudent.<sup>18</sup>

## 2.4. Interest during construction

Pursuant to section 9.6(e)(ii) of the Undertaking, interest incurred during construction of a stage in a capital project will be deemed Prudent at the date of completion of that stage where the following criteria have been met:

- the delivery timeframe for the project is more than 12 months
- the RCG consents to a staged delivery of the project
- the stage has been completed.

ARTC reported nil interest during construction in 2022.

## 2.5. Written down value of disposals

The written down value of disposals is removed from the asset base in the disposal year.<sup>19</sup> ARTC submitted that the written down value of disposals was \$11.0 million in 2022, compared to \$11.4 million in 2021. Disposals in 2022 were primarily due to rerailing, turnout renewals and track strengthening activities across the network.<sup>20</sup>

We understand that ARTC's disposals in 2022 were a necessary consequence of Sustaining Capital projects that have been approved by the RCG. The ACCC accepts that ARTC's treatment of disposals is consistent with the Undertaking.

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<sup>16</sup> ARTC, *Sustaining Capital Reconciliation Cost Report, December 2022* - Hunter Valley (confidential), p 4.

<sup>17</sup> RCG endorsement dates and numbers are shown in Appendix C of ARTC's 2022 Main Submission, with further detail contained in confidential documents provided to the ACCC. As noted in the text, one very minor overspend was not specifically endorsed by RCG.

<sup>18</sup> Section 4J.10(d)(iii) of the Undertaking.

<sup>19</sup> Under section 4.4 of the Undertaking, the written down value of any disposals is deducted from 'out turn Capital Expenditure', including interest cost incurred during construction, to derive Net Capex, that is, net capital expenditure.

<sup>20</sup> ARTC, *2022 Main Submission*, p. 22.

## 2.6. ACCC capital expenditure determination for 2022

ARTC has demonstrated that the Sustaining Capital projects included in its 2022 expenditure are part of programs endorsed by the RCG in recent years. Furthermore, ARTC has treated the disposals in accordance with the Undertaking.

It is therefore appropriate for ARTC to include:

- its net capital expenditure for the Constrained Network in the RAB Floor Limit for the Constrained Network
- its net capital expenditure for Zone 3 in the RAB and RAB Floor Limit for Zone 3.

### 3. Efficiency of operating expenditure

Section 4J.10(e) of the Undertaking requires the ACCC to determine whether ARTC has incurred Efficient operating expenditure in accordance with section 4J.5(b) of the Undertaking. If ARTC's operating expenditure is Efficient in accordance with that, then:

- the costs are included in the Ceiling Limit for the Constrained Network
- the costs are included in the RAB for Zone 3
- the Variable Maintenance Cost portion of operating expenditure is included in the Floor Contribution for each Pricing Zone.

ARTC's operating expenditure increased from \$211.4 million in 2021 to \$214.8 million for coal customers for 2022, which was a fall in real terms of 4.2% after accounting for the unusually high inflation rate of 6.1% in 2022. Expenditure in all categories except network control fell in real terms, in particular, business unit management costs by 10.8% and expensed project costs by 53.3%.

Maintenance expenditure was \$124.7 million in 2022 compared with \$119.0 million in 2021, a fall of 1.2% in real terms. ARTC provided a Maintenance Plan (the Plan) for 2022, the first such plan required under the HVAU. Actual maintenance expenditure was only 0.3% above the Plan's total forecast expenditure for 2022, although there was considerable variability between the Plan and actual expenditure for individual maintenance activities. For example, expenditure on Ballast Undercutting was greater than the Plan by 42.3% while expenditure on Rail Defect Removal was less than the Plan by 28.8% in real terms.

The changes in overall expenditure compared to the Plan and compared to the previous year were relatively small despite challenges reported by ARTC including the ongoing scarcity of specialised rail workers, high inflation, and severe weather events. Reductions in the scope of work through reprioritisation and reductions in unit rates for inputs for some activities helped to offset these factors.

Considering the evidence submitted, the ACCC accepts that ARTC's operating expenditure for 2022 is Efficient and therefore appropriate to include this expenditure in the Ceiling Limit, RAB, and Floor Contribution calculations.



## 3.1. Overview of operating expenditure

Table 3 shows that ARTC's operating expenditure increased from \$211.4 million to \$214.8 million for coal customers for 2022, which was a fall in real terms of 4.2%.<sup>21</sup>

**Table 3: Overview of total operating expenditure (nominal \$'000), 2021 and 2022**

Category	2021	2022	% Change from 2021 to 2022 - Nominal	% Change from 2021 to 2022 - Real
Infrastructure maintenance (whole network)	119,012	124,702	5%	-1%
Business unit management	40,534	38,347	-5%	-11%
Corporate overheads	24,930	26,099	5%	-1%
Network control	19,919	21,244	7%	1%
Net loss on disposals	10,135	9,748	-4%	-9%
Expensed project costs	4,437	2,200	-50%	-53%
less non-coal opex	7,555	7,539	0%	-6%
<b>Operating Expenditure - coal</b>	<b>211,413</b>	<b>214,800</b>	<b>1.6%</b>	<b>-4.2%</b>

Source: ACCC calculations based on ARTC, [Hunter Valley Coal Network Access Undertaking – 2022 Annual Compliance Assessment, Attachment 1: Hunter Valley Network Operating Costs](#) (2022 submission – Att. 1: Operating costs), 11 April 2024, p. 6; and ARTC, confidential model for 2022.

Notes: Opex attributed to the Constrained Network and Zone 3 RAB is shown in chapters 4 and 5 respectively. Network costs are allocated between coal and non-coal users according to drivers such as GTKs and Direct Stay in Business costs allocators.

Table 3 shows that the 3 largest categories of ARTC's operating expenditure in 2022 were infrastructure maintenance, business unit management and corporate overheads. Expenditure in all categories except network control fell in real terms – in particular, business unit management costs by 11% and expensed project costs<sup>22</sup> by 53%.<sup>23</sup>

In 2022 ARTC's operating expenditure for the Constrained Network was \$139.9 million, while operating expenditure for Zone 3 was \$67.8 million.<sup>24</sup> The ACCC's assessment of ARTC's operating expenditure considers changes in operating expenditure in real terms over time, changes in volume and other drivers, such as environmental factors.

## 3.2. Total operating expenditure

Figure 3 below shows that ARTC's total real operating expenditure fell for the second consecutive year in real terms and in 2022 was at its lowest in five years.

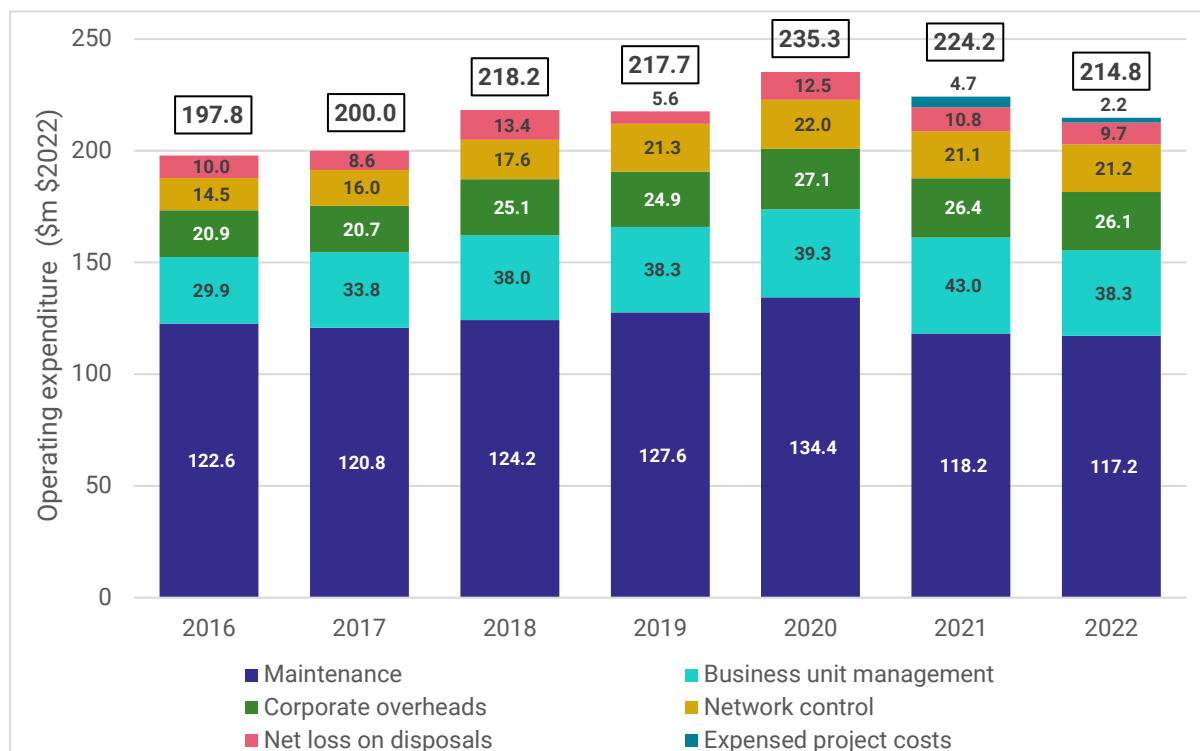
<sup>21</sup> This is based on an increase in the average CPI from 2021 to 2022 of 6.1%, with the average for each year estimated from the 4 quarterly index values in the calendar year.

<sup>22</sup> Expensed projects are the cost attributable to capital projects that have been identified as no longer being required. The amount expensed represents the value of work in progress up to the point at which the project was suspended.

<sup>23</sup> ACCC calculations based on ARTC, (2022 submission – Att. 1: Operating costs), 11 April 2024, p. 6; and ARTC, confidential model for 2022.

<sup>24</sup> ARTC, 2022 Main Submission, p. 12 and 25.

**Figure 3: Total operating expenditure by cost category (real \$2022), 2016 to 2022**



Source: ACCC, *Final Determination, 2016 to 2021*; ARTC, *Hunter Valley Coal Network Access Undertaking – 2022 Compliance Assessment Submission (Att 1 Network Operating Costs)*, 27 March 2024.

Note: The number at the top of each column is the total operating expenditure allocated to coal traffic in the Hunter Valley for the year.

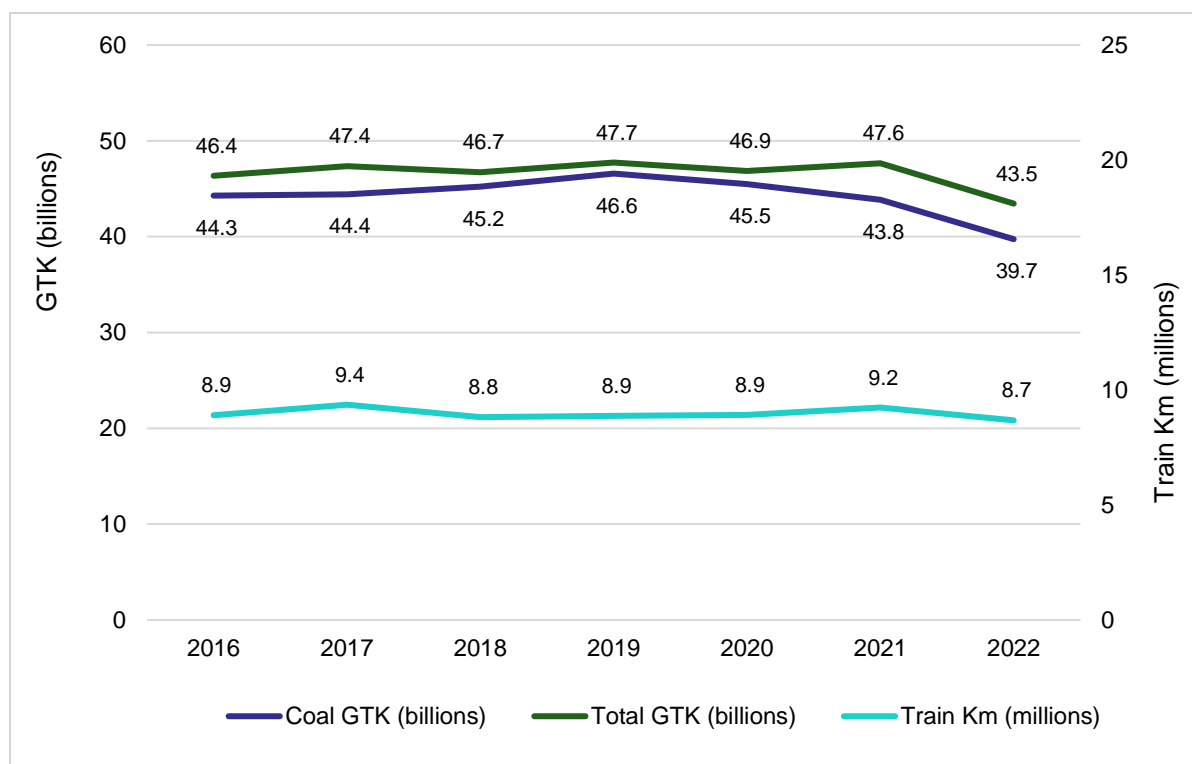
Operating volumes are measured in 2 ways:

- Gross Tonne Kilometres (GTKs), which is the gross tonnes of coal carried multiplied by the number of kilometres travelled on the network
- Train Kilometres (Train Kms), which is the number of kilometres travelled by trains on the network.

Higher GTKs are associated with higher variable costs, such as maintenance, due to greater degradation of the network. Other costs such as overheads, business unit management and network control costs tend to be relatively fixed regardless of GTKs, but over the longer term vary with other factors including Train Kms.

Figure 4 shows that volumes, in both GTKs and Train Kms, decreased in 2022.

**Figure 4: Total operating volumes – GTK and Train Km, 2016 to 2022**



Source: ACCC calculations based on ARTC, confidential models for 2022.

Note: The Train Km figures relate to the whole network, including both coal and non-coal traffic.

The decrease in coal GTKs reflects network disruptions that affected train traffic and therefore volumes carried on the network. ARTC submitted that the primary factors were:

- persistent wet weather and flooding interrupting operations
- export market demand and price premiums for high quality low ash coal which saw Customers target these markets leading to increased washing of Run-Of-Mine (ROM) coal and therefore lower yield and railings.<sup>25</sup>

At a zone level, there was a notable difference in coal volume changes between the zones, GTKs in Zones 1 and 2 decreased by 12.1% and 14.8% respectively, while Zone 3 GTKs increased 5.2%, due to the contrasting impacts of extreme wet weather in 2021 and 2022.<sup>26</sup>

### 3.3. Infrastructure maintenance

Infrastructure maintenance costs are those ARTC incurs in maintaining the network’s physical infrastructure, such as rail grinding and ballast cleaning expenses.

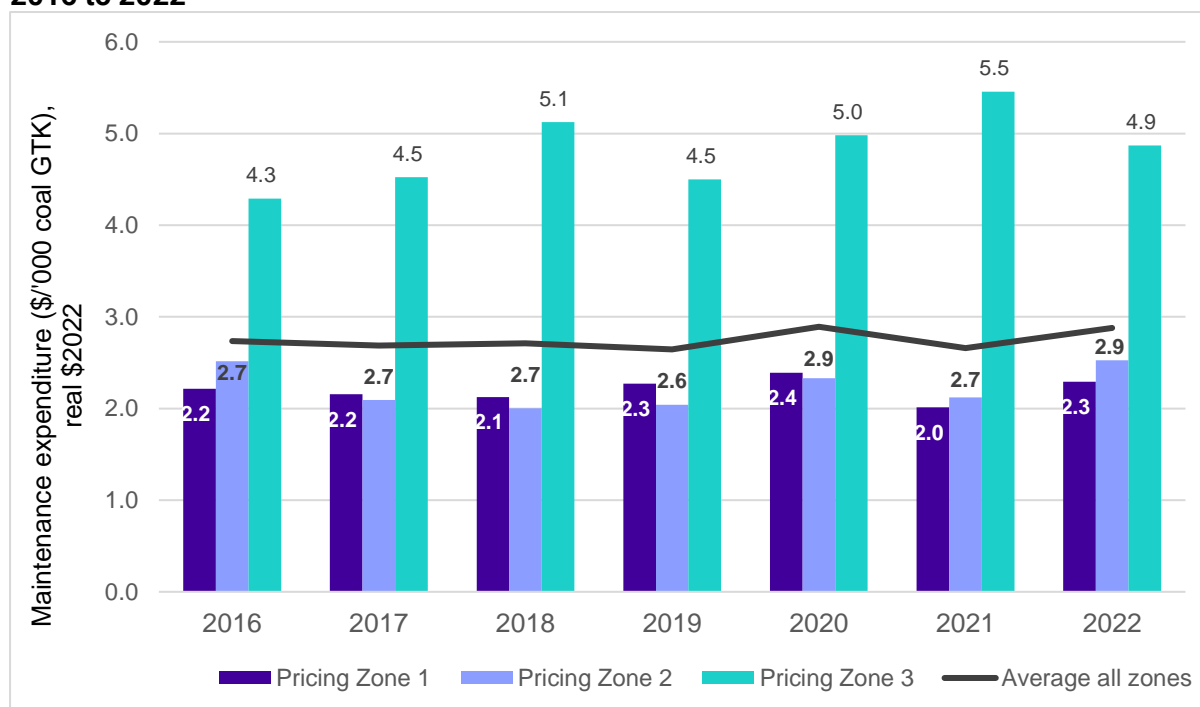
<sup>25</sup> ARTC, 2022 Submission – Att.1: Operating costs, p. 3.

<sup>26</sup> ARTC, 2022 Submission – Att.1: Operating costs, p. 3.

Total maintenance costs on the network were \$124.7 million in 2022, of which the share allocated to coal traffic was \$117.2 million, a fall of 0.9% in real terms from 2021.<sup>27</sup>

The cost of maintenance per GTK varies by zone. Figure 5 shows that maintenance per GTK is lowest in Zone 1 and is significantly lower than in Zone 3. This is partly because all trains must use Zone 1, resulting in significantly higher GTKs in Zone 1, with the result being that costs are shared across more users.

**Figure 5: Infrastructure maintenance expenditure per '000 coal GTK by zone (real \$2022), 2016 to 2022**



Source: ACCC calculations based on ARTC, confidential models for 2022; and ABS CPI data.

Notes: Chart shows expenditure for the Hunter Valley coal network, excluding non-coal, per 1,000 coal GTKs. These figures are different from the figures in figure 5 in ARTC's Attachment 1 because the formulae used to derive the figures above does not include provision centre, zone specific indirect, HVAU wide indirect or incident costs.

Real expenditure per GTK in 2022 increased in Zones 1 and 2 and decreased in Zone 3. This reflects the falls in GTK in Zones 1 and 2 and the increase in GTK in Zone 3, as noted above.

### 3.3.1. ARTC's maintenance plan

ARTC has prepared a maintenance plan and budget (the Plan) for the 2022 compliance year, the first such annual plan required under version 8 of the Undertaking (section 9.11). One of the objectives of the Plan specified in the Undertaking is "that maintenance costs are Efficient". While ARTC is required to consult with Access Holders on the Plan, Access Holders have no role in endorsing maintenance expenditure. The Plan focuses on the top 10 maintenance activities by cost and ARTC is required to report on these to the RCG quarterly.

<sup>27</sup> After deducting non-coal share of \$7.5 million (ARTC, 2022 Submission – Att.1: Operating costs, p. 6).

Table 4 shows that, overall, the actual maintenance expenditure in 2022 was only 0.3% above forecast expenditure in the Plan, while expenditure on the top 10 activities was 1.6% above the Plan forecast.

**Table 4: Maintenance Expenditure: 2021 actual, 2022 Plan and 2022 actual (nominal \$'000 and %)**

Activity (UOM)	Cost (\$'000) Nominal				Variance (\$'000)	Variance (%)	
	2021 Actual	2022 Plan	2022 Actual	2022 Actual over 2022 Plan	2022 actual over 2021 Actual	2022 actual over 2022 Plan	2022 Actual over 2021 actual
Top 10 activities	73,891	72,686	73,834	1,148	-57	1.6%	-0.1%
Other Activities	45,122	51,613	50,867	-746	5,745	-1.5%	12.7%
<b>Total Maintenance</b>	<b>119,012</b>	<b>124,299</b>	<b>124,702</b>	<b>403</b>	<b>5,690</b>	<b>0.3%</b>	<b>4.8%</b>

Source: ARTC, 2022 Att 1 HV Network Operating Costs, Table 3A, p 11.

Note: Costs in the 2022 Plan include an assumed yearly cost escalation of 2.5% for inflation (ARTC, HVAU 2022 Maintenance Plan, p31).

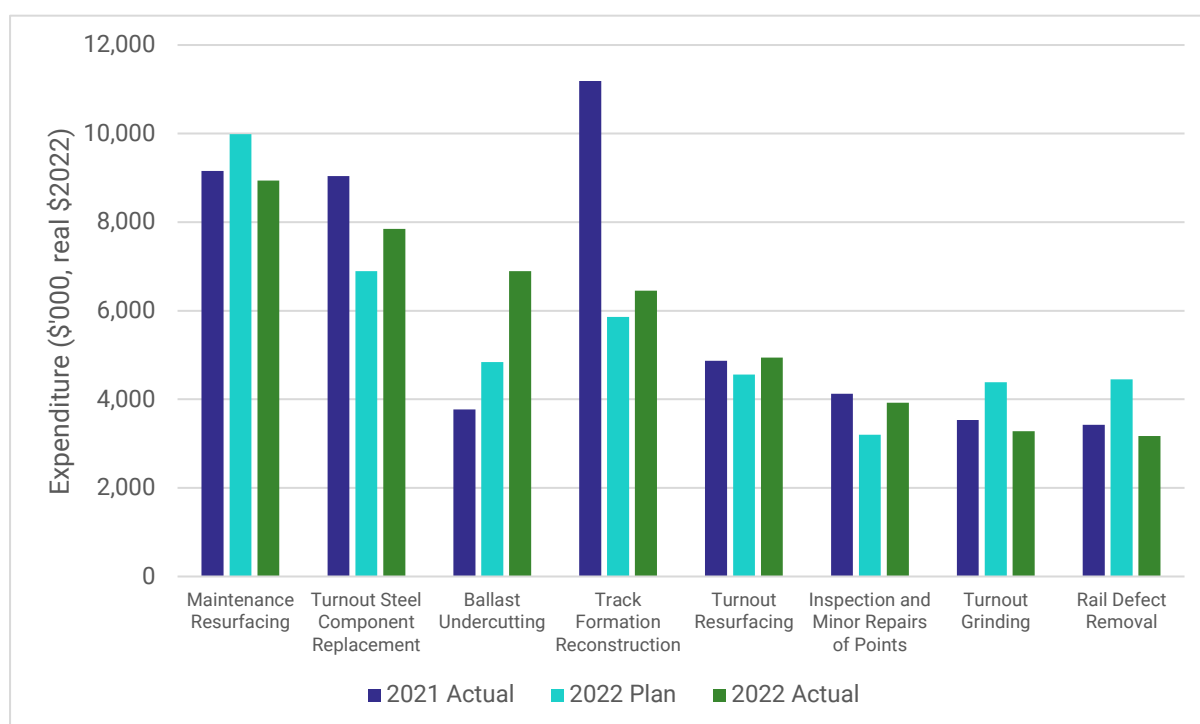
The changes in overall expenditure compared to the Plan and to the previous year were relatively small despite challenges reported by ARTC including “the ongoing scarcity of specialised rail workers, the effects of unprecedented inflation and the impacts associated with the severe weather events, in particular the flooding that occurred in July 2022”.<sup>28</sup> Reductions in the scope of work completed and also in unit rates for inputs, helped to offset these factors.

Figure 6 shows the largest categories of maintenance expenditure in 2022 compared with 2021 and compared with forecast expenditure as per the Plan.<sup>29</sup> The top 10 categories accounted for \$73.8 million or around 59% of total infrastructure maintenance expenditure in 2022. The variance between the Plan and actual expenditure and between 2021 and 2022 was relatively small.

<sup>28</sup> ARTC, 2022 Submission – Att.1: Operating costs, p. 7.

<sup>29</sup> These activities are described further in Appendix A of the Background Document.

**Figure 6: Top 10 Maintenance Activities: 2021 actual, 2022 Plan and 2022 actual (real \$2022)**



Source: ARTC, 2022 Submission – Att.1: Operating costs, Table 3A, p. 11.

Notes: The top 10 activities have been arranged from highest to lowest expenditures in 2022.

Expenditures on ballast cleaning and rail grinding are confidential and have been omitted from the chart to avoid identification of individual businesses’ data due to ARTC having a small number of suppliers.

Those activities that recorded an increase in expenditure, both compared with the Plan and compared with 2021, were ballast undercutting and turnout resurfacing. Expenditure on some other activities - turnout steel component replacement, track formation reconstruction, and inspection and minor repairs of points – was greater than the Plan but less than actual 2021 expenditure. Expenditure was less than the Plan for maintenance resurfacing, turnout grinding and rail defect removal. Those categories of maintenance with notable changes in expenditure are outlined below.

Separately to Figure 6, the total expenditure on ballast cleaning and rail grinding is confidential. However, expenditure on ballast cleaning in 2022 was 3.6% less than the Plan and 2.8% less than 2021. Expenditure on rail grinding was 4% more than the Plan and 3.5% less than 2021, reflecting a reduction in scope due to additional safety measures, flooding, and other unforeseen issues, and an increase in unit rates.

### Ballast undercutting

Expenditure on ballast undercutting increased by \$3.1 million or 83% above the previous year in real terms. It also increased by \$2 million, or 42.3% compared with the Plan. This was driven by an increase of 92% in scope (metres of track treated), scope was 33% greater than compared with the Plan.

The increase in scope compared to the Plan occurred only in Zones 1 and 2, particularly due to wet weather causing ballast deterioration, and undercutting to alleviate long-standing

speed restrictions and points failures. There was also variability between zones in unit rates as the unit rate increased by 188% in Zone 2 and fell by 52% in Zone 3 but they were returning to more normal levels.<sup>30</sup>

## Track formation reconstruction

Expenditure on Track formation reconstruction decreased from \$11.2 million to \$6.4 million for coal customers for 2022, which was a fall in real terms of 42.3% driven by a 62% reduction in scope delivered. The expenditure was \$0.6 million or 10% above the Plan, as the Plan had already accounted for a substantial reduction in scope.<sup>31</sup>

## Turnout steel component replacement

Expenditure on turnout component replacement decreased from \$9 million to \$7.9 million for coal customers for 2022. This was a fall in real terms of 13% from 2021 to 2022, and represented a 14% increase over the Plan, which had budgeted \$6.9 million. When preparing the Plan ARTC had anticipated that an increased focus on post-installation grinding of components would result in a reduction in turnout steel replacement costs but the anticipated reduction was not fully achieved.

There was considerable variation between zones, with Zones 1 and 2 costing less than 2021 (22% and -63% respectively in real terms), and Zone 3 costing more (51% in real terms). This year-to-year variation across zones is largely driven by the reactive nature of this activity and the conditions that arise within the year. The main driver for the increase in costs for Zone 3 was the more expensive types of components that were replaced during the year.<sup>32</sup>

## Rail defect removal

Expenditure on rail defect removal fell from \$3.2 million in 2021 to \$3.1 million in 2022. This was only an 8% reduction from 2021 in real terms but was 29% lower than the Plan (\$4.5 million). ARTC submitted that “the reduction compared to the plan is driven by budget assumptions at the time of preparing the 2022 Maintenance Plan, as costs were anticipated to remain high, off the back of the costs in experienced in 2020.”<sup>33</sup>

ARTC reported that rail defect removal, along with other maintenance activities, over the recent years has contributed to a reduction in rail break events to 36, the lowest number of breaks achieved in any one year over the decade prior.<sup>34</sup>

## 3.4. Business unit management

Business unit management costs comprise Hunter Valley direct costs and encompass 4 functions: Hunter Valley Customer Service and Operations, Hunter Valley Asset Delivery

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<sup>30</sup> ARTC, 2022 Submission – Att. 1: Operating costs, pp. 33-34.

<sup>31</sup> ARTC, 2022 Submission – Att. 1: Operating costs, p. 21.

<sup>32</sup> ARTC, 2022 Submission – Att. 1: Operating costs, p. 28.

<sup>33</sup> ARTC, 2022 Submission – Att. 1: Operating costs, p. 37.

<sup>34</sup> ARTC, 2022 Submission – Att. 1: Operating costs, p. 37

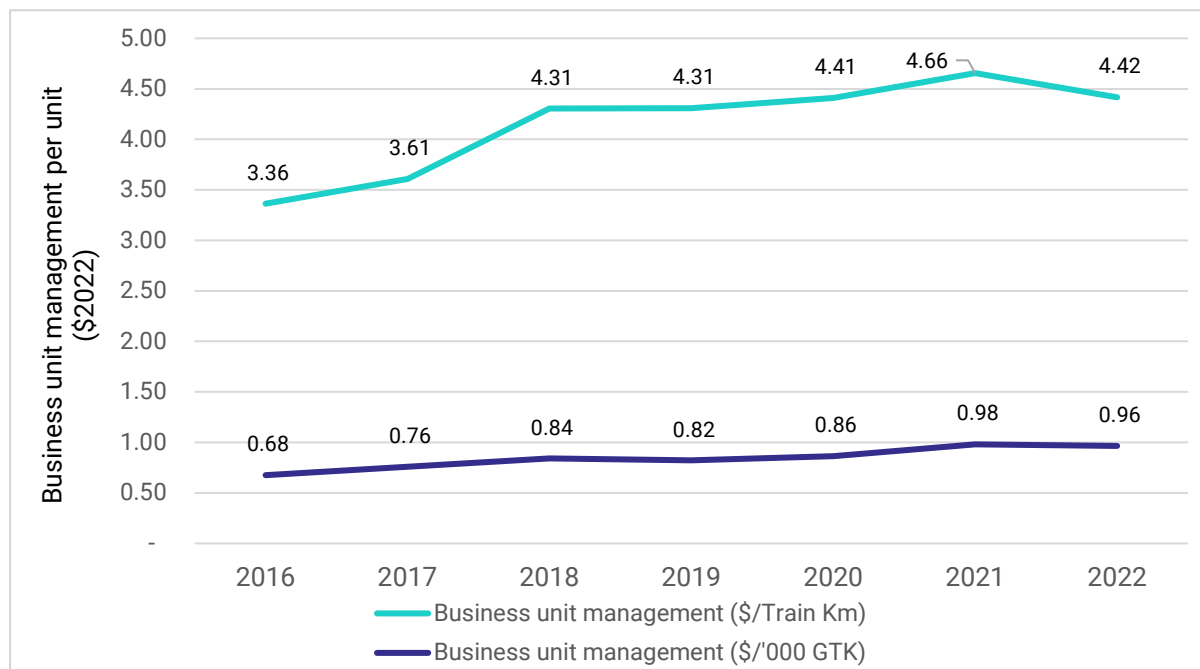
including the Provisioning Centres, Hunter Valley Asset Development, and Hunter Valley Management and Support.<sup>35</sup>

ARTC’s business unit management costs were \$38.3 million in 2022, a decrease of \$4.7 million in real terms since 2021. ARTC stated that the following were major drivers of nominal cost movements between 2021 and 2022.

- There was a \$4.5 million decrease in engineering software support platforms in 2022 due to one-off costs incurred in 2021 that relate to the internal review of the accounting treatment for various cloud-based software related projects such as the Decision Support Platform (DSP), Weighbridge Data Capture Project (WDC) and the Ellipse Update.<sup>36</sup>
- There were relatively minor cost increases for labour (\$0.3 million), property (\$0.3 million), contractors (\$0.4 million), Asset Management Improvement Program (AMIP) mobile functionality for field workers (\$0.2 million), and allocator movements due to the impact of lower Direct Stay In Business costs (\$0.3 million) and other cost movements across various business unit activities (\$0.8 million).<sup>37</sup>

Figure 7 illustrates that on both a Train Km and a GTK basis, business unit management costs declined in 2022, after increasing significantly between 2016 and 2021. From 2021 to 2022, costs per 1,000 GTKs declined by 1.6% in real terms (from 0.98 to 0.96), while costs per Train Km declined by 5.1% in real terms (from 4.66 to 4.42).

**Figure 7: Business unit management expenditure per GTK or Train Km (real \$2022), 2016 to 2022**



Source: ACCC calculations based on ARTC, confidential models for 2022; and ABS CPI data.

Note: Chart shows the allocation to Hunter Valley coal customers of ARTC’s business management expenditure.

<sup>35</sup> ARTC, 2022 Submission – Att.1: Operating costs, p. 45.

<sup>36</sup> ARTC, 2022 Submission – Att.1: Operating costs, p. 45.

<sup>37</sup> ARTC, 2022 Submission – Att.1: Operating costs, pp. 45-46.



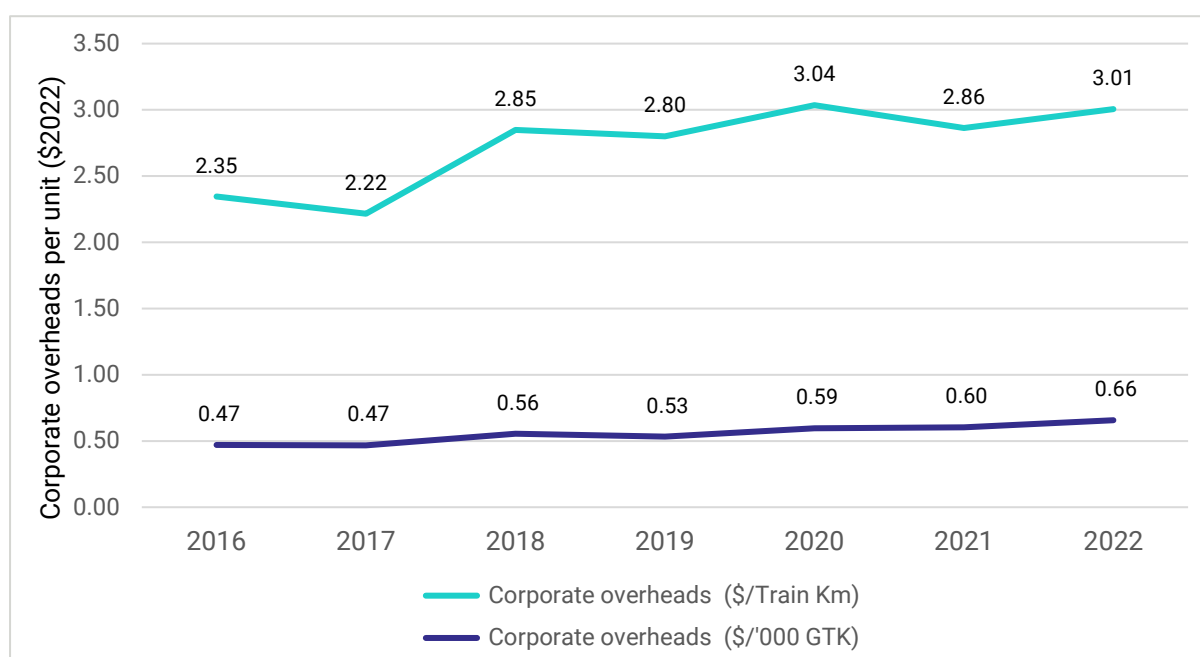
## 3.5. Corporate overheads

Corporate overheads are indirect costs shared across the organisation and include the following categories: executive, finance, people, corporate services and safety, and strategy.

Expenditure on Corporate Overheads for coal customers increased from \$24.9 million in 2021 to \$26.1 million in 2022, which was a fall in real terms of 1%.

Figure 8 shows that corporate overhead expenditure increased on both a per GTK and Train Km basis in 2022, continuing a trend since 2017. The increase in 2022 was driven by the falls in volume despite a reduction in costs.

**Figure 8: Corporate overhead expenditure per GTK or Train Km (real \$2022), 2016 to 2022**



Source: ACCC calculations based on ARTC, confidential models for 2022; and ABS CPI data.

Notes: Chart shows the amount of ARTC's corporate overheads allocated to coal traffic in the Hunter Valley network. ARTC changed its overhead cost allocation methodology in version 6 of the Undertaking.

In its compliance submission, ARTC noted some minor changes in expenditure among those individual categories of corporate overheads in 2022 compared to 2021.

- A \$0.7 million increase in insurance costs due to continuing severe weather, with a further rise in flood losses and claims leading to increases in insurance premiums and deductibles.
- A \$0.9 million increase due to the allocation of a greater share of corporate overhead costs to coal customers from non-coal customers, due to lower Direct Stay in Business Costs for non-coal compared to 2021.
- A \$0.2 million reduction in plant charges.<sup>38</sup>

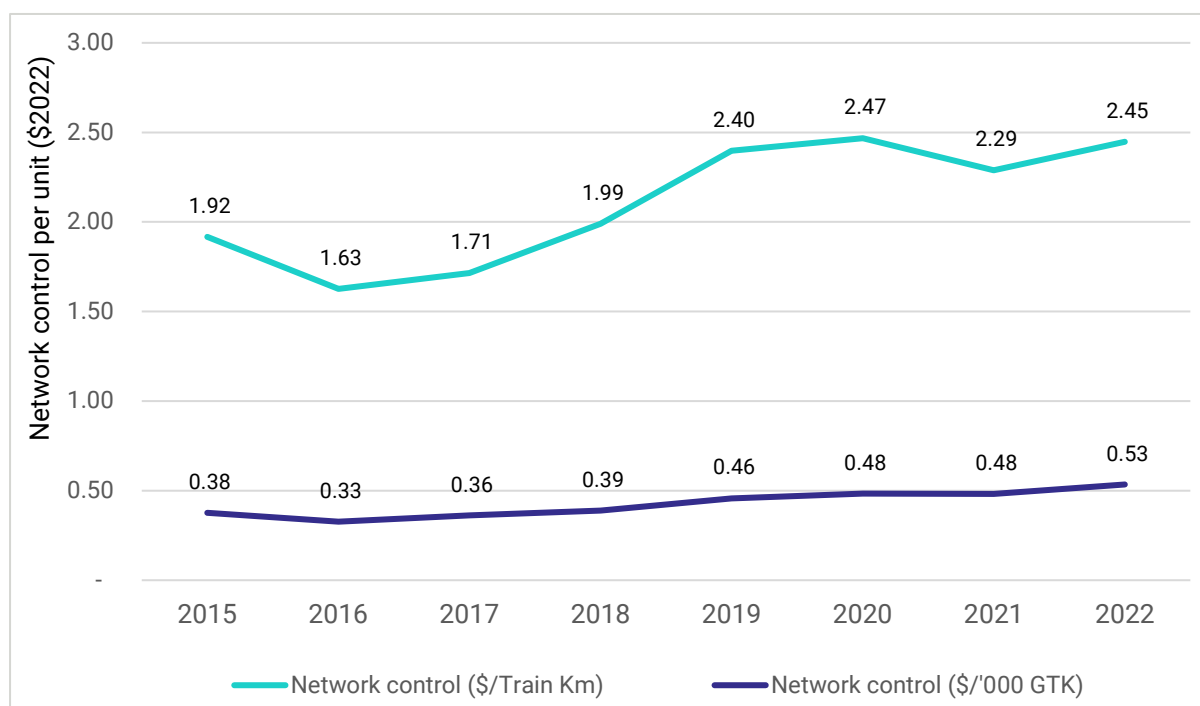
<sup>38</sup> ARTC, 2022 Submission – Att.1: Operating costs, pp. 47.

## 3.6. Network control

Expenditure on Network Control for coal customers increased from \$19.9 million in 2021 to \$21.2 million in 2022, which was an increase in real terms of 1%.

Figure 9 shows that network control expenditure increased on both a per GTK and Train Km basis in 2022, continuing an overall trend since 2016. The increase in 2022 was driven by the decline in volume that was greater than the increase in costs, noting that network control costs are not affected by these measures of traffic in the short run.

**Figure 9: Network Control expenditure per GTK or Train Km (real \$2022), 2015 to 2022**



Source: ACCC calculations based on ARTC, confidential models for 2022 and ABS CPI data.

Note: Chart shows the amount of ARTC's network control costs allocated to coal traffic in the Hunter Valley network.

ARTC highlighted the following drivers of network control expenditure in 2022 compared to 2021:

- A \$0.3 million increase in labour costs due to enterprise bargaining agreement annual award increases.
- A \$0.9 million increase in utilities expenditure linked to the correction in 2021 of an over-accrual of electricity costs from prior years.<sup>39</sup>

ARTC also commented that ANCO (ARTC's Network Control Optimisation system) is now embedded in ARTC's technology suite.<sup>40</sup>

<sup>39</sup> ARTC, 2022 Submission – Att.1: Operating costs, pp. 44–45.

<sup>40</sup> ACCC, Final Determination: ARTC's compliance with HVAU financial model for 2021, pp. 29–31.

## 3.7. Overhead allocation model

ARTC provides the overhead cost allocation model to the ACCC each year on a confidential basis as part of its compliance submission. The overhead cost allocation model shows the allocation of the Non-Segment Specific costs including the categories of an overhead nature in operating expenditures – corporate overheads, business unit management and network control. The model shows total overhead costs for the whole company for different functions, and the allocation of costs for each function to different parts of the business by various drivers. ARTC's overhead costs must be allocated in accordance with Schedule I of the Undertaking. An explanation of ARTC's approach for allocating overhead costs can be found in section 4.2 of the Background Document.

In its submission to the consultation paper, the Hunter Valley Rail Access Task Force raised the topic of the checking and reviewing of the appropriateness of corporate overheads and their allocation. It stated:

*This is a potential risk area with the potential for costs to be misallocated between ARTC's different business units.*<sup>41</sup>

The ACCC acknowledges the measures ARTC has taken to promote the transparency of its overhead cost allocation methodology. In particular, in July 2022 ARTC held a workshop with customers and provided worked examples of the mechanics of the Overhead Allocation Framework. The ACCC has reviewed the overhead cost allocation model for 2022 and is satisfied that the allocation is in accordance with Schedule I of the Undertaking.

## 3.8. Loss on disposals

ARTC's reported net loss on disposals fell from \$10.1 million in 2021 to \$9.7 million in 2022. This resulted from disposals with a written down value of \$11.0 million and proceeds from sale of \$1.3 million. The recovery rate (defined as proceeds as a percentage of written down value) increased from 10.8% in 2021 to 11.7% in 2022.<sup>42</sup>

ARTC noted that the major contributor to the reduction in net loss on disposals was a reduction in the scope of rerailing by 41% in 2022. There was also a reduction in loss on disposals for signalling related activities in 2022 following the replacement of the signalling infrastructure for Waratah to Sandgate in 2021.<sup>43</sup> These reductions on loss on disposals were partly offset by increases across turnout renewal and track strengthening projects.

The ACCC is satisfied that the losses incurred by ARTC on disposals were reasonable, given the type and condition of materials being disposed of.

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<sup>41</sup> Hunter Rail Access Task Force, *2022 Submission*, p. 2.

<sup>42</sup> 2022 calculation based on data in Table 5, *ARTC, 2022 Submission – Att.1: Operating costs*, p. 40.

<sup>43</sup> *ARTC, 2022 Submission – Att.1: Operating costs*, p. 40.

## 3.9. Expensed project costs

Expensed projects reflect the development cost of capital projects (as endorsed by the RCG) that have since been determined to be no longer required. The amount expensed represents the value of work in progress up to the point at which the project was suspended.

ARTC reported that the expensed costs decreased from \$4.4 million in 2021 to \$2.2 million in 2022, a decline of 53% in real terms. This was due to a reassessment of projects linked to the expected volumes associated with the proposed development of Terminal 4 at Port Waratah Coal Services. These projects comprised Aberdeen Loop extension, Blandford Loop phase 1, Bells Gate South and Ardglen to Kankool duplication. ARTC concluded that the projects were no longer required to meet capacity demands as more recent forecasts have predicted lower volumes in line with existing rail capacity.<sup>44</sup>

## 3.10. ACCC determination on operating expenditure for 2022

The ACCC considers that ARTC has incurred Efficient operating expenditure for 2022 in accordance with section 4J.10(e) of the Undertaking. It is therefore appropriate to include this expenditure in the Economic Cost calculations, as per section 4J.5 of the Undertaking.

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<sup>44</sup> ARTC, 2022 Submission – Att1: Operating costs, p, 42

## 4. The Constrained Network

Pursuant to sections 4J.10(d)(i) and (ii) of the Undertaking, the ACCC has determined that for 2022, ARTC has undertaken the calculation of:

- the roll forward of the RAB Floor Limit for the Constrained Network
- the reconciliation of Access revenue with the applicable Ceiling Limits, and
- the total under recovery amount and its allocation between customers in accordance with the Undertaking.

### 4.1. RAB Floor Limit roll forward

Table 5 shows ARTC's reported RAB Floor Limit roll forward for the Constrained Network in 2021 and 2022.

**Table 5: RAB Floor Limit roll forward for the Constrained Network (nominal \$), 2021 and 2022**

	2021	2022
Opening RAB Floor Limit	1,414,824,365	1,426,130,411
<i>add CPI</i>	41,067,046	99,663,024
<i>add Net Capital Expenditure</i>	43,548,209	82,964,108
<i>less Depreciation</i>	(73,309,209)	(76,286,743)
<b>Closing RAB Floor Limit</b>	<b>1,426,130,411</b>	<b>1,532,470,800</b>

Source: ARTC, confidential models for 2021 and 2022.

The closing RAB Floor Limit balance increased by 7.5% in nominal terms between 2021 and 2022.<sup>45</sup> This reflected a higher CPI adjustment in 2022 and net capital expenditure exceeding the reduction due to Depreciation. The large increase in net capital expenditure in 2022 is attributable to the expenditure on the Muswellbrook Bridge Replacement Project which was endorsed in 2019.<sup>46</sup>

Further information on the methodology of the RAB Floor Limit roll forward is available in section 2.3.1 of the Background Document. The applicable CPI and depreciation rates are outlined below.

#### CPI

ARTC applied a CPI indexation factor of 6.99% for the RAB Floor Limit in 2022 based on the percentage increase in CPI (All Groups, Sydney) from 120.2 for the September quarter 2021 to 128.6 in the September quarter 2022. This was noticeably higher than in 2021, when the indexation was 2.91%.

<sup>45</sup> Note that the closing RAB Floor Limit balance in 2021 equals the opening RAB Floor Limit balance in 2022.

<sup>46</sup> ARTC, *2022 Capital Consultation*, p. 7.

## Depreciation

Depreciation is charged on the inflation-adjusted opening balance of the RAB Floor Limit and on Capital Expenditure incurred during the compliance year. As discussed in section 2.3.1 of the Background Document, the depreciation rate is calculated by dividing the value of assets by their remaining useful life, which is 20.5 years at the start of the 2022 year.

### 4.1.1. ACCC Constrained Network RAB Floor Limit determination 2022

ARTC has undertaken the roll forward of the RAB Floor Limit for the Constrained Network in accordance with the Undertaking, resulting in a closing RAB Floor Limit value at the end of 2022 of \$1.5 billion.

## 4.2. Ceiling test

Table 6 shows ARTC's Economic Cost calculation for the Constrained Network for 2021 and 2022, as per the methodology shown in section 2.5.2 of the Background Document.

**Table 6: Economic Cost (Ceiling Limit) for Constrained Network (nominal \$), 2021 and 2022**

	2021	2022
Operating Expenditure	140,241,911	139,882,253
Depreciation	66,063,611	69,054,954
Return on Assets	63,560,443	61,600,397
<b>Economic Cost (Ceiling Limit)</b>	<b>269,865,965</b>	<b>270,537,604</b>

Source: ARTC, 2022 Main Submission, p. 25.

Note: Depreciation in Table 6 is lower than in Table 5 because the depreciation component attributable to Zone 3 producers traversing Zone 1 has been deducted.

The return on assets was based on a real pre-tax rate of return of 4.60% for 2022, as required by section 4J.8 of the Undertaking.

Table 7 summarises the outcome of the ceiling test for the Constrained Network for 2021 and 2022, as per the methodology shown in section 2.6.1 of the Background Document.

**Table 7: Ceiling test for Constrained Network (nominal \$), 2021 and 2022**

	2021	2022
Access Revenue	261,785,472	252,651,180
Ceiling Limit	269,865,965	270,537,604
<b>Difference (under recovery)</b>	<b>(8,080,493)</b>	<b>(17,886,424)</b>

Source: ARTC, 2022 Main Submission, p. 25.

### 4.2.1. ACCC ceiling test determination 2022

ARTC has undertaken the calculations for the reconciliation of Access revenue with the Ceiling Limits for 2022 correctly, resulting in an under recovery of around \$17.9 million, as shown in Table 7.

## 4.3. Unders and overs

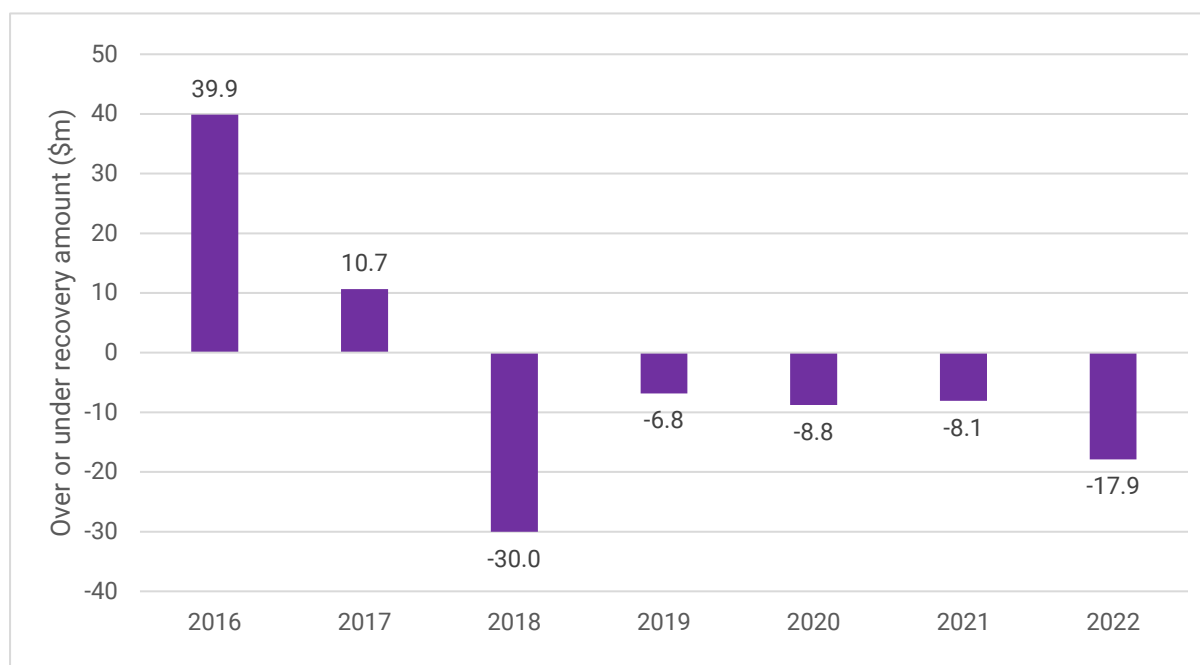
The 'unders and overs amount' is the amount by which ARTC has under or over recovered revenue from the Constrained Network in a given year.

Version 8 of the Undertaking introduced a new requirement for ARTC to provide an indicative estimate of the unders and over amount for the relevant compliance year if the annual compliance process is behind schedule. This new process is intended to provide users with additional visibility about any potential unforeseen outcomes in the forthcoming compliance year.

On 27 April 2023 ARTC provided an indicative estimate of an under recovery of around \$18.3 million for the 2022 compliance year, as required under section 4J.10(a1)(ii) of the Undertaking. The estimate was around \$0.4 million more than under recovery of \$17.9 million that was reported for 2022 following the Ceiling Limit calculation for the year.

Figure 10 shows that the under recovery incurred in 2022 was more than twice as large as the under recovery in any of the previous 3 years.

**Figure 10: Unders and overs amounts for the Constrained Network (nominal \$million), 2016 to 2022**



Source: ACCC, Undertaking Compliance Final Determination 2016 to 2021; and ARTC, 2022 Main Submission, p. 25.

The under recovery for 2022 as shown in Figure 10 can be attributed to actual constrained volumes being lower than forecast, which accounted for around 45% of the under recovery, and higher than forecast Capital costs, overhead costs and loss on disposals.<sup>47</sup>

To comply with section 4J.9(b) of the Undertaking, ARTC calculated the allocation of the total unders and overs amount between individual Constrained Coal Customers for the 2022 year and provided this information to the ACCC in a confidential spreadsheet. The proportion of the under recovery allocated to each Constrained Coal Customer is based on the proportion of Access revenue paid by each customer.<sup>48</sup> ARTC must bring each customer's Constrained Coal Customer Account balance back to zero by collecting the share of the under recovery that is owed by the customer.<sup>49</sup>

### **4.3.1. ACCC unders and overs determination 2022**

ARTC has undertaken the allocation of the total under recovery for 2022 in accordance with the Undertaking, as shown in the confidential spreadsheets submitted to the ACCC.

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<sup>47</sup> ARTC, 2022 *Main Submission*, p. 27.

<sup>48</sup> Section 4J.9(b)(iii) of the Undertaking.

<sup>49</sup> Section 4J.9(b) of the Undertaking.



## 5. Pricing Zone 3

Pursuant to section 4J.10(d)(i) and (ii) of the Undertaking, the ACCC has determined that for 2022, ARTC has undertaken the roll forward of the RAB Floor Limit and RAB for Zone 3 in accordance with the Undertaking.

Zone 3 became part of the Constrained Network from 1 January 2023 and will be subject to the same Ceiling Limit test and revenue reconciliation via the unders and overs process for the 2023 compliance year.

### 5.1. RAB Floor Limit roll forward for Zone 3

Table 8 shows ARTC's reported RAB Floor Limit roll forward for Zone 3.

**Table 8: RAB Floor Limit roll forward for Zone 3 (nominal \$), 2021 and 2022**

	2021	2022
Opening RAB Floor Limit	708,832,912	707,102,519
<i>refadd CPI</i>	20,667,562	49,414,818
<i>add Net Capital Expenditure</i>	14,438,856	24,548,356
<i>less Depreciation</i>	(36,836,811)	(37,487,225)
<b>Closing RAB Floor Limit</b>	<b>707,102,519</b>	<b>743,578,468</b>

Source: ARTC, 2022 Main Submission, p. 18, and 2021 Main Submission, pp 19 - 20.

Note: Totals may not add due to rounding.

#### 5.1.1. ACCC Zone 3 RAB Floor Limit determination 2022

The ACCC has determined that ARTC has undertaken the roll forward of the RAB Floor Limit for Zone 3 in accordance with the Undertaking, resulting in the closing RAB Floor Limit value of \$743.6 million.

## 5.2. RAB roll forward for Zone 3

Table 9 shows ARTC's reported RAB roll forward for Zone 3.<sup>50</sup>

**Table 9: RAB roll forward for Zone 3 (nominal \$), 2021 and 2022**

	2021	2022
Opening RAB	746,718,835	717,637,612
add Return on Opening RAB	53,165,237	46,144,098
add Operating Expenditure	65,260,517	67,795,582
add Net Capital Expenditure	14,438,856	24,548,356
add Return on Net Capital Expenditure	274,653	789,230
less Access Revenue	(162,220,485)	(153,357,474)
<b>Closing RAB</b>	<b>717,637,612</b>	<b>703,557,405</b>

Source: ARTC, 2022 Main Submission, pp. 18 and 23; and 2021 Main Submission, pp 19 - 20.

Note: Access revenue for 2022 in the table above is the total access revenue paid by Zone 3 Access Holders for their use of Zone 1 (around \$172.7 million) minus the Variable Maintenance Costs and Incremental Capital Cost incurred for their use of Zone 1 (\$19.3 million). (Source – ARTC confidential financial models). The methodology is described in section 2.4.1 of the Background Document.

Totals may not add due to rounding.

The return on the opening RAB and on net capital expenditure was based on a nominal pre-tax rate of return of 6.43% for 2022.<sup>51</sup>

### 5.2.1. ACCC Zone 3 RAB determination 2022

The ACCC has determined that ARTC has undertaken the roll forward of the RAB for Zone 3 in accordance with the Undertaking, resulting in the closing RAB value of \$703.6 million.

## 5.3. Loss capitalisation balance for Zone 3

The loss capitalisation balance is the difference between the RAB and the RAB Floor Limit for Zone 3. This balance can be viewed as the accumulated sum of ARTC's operating losses and return on capital invested for that zone.

Table 10 (see overleaf) shows that the loss capitalisation balance was minus \$40.0 million at the end of 2022 – that is, \$40.0 million was owed by ARTC to customers, compared with plus \$10.5 million the previous year. This is a reversal from all previous years when the loss capitalisation balance was positive, as shown in Figure 1.

<sup>50</sup> Under section 4J.4(a) of the Undertaking, the RAB only applies to Zone 3 (see section 2.3 of the Background Document).

<sup>51</sup> Section 4J.8 of the Undertaking.

**Table 10: Comparison of RAB and RAB Floor Limit for Zone 3 (nominal \$), 2021 and 2022**

	2021	2022
Closing RAB	717,637,612	703,557,405
Closing RAB Floor Limit	707,102,519	743,578,468
<b>Difference (RAB minus RAB Floor limit)</b>	<b>10,535,093</b>	<b>(40,021,063)</b>

Source: ARTC, 2022 Main Submission, p. 18 and 2021 Main Submission, pp. 30 – 31.

This shows a large turnaround of \$50.5 million in the balance from 2021 to 2022.

Table 11 shows that the difference in the loss capitalisation balance compared to the previous year was mainly attributable to the larger than usual CPI adjustment on the opening RAB Floor Limit.

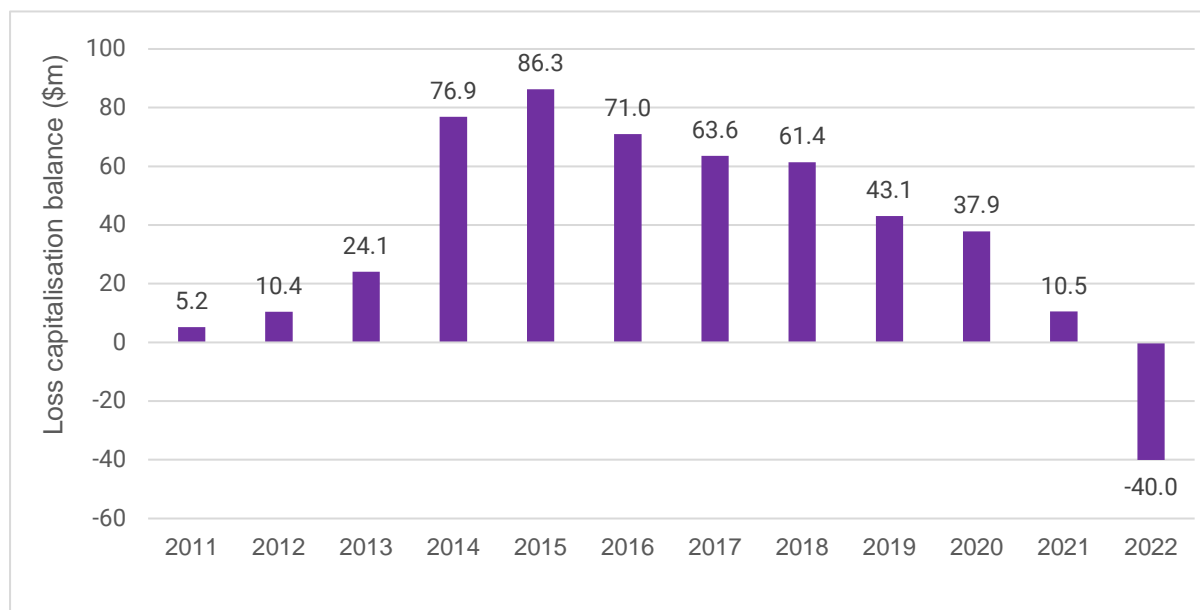
**Table 11: Components of loss capitalisation balance for Zone 3 (nominal \$), 2021 and 2022**

	2021	2022
Opening Balance Capitalised losses	37,885,923	10,535,093
Return on Opening RAB	53,165,237	46,144,098
Operating Expenditure	65,260,517	67,795,582
Depreciation	36,836,811	37,487,225
Return On Capital Expenditure	274,653	789,230
CPI on Opening Floor Limit	(20,667,562)	(49,414,818)
Access Revenue	(162,220,485)	(153,357,474)
<b>Closing Loss Capitalisation Balance</b>	<b>10,535,093</b>	<b>(40,021,063)</b>

Source: ARTC, 2022 Main Submission, p. 19 and 2021 Main Submission, p. 31.

Figure 11 shows that the loss capitalisation balance increased from its introduction in 2011 up to a peak in 2015 and then decreased every year after that before declining to a negative amount in 2022.

**Figure 11: Closing loss capitalisation balance for Zone 3 (nominal \$million), 2011 to 2022**



Source: ACCC, Undertaking Compliance Final Determinations 2011 to 2021; and ARTC, 2022 Main Submission, p. 18.

Section 4J.9(g) of version 8 of the Undertaking requires ARTC to set the loss capitalisation amount to zero on 31 December 2022, through the following process:

- (i) determine the Final Capitalised Losses Amount, which is the difference between the RAB and RAB Floor Limit as at 31 December 2022
- (ii) determine an allocation of the total Final Capitalised Losses Amount for each Pricing Zone 3 Access Holder based on the proportion of Access revenue each one paid
- (iii) advise each Access Holder of its allocation
- (iv) bring the balance for each Access Holder back to zero, with the method depending on whether the amount is positive or negative. Given that the Final Capitalised Losses Amount was negative, ARTC is required to refund to each Access Holder the applicable amount within 20 Business Days of giving them advice under subsection (g)(iii).

ARTC has provided the ACCC with confidential details of the allocation each Access Holder will receive.<sup>52</sup> ARTC advised that it will pay the balance following the publication of the ACCC's decision on the 2022 Annual Compliance Assessment.<sup>53</sup>

<sup>52</sup> ARTC, email to ACCC of 9 May 2024.

<sup>53</sup> ARTC, email to ACCC of 17 May 2024.

### **5.3.1. ACCC loss capitalisation determination 2022**

The RAB is lower than the RAB Floor Limit for Zone 3 at the end of 2022 by \$40.0 million. ARTC is required to refund this amount to Access Holders as per section 4J.9(g)(iv).

The end of the loss capitalisation mechanism on 31 December 2022 will mean that Pricing for Zone 3 will become constrained in 2023 and therefore be subject to the Ceiling Limit.

## 6. True up test audit

The Undertaking incorporates liability arrangements for the payment of rebates to users where ARTC fails to deliver contracted path capacity. The payment of these rebates occurs following the completion of an annual reconciliation process, which is informed by a true up test. The true up test determines whether there was sufficient capacity available on ARTC's rail network to meet all contracted entitlements.

The true up test Auditor for 2022, Grant Thornton, was appointed in accordance with section 4.10A(c) of the Undertaking.

In accordance with section 4.10A(k), the ACCC reviewed the Final Audit Report and has decided ARTC does not owe any underpayment of rebates to Access Holders and there are no overpayments of rebates that ARTC is entitled to recover.

ARTC's true up test audit obligations are set out in Schedule 2 (System True Up Test) of the Indicative Access Holder Agreement (see Chapter 5 of the Background Document for an explanation of the true up test requirements).<sup>54</sup>

The ACCC must:

- review the true up test Final Audit Report, and
- decide and notify ARTC any amounts of underpayment of rebates that are owing to Access Holders or amounts of overpayment of rebates ARTC is entitled to recover.<sup>55</sup>

Grant Thornton was appointed as the Auditor for 2022 on terms approved by the ACCC, in accordance with section 4.10A(c) of the Undertaking.

In its report Grant Thornton concluded that ARTC has complied, in all material respects, with Schedule 2 of the Indicative Access Holder Agreement for the period 1 January 2022 to 31 December 2022.<sup>56</sup>

No stakeholders commented on the Final Audit Report.

### 6.1. ACCC true up test audit determination 2022

In accordance with section 4.10A(k), the ACCC has reviewed the Final Audit Report and decided that there is no underpayment of rebates owed to Access Holders and no amounts of overpayments of rebates ARTC is entitled to recover.

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<sup>54</sup> See section 4.10A(a) of the Undertaking. The Indicative Access Holder Agreement is Annexure A to the Undertaking.

<sup>55</sup> Section 4.10A(k) of the Undertaking.

<sup>56</sup> Grant Thornton, [Australian Rail Track Corporation Limited - Independent Reasonable Assurance Engagement Report Hunter Valley Access Undertaking – System Wide True Up Test Audit \(2022 TUT Audit report\)](#), March 2022, p. 3.