Consultation Paper

Australian Rail Track Corporation's compliance with the Hunter Valley Coal Network Access Undertaking financial model for 2019 and 2020

February 2022

Submissions are due by: **Thursday, 17 March 2022**

Updated version May 2022 to correct an error in Figure 5.

Foreword

The Australian Competition and Consumer Commission (ACCC) is conducting a public consultation as part of its assessment of the Australian Rail Track Corporation's (ARTC) compliance for the 2019 and 2020 calendar years with the Hunter Valley Coal Network Access Undertaking (HVAU).

The ACCC is seeking submissions from interested parties with respect to ARTC's submission. Questions for stakeholders are set out in chapter 3 of this consultation paper. However, comments are welcome on any aspect of ARTC's submission.

The ACCC's intention is that this will be the only round of consultation before the ACCC makes a final determination in relation to ARTC's compliance in 2019 and 2020. However, the ACCC may consult further with industry if appropriate.

Submissions are due by **Thursday, 17 March 2022** and should be addressed to:

Mr Matthew Schroder
General Manager
Infrastructure & Transport – Access & Pricing Branch
Australian Competition and Consumer Commission
Email: transport@accc.gov.au

Confidentiality

The ACCC strongly encourages public submissions. Unless a submission, or part of a submission, is marked confidential, we will publish it on the ACCC's website and make it available to any person or organisation upon request. If stakeholders wish to provide a confidential submission, the ACCC asks that stakeholders provide a full copy of the document and a public version with the confidential information omitted, which we will publish on the ACCC website.

Stakeholders should clearly identify sections of submissions that you claim to be confidential. The ACCC will consider each claim of confidentiality on a case-by-case basis. If the ACCC refuses a request for confidentiality, we will give the submitting party the opportunity to withdraw the submission in whole or in part.

The ACCC will redact signatures and any other information it deems personal information from submissions prior to publication.

For further information about the use of information provided to the ACCC, please refer to the ACCC publication '*ACCC & AER Information Policy – the collection, use and disclosure of information*' available on the ACCC website at: https://www.accc.gov.au/publications/acccaer-information-policy-collection-and-disclosure-of-information.

Further Information

ARTC's public annual compliance submission documents and Version 7 of the HVAU are available at: https://www.accc.gov.au/regulated-infrastructure/rail/artc-hunter-valley-annual-compliance/hvau-annual-compliance-assessment-for-2019-and-2020/artcs-compliance-submission.

If you have any queries about matters raised in this document, please contact:

Mr Justin Martyn
Director, Regulated Access - Rail
Infrastructure & Transport – Access & Pricing Branch
Phone: 08 8456 3536
Email: Justin.Martyn@accc.gov.au

Executive Summary

ARTC has submitted compliance documentation for 2019 and 2020 to the ACCC for assessment pursuant to the HVAU (the Submission). ARTC committed to using its 'best endeavours to complete the 2019 and 2020 Compliance Assessments as a single submission' in Version 8 of the HVAU (Section 4J.10 (g)). This was to assist in 'catching up' on compliance assessments, as the process is currently around 19 months behind.

The HVAU financial model allows ARTC to recover revenue equivalent to its efficient costs in each calendar year for the Constrained Network (currently comprising rail Segments in Pricing Zones (Zones) 1 and 2). The financial model also allows ARTC to capitalise revenue shortfalls for the unconstrained part of the network (i.e. Zone 3) into the regulatory value of its assets for recovery in future years.

ARTC submitted that it had under-recoveries of revenue for the Constrained Network of $6.9 million in 2019 and $8.8 million in 2020, which is to be paid back by Zone 1 and 2 Access Holders.

ARTC also submitted that 'loss capitalisation' continued to apply in Zone 3. The net balance of losses capitalised reduced from $61.4 million at the end of 2018 to $43.1 million at the end of 2019 and to $37.9 million at the end of 2020. This is a reduction of $23.4 million over two years.[1]

ARTC submitted that total net capital expenditure for 2019 was $70.2 million and for 2020 was $90.2 million (Table 2). This is the first time ARTC has recorded new major capital projects since 2016. For the 2 years combined, minor (or sustaining) capital comprised 78% of gross capital expenditure, the rest being major capital projects.

ARTC submitted that its total operating expenditure for the coal network was $198.7 million in 2019 and $215.9 million in 2020 (Table 3). Over the 2 years from 2018 to 2020, expenditure increased by 10.1%, with an increase of 11.4% for the Constrained Network and 9.1% for Zone 3.

A key component of operating expenditure is infrastructure maintenance costs, which were $116.5 million in 2019 and $123.3 million in 2020, an increase of 10.5% over the 2 years.

1 Figures do not align due to rounding.

Contents

1. Introduction

1.1. Background

ARTC is an Australian Government-owned corporation. It was established in 1998 to be the single point of contact for parties seeking to run trains on the Australian Interstate rail network and the Hunter Valley rail network in New South Wales.

The Hunter Valley coal chain is the largest export coal supply chain in the world and is predominantly used to transport coal from mines in the Hunter Valley region to the Port of Newcastle for export to international customers. Additionally, the network is used for domestic coal purposes, such as for power stations, and by non-coal traffic, including general and bulk freight services (such as grain) and passenger services. ARTC has a natural monopoly over the below-rail infrastructure used to transport coal from the Hunter Valley to the Port of Newcastle.

The Hunter Valley network is divided into Pricing Zones (Zones), where:

- Zone 1 extends from the Port of Newcastle to Muswellbrook and contains the oldest mines. Traffic from the other zones must traverse Zone 1 to reach the port.
- Zone 2 extends east from Muswellbrook to Ulan.
- Zone 3 extends from Muswellbrook north to Narrabri and includes the newest mines.

Zones 1 and 2 form the Constrained Network, which is defined as the group of Segments within the Network bounded by the mine loading points and the Newcastle port where access revenue on those Segments is likely to reach or exceed the Economic Cost for those Segments on a stand-alone basis.[2]

1.2. Hunter Valley Coal Network Access Undertaking

Access to ARTC's Hunter Valley Rail Network is currently regulated through the HVAU, which sets out the terms and conditions for Access seekers (both current and future). The ACCC accepted the 2011 HVAU submitted by ARTC under Part IIIA of the *Competition and Consumer Act 2010*. The Hunter Valley network was previously subject to the NSW Rail Access Undertaking and administered by the NSW Independent Pricing and Regulatory Tribunal.

The HVAU came into effect on 1 July 2011 and was originally due to expire on 30 June 2016 but has been extended and varied several times. The current version of the HVAU is due to expire on 31 December 2026.

2019 and 2020 assessment

Version 7 of the HVAU, which the ACCC accepted on 29 November 2018, is applicable to compliance for 2019 and 2020. Version 7 introduced path-based pricing and changed the incremental cost methodology, with Incremental Capital Costs allocated based on contracted capacity (rather than actual usage, as under Version 6). References to the HVAU in this document are references to Version 7, unless otherwise stated.

2 Defined in section 14.1 of the HVAU.

Future assessments

Version 8 of the HVAU, which the ACCC accepted on 2 June 2021, is applicable to future compliance assessments. Section 4A.1 (c) of HVAU Version 8 specifies that Schedule J of HVAU Version 8 applies to the 2021 and 2022 assessments, and that Section 4 of HVAU Version 8 applies for 2023 onwards.

More information on the HVAU and its variations and extensions can be found on the ACCC website: https://www.accc.gov.au/regulated-infrastructure/rail/artc-hunter-valley-access-undertaking.

Capitalised terms used in the remainder of this paper are terms that are defined in section 14.1 of the HVAU.

1.3. HVAU financial model and revenue reconciliation

Section 4 of the HVAU regulates the amount of revenue that ARTC is entitled to recover from Access Holders for the Hunter Valley Rail Network. Key concepts outlined in the HVAU are the Economic Cost, the Regulatory Asset Base (RAB) Floor Limit and the RAB.

1.3.1. Economic Cost

Section 4.3 of the HVAU caps the amount of revenue that ARTC is entitled to receive from Access Holders at the Economic Cost of providing services (this is also referred to as the Ceiling Limit). The Economic Cost is the sum of the return on the RAB Floor Limit, depreciation, and operating expenditure.

1.3.2. The RAB Floor Limit and RAB

Section 4.4 of the HVAU sets out how the RAB Floor Limit (all Zones) and Zone 3's RAB, is rolled forward each year.

The RAB Floor Limit is the accumulated value of ARTC's infrastructure assets. The opening RAB Floor Limit for a given year equals the closing RAB Floor Limit of the previous year. The opening RAB Floor Limit is then rolled forward for the next year by adding an adjustment for inflation, adding net capital expenditure and deducting depreciation.[3]

Zone 3's RAB comprises the regulatory value of Zone 3 assets (RAB Floor Limit) and the accumulated losses incurred in Zone 3. It is rolled forward each year by adding new capital expenditure, return on the RAB and operating expenditure, and deducting revenue.

Reconciliation

The HVAU sets out a different methodology for reconciling the allowed revenue with actual revenue received from each of the Constrained Network and Zone 3.

[3] Net capital expenditure is the sum of ARTC's capital expenditure commissioned during the year, plus interest incurred during construction of capital projects up until 1 July in the calendar year the asset was commissioned, less the written down value of disposed assets.

Constrained Network (unders and overs)

For the Constrained Network, the HVAU applies an 'unders and overs' accounting framework that enables ARTC to recover the Economic Cost of providing services in each compliance period (i.e. calendar year). If ARTC's revenue for the Constrained Network is more than the Economic Cost in a given year, then ARTC is required to refund the 'overs' amount to Constrained Coal Customers (and vice versa).

Zone 3 loss capitalisation

For Zone 3 Access Holders, the HVAU sets out a loss capitalisation model. This was developed to encourage investment in new assets and to help Access Holders in Zone 3 who were initially unable to pay the full economic cost of the new part of the network. Instead, the annual losses incurred in earlier years were aggregated into a loss capitalisation balance, which Zone 3 Access Holders have been paying down since 2015.

The loss capitalisation balance is the difference between the RAB and the RAB Floor Limit for Zone 3. When the RAB exceeds the RAB Floor Limit, loss capitalisation continues to apply as Access Holders are still paying for losses incurred earlier. When the RAB is equal to or less than the RAB Floor Limit, Access Holders have paid down incurred losses and ARTC is able to recover the Economic Cost of Zone 3.

The loss capitalisation amount will be set to zero as at 31 December 2022, as required under section 4J.9(g) of the HVAU Version 8. Zone 3 Access Holders will need to pay any remaining loss capitalisation amount in 12 equal monthly instalments after publication of the ACCC's 2022 annual compliance final determination. Zone 3 will then become part of the Constrained Network and the 'unders and overs' accounting framework.

1.4. ACCC compliance assessment obligations

Table 1 shows the ACCC's obligations under the HVAU in relation to the ACCC's annual compliance assessment.

Table 1: Annual compliance obligations for the ACCC in the HVAU

HVAU Section	Obligation
4.10(d)(i)	Determine whether ARTC has undertaken the roll forward of the RAB in accordance with the HVAU (and if not undertaken in accordance with the HVAU, determine what the closing RAB should be). Determine whether ARTC has undertaken the roll forward of the RAB Floor Limit in accordance with the HVAU (and if not undertaken in accordance with the HVAU, determine what the closing RAB Floor Limit should be).
4.10(d)(ii)	Determine whether ARTC has undertaken calculations relevant to reconciliation of Access revenue with the applicable Ceiling Limit. Determine whether ARTC has undertaken calculations of any allocation of the total unders and overs amount in accordance with the HVAU (and where calculations are not in accordance with the HVAU, determine what total unders and overs amount allocation would be in accordance with the HVAU).
4.10(e)	Determine whether ARTC has incurred Efficient costs and Efficient operating expenditure, in accordance with section 4.5(b), and if necessary determine the change to the total unders and overs amount or allocation and the closing RAB and RAB Floor Limit in section 4.4.
4.10(f)(xi)	Review the final audit report for the annual true-up test undertaken by an independent auditor. Decide, and notify ARTC of, any amounts of underpayment of rebates that are owing to Access Holders or amounts of overpayment of rebates ARTC is entitled to recover.

Source: ACCC, based on HVAU Version 7.

The relevant provisions of the HVAU relating to the annual compliance assessment are outlined in Appendix A of this consultation paper.

1.5. ARTC's 2019 and 2020 annual compliance submission

ARTC committed to using its 'best endeavours to complete the 2019 and 2020 Compliance Assessments as a single submission' in Version 8 of the HVAU (Section 4J.10 (g)). This was to assist in 'catching up' on compliance assessments, as the process is currently around 19 months behind.

On 26 November 2021, ARTC submitted its annual compliance documentation for calendar years 2019 and 2020. ARTC submitted some revised documents on 7 January and 27 January 2022, to correct some minor errors.

ARTC's public submitted documents are available at: https://www.accc.gov.au/regulated-infrastructure/rail/artc-hunter-valley-annual-compliance/hvau-annual-compliance-assessment-for-2019-and-2020/artcs-compliance-submission.

The ACCC will assess the two periods in the one compliance process. The ACCC will, however, make formal determinations on compliance for each year separately. All figures presented in this consultation paper for 2019 and 2020 are as submitted by ARTC and are yet to be assessed by the ACCC.

1.6. Real and nominal data

This consultation paper presents financial outcomes in real and nominal dollars.

Nominal dollars include the impact of inflation and (for example) are used when ARTC reports its financial information in its annual reports, publishes prices and reports values within its submission for this compliance assessment. In contrast, real dollars allow a comparison of values over time, as they remove the impact of inflation from the values.

We have used an index equal to the average of the 4 quarters of the Consumer Price Index for All Groups, Sydney for each calendar year to convert nominal dollars to real dollars.[4]

Values in this consultation paper are in nominal dollars, unless stated otherwise.

---

4 See Australian Bureau of Statistics, *Consumer Price Index Australia*, latest release, available at: https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/consumer-price-index-australia.

2. Key areas for the 2019 and 2020 compliance assessment

The ACCC has identified the following key areas as being relevant for 2019 and 2020:

- unders and overs (section 2.1)
- loss capitalisation (section 2.2)
- prudency of capital expenditure (section 2.3)
- efficiency of operating expenditure (section 2.4)
- true-up test audit (section 2.5).

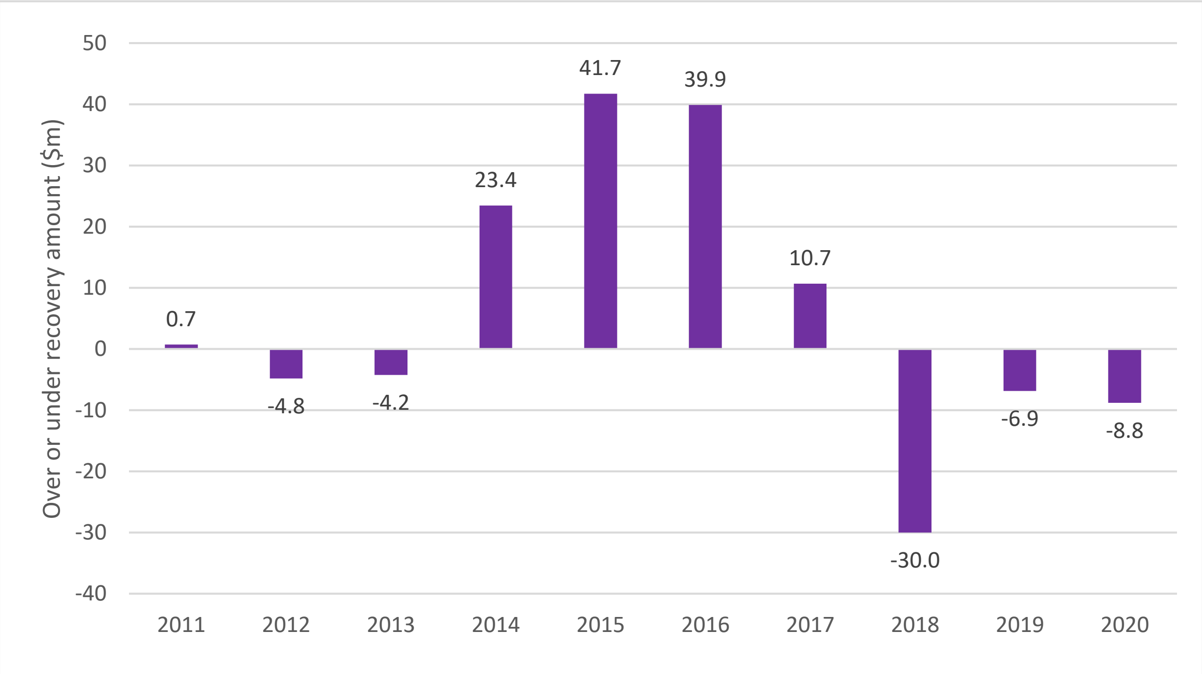
2.1. Unders and overs

Section 4.10(d)(ii) of the HVAU requires the ACCC to determine whether ARTC has allocated the total 'unders and overs' amount to Access Holders in accordance with the HVAU.

ARTC submitted that there were under-recoveries for the Constrained Group of Mines (i.e. Zone 1 and 2 customers) of $6.9 million in 2019 and $8.8 million in 2020.

Figure 1 displays the 'unders and overs' amounts for the Constrained Network from 2011 to 2020.

Figure 1: **Over or under recovery amounts for the Constrained Network ($million), 2011 to 2020**



Source: ACCC, *Final Determination*, 2013 to 2018; ARTC, *Hunter Valley Coal Network Access Undertaking – 2019 Compliance Assessment Submission*, 7 January 2022, p 23; ARTC, *Hunter Valley Coal Network Access Undertaking – 2020 Compliance Assessment Submission*, 7 January 2022, p 27.

ARTC also provided confidential spreadsheets to the ACCC that set out the allocation of the total 'unders and overs' amount to individual Access Holders for 2019 and 2020, as required by section 4.9(b)(ii) of the HVAU.

If the ACCC determines there has been an under recovery of access revenue then Access Holders will, in aggregate, be required to pay this value to ARTC. This amount will be on top of the under recovery of $30.0 million from 2018, noting that Access Holders began repaying the 2018 amount as of 10 February 2022 in 12 equal monthly instalments.[5]

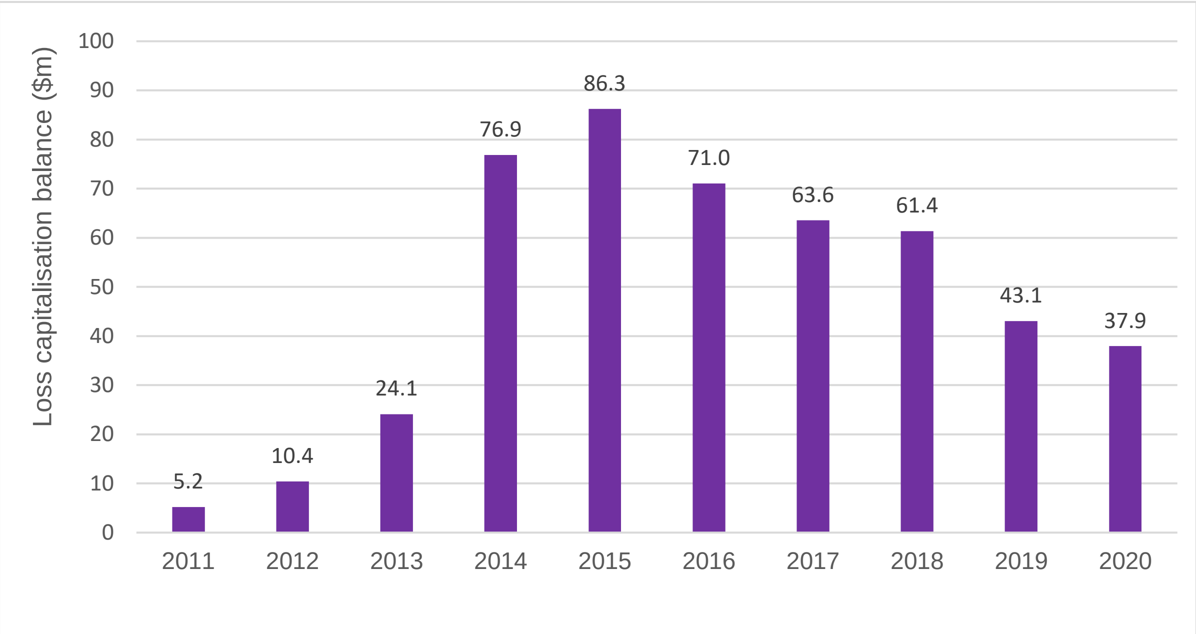
2.2. Loss capitalisation

Section 4.10(d)(i) of the HVAU requires the ACCC to determine whether ARTC has correctly rolled forward the RAB and the RAB Floor Limit. The ACCC must then determine whether the RAB exceeds the RAB Floor Limit for Zone 3 and loss capitalisation still applies.

ARTC submitted that loss capitalisation still applies for Zone 3 and that the loss capitalisation balance was $37.9 million at the end of 2020, down from $61.4 million at the end of 2018 and $43.1 million at the end of 2019. This is a reduction of $23.4 million over the 2 years.[6]

Figure 2 shows the closing loss capitalisation balance for Zone 3 from 2011 to 2020.

Figure 2: Closing loss capitalisation balance for Zone 3 ($million), 2011 to 2020



Source: ACCC, *Final Determination*, 2013 to 2018; ARTC, *Hunter Valley Coal Network Access Undertaking – 2019 Compliance Assessment Submission*, 7 January 2022, p 18; ARTC, *Hunter Valley Coal Network Access Undertaking – 2020 Compliance Assessment Submission*, 7 January 2022, p 20.

As noted above, the loss capitalisation balance will be set to zero at the end of 2022.[7]

---

5 This repayment schedule is set out in clause 4J.10 (f) of the HVAU Version 8. Repayments are to begin 6 months after the date of the ACCC's final determination on 2018 annual compliance, which was published on 10 August 2021.

6 Figures do not align due to rounding.

7 Section 4J.9 (g) of the HVAU Version 8 provides for the reconciliation and repayment of any remaining capitalised loss balance.

2.3. Prudency of capital expenditure

Sections 4.4(a) and (b) of the HVAU define net capital expenditure as capital additions to the RAB and RAB Floor Limit, plus interest costs incurred during construction, less the written-down value of any disposals. The HVAU requires that, for capital expenditure to be included in the RAB and RAB Floor Limit, it must be incurred on a 'prudent' basis.

Section 4.10(d)(iii) of the HVAU explicitly provides that, if capital expenditure has been endorsed by the Rail Capacity Group (RCG) in accordance with the consultation obligations set out in section 9 of the HVAU, then the ACCC will accept that capital expenditure as prudent. The RCG is a representative group made up of a range of stakeholders, including Access Holders, above-rail operators and the Hunter Valley Coal Chain Coordinator (in a non-voting capacity).

ARTC has provided information on the RCG's endorsement of both major and minor capital expenditure to the ACCC on a confidential basis. The ACCC will review this in its assessment.

2.3.1. Summary of capital expenditure

As shown in Table 2, ARTC's total net capital expenditure was $70.2 million in 2019, rising to $90.2 million in 2020. Over the 2 years, the Constrained Network accounted for 65% of expenditure with Zone 3 accounting for the remaining 35%.

Table 2: Capital expenditure ($ million), 2019 and 2020

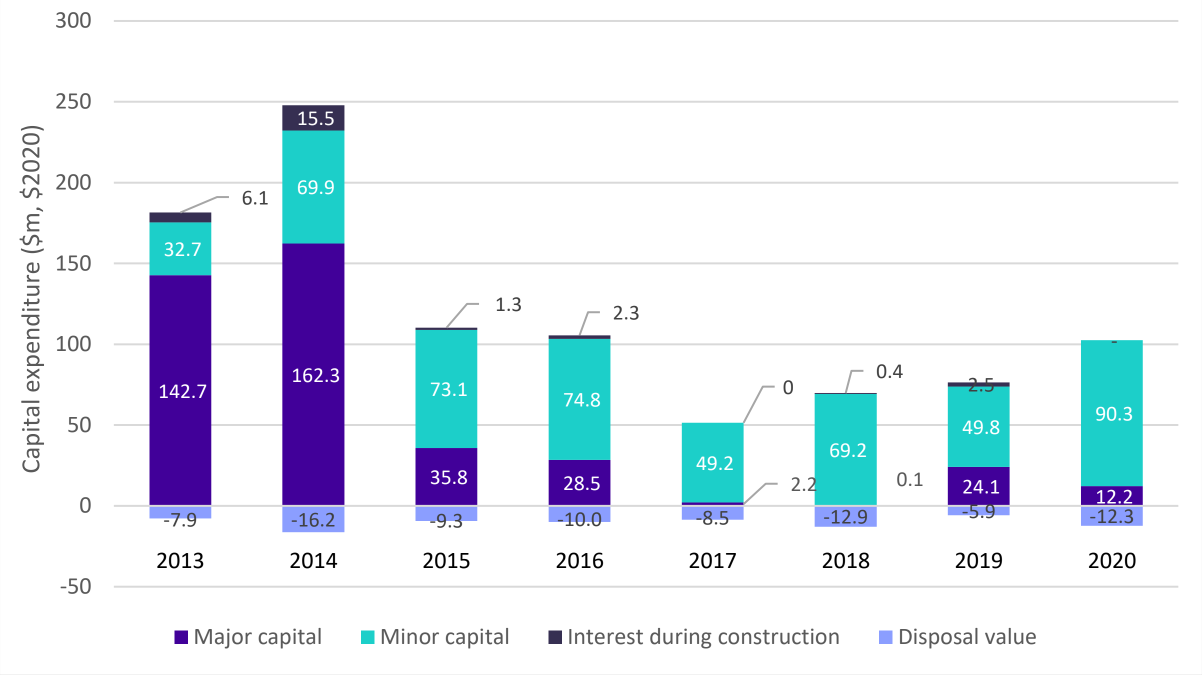
Category	Constrained Network		Zone 3		Total	
	2019	**2020**	**2019**	**2020**	**2019**	**2020**
Major capital expenditure	16.7	11.9	7.3	0.3	24.0	12.2
Minor capital expenditure (Corridor Capital)	35.4	51.2	14.1	39.2	49.5	90.3
Interest during construction	1.7	-	0.7	-	2.5	-
Disposal value	(4.7)	(7.8)	(1.2)	(4.5)	(5.8)	(12.3)
Net capital expenditure	**49.2**	**55.3**	**21.0**	**34.9**	**70.2**	**90.2**

Source: ARTC, *Hunter Valley Coal Network Access Undertaking – 2019 Compliance Assessment Submission*, 7 January 2022, pp. 12, 15 and 33; ARTC, *Hunter Valley Coal Network Access Undertaking – 2020 Compliance Assessment Submission*, 7 January 2022, pp. 13, 16 and 38; ARTC's confidential models for 2019 and 2020.

Note: Totals may not add due to rounding.

Figure 3 shows ARTC's net capital expenditure and its components in real terms from 2013 to 2020.

Figure 3: Capital Expenditure components ($million, real $2020), 2013 to 2020



Source: ACCC calculations based on ACCC, *Final Determination*, 2013 to 2018; ABS CPI data; ARTC, *Hunter Valley Coal Network Access Undertaking – 2019 Compliance Assessment Submission*, 7 January 2022, pp. 12 and 15; ARTC, *Hunter Valley Coal Network Access Undertaking – 2020 Compliance Assessment Submission*, 7 January 2022, pp. 13 and 16; and ARTC's confidential models for 2019 and 2020.

Figure 3 illustrates that net capital expenditure has increased each year since its low in 2017. Major capital expenditure resumed in 2019 (after 2 years of insignificant expenditures), before almost halving in 2020.

Minor capital fell in 2019 before increasing in 2020 to its highest level since the beginning of the HVAU.

2.3.2. Major capital expenditure

Major capital expenditure (also called 'expansion capital') relates to projects that create additional capacity in the network. ARTC submitted major capital expenditure of $36.2 million across 2019 and 2020. This was the first significant major capital expenditure recorded since 2016.

ARTC's Network Control Optimisation (ANCO) project, which was newly commissioned in 2019 and 2020, accounted for around $35.6 million. Expenditure was spread across all segments, although the majority (62%) was in Zone 1.[8]

[8] ARTC, *Hunter Valley Coal Network Access Undertaking 2019 and 2020 Annual Compliance Assessment Attachment 2: Capital consultation*, 26 November 2021, pp 11-12.

The remaining $0.6 million was post-commissioning costs for the Maitland to Minimbah Third Road in Zone 1 over the 2 years.

Note that the RCG approves individual major capital expenditure projects.

2.3.3. Minor capital expenditure

Minor capital expenditure (also known as 'corridor capital' or 'sustaining capital') relates to projects that are minor in scope or cost.[9] A project would typically be considered minor if it relates to ongoing annual programs for asset replacement, cost reduction or safety-related projects, rather than additional capacity.

Minor capital expenditure was $67.8 million in 2018. ARTC submitted that this expenditure decreased to $49.5 million in 2019 and then increased to $90.3 million in 2020.

ARTC reported that the extensive bushfires in November 2019 reduced the scope of work in 2019, although the deferred works were completed in 2020.[10] ARTC undertook additional work in 2019 to restore track formation at 3 sites in the Lower Hunter following heavy rains.[11]

Rerailing continued at a slightly higher level in 2019 than in 2018, concentrated in Zones 1 and 2. ARTC further increased rerailing scope in 2020 by 49%, based on forecasted rail condition reaching condemning limits.[12]

Other significant renewal projects included:

- track strengthening as part of a continuing program based on deteriorating track formation
- signalling upgrades, including to Coded Track Circuits in Zone 2 and Zone 3 in 2019
- replacement of the Jacobs and Josephs Bridge and Quirindi Creek Bridge in Zone 3 in 2020.

Note that the RCG approves programs of work relating to minor capital expenditure projects (rather than individual projects).

2.4. Efficiency of operating expenditure

Section 4.10(e) of the HVAU provides for the ACCC to assess the efficiency of ARTC's operating expenditure. Efficient costs and operating expenditure, in turn, inform the determination of the Economic Cost and the maximum amount of revenue that ARTC is entitled to receive.

Figure 4 displays ARTC's historical operating expenditure in real terms from 2012 to 2020.

---

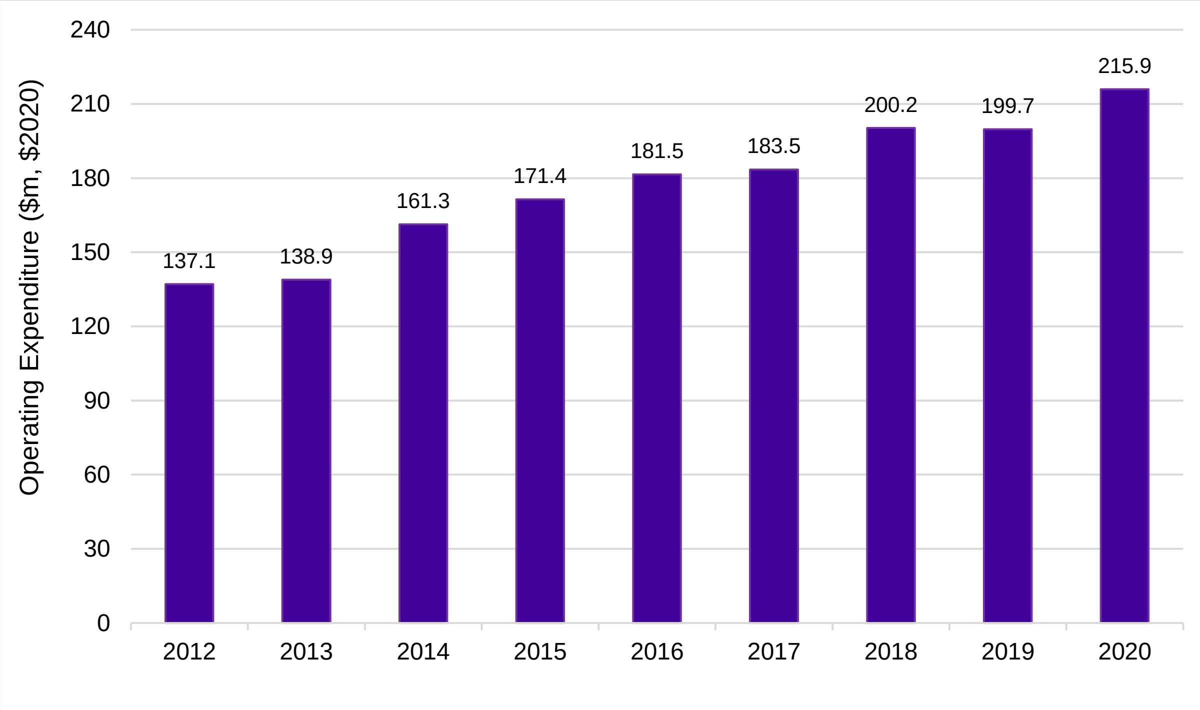
9 Sustaining capital includes some large projects that may not be considered 'minor' but involve renewal of existing assets.

10 ARTC, *Hunter Valley Coal Network Access Undertaking – 2019 Compliance Assessment Submission*, 7 January 2022, p 6.

11 ARTC, *Hunter Valley Coal Network Access Undertaking 2019 and 2020 Annual Compliance Assessment Attachment 2: Capital consultation*, 26 November 2021, p 8.

12 ARTC, *Hunter Valley Coal Network Access Undertaking – 2020 Compliance Assessment Submission*, 7 January 2022, p. 23.

Figure 4: Total Operating Expenditure ($million, real $2020), 2012 to 2020



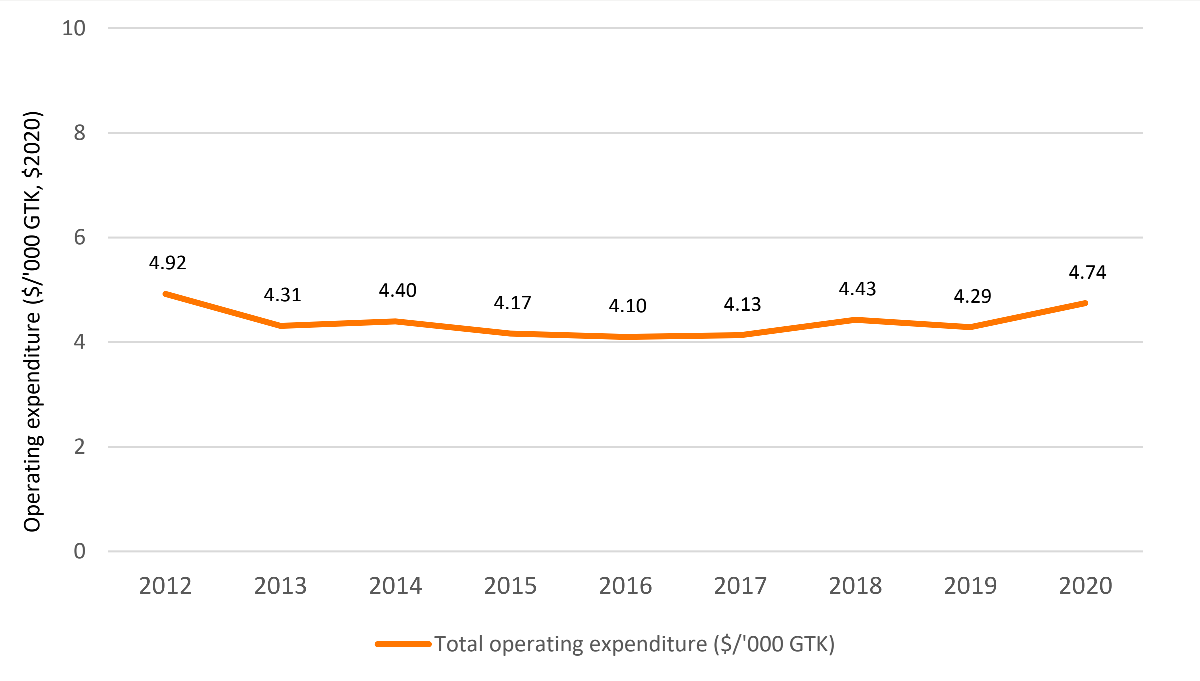
Source: ACCC calculations based on ABS CPI data and ARTC's financial models for the 2012 to 2020 HVAU Annual Compliance processes.

Note: Chart shows total operating expenditure for the Hunter Valley coal network. This differs from Figure 8 in the ACCC's 2018 Final Determination, which shows operating expenditure allocated to the Constrained Network Ceiling Test and Zone 3's RAB.

Figure 4 illustrates that, except for 2019, ARTC's real operating expenditure has steadily increased (over and above inflation) since 2012. Real operating expenditure decreased 0.3% in 2019.

In contrast, Figure 5 shows total operating expenditure on a Gross Tonne Kilometre (GTK) basis, in real terms, from 2012 to 2020.

Figure 5: Total Operating Expenditure per '000 GTK (real $2020), 2012 to 2020



Source: ACCC calculations based on ARTC's financial models for the 2012 to 2020 HVAU Annual Compliance processes.

Notes: Chart shows total operating expenditure for the Hunter Valley coal network.
This chart is a corrected version of the chart in the original paper published in February 2022.

GTKs measure gross tonnes of coal carried multiplied by the number of kilometres travelled. It broadly reflects operational activity on the rail network. Increased network activity would likely result in higher operating expenditure, due to increased maintenance needs.

Figure 5 shows that total operating expenditure per GTK, in real terms, has fluctuated over time. Real operating expenditure per GTK jumped 10.7% in 2020, after decreasing in 2019. GTKs on the rail network decreased 2.3% in 2020, while total operating expenditure increased 8.1%. This resulted in higher expenditure on a per GTK basis.

Table 3 sets out ARTC’s 2019 and 2020 operating expenditure by major components.

Table 3: Operating expenditure by category ($million), 2019 and 2020

Category	Constrained Network		Zone 3		Total Hunter Valley coal network	
	2019	2020	2019	2020	2019	2020
Maintenance costs	72.4	73.1	36.9	43.2	116.5	123.3
Business unit management	27.1	27.7	7.8	8.4	34.9	36.1
Corporate overheads	18.2	19.6	4.5	5.2	22.7	24.8
Network control	14.2	14.7	5.2	5.5	19.4	20.2
Net loss on disposals	3.6	6.6	1.2	4.4	5.1	11.5
Expensed project costs	-	-	-	-	-	-
Operating expenditure	**135.6**	**141.7**	**55.6**	**66.8**	**198.7**	**215.9**

Source: ARTC, Hunter Valley Coal Network Access Undertaking – 2019 Compliance Assessment Submission, 7 January 2022, pp. 12; ARTC, Hunter Valley Coal Network Access Undertaking – 2020 Compliance Assessment Submission, 7 January 2022, pp. 13 and 16; ARTC, Hunter Valley Coal Network Access Undertaking 2019 and 2020 Compliance Assessment Submission Attachment 1: Hunter Valley Network Operating Costs, 26 November 2021, p.5.

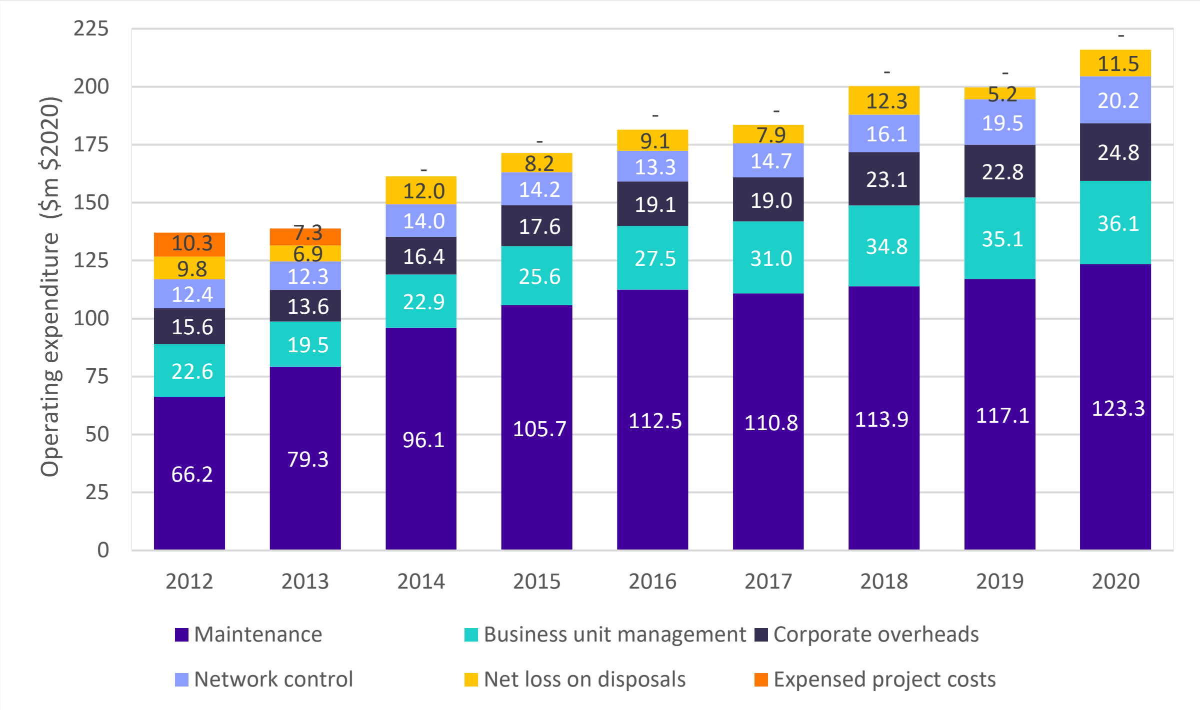
Notes: Constrained Network expenditure is as included in Ceiling Test.
Zone 3 is as included in RAB.
Total coal is for Hunter Valley coal network and is higher than sum of Constrained and Zone 3 because it also includes Zone 3 incremental costs incurred in Zone 1, and unconstrained segments in Zone 1.

ARTC submitted operating expenditure for the Constrained Network of $135.6 million and $141.7 million for 2019 and 2020 respectively. This reflects an increase of 11.4% from 2018 to 2020.

ARTC submitted operating expenditure for Zone 3 of $55.6 million and $66.8 million for 2019 and 2020 respectively. This reflects an increase of 9.1% from 2018 to 2020.

Figure 6 shows the six categories of ARTC's historical operating expenditure in real terms from 2012 to 2020.

Figure 6: Real Operating Expenditure by category ($million, real $2020), 2012 to 2020



Source: ACCC calculations based on ABS CPI data and ARTC's financial models for the 2012 to 2020 HVAU Annual Compliance processes.

Note: Chart shows total operating expenditure for the Hunter Valley coal network.

Figure 6 illustrates the magnitude of maintenance expenditure in total operating expenditure and the upward trend in all operating expenditure categories (except for net loss on disposals) from 2018 to 2020.

2.4.1. Maintenance costs

ARTC submitted maintenance costs for 2019 and 2020 of $116.5 million and $123.3 million respectively. Maintenance costs increased by 10.5% between 2018 and 2020, with an increase of 16.6% for the Constrained Network and 1.7% for Zone 3.

ARTC provided details on the top 10 maintenance activities by value for the network and each of the Zones. These are shown for 2019 to 2020 in Table 4 below.

Table 4: Top 10 Hunter Valley infrastructure maintenance expenditures ($million), 2019 to 2020

Expenditure category	2019	2020	Change from 2018 to 2020
Ballast Cleaning	[confidential]	[confidential]	-7.9%
Rail Grinding	[confidential]	[confidential]	4.7%
Turnout Steel Component Replacement	6.8	9.0	53.1%
Maintenance Resurfacing	8.1	8.6	14.8%
Full Track Reconditioning	5.8	7.8	10.1%
Rail Defect Removal	4.6	6.5	35.8%
Ballast Undercutting	3.8	4.5	39.9%
Turnout Resurfacing	4.7	4.3	29.0%
Inspection and Minor Repairs of Points	3.5	4.1	50.6%
Turnout Grinding	3.2	4.0	31.7%
Total top 10	**66.8**	**74.3**	**16.6%**

Source: ARTC, *Hunter Valley Coal Network Access Undertaking 2019 and 2020 Compliance Assessment Submission Attachment 1: Hunter Valley Network Operating Costs*, 26 November 2021, p. 8.

Expenditure on all maintenance activities, except for ballast cleaning, increased from 2018 to 2020. Turnout steel component replacement costs increased the most of any maintenance activity over 2018 to 2020, with a 53% increase over the 2 years. In the same period, ARTC also reported increased expenditure of over 30% for rail defect removal, ballast undercutting, turnout resurfacing, inspections and minor repair of points and turnout grinding.

Rail defect removals

In its *2018 HVAU Compliance Final Determination*, the ACCC noted 'the increased trend of rail defect removals over the life of the Undertaking' and that it 'may seek further information from ARTC about this upward trend if it continues in 2019 and 2020'.[13] ARTC reported a decrease in rail defect removal costs of $0.2 million (3.3%) in 2019. However, in 2020 rail defect removal costs increased by $1.9 million (40.5%).

ARTC provided the following comments about its reported rail defect removal costs:

> *ARTC's rail defect removal strategy is aimed at improving network reliability and reducing network losses associated with rail breaks or the development of emergency internal defects that require extensive, unplanned intervention. In 2018 and 2019, rail breaks were the leading cause of RCG reportable infrastructure*

[13] ACCC, *Final Determination: Australian Rail Track Corporation's compliance with the Hunter Valley Coal Access Undertaking financial model for calendar year 2018*, 10 August 2021, p.30.

losses, requiring a strategic focus in this area to improve outcome. While expenditure on rail defect removal was higher in 2020 than previous years, RCG reportable infrastructure losses attributable rail defects and breaks were down from 0.46% in 2018 and 0.68% in 2019, to 0.33% in 2020, and the total number of rail breaks also reduced from 75 in 2018 and 61 in 2019, to 38 in 2020 across all zones. As a result of this effort, in 2020, rail breaks were no longer the leading cause of RCG reportable infrastructure losses, indicative of the effectiveness of the rail defect removal strategy.[14]

2.4.2. Business unit management costs

Business unit management was introduced as a cost category in 2015 due to a corporate restructure, covering costs previously included in maintenance costs.

Business unit management costs comprise Hunter Valley direct costs and encompass four functions:

- Hunter Valley Customer Service and Operations
- Hunter Valley Asset Delivery, including the Provisioning Centres
- Hunter Valley Asset Development
- Hunter Valley Management and Support.

Business unit management costs were the second-highest expense in both 2019 and 2020. These costs have increased every year since 2015. Business unit management costs increased by $0.8 million (2.3%) and $1.2 million (3.3%) in 2019 and 2020 respectively, albeit these increases were less than those recorded in 2017 (15.3%) and 2018 (14.7%).[15]

Capacity Fastrack Initiative and Asset Management Improvement Program

In its *2018 HVAU Compliance Final Determination*, the ACCC stated it was satisfied that the Capacity Fastrack Initiative and Asset Management Improvement Programs have delivered and are expected to continue to deliver value for stakeholders. However, the ACCC also noted that it would continue to seek evidence of benefits of these projects to stakeholders in future annual compliance submissions.

ARTC did not include any comments specific to the Capacity Fast Track Initiative in its 2019 and 2020 compliance submission.

ARTC provided the following comments relating to the Asset Management Improvement Program (AMIP):

[AMIP will] deliver value through improved asset assurance function, resource optimisation and defect management on the rail assets. This will provide a more sophisticated asset management framework for ARTC to build robust maintenance plans and enable a deeper level of discussion on risk.

---

[14] ARTC, *Hunter Valley Coal Network Access Undertaking 2019 and 2020 Compliance Assessment Submission Attachment 1: Hunter Valley Network Operating Costs*, 26 November 2021, p. 25.

[15] ARTC, *Hunter Valley Coal Network Access Undertaking 2017 Compliance Assessment Submission Attachment 1: Hunter Valley Network Operating Costs*, 23 April 2020, p. 4; and ARTC, *Hunter Valley Coal Network Access Undertaking 2018 Compliance Assessment Submission Attachment 1: Hunter Valley Network Operating Costs*, 17 June 2021, p. 5.

> *…Since the 2017 Strategy ARTC has commenced monitoring Mean Time To Repair (MTTR) and Mean Time Between Failure (MTBF) analysis for rail breaks. The AMIP outcomes provide asset data that can be relied upon for the analysis identifying the parameters that impact network reliability. The completion of AMIP will enhance the data for the MTTR and MTBF analysis for rail breaks and the principles will also be applied to other asset types.*[16]

Consultancy expenditure

The ACCC noted in its *2018 HVAU Compliance Final Determination* that it would continue to monitor and engage with ARTC in relation to projects involving substantial consultant expenditure.

ARTC reported a $1.3 million decrease in consultancy expenditure in 2019, citing less reliance on specialist support relating to 'HVAU related regulatory activities' as the reason for this reduction.

However, ARTC's consultancy expenditure increased by $1.1 million in 2020. ARTC provided the following comments about its increased consultancy expenditure for 2020:

- *$0.6m increase in professional fees relating to the renewal of the Hunter Valley Coal Network Access Undertaking (HVAU) V8 and resourcing to assist with the accelerated lodgement of historical compliance submissions.*
- *$0.3m increase relating to professional fees to develop customer reporting tools. Specialised skills were required to transition and stabilise substantial raw data sets collected via Movement Planner to a usable format for analysis and distribution.*
- *$0.2m increase relates to the engagement of a consultant with the requisite skills to redesign the existing Signalling Statement of Competency (SOC) to assist with the shortage of signalling and other critical resources needed to maintain network infrastructure.*[17]

2.4.3. Corporate overhead costs

ARTC has stated that corporate overheads are general costs shared across the organisation and include the following expenditure: executive, finance, people, corporate services and safety, and strategy. Corporate overheads increased by $0.1 million (0.5%) and $2.1 million (9.4%) in 2019 and 2020 respectively.[18] This continues an overall increasing trend in corporate overhead costs since 2013.

Procurement and marketing

The ACCC noted in its *2018 HVAU Compliance Final Determination* that it would continue to monitor and engage with ARTC in relation to procurement and marketing expenditure.

---

16 ARTC, *2019 Hunter Valley Corridor Capacity Strategy*, May 2019, p 53.

17 ARTC, *Hunter Valley Coal Network Access Undertaking 2019 and 2020 Compliance Assessment Submission Attachment 1: Hunter Valley Network Operating Costs*, 26 November 2021, p. 37.

18 Ibid, p. 39.

ARTC reported an increase in procurement expenditure of $0.9 million and $0.1 million for 2019 and 2020 respectively. ARTC provided the following comments about this increased expenditure:

> *$1.0m increase in costs relating to Procurement. Building on the foundation provided by the development of the Procurement Framework in 2018, ARTC appointed an external professional services partner (PTP Consultant) for the next phase of the Procurement Transformation Project (PTP), the multiyear large-scale functional transformation covering end to end supply chain management across the organisation. Drawing on proven expertise, the PTP Consultant was engaged to assess all elements of ARTCs procurement operating model including functional structure and governance, people and culture, process, data, performance management, budgets, planning, life cycle costs, systems and delegations.*[19]

ARTC did not report any movements in or comment on marketing expenditure in its submission.

2.4.4. Network control costs

Network control expenditure includes '*labour and materials associated with the delivery of the following functions:*

- *train control and signalling both on the main line and within the coal terminals;*
- *train planning and programming;*
- *operations and operational customer interface;*
- *incident management; and*
- *communication costs*'.[20]

ARTC submitted that network control costs were $19.4 million and $20.2 million in 2019 and 2020 respectively.[21] This reflects a 27.9% increase between 2018 and 2020.

ARTC Network Control Optimisation (ANCO) project

The ACCC noted in its *2018 HVAU Compliance Final Determination* that the ANCO project is expected to deliver tangible benefits through future cost savings and network optimisation. It also noted it 'will continue to monitor the ANCO project… to ensure these financial benefits materialise for access holders'.[22]

ARTC reported $2.9 million and $1.0 million for ANCO licensing fees for 2019 and 2020 respectively.[23] ARTC has highlighted the following benefits of the ANCO project:

> *ANCO increases network capacity and efficiency via technological tools and process changes to enable real time visibility, dynamic planning and variation*

---

19 ARTC, *Hunter Valley Coal Network Access Undertaking 2019 and 2020 Compliance Assessment Submission Attachment 1: Hunter Valley Network Operating Costs*, 26 November 2021, p. 39.

20 Ibid, p. 34.

21 Ibid, p. 34.

22 ACCC, *Final Determination: Australian Rail Track Corporation's compliance with the Hunter Valley Coal Access Undertaking financial model for calendar year 2018*, 10 August 2021, p.36.

23 ARTC, *Hunter Valley Coal Network Access Undertaking 2019 and 2020 Compliance Assessment Submission Attachment 1: Hunter Valley Network Operating Costs*, 26 November 2021, p. 34.

management capability as an alternate means to constructing additional capital funded crossing loops (the traditional method to increase capacity in a rail network)….

The primary tangible benefits of the ANCO project as outlined in the business case being the increase in track utilisation and the deferral of capital expenditure in the form of track infrastructure have been delivered. Productivity gains from dynamic train management has resulted in the targeted reduction in train dwell being met and data capture enabled by the technology has resolved historical barriers to accurately and easily measure train cycle time. Efforts are ongoing to continue to synthesize and integrate this newly available data into current systems and processes to support more accurate and efficient decision making.[24]

2.4.5. Consultant benchmarking of ARTC's corporate overheads

The ACCC has engaged Arup Australia to assist with reviewing ARTC's overhead costs as part of its 2019 and 2020 annual compliance assessment. Arup will assist with benchmarking ARTC's Business Unit Management, Corporate Overheads and Network Control costs, in a similar manner to the benchmarking conducted by Deloitte in September 2018.[25]

2.5. True-up Test audit

The true-up test (TUT) determines whether ARTC is liable for any rebates to users for ARTC's failure to deliver contracted path usages.

2.5.1. 2019 audit

RSM Australia (RSM) audited ARTC's compliance with the system TUT obligations in 2019, under Schedule 2 of the Indicative Access Holder Agreement annexed to the HVAU.

RSM found three minor compliance risk issues in its TUT audit:

- Four instances where monthly TUT reports were not published on ARTC's website within three weeks of the end of the TUT period.
- Two minor administration errors in the calculation of the total path usage in relation to forecast system losses arising from other parties and path usage by non-coal trains were identified.
- Lack of supporting documentation over the TUT data used to determine the cause of domestic cancellations.

These errors were deemed non-material and did not result in any shortfalls by ARTC.

The final audit report concluded that ARTC had complied, in all material respects, with Schedule 2 of the Access Holder Agreements under the HVAU for the year ended 31 December 2019 and ARTC is not liable to pay any rebates to users. [26]

[24] ARTC, *Hunter Valley Coal Network Access Undertaking 2019 and 2020 Annual Compliance Assessment Attachment 2: Capital Consultation*, 26 November 2021, pp.6-7.

[25] See *Australian Rail Track Corporation Ltd Operating and Maintenance Expenditure Analysis*, September 2018, pp.35-39.

[26] RSM Australia, *Australian Rail Track Corporation Limited – Hunter Valley Access Undertaking – System Wide True Up Test Audit – Reasonable Assurance Engagement Report*, April 2020, p. 6.

Additional details about the TUT results can be found in RSM's audit report.

2.5.2. 2020 audit

Grant Thornton conducted the TUT audit for 2020. It found two minor compliance risk issues:

- The monthly TUT reports for January 2020 were not published on ARTC's website within three weeks of the end of the TUT period.
- ARTC calculated Network Path Capability (NPC) using multiple network points rather than using single points as set out in the AHA. The approach taken by ARTC provides a more accurate representation of NPC and is effectively communicated to users at the start of each year through the NPC Notification document.

These errors were deemed non-material and did not result in any shortfalls by ARTC.

The final audit report concluded that ARTC had complied, in all material respects, with Schedule 2 of the Access Holder Agreements under the HVAU for the year ended 31 December 2020 and ARTC is not liable to pay any rebates to users.[27]

Additional details about the TUT results can be found in Grant Thornton's audit report.

---

[27] Grant Thornton, *Australian Rail Track Corporation Limited - Independent Reasonable Assurance Engagement Report Hunter Valley Access Undertaking – System Wide True Up Test Audit*, March 2021, p.4.

3. Questions

The ACCC welcomes stakeholder views on any aspect of ARTC's 2019 and 2020 compliance submission. In particular, the ACCC seeks stakeholder responses to the following questions:

Unders and overs

1) Do you hold any concerns about the reported under recovered revenue of $6.9 million in 2019 and $8.8 million in 2020? If so, what are these concerns?

Loss capitalisation

2) Do you hold any concerns about the reported loss capitalisation balances of $43.1 million in 2019 and $37.9 million in 2020? If so, what are these concerns?

Capital expenditure

3) Do you hold any concerns, and if so what are they, about ARTC's compliance with the HVAU regarding:

   (a) the cost of major capital projects to be rolled into the regulatory value of assets for 2019 and 2020.

   (b) the level of capital expenditure in relation to minor capital projects and the costs of those projects to be rolled into the regulatory value of assets for 2019 and 2020.

4) Do you have any concerns with the process conducted by ARTC in relation to consultation with, and endorsement of, capital expenditure by the RCG? If so, what are they?

Operating expenditure

5) Do you have any concerns as to whether the operating expenditure incurred by ARTC during the 2019 and 2020 compliance period was incurred in an efficient manner (as defined in section 14 of the HVAU), including ARTC's infrastructure maintenance, business unit management, corporate overheads, and network control costs, as well as its loss on disposals? If so, what are these concerns?

6) In your view, has ARTC provided adequate evidence to demonstrate efficiencies and benefits for Access Holders resulting from the expenditures queried by the ACCC in its 2018 Final Determination, including:

   a) Maintenance costs relating to rail defect removals

   b) Business unit management costs relating to the Capacity Fastrack Initiative and Asset Management Improvement Program

   c) Corporate overhead costs, particularly those relating to procurement and marketing

   d) Network control costs relating to the ANCO project.

True-up Test audit

7) Do you hold any concerns regarding ARTC's application of the TUT for 2019 and 2020 or the findings set out in the audit reports prepared by RSM for 2019 and Grant Thornton for 2020? If so, what are they?

Appendix A: Annual compliance assessment provisions in the HVAU (Version 7)

Section 4.10 of the HVAU provides for the ACCC to conduct an annual compliance assessment to determine whether ARTC has complied with the access pricing principles under the HVAU. These provisions are set out below (capitalised terms are defined under section 14 of the HVAU).

a) ARTC will submit to the ACCC by the later of 30 April each year and 4 months from the ACCC's final determination in respect of the previous calendar year:

   i. documentation detailing roll-forward of the RAB and the RAB Floor Limit, and comparisons between RAB and RAB Floor Limit;

   ii. where documentation in (i) above demonstrates that RAB is at or below RAB Floor Limit, documentation detailing calculations relevant to reconciliation of Access revenue with the applicable Ceiling Limit and calculation of any allocation of the total unders and overs amount; and

   iii. where documentation in (i) above demonstrates that RAB is above the RAB Floor Limit in Pricing Zone 3, documentation demonstrating that the Standard Access Charge, satisfy the requirements in section 4.3(c).

b) The documentation submitted by ARTC to the ACCC will, unless otherwise agreed with the ACCC and having regard to the relevant circumstances applicable at the time, meet the information provision guidelines and the timeframes set out in Schedule G.

c) If the ACCC reasonably considers that it requires additional information, other than that provided by ARTC in accordance with Schedule G, in order to carry out its assessment under section 4.10(d), it may request this information from ARTC in accordance with section 3 of Schedule G and upon receipt of such a request ARTC will use reasonable endeavours to provide the information to the ACCC as soon as reasonably practicable.

d) The ACCC will determine whether ARTC has undertaken:

   i. roll-forward of the RAB and RAB Floor Limit in accordance with the Undertaking and, where the roll forward is not in accordance with the Undertaking, determine what closing RAB or RAB Floor Limit would be in accordance with the Undertaking;

   ii. when required, the calculations relevant to reconciliation of Access revenue with the applicable Ceiling Limit and calculation of any allocation of the total unders and overs amount in accordance with the Undertaking, and where the calculations are not in accordance with the Undertaking, determine what total unders and overs amount or allocation would be in accordance with the Undertaking having regard to the operation of its unders and overs account;

   iii. in determining whether ARTC has complied with the provisions of section 4.4 in rolling forward the RAB or the RAB Floor Limit, the ACCC may have regard to the submissions of relevant industry participants but if Capital Expenditure or Capital Allocations have been endorsed by the RCG in accordance with section 9, the ACCC will not consider whether that Capital Expenditure is Prudent or review the Capital Allocation;

iv. the ACCC will publish its findings on its website and/or circulate to Access Holders in relation to the matters for its determination; and

v. ARTC will revise the closing RAB and manage Constrained Coal Customer Accounts in accordance with any determination by the ACCC.

e) The ACCC will determine whether ARTC has incurred Efficient costs and Efficient operating expenditure in accordance with section 4.5(b), and determine the change (if any) to:

i. the total ‘unders and overs’ amount or allocation; and

ii. closing RAB and RAB Floor Limit in section 4.4,

that results from Economic Cost under section 4.5(a) only including Efficient costs and Efficient operating expenditure determined in accordance with section 4.5(b).

Section 4.10(f)(x) of the HVAU also provides that ARTC will provide the final written report of the True-Up Test, as prepared by the independent auditor, to the ACCC to review as part of the annual compliance assessment process under the HVAU.