Draft Determination

Australian Rail Track Corporation’s compliance with the Hunter Valley Access Undertaking financial model for the 2015 calendar year

18 February 2019
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### Abbreviations and acronyms

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<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>ACCC</td>
<td>Australian Competition and Consumer Commission</td>
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<tr>
<td>AMP</td>
<td>Asset Management Plan</td>
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<tr>
<td>ANAO</td>
<td>Australian National Audit Office</td>
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<tr>
<td>ARTC</td>
<td>Australian Rail Track Corporation</td>
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<tr>
<td>ATSB</td>
<td>Australian Transport Safety Bureau</td>
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<tr>
<td>AWP</td>
<td>Annual Works Program</td>
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<tr>
<td>BDO</td>
<td>BDO (SA) Pty Ltd</td>
</tr>
<tr>
<td>Capex</td>
<td>Capital expenditure</td>
</tr>
<tr>
<td>DORC</td>
<td>Depreciated Optimised Replacement Cost</td>
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<tr>
<td>FTE</td>
<td>Full Time Equivalent</td>
</tr>
<tr>
<td>HRATF</td>
<td>Hunter Rail Access Task Force</td>
</tr>
<tr>
<td>Hunter Valley network</td>
<td>The standard gauge below-rail network subject to the HVAU</td>
</tr>
<tr>
<td>HVAU</td>
<td>Hunter Valley Access Undertaking</td>
</tr>
<tr>
<td>HVCCC</td>
<td>Hunter Valley Coal Chain Coordinator</td>
</tr>
<tr>
<td>IPART</td>
<td>Independent Pricing and Regulatory Tribunal</td>
</tr>
<tr>
<td>MPM</td>
<td>Major Periodic Maintenance</td>
</tr>
<tr>
<td>NSW</td>
<td>New South Wales</td>
</tr>
<tr>
<td>NSWRAU</td>
<td>New South Wales Rail Access Undertaking</td>
</tr>
<tr>
<td>RAB</td>
<td>Regulatory Asset Base</td>
</tr>
<tr>
<td>RCG</td>
<td>Rail Capacity Group</td>
</tr>
<tr>
<td>RCRM</td>
<td>Routine Corrective and Reactive Maintenance</td>
</tr>
<tr>
<td>TMP</td>
<td>Technical Maintenance Plan</td>
</tr>
<tr>
<td>TAL</td>
<td>Tonne axle load</td>
</tr>
<tr>
<td>TOP</td>
<td>Take-or-Pay</td>
</tr>
</tbody>
</table>
Executive summary

The Australian Rail Track Corporation (ARTC) has a natural monopoly over the below-rail infrastructure used to transport coal from the Hunter Valley to the Port of Newcastle for export. The Hunter Valley is the largest coal supply chain in the world. The Hunter Valley network is also used to transport coal to power stations and for non-coal traffic, including general and bulk freight (such as grain) and passenger services.

In the absence of appropriate regulation, ARTC would have the ability and incentive to exercise its market power to charge higher prices, to operate inefficiently, and undertake unnecessary investment. This would be to the detriment of coal producers using the infrastructure as well as participants in upstream and downstream markets. This ultimately impacts upon the efficiency and productivity of the Australian economy.

Access to the below-rail infrastructure of the Hunter Valley network is regulated through the Hunter Valley Access Undertaking (HVAU). The Australian Competition and Consumer Commission (ACCC) accepted the HVAU in June 2011. The ACCC’s role in assessing the HVAU is to ensure ARTC behaves in a manner that avoids these distortionary outcomes associated with the exercise of monopoly power.

The annual compliance assessment, in combination with other aspects of the HVAU, is intended to ensure that ARTC does not abuse its market power and charge prices yielding revenues in excess of efficient costs and normal profit levels. This promotes an environment for coal producers and associated industries where efficient investment and expenditure can be undertaken.

Under the HVAU, ARTC is required to annually submit documentation to the ACCC for an assessment of its compliance with the HVAU financial model. The HVAU financial model allows ARTC to recover revenue equivalent to its efficient costs in each calendar year for the Constrained Network (comprising of rail Segments in Pricing Zones 1 and 2). The model also allows ARTC to capitalise revenue shortfalls for Pricing Zone 3 into its regulatory value of assets for recovery in future years.

This current assessment relates to the period from 1 January 2015 to 31 December 2015. A summary of the issues of this assessment is outlined below.

Prudence of capital expenditure

The ACCC considers ARTC’s submitted major capital expenditure ($33.2 million), minor capital expenditure ($67.5 million) and disposals ($8.6 million) is prudent. However, the ACCC considers that ARTC’s submitted interest during construction ($2.1 million) for the Gunnedah Yard upgrade is not fully prudent.

The Gunnedah Yard upgrade was scheduled for completion in November 2014. However, completion of the project was delayed until March 2015 due to a contractor of ARTC not delivering a component on-time. As a result of this delay, ARTC submitted that an additional year of interest during construction should be included. The ACCC considers the cost of delayed completions caused by contracts not delivering should be borne by ARTC and not

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1 The Constrained Network is defined in section 14.1 of the HVAU 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 Economic Cost for those Segments on a stand-alone basis. ARTC’s charges on those Segments are constrained by a revenue ceiling equal to the Economic Cost.

“Segment” means a component of the Network as defined in section 14 of HVAU and listed in Schedule E.

2 Pricing Zone 3 is the part of the Network where the mines are newest. During the development of the HVAU, ARTC proposed the loss capitalisation model as a way to encourage investment in new assets where there was limited initial demand due to the start-up phase of the mines in that part of the Network.
Access Holders. The ACCC is of the view that prudent interest during construction is $1.1 million.

Therefore, the ACCC considers that net capital expenditure of $93.6 million on the Hunter Valley network incurred by ARTC is prudent. This is a decrease of $1.0 million in comparison to ARTC’s submission.

**Efficiency of operating expenditure**

For the 2015 Annual Compliance assessment, the ACCC undertook an in-depth assessment of the efficiency of ARTC’s operating expenditure on the Hunter Valley network. To assist with this assessment, the ACCC engaged WIK-Consult (who subcontracted engineering firm TÜV Rheinland) to provide independent advice on the efficiency of operating expenditure.

It is worth noting for both the operating expenditure and capital expenditure assessments, the ACCC sought additional information from ARTC on three occasions. In total, the ACCC was awaiting ARTC’s responses to these requests for 366 days.

The ACCC considers ARTC’s submitted expenditure for business unit management ($23.7 million), and Network Control ($13.1 million) is efficient. The ACCC considers ARTC’s submitted expenditure for corporate overheads ($16.3 million) is likely to be efficient, but seeks further explanation from ARTC in respect of four cost allocators identified by WIK-Consult as inappropriate. However, the ACCC considers that ARTC’s submitted expenditure on maintenance ($93.7 million) was not fully efficient.

In particular, ARTC applied a margin of 10 per cent to Routine Corrective and Reactive Maintenance (RCRM). The ACCC considers that by applying this margin to RCRM, it is receiving a double profit allowance—with a margin on the efficient prices for below-rail services via the rate of return and a margin on the price of maintenance services.

The ACCC considers this 10 per cent margin on RCRM is not efficient. The ACCC considers the efficient expenditure on maintenance is $91.9 million. The ACCC notes the application of this margin was only made known through the in-depth efficiency assessment of ARTC’s operating expenditure. The ACCC understands that ARTC would have applied this margin to RCRM in previous years.

Therefore, the ACCC considers that operating expenditure of $152.7 million on the Hunter Valley network incurred by ARTC is efficient. This is a decrease of $1.8 million in comparison to ARTC’s submission.

The ACCC has set out circumstances identified by WIK-Consult where ARTC’s compliance submission was not consistent with additional information received from ARTC. Further, the ACCC notes WIK-Consult questioned the sequence for allocating Network Control expenditure. The ACCC seeks clarification from ARTC on these issues and other matters identified in this Draft Determination. This Draft Determination does not adjust for these matters.

The ACCC notes its assessment for the efficiency of ARTC’s operating expenditure is for 2015. It does not imply that future years operating expenditures are automatically efficient. For the ACCC to continue to be satisfied that ARTC’s operating expenditure is efficient, ARTC needs to provide the additional information set out in the Draft Determination.

**Ceiling Limit for the Constrained Network**

The ACCC considers that the Ceiling Limit for the Constrained Network in 2015 was $304.5 million. This is a decrease of $1.3 million in comparison to ARTC’s submission. Given that
ARTC received revenue of $346.2 million from Constrained Coal Access Holders, the ACCC considers ARTC over-recovered $41.7 million. This increase in the over-recovery is attributable to the removal of the 10 per cent margin on RCRM.

**Loss capitalisation for Pricing Zone 3**

The balance of the capitalised losses is the difference between the Regulated Asset Base (RAB) and RAB Floor Limit for Pricing Zone 3 (as defined in section 4.4 of the HVAU). The ACCC considers that the balance of capitalised losses at the end of 2015 is $86.2 million. This is a decrease of $0.7 million in comparison to ARTC’s submission. This decrease in the balance of capitalised losses is attributable to the removal of the 10 per cent margin on RCRM and reduced interest during construction for the Gunnedah Yard upgrade.
1. Introduction

ARTC is an Australian Government-owned corporation established in 1998 as a single point of contact for parties seeking to run trains on the Interstate network across Australia and the Hunter Valley network in New South Wales (NSW). ARTC is vertically separated, providing ‘below-rail’ services (such as the rail track infrastructure) but not ‘above-rail’ services (such as haulage). The Interstate network and the Hunter Valley network are currently subject to separate access undertakings that were accepted by the ACCC in relation to each network in 2008 and 2011 respectively.

The Hunter Valley network is predominantly used to transport coal from mines in the Hunter Valley region to the Port of Newcastle for export and to domestic customers, such as power stations. It is also used by non-coal traffic, including general and bulk freight services (such as grain) and passenger services.

The Hunter Valley network is divided into Pricing Zones (Figure 1), where:

- Pricing Zone 1 extends from the Port of Newcastle to Muswellbrook
- Pricing Zone 2 extends from Muswellbrook to Ulan
- Pricing Zone 3 extends from Muswellbrook to Narrabri.

Figure 1: Hunter Valley rail network – Pricing Zones

Note: Pricing Zone 1 and Pricing Zone 2 make up the Constrained Network.
Source: ARTC.
The Hunter Valley network was previously subject to the NSW Rail Access Undertaking (NSWRAU) administered by the NSW Independent Pricing and Regulatory Tribunal (IPART). However, access to the Hunter Valley network has been regulated through the HVAU since the ACCC accepted the undertaking in June 2011.

The 2011 HVAU was initially accepted for a five year term to the end of June 2016, but has since been varied six times:

- On 17 October 2012, the ACCC consented to ARTC’s 7 September 2012 application to vary the HVAU to implement changes to its pricing structure and charges (the Initial Indicative Services).
- On 25 June 2014, the ACCC consented to ARTC’s 28 June 2013 application to vary the HVAU to incorporate the Gap to Turrawan Segments.
- On 22 June 2016, the ACCC consented to ARTC’s 16 June 2016 application to vary the HVAU to extend the term of the undertaking to 31 December 2016.
- On 23 November 2016, the ACCC consented to ARTC’s 18 October 2016 application to extend the term of the undertaking to 30 June 2017.
- On 29 June 2017, the ACCC consented to ARTC’s 16 June 2017 application to vary the undertaking to:
  - extend the term of the undertaking to 31 December 2021
  - vary the real pre-tax rate of return to 5.38 per cent and the remaining mine life to 23 years
  - incorporate a new Schedule with ARTC’s cost allocation methodology.
- On 29 November 2018, the ACCC consented to ARTC’s 28 September 2018 application to vary the HVAU to incorporate the following changes into the undertaking:
  - incorporate path based pricing
  - apply an Incremental Cost methodology such that:
    - Pricing Zone 3 Access Holders contribute Incremental Costs for Pricing Zone 1 for the remaining term of the undertaking
    - incremental maintenance costs are allocated on the basis of actual usage and incremental capital costs are allocated on the basis of contracted capacity
    - Take-or-Pay (TOP) charges include incremental capital based on contracted capacity
    - a dual ceiling limit applies.

The undertaking that applies for the purpose of the 2015 Annual Compliance Assessment is the HVAU which was in effect at the beginning of 2015, which can be accessed at: https://www.accc.gov.au/public-registers/access-to-services-registers/s-44zzc2-access-undertaking-australian-rail-track-corporation-variation-to-2012-variation.

Capitalised terms used which are not defined in this Draft Determination are terms defined in section 14.1 of the HVAU.

### 1.1. HVAU financial model

The annual compliance assessment is based on the HVAU financial model which aggregates the revenues and costs for the Hunter Valley network.
Section 4 of the HVAU sets out the amount of revenue that ARTC is entitled to recover from Access Holders for the Hunter Valley network by implementing revenue floor and ceiling limits.

- Section 4.2 of the HVAU sets the minimum revenue amount that ARTC is to receive from Access Holders as the ‘Direct Cost’ and ‘Incremental Cost’ (Floor Limit) of providing services.\(^3\)

- Section 4.3 of the HVAU caps the maximum revenue amount that ARTC is entitled to receive from Access Holders (Ceiling Limit) at the Economic Cost of providing services.

The Economic Cost of providing services is calculated using a ‘building block model’ and incorporates allowances for return on assets, return of assets (depreciation) and efficient operating expenditure.

The calculation of the Economic Cost, therefore, also requires a regulatory valuation of assets. Two concepts of the RAB are defined in the section 4.4 of HVAU:

- The RAB Floor Limit at the end of a year is the RAB Floor Limit at the end of the previous year rolled forward by adding inflation and net prudent capital expenditure and deducting depreciation.\(^4\)

- The RAB at the end of a year is the RAB at the end of the previous year rolled forward by adding the annual rate of return, operating expenditure and net capital expenditure, and deducting revenue received.

The RAB Floor Limit is the more traditional type of asset base used in other building block models. The RAB is a type of loss capitalisation account used for Pricing Zone 3 in the HVAU.

Reconciliation of revenues received from Access Holders with the ceiling revenue limits is applied for the different parts of the Hunter Valley network as follows:

- For the Constrained Network, the HVAU applies an ‘unders and overs’ accounting framework that enables ARTC to recover the full Economic Cost of providing services in each compliance period.

  If ARTC’s revenue from Constrained Coal Customers is less than the relevant Economic Cost (being the Ceiling Limit for Constrained Group of Mines) in a compliance period, then ARTC is entitled to recover the ‘under’ from Constrained Coal Customers. Conversely, if ARTC’s revenue exceeds the relevant Economic Cost, then ARTC is required to refund the ‘over’ to Constrained Coal Customers.\(^5\)

- For Pricing Zone 3 only, the HVAU allows for loss capitalisation. Until a time that ARTC is able to recover the Economic Cost of Pricing Zone 3, ARTC is allowed to capitalise revenue shortfalls into the Pricing Zone 3 regulatory value of assets for recovery in future periods.

  When the RAB is equal to or falls below the RAB Floor Limit, the Access revenue from any Access Holder, or group of Access Holders must not exceed the Ceiling Limit. Once ARTC is able to recover the Economic Cost of Pricing Zone 3 and has recovered the

\(^3\) “Direct Cost” is defined as maintenance expenditure, including major periodic maintenance that varies with usage of the Network, and may include other costs that vary with the usage of the Network but excluding Depreciation, assessed on an Efficient basis; “Incremental Cost” means all costs that could be avoided in the medium term if a Segment was removed from the Network.

\(^4\) The initial value of the RAB was the value previously ascribed in the NSW Rail Access Undertaking based on the depreciated optimised replacement cost (DORC) method of valuing assets.

\(^5\) The Constrained Group of Mines and Constrained Coal Customers, corresponding to the Constrained Network, are defined in section 14 of the HVAU.
losses capitalised from previous years, then Pricing Zone 3 will become constrained and the ‘unders and overs’ accounting framework will take effect.

1.2. ACCC annual compliance assessment

Section 4.10 of the HVAU provides for the ACCC to conduct an annual assessment to determine whether ARTC has complied with the HVAU financial model for the calendar year. In particular, the ACCC is required to determine whether:

- ARTC has undertaken prudent capital expenditure and incurred efficient operating expenditure in accordance with the requirements set out in the HVAU
- ARTC has rolled forward the regulatory value of its assets in accordance with the HVAU
- Pricing Zone 3 forms part of the Constrained Network or whether ‘loss capitalisation’ continues to apply for that pricing zone
- ARTC has reconciled revenues with the applicable revenue floor and ceiling limits and determined the allocation of any under- or over-recovery of revenue to Constrained Coal Customers in accordance with the HVAU.

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

1.3. ARTC’s submission for the 2015 calendar year

ARTC submitted its annual compliance documentation for the 2015 calendar year on 31 August 2017. As the opening balances for each compliance period are based upon the closing balances of the previous compliance period, ARTC’s submission for 2015 was delayed until the ACCC’s assessment of the 2014 period was completed on 31 March 2017.

The documentation includes ARTC’s financial model (provided to the ACCC on a confidential basis) that details the allocation of the ‘unders and overs’ amount to each Constrained Coal Customer for 2015.


1.4. Consultation with stakeholders on ARTC’s submission

The ACCC’s public consultation process regarding this assessment included a four week period where the ACCC invited views from industry stakeholders.

On 15 September 2017, the ACCC published a Consultation Paper inviting comments from interested parties on ARTC’s compliance submission. The ACCC received submissions from:

- Whitehaven
- Anglo American.


Key points in the submissions are summarised in the relevant chapters below.
1.5. Requests for additional information and engagement of consultants

On 5 December 2017 the ACCC engaged WIK-Consult to provide independent advice on the efficiency of ARTC’s operating expenditure. WIK-Consult sub-contracted TUV-Rheinland for its rail engineering expertise.

The ACCC’s decision to engage a consultant followed concerns expressed by stakeholders that there was limited transparency and oversight over the efficiency of ARTC’s operating expenditures.

Under the HVAU the Rail Capacity Group (RCG) is required to endorse any capital expenditure in order for the ACCC to determine it is prudent. However, there is no similar provision for operating expenditure. Further, the ACCC notes that ARTC’s cost profile is currently shifting away from capital towards operating expenditures.

Additionally, ARTC began developing an operating expenditure efficiency mechanism as part of its proposed 2017 HVAU. However, ARTC subsequently withdrew this application, and has not sought to incorporate any similar performance incentives schemes in later variation applications.

To inform WIK-Consult’s assessment and its own analysis, the ACCC sought further information from ARTC regarding its compliance submission on three occasions. Information was also provided by ARTC at an operating expenditure workshop held between 2 and 4 July 2018. Table 1 sets out the timeline of additional information sought by the ACCC as part of the assessment process. In total, the ACCC was awaiting ARTC’s responses to these requests for 366 days.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 November 2017</td>
<td>ACCC sends a request for clarification primarily on capital expenditure issues</td>
</tr>
<tr>
<td>21 December 2017</td>
<td>ACCC issues a request for information under Schedule G of the HVAU on operating expenditure issues</td>
</tr>
<tr>
<td>19 June 2018</td>
<td>ARTC provides complete set of responses to 21 December 2017 request for information</td>
</tr>
<tr>
<td>2–4 July 2018</td>
<td>Operating expenditure workshop between ACCC, WIK-Consult, TÜV Rheinland and ARTC in Newcastle</td>
</tr>
<tr>
<td>12 July 2018</td>
<td>ACCC and ARTC agree on a list of follow-up items from operating expenditure workshop</td>
</tr>
<tr>
<td>26 September 2018</td>
<td>ARTC provides complete set of responses to 12 July 2018 follow-up items</td>
</tr>
<tr>
<td>28 November 2018</td>
<td>ARTC provides complete set of responses to 27 November 2017 request for clarification</td>
</tr>
</tbody>
</table>

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6 Operating expenditure includes maintenance, business unit management, network control and corporate overhead costs.

On 19 October 2018, WIK-Consult provided its draft report on the efficiency of ARTC’s operating expenditure, with the final report provided on 21 December 2018.

1.6. Consultation on this Draft Determination

The ACCC’s Draft Determination of ARTC’s compliance for the 2015 calendar year takes into account the views expressed through stakeholder consultation and the additional information provided by ARTC. The ACCC is now seeking submissions from interested parties on the Draft Determination.

1.6.1. Making a submission

Submissions should be addressed to:

Mr Matthew Schroder  
General Manager Infrastructure & Transport—Access & Pricing Branch  
Australian Competition and Consumer Commission  
GPO Box 520  
Melbourne VIC 3001  
Email: transport@accc.gov.au

Submissions are due by 4 March 2019.

1.6.2. Confidentiality

The ACCC strongly encourages public submissions. Unless a submission, or part of a submission, is marked confidential, it will be published on the ACCC’s website and may be made available to any person or organisation upon request.

Sections of submissions that are claimed to be confidential should be clearly identified. The ACCC will consider each claim of confidentiality on a case by case basis. If the ACCC refuses a request for confidentiality, the submitting party will be given the opportunity to withdraw the submission in whole or in part.

For further information about the collection, use and disclosure of information provided to the ACCC, please refer to the ACCC publication ‘Australian Competition and Consumer Commission / Australian Energy Regulator Information Policy – the collection, use and disclosure of information’.8

1.6.3. Further information

ARTC’s submission in relation to the 2015 Annual Compliance assessment and other relevant information, including the current effective HVAU, are available on the ACCC’s website at: http://accc.gov.au/regulated-infrastructure/rail/artc-hunter-valley-access-undertaking.

Public submissions received during the current assessment will also be published at this location.

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

Kristopher Morey  
Infrastructure & Transport—Access & Pricing Branch  
Infrastructure Regulation Division  
Phone: +61 3 9290 1948  
Email: kristopher.morey@accc.gov.au

1.7. Structure of Draft Determination

The following chapters outline the ACCC’s views on the key issues relating to ARTC’s compliance submission:

- prudence of capital expenditure (chapter 2)
- efficiency of operating expenditure (chapter 3)
- calculation of Incremental Costs (chapter 4)
- True-Up Test audit (chapter 5)
- the ACCC’s Draft Determination regarding compliance and revenue reconciliation (chapter 6).
2. Prudency of capital expenditure

Sections 4.4(a) and (b) of the HVAU define net capital expenditure as capital additions, 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 regulatory value of assets, 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 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 (HVCCC) (in a non-voting capacity).

The HVAU provides that ARTC can recover interest costs incurred during construction up until 1 July in the calendar year that the asset was commissioned (determined by reference to the appropriate rate of return.9

2.1. ARTC's August 2017 compliance submission

For 2015, ARTC has sought to roll-forward into its regulatory value of assets total net capital expenditure of $94.6 million as set out in Table 2. This total was 55 per cent lower than 2014 net capital expenditure of $210.8 million.

Table 2: Net capital expenditure ($)10

<table>
<thead>
<tr>
<th>Category</th>
<th>Pricing Zone 1</th>
<th>Pricing Zone 2</th>
<th>Pricing Zone 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major capital expenditure</td>
<td>13 348 548</td>
<td>536 685</td>
<td>19 311 897</td>
<td>33 197 130</td>
</tr>
<tr>
<td>Minor capital expenditure</td>
<td>18 593 430</td>
<td>9 698 191</td>
<td>39 556 647</td>
<td>67 848 268</td>
</tr>
<tr>
<td>Interest during construction</td>
<td>0</td>
<td>0</td>
<td>2 123 704</td>
<td>2 123 704</td>
</tr>
<tr>
<td>Disposal value</td>
<td>−1 767 464</td>
<td>−1 397 628</td>
<td>−5 435 445</td>
<td>−8 600 537</td>
</tr>
<tr>
<td>Net capital expenditure</td>
<td>30 174 514</td>
<td>8 837 248</td>
<td>55 556 802</td>
<td>94 568 564</td>
</tr>
</tbody>
</table>

Note: Totals may not add due to rounding.

2.1.1. Major capital expenditure and associated interest during construction

ARTC noted that the Gunnedah Yard upgrade was the only major capital project commissioned during 2015, with total capital expenditure of $18.2 million. Post-commissioning spending occurred on 12 other projects, the bulk of it being on Hexham Relief Roads Stage 1 ($12.2 million) following its commissioning in 2014.11

The interest during construction of $2.1 million was due to the Gunnedah Yard Upgrade project which was commissioned during 2015.12 This is set out in Table 3 below.

9 The rate of return is defined under section 4.4 of the HVAU.
11 Ibid, p. 11.
12 Ibid.
Table 3: ARTC’s major project expenditure and interest during construction costs proposed to be included in the asset base for 2015 ($)\textsuperscript{13}

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Project Spend</th>
<th>Interest</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pricing Zone 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gunnedah Yard upgrade</td>
<td>18 220 703</td>
<td>2 123 704</td>
<td>20 344 406</td>
</tr>
<tr>
<td>Post-commissioning</td>
<td>14 958 427</td>
<td>0</td>
<td>14 958 427</td>
</tr>
<tr>
<td>Total Major Projects</td>
<td>33 197 130</td>
<td>2 123 704</td>
<td>35 320 834</td>
</tr>
</tbody>
</table>

Note: Totals may not add due to rounding.

2.1.2. Minor capital expenditure

Minor projects (also referred to by ARTC as corridor capital) are typically those relating to ongoing annual programmes for asset replacement rather than delivering additional capacity.\textsuperscript{15} The total minor capital works of $67.8 million comprised 263 different projects, the largest of which were for rerailing and track strengthening.\textsuperscript{16}

Regarding the minor works, ARTC submitted that:\textsuperscript{17}

\textit{During 2015, ARTC undertook a process with the RCG in relation to the Corridor Capital programme, where the programme was presented for endorsement, indicative works and costings within that programme were provided, the programme was endorsed, and the works delivered.}

\textit{It is noted that changes at the detailed project level can occur in terms of the scope, priority and timing depending on prevailing circumstances such as identified network conditions and access to the network. During 2015, ARTC kept the RCG informed of the progress of the endorsed Corridor Capital program where material variations were identified, i.e. projects showing a forecast variance to cost to complete of +/- $50,000 of the amount endorsed or that encountered a material change to planned delivery. Updates on the delivery of the Corridor Capital programme were provided on a six monthly basis to the RCG.}

ARTC provided the ACCC with confidential evidence of RCG endorsement for major and minor capital expenditure amounts.

\textsuperscript{13} Ibid.
\textsuperscript{14} Ibid, p. C1.
\textsuperscript{17} Ibid, pp. 10–1.
2.1.3. Disposals

ARTC submitted that capital works resulted in asset disposals for 2015 with a total written down value of $8.6 million.\(^{18}\) Table 4 sets out further detail on ARTC’s asset disposals and the net loss on the disposal of those assets by Pricing Zone.

**Table 4: ARTC’s proposed Asset Disposals and Loss on Disposals ($)^{19}\)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Pricing Zone 1</th>
<th>Pricing Zone 2</th>
<th>Pricing Zone 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets disposed</td>
<td>1 767 464</td>
<td>1 397 628</td>
<td>5 435 445</td>
<td>8 600 537</td>
</tr>
<tr>
<td>less Disposal proceeds</td>
<td>−361 099</td>
<td>−139 126</td>
<td>−457 768</td>
<td>−957 993</td>
</tr>
<tr>
<td>Net loss on disposal</td>
<td>1 406 366</td>
<td>1 258 502</td>
<td>4 977 677</td>
<td>7 642 544</td>
</tr>
</tbody>
</table>

*Note: Totals may not add due to rounding.*

2.2. Stakeholder submissions

Whitehaven’s submission included views on the prudence of ARTC’s capital expenditure. It focused on ARTC’s calculation of interest during construction and ARTC’s procedures during disposals. These comments are summarised below.

2.2.1. Interest during construction

Whitehaven raised the issue of the calculation of interest during construction for the Gunnedah Yard upgrade. Whitehaven notes that the works were due for completion in November 2014 but the completion date was delayed until March 2015. Whitehaven submitted that the delay was due to ARTC technical issues so it would be expected that the interest during construction would be calculated based on the original completion date in 2014.\(^{20}\)

2.2.2. Loss on disposals

Whitehaven noted that ARTC disposed of $8.6 million of assets from the RAB during 2015 and recovered $1.0 million or 11 per cent. Whitehaven considered that this is either the result of the ARTC being significantly overvalued or that ARTC is not prudently disposing of these assets at the highest possible value.\(^{21}\)

Whitehaven also stated:\(^{22}\)

*Of significant concern is the practice of ARTC using the average market rate for scrap metal, and utilizing "life expired" rail in areas of the non-30 TAL network. It would be expected in this circumstance that the assets would be transferred at book value rather than scrap value.*

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\(^{18}\) Besides deducting the written down value of asset disposals from the RAB, ARTC also includes the net loss on disposals in its operating expenditure (see chapter 3).


\(^{21}\) Ibid.

\(^{22}\) Ibid.
2.3. Further information provided by ARTC

ARTC provided further information on its capital expenditure in response to a request for clarification sent by the ACCC on 27 November 2017. The request sought information on the following issues:

- RCG endorsement for minor projects where it had not been apparent from the initial submission
- a difference between the RCG endorsed value used in the ARTC’s ceiling test model and the RCG documentation
- total expensed values used for certain projects in the ceiling test model differing from the Corridor Capital Reconciliation Report
- the total expensed amount to be rolled into the RAB Floor Limit for certain projects being significantly more than the RCG endorsed amount
- negative capital expenditure on projects
- updated details for 30 TAL projects in 2015
- claiming interest during construction for Gunnedah Yard upgrade after the original commissioning date
- ARTC procedures affecting disposal of assets and valuation of disposed assets.

ARTC provided some responses between 21 and 28 November 2018, after the ACCC agreed responding to the 21 December 2017 request for information regarding operating expenditures should take priority.

ARTC’s responses form part of the information taken into account by the ACCC in its assessment, set out in the next section.

2.4. ACCC’s Draft Determination

Taking into account ARTC’s compliance submission, stakeholder submissions and further information provided by ARTC, the ACCC’s views on ARTC’s prudency of capital expenditure are set out below regarding each of the following:

- major capital expenditure additions
- minor capital expenditure additions
- interest during construction
- disposals
- ACCC’s overall view on the prudency of ARTC’s capital expenditure.

2.4.1. Major capital expenditure additions

The HVAU explicitly provides that if capital expenditure has been endorsed by the RCG, the ACCC must accept that the capital expenditure is prudent.

The ACCC has reviewed the confidential documents provided by ARTC as evidence of RCG endorsement for major capital expenditure additions. These additions include one major project commissioned in 2015 as well as post-commissioning spending that occurred in 2015 on several other projects.
The ACCC is satisfied that ARTC has shown evidence of RCG endorsement for capital expenditure on major projects of $33.2 million and that this amount may be rolled into the regulatory value of assets for 2015.

2.4.2. Minor capital expenditure additions

Minor capital expenditure additions for 2015 totalled $67.8 million, made up of 263 individual capital projects. Of these projects, 126 are related to the 30 TAL works project in Pricing Zone 3.  

RCG endorsement for projects

The consultation process for minor projects differs from that for major projects in that RCG endorsement is provided for a package of minor projects rather than individual ones.  

ARTC’s compliance submission provided evidence that the original RCG endorsement covered most minor capital projects in 2015. This included endorsement for the package of 30 TAL works in Pricing Zone 3. The amount ARTC proposed to add to the RAB in relation to 30 TAL projects was less than the RCG endorsed amount. For most non-30 TAL minor capital projects in 2015, the RCG endorsement documents provided by ARTC reconciled with its compliance submission.

There were a small number of minor capital expenditure projects where either ARTC did not provide evidence of RCG endorsement or where the RCG endorsed amount did not reconcile with the amounts ARTC sought to roll into the regulatory value of assets. The ACCC subsequently requested further information from ARTC to confirm the prudence of expenditure for these projects.

In response ARTC provided evidence supporting its projects, attaching additional documentation of internal variations and updates to RCG. Several of the changes were due to changed project numbers and reclassification from major to minor capital.

In the case of one project (Coals resignal) where the RCG endorsed value used in ARTC’s ceiling test model was less than the RCG documentation, ARTC’s response showed that the difference was explained mainly by the project having been split between two projects.

For several projects there was a difference in expensed values between ARTC’s ceiling test model and its Corridor Capital Reconciliation Reports provided to the RCG. ARTC’s response provided explanations concerning regrouping of projects and stated that:

The values reflected in the 4 November 2015 RCG Report represent actual and forecast information as at June 2015. The Corridor Capital Reconciliation Reports are provided to the RCG on a six-monthly basis as progress reports and do not necessarily reflect the final cost. Final costs capitalised to the RAB can vary against the interim RCG Reports based on actual costs incurred and following ARTC’s capital closeout review which may result in reallocation of costs or additional costs incurred post commissioning.

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23 This refers to additional works to implement 30 tonne axle load (30 TAL) operations in Pricing Zone 3.
25 ARTC, Request number: 1 (Minor capital expenditure RCG endorsements), Response to ACCC’s 27 November 2017 request for clarification, 23 November 2018, pp. 1–2.
26 ARTC, Request number: 2 (Differing RCG endorsed values), Response to ACCC’s 27 November 2017 request for clarification, 21 November 2018, p. 1.
27 ARTC, Request number: 3 (Differing expensed values), Response to ACCC’s 27 November 2017 request for clarification, 21 November 2018, pp. 3–4.
Variation in expenditures from endorsed budget

The ACCC noted that there were a number of projects for which the expenditure added to the RAB was more than 10 per cent above the amount endorsed by the RCG. The ACCC subsequently requested further information from ARTC to confirm the prudency of expenditure for these projects.

ARTC’s response stated that a number of rerailing and turnout renewal projects had been endorsed earlier by RCG as part of the corridor capital program but later incorporated in the 30 TAL project. ARTC made corresponding adjustments to project numbers and budgets. The 30 TAL projects subsequently showed expenditures often well in excess of the original endorsed amount, but the total expenditures were within the combined budgets.28

For some other projects ARTC submitted that the expenditures were based on competitive tenders but experienced over-runs due to reasons such as unforeseen latent site conditions, adverse weather, additional out-of-scope works and purchase of spares to ensure future serviceability.

The ACCC notes that the additional expenditure (where explicit RCG endorsement was not provided) was effectively funded by underspends in other minor capital projects.

30 TAL projects

ARTC provided updated data showing the value of endorsed 30 TAL expenditure as at 31 December 2015 was $137.4 million, with project expenditure to that date of $76.0 million. That was well within the endorsed total, although further 30 TAL expenditure is being incurred as the program progresses.29

Negative capital expenditure

The ACCC queried the reasons for the negative capital expenditure shown on a number of projects in ARTC’s model. ARTC’s response listed reasons for each project but there were two primary reasons: 30

- Accrual adjustment
  As part of ARTC’s end of month/year processes, costs are accrued based on the estimated value for services that have been performed. Final invoices will be received after the work is completed which can fall into the following month or in this case calendar year. The invoices may contain a variation from the amount estimated. Where the final invoice received in the following calendar year has come in lower than the amount estimated, a negative expense is posted so as to reverse the excess amount in the previous year.

- Reallocation of expenditures
  In a number of cases ARTC changed an earlier assignment of expenditure from one project to another, resulting in a negative amount in 2015. In particular, this occurred with legal costs of $0.4 million that had been charged to overhead expenditure in 2014. These

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28 ARTC, Request number: 4 (Expensed values exceed RCG endorsed amounts), Response to the ACCC’s 27 November 2017 request for clarification, 28 November 2018, pp. 3–4, and ‘Appendix A RN4_confidential.xlsx’.
30 ARTC, Request number: 5 (Negative expenditure), Response to the ACCC’s 27 November 2017 request for clarification, 21 November 2018, pp. 1–6.
costs were subsequently reallocated to corridor maintenance ($0.2 million) and capital ($0.2 million) through an accounting journal in 2015.31

**Conclusion on minor capital**

The ACCC is satisfied that ARTC has shown evidence to demonstrate prudent expenditure on minor capital projects. The total expenditure in 2015 was within the collective budget endorsed by the RCG, and ARTC regularly notified the RCG of adjustments required for individual projects.

Accordingly, the ACCC considers that ARTC may roll its capital expenditure on minor projects of $67.8 million into the RAB for 2015.

### 2.4.3. Interest during construction

ARTC has sought to roll-forward total interest during construction of $2.1 million, from the Gunnedah Yard upgrade in Pricing Zone 3. The original approved commissioning date for this project was November 2014, but the project was not completed until March 2015. Expenditure up to 2014 totalled $15.2 million, with a further $3 million of expenditure in 2015. Interest accumulated up to 2014 totalled $0.9 million, with a further $1.1 million in 2015.

In light of Whitehaven’s submission, the ACCC requested information on the circumstances of the delay in completion, and why ARTC was claiming interest during construction up to 2015 rather than 2014.

ARTC submitted in response that:32

> The objective of the project was to deliver section capacity by providing an unrestricted run for through traffic, with a speed increase (25km/h to 60km/h) and an upgrade of the mainline infrastructure to allow for 30 tonne axle load (30TAL) trains.

> The project delay was caused by a delay in the finalisation of a component of the signal design (Microlok data) by the signal design consultant engaged by ARTC despite assurances that it would be provided as scheduled and in time for the planned commissioning. The performance of the signal design consultant was considered unsatisfactory and ARTC took steps during the project to replace the design consultant’s project managers.

ARTC advised that it provided regular progress updates on the Gunnedah Yard upgrade to stakeholders through the RCG, and that it advised the RCG once this delay was identified. ARTC’s monthly reports to RCG from November 2014 to February 2015 provided advice on progress of the project. The ACCC notes that the first notification in the monthly reports of the delay was in November 2014, the intended month of completion.

The track work component of the works had been completed by October 2014, and temporary arrangements were made to enable 30 TAL wagons to traverse Gunnedah Yard from 1 January 2015 at a reduced speed. This achieved the second part of the project objective and allowed customers to benefit from the newly installed track infrastructure until the signal commissioning was completed during the March 2015 closedown.33

If interest is carried through to 2015 as it is in ARTC’s model, the relatively minor delay in completion would trigger another full year’s interest on the accumulated expenditure.

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31 ARTC, Request number: 7, Response to the ACCC’s 21 December 2017 request for information, 19 June 2018, p. 1.
33 Ibid.
However, the ACCC considers that the costs of delayed completion should be a risk borne by ARTC as the responsible manager of the project and its associated risks, including selection of a contractor subsequently found to be unsatisfactory. Therefore, the ACCC considers that the cost of delayed completion should not be accepted as prudent expenditure and Access Holders should not bear the cost of an additional year’s interest in 2015.

Actual expenditure on the Gunnedah Yard upgrade of $18.2 million to 2015 was within the endorsed project budget of $18.5 million. Accordingly the ACCC considers that the total expenditure through to 2015 was prudent. However, interest on the accumulated expenditure during construction should be calculated only to 2014, allowing a half year’s interest on the 2015 expenditure as if it had been spent in 2014. This effectively reduces interest during construction by $1.0 million to avoid the interest cost being carried past the planned completion date.

Accordingly, after adjustment for 2015 interest, the ACCC considers that ARTC may roll forward interest during construction of $1.2 million into the regulatory value of assets for 2015.

2.4.4. Disposals

ARTC submitted that the total reduction in asset values due to disposals was $8.6 million, with a net loss on disposal of $7.6 million. For Pricing Zone 3, ARTC submitted a total disposal value of $5.4 million with a net loss on disposal of $5.0 million.

The disposal rate is lower than the values recorded in the 2014 year, following the completion of some major renewal projects with associated disposals. In addition the recovery rate is lower than the previous year, as shown in Table 5.

<table>
<thead>
<tr>
<th>Pricing Zone</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pricing Zone 1</td>
<td>45</td>
<td>20</td>
</tr>
<tr>
<td>Pricing Zone 2</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>Pricing Zone 3</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>11</td>
</tr>
</tbody>
</table>

Whitehaven expressed concern about the low recovery values in 2015 and ARTC’s valuation at scrap value of “life expired” rail used in areas of the non-30 TAL network.

The ACCC sought further information from ARTC relating to the procedures it used to value disposed assets, an explanation on the reasons that it experienced a lower recovery rate compared to the previous year, and the use and disposal of scrap steel.

ARTC’s response included the following points:

- Where an asset is disposed of, the corresponding carrying value removed from the RAB is based on the underlying regulatory value of the asset with CPI escalation and accumulated depreciation applied in accordance with the annual roll-forward methodology for the RAB Floor Limit under section 4.4 of the HVAU.

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34 ARTC, Gunnedah Yard Upgrade, RCG Memo Phase 2, 5 December 2013, p. 30.
• Recovery rates in 2015 were lower as:
  o the line Segments where the capital activities were undertaken in 2015 had lower RAB carrying values
  o the average price of scrap material decreased 19 per cent from $238 per tonne in 2014 to $193 per tonne in 2015.\(^{35}\)

• The overall asset recovery rate of 11.1 per cent for 2015 is comparable to 2013 where there was an average recovery rate of 12 per cent.

• The market rate for scrap rail, used to determine disposal proceeds, is calculated with reference to the average scrap sales value per tonne as received by ARTC in 2015.

• When items of infrastructure are reused within the Hunter Valley coal network, they are treated as a disposal and addition to the RAB against the relevant line Segments. When they are reused external to the Hunter Valley coal network, they are treated as a disposal to the RAB. Proceeds on disposals are deemed where ARTC would have received a scrap value had the asset been sold rather than reused.

Overall, taking into account the additional contextual information received from ARTC, the ACCC is satisfied that ARTC has demonstrated prudency regarding disposals for 2015. However, to ensure continued prudency of disposal, ARTC will need to provide the underlying calculations which determine the written down value of disposed assets.

2.4.5. ACCC’s overall view of ARTC’s prudency of capital expenditure

The ACCC’s assessment of ARTC’s prudency of capital expenditure has had regard to the relevant factors in the definition of prudent in the HVAU.\(^{36}\)

The ACCC is of the view that ARTC has demonstrated prudency of its capital expenditure, except that interest during construction should be reduced by $1.0 million. It is therefore appropriate for ARTC to roll forward total net capital expenditure of $93.6 million into its RAB (Table 6).

Table 6: ACCC’s overall view of ARTC’s prudency of capital expenditure ($)

<table>
<thead>
<tr>
<th>Category</th>
<th>Pricing Zone 1</th>
<th>Pricing Zone 2</th>
<th>Pricing Zone 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major capital expenditure</td>
<td>13 348 548</td>
<td>536 685</td>
<td>19 311 897</td>
<td>33 197 130</td>
</tr>
<tr>
<td>Minor capital expenditure</td>
<td>18 593 430</td>
<td>9 698 191</td>
<td>39 556 647</td>
<td>67 848 268</td>
</tr>
<tr>
<td>Interest during construction</td>
<td>0</td>
<td>0</td>
<td>1 164 154</td>
<td>1 164 154</td>
</tr>
<tr>
<td>Disposal value</td>
<td>–1 767 464</td>
<td>–1 397 628</td>
<td>–5 435 445</td>
<td>–8 600 537</td>
</tr>
<tr>
<td>Net capital expenditure</td>
<td>30 174 514</td>
<td>8 837 248</td>
<td>54 597 253</td>
<td>93 609 015</td>
</tr>
</tbody>
</table>

Note: Totals may not add due to rounding.

\(^{35}\) ARTC, Request number 8 and 9 (Loss on Disposal), Response to ACCC’s 27 November 2017 request for clarification, 26 November 2018, pp. 1–6.

\(^{36}\) ‘Prudent’ is defined under section 14.1 of the HVAU.
3. Efficiency of operating expenditure

Section 4.10(e) of the 2011 HVAU provides for the ACCC to assess the efficiency of ARTC’s operating expenditure. Efficient costs and operating expenditure in turn informs the determination of the Economic Cost and the maximum amount of revenue that ARTC is entitled to receive.

Section 2(c) of Schedule G of the HVAU requires ARTC to submit, amongst other particulars, a detailed breakdown of the Economic Costs for the review period into standard operating cost line items, return and depreciation, as well as provide comparative values from the previous review period.

3.1. ARTC’s August 2017 compliance documentation

For 2015, ARTC submitted that it incurred a total operating expenditure of $109.8 million in the Constrained Network (Table 7) and $44.7 million in Pricing Zone 3 (Table 8).

Table 7: Operating expenditure for the Constrained Network ($)

<table>
<thead>
<tr>
<th>Operating expenditure</th>
<th>2014(^{37})</th>
<th>2015(^{38})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance costs</td>
<td>61 315 380</td>
<td>66 410 954</td>
</tr>
<tr>
<td>Business unit management (formerly shared maintenance) costs</td>
<td>16 610 425</td>
<td>18 315 152</td>
</tr>
<tr>
<td>Corporate overheads</td>
<td>12 201 218</td>
<td>12 724 871</td>
</tr>
<tr>
<td>Network control</td>
<td>9 389 101</td>
<td>9 702 875</td>
</tr>
<tr>
<td>Net loss on disposals</td>
<td>4 420 358</td>
<td>2 664 867</td>
</tr>
<tr>
<td>Expensed project costs</td>
<td>2 629 041</td>
<td>0</td>
</tr>
<tr>
<td>Total operating expenditure</td>
<td>106 565 523</td>
<td>109 818 719</td>
</tr>
</tbody>
</table>

*Note: Totals may not add due to rounding.*

3.1.1. Maintenance

For the Constrained Network, ARTC submitted that the total maintenance cost for 2015 was $66.4 million, compared to $61.3 million in 2014. This represents an increase of $5.1 million or 8.3 per cent. For Pricing Zone 3, ARTC submitted that total maintenance cost for 2015 was $27.2 million, compared to $23.3 million in 2014. This represents an increase of $3.9 million or 16.7 per cent.\(^{39}\)

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\(^{38}\) Ibid.

\(^{39}\) Noting that prior to 2015, business unit management costs were submitted as shared maintenance costs. The maintenance cost figures presented do not include business unit management costs.
Table 8: Operating expenditure in Pricing Zone 3 ($)

<table>
<thead>
<tr>
<th>Operating expenditure</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance costs</td>
<td>23,343,896</td>
<td>27,244,635</td>
</tr>
<tr>
<td>Business unit management (formerly shared maintenance)</td>
<td>4,201,497</td>
<td>5,419,719</td>
</tr>
<tr>
<td>Corporate overheads</td>
<td>2,686,354</td>
<td>3,621,526</td>
</tr>
<tr>
<td>Network control</td>
<td>3,327,252</td>
<td>3,445,010</td>
</tr>
<tr>
<td>Net loss on disposals</td>
<td>6,471,642</td>
<td>4,977,677</td>
</tr>
<tr>
<td>Expensed project costs</td>
<td>3,905,729</td>
<td>0</td>
</tr>
<tr>
<td>Total operating expenditure</td>
<td>43,936,370</td>
<td>44,708,567</td>
</tr>
</tbody>
</table>

Note: Totals may not add due to rounding. Annual Compliance assessments from 2014 onwards incorporate the Gap to Turrawan Segments in Pricing Zone 3, while assessments prior to 2013 do not. Therefore, care should be taken when making comparisons to years prior to 2014.

ARTC attributed the increases in maintenance costs in 2015 to ballast cleaning, rail grinding and turnout steel replacements. ARTC submitted that increased levels of activity in the aforementioned three maintenance activities arose from:

...increased rail traffic experienced on the network in recent years in the form of longer and heavier trains carrying larger payloads.

It should be noted, ARTC divided maintenance into Major Periodic Maintenance (MPM) and RCRM. MPM is defined as follows:

Cyclical or planned activities that maintain the operating performance and asset life of operational infrastructure, and aim to reduce the level of defects and corrective maintenance.

RCRM is defined as follows:

Scheduled activities used to inspect or service assets on a routine basis. RCRM extends to include reactive or corrective activities that are required as a result of the inspections or identification of defects that, because of their nature, are dealt with on the spot or as soon as is reasonably practical thereafter.

3.1.2. Business unit management

ARTC submitted that for 2015, a new cost category called ‘business unit management’ would replace what was historically categorised as ‘shared maintenance’ costs. Business
unit management costs are the direct costs of resources located in the Hunter Valley and are divided into the following five functions:

- Hunter Valley customer and operations
- Hunter Valley asset management delivery
- Hunter Valley asset management development
- Hunter Valley management and support
- Interstate customer and commercial.

ARTC submitted that this change resulted from a restructure undertaken in late 2014, which saw:

...commercial, regulatory compliance and other functions (e.g. some elements of finance) [being] moved from corporate to the ARTC business units.

ARTC submitted this restructure meant:

...management and administrative costs emanating from Newcastle can no longer be classified simply as an adjunct to maintenance costs and it is more appropriate to include these costs as a separate category of indirect costs, similar to Corporate Overheads, albeit that a substantial component of that cost remains related to the maintenance and operation of the network.

For the Constrained Network, ARTC submitted that business unit management costs during 2015 were $18.3 million, compared to shared maintenance costs of $16.6 million in 2014. This represents an increase of $1.7 million or 10.3 per cent. For Pricing Zone 3, ARTC submitted that business unit management costs during 2015 were $5.4 million, compared to shared maintenance costs of $4.2 million in 2014. This represents an increase of $1.2 million or 30 per cent.

In relation to comparing these costs between 2014 and 2015, ARTC noted that shared maintenance costs from 2015 in Table 14 of its compliance submission:

...[had] not been adjusted to attempt to match the new corporate structure. The comparison should be understood in that context.

### 3.1.3. Corporate overheads

For the Constrained Network, ARTC submitted that corporate overhead costs for 2015 were $12.7 million, compared to $12.2 million in 2014. This represents an increase of $0.5 million or 4.3 per cent. For Pricing Zone 3, ARTC submitted that corporate overhead costs for 2015 were $3.6 million, compared to $2.7 million in 2014. This represents an increase of $0.9 million or 34.8 per cent.

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47 ARTC, Request number: 2, Response to the ACCC’s 21 December November 2017 request for information, 19 June 2018, p. 2.
49 Ibid, p. 17.
51 Ibid.
54 Ibid.
ARTC submitted that:\(^{55}\)

*Increased labour costs from wage increases were largely offset by a reduction in corporate headcount due to the restructure that placed commercial and other functions into the business units. However, even though the total cost pool was largely the same as for 2014, Hunter Valley coal received a higher proportion of costs due to a higher proportion of Train Km compared to lower activity levels in ARTC’s interstate business and other non-coal traffics.*

### 3.1.4. Network Control

ARTC noted that its Network Control costs include labour and materials associated with the delivery of train control and signalling functions (both on the main line and within the coal terminals), train planning and programming, operations and customer management and train communication costs.\(^{56}\)

For the Constrained Network, ARTC submitted that Network Control costs for 2015 were $9.7 million,\(^{57}\) which was a slight increase from $9.4 million in 2014.\(^{58}\) For Pricing Zone 3, ARTC submitted that Network Control costs for 2015 was $3.4 million, compared to $3.3 million for 2014.

### 3.1.5. Expensed project

ARTC submitted that there were no expensed projects in the Constrained Network or Pricing Zone 3 during in 2015.\(^{59}\)

### 3.2. Stakeholder submissions

The ACCC received stakeholder comments on the efficiency of ARTC’s operating expenditure from Whitehaven. Specifically, Whitehaven submitted on:

- treatment of major incidents
- approach to assessing efficiency
- corporate restructure.

First, Whitehaven noted that there ‘were three major incidents affecting track infrastructure on the Hunter Valley network in 2015’.\(^{60}\) These were:

- Kankool derailment on 25 February 2015
- April 2015 major flooding near Maitland
- Pages River derailment on 28 August 2015.

Whitehaven noted it: \(^{61}\)

*…is understood these incidents have a significant time period for finalization of insurance claims or claims on "at fault" third parties. It is unclear in the ARTC*

\(^{55}\) Ibid, p. 20.
\(^{56}\) Ibid, pp. 18–9.
\(^{57}\) Ibid, p. 19.
\(^{59}\) Ibid, p. 17.
\(^{60}\) Whitehaven Coal, *Submission to the 2015 Annual Compliance*, 13 October 2017, p. 3.
\(^{61}\) Ibid.
Compliance Submission information as to how these incidents were treated within the 2015 opex reporting.

It would be expected that any funds returned with regards to these incidents would be either allocated as additional revenue or a reduction in costs in in the relevant Pricing Zone for the 2015 compliance period. Whitehaven would request ACCC investigate the treatment of these incidents in the Compliance Test.

Second, in regards to the approach to assessing operating expenditure efficiency, Whitehaven states:\(^{62}\)

With the decrease in the number of major capital projects, the ARTC operating expense continues to increase as a percentage of total costs. Given this increase in focus, we would encourage ACCC to expand its expertise in the area of rail infrastructure expenses to allow a more detailed analysis of the ARTC operating expenditure for future compliance tests.

Third, in regards to the corporate restructure, Whitehaven stated:\(^{63}\)

The restructure undertaking by ARTC in late 2014 has led to a 10% increase in Business Unit Overheads from the previous year. As the Corporate Overheads remained static in the same period it can be assumed the restructure increased the total operating costs. As this restructure did not require approval of Hunter Valley access holders Whitehaven would challenge the validity of this type of operating expense increase being passed through to the access holders.

### 3.3. Further information provided by ARTC

As noted in section 1.5, the ACCC undertook an in-depth assessment on the efficiency of ARTC’s operating expenditures for 2015. To assist in this assessment, the ACCC engaged WIK-Consult (who subcontracted engineering firm TÜV Rheinland) to provide independent advice on this matter.

As part of the assessment into the efficiency of ARTC’s operating expenditure, there have been four circumstances where ARTC has provided further information on its operating expenditure. These were:

- in response to the 21 December 2017 information request
- throughout the July 2018 workshop
- in response to the 12 July 2018 follow up items from the workshop
- ARTC’s 20 September 2018 submission to the assessment.

In addition, the ACCC provided ARTC with a request for clarification on 27 November 2017. While most of this request focused on capital expenditure issues, part of one question related to operating expenditure.

#### 3.3.1. ARTC’s responses to 21 December 2017 information request

On 21 December 2017, the ACCC issued an information request to ARTC under section 3(b) in Schedule G of the 2011 HVAU. Table 9 sets out a summary of the information sought from ARTC in the information request.

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\(^{62}\) Ibid.

\(^{63}\) Ibid.
Table 9: Summary of 21 December 2017 information request

<table>
<thead>
<tr>
<th>Item</th>
<th>Information sought</th>
</tr>
</thead>
</table>
| 1    | ARTC’s corporate documents on:  
|      | • coding and reporting in ARTC’s financial and management suite  
|      | • preparing submissions for seeking project approval  
|      | • its chart of accounts  
|      | • its maintenance activity schedule  
|      | • its 10 year asset management plan |
| 2    | Details on all activities classified as Network Control, business unit management and corporate overheads |
| 3    | Breakdown of GTKs (actual, forecast and contracted), Train Km (actual, forecast and contracted) and Track Km into:  
|      | • Hunter Valley and Interstate  
|      | • coal and non-coal |
| 4    | Staff numbers for each of ARTC’s work areas |
| 5    | Staff numbers allocated to the Hunter Valley and Interstate networks |
| 6    | Breakdown of submitted operating expenditure into cost centres |
| 7    | Data extracts from ARTC’s general ledger accounts for all submitted operating expenditure |
| 8    | Mapping of transactions in the general ledger accounts to submitted operating expenditure |
| 9    | All maintenance activities undertaken and associated internal project management plans and decision documents |
| 10   | Details on ARTC corporate restructure in 2014 |
| 11   | Details on ARTC’s capitalisation policy (that is, how projects are determined to be operating expenditure or capital expenditure) |
| 12   | Details on ARTC’s procurements procedures and their application |

The ACCC’s 21 December 2017 information request sought complete responses by 2 February 2018. ARTC provided a complete response to this information request on 19 June 2018. It was intended that responses to the 21 December 2017 information request would be provided to the ACCC with adequate review time prior to a schedule workshop between 2 and 4 July 2018.

Table 10 sets out key information provided and the nature of information provided to the ACCC by ARTC in response to the 21 December 2017 information request.
### Table 10: Summary of ARTC’s responses to the 21 December 2017 information request

<table>
<thead>
<tr>
<th>Information provided</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Selected corporate documents</strong></td>
<td>ARTC provided the following corporate documents which were applicable in 2015:</td>
</tr>
<tr>
<td></td>
<td>- FIN-GL-018 Coding and Reporting Guidelines—which ‘provides the overview of the structure and key inputs that are required to deliver the financial and management report suite for ARTC’</td>
</tr>
<tr>
<td></td>
<td>- FIN-RG-039 Budget and Investment Committee (BIC) Submission Procedure—which ‘provide[s] guidance for preparing project submissions that are likely to exceed $2 million or that do not have an approved budget, to ARTC’s internal BIC to facilitate their evaluation and endorsement at the required authority level’.</td>
</tr>
<tr>
<td></td>
<td>- FIN-RG-006 Chart of Accounts—which is used ‘as a chart of the differing coding structures and description when applicable to ensure there is clarity in the coding of accounts’</td>
</tr>
<tr>
<td></td>
<td>- FIN-RG-009 ARTC Maintenance Activity Schedule—which provides ‘additional information of the maintenance coding in relation to its description in ARTC’s accounts and the relevant program that it is under’.</td>
</tr>
<tr>
<td><strong>Asset Management Plan (AMP)</strong></td>
<td>ARTC provided a copy of the ten year AMP spreadsheet between 2014–15 and 2024–25. The spreadsheet sets out the expected cost for each financial year by MPM and RCRM activities, Segment and projects.</td>
</tr>
<tr>
<td><strong>Operating expenditure activities</strong></td>
<td>ARTC provided detailed descriptions of the operating expenditure activities classified as Network Control, business unit management and corporate overheads.</td>
</tr>
<tr>
<td><strong>GTK, Train Km and Track Km</strong></td>
<td>ARTC provided for 2014 and 2015 the actual, forecast and contracted GTK and Train Km by Pricing Zone in the Hunter Valley network and for the Interstate network. In addition, ARTC provided the Track Km by Pricing Zone in the Hunter Valley network and for the Interstate network.</td>
</tr>
<tr>
<td><strong>Staff numbers</strong></td>
<td>ARTC provided for 2014 and 2015 the number of Full Time Equivalent (FTE) allocated to the Hunter Valley network and Interstate network. This include a breakdown of FTE by business unit and transfers between business units.</td>
</tr>
<tr>
<td><strong>Account ledgers</strong></td>
<td>ARTC provided extracts from its account ledgers for all operating expenditure for 2014 and 2015. For maintenance expenditure, for each transaction this included Segment, activity, account number, purchase order number and cost. For all other expenditures, for each transaction this included business unit, Segment, activity, account number and share allocated to the Hunter Valley network.</td>
</tr>
<tr>
<td><strong>Corporate restructure</strong></td>
<td>ARTC provided addition information, including a presentation, on the purpose of the 2014 restructure and effect on operating expenditure.</td>
</tr>
<tr>
<td><strong>Capitalisation policy</strong></td>
<td>ARTC provided a copy of FCA-PO-004 Fixed Assets Policy which details when expenditure can be treated as a capital expenditure (and when it is operating expenditure).</td>
</tr>
</tbody>
</table>
Procurement processes

ARTC provided a copy of FCCC-01 Contract Management which outlines ‘internal procurement procedures and includes guidance on the best practice principles to ensure value for money and appropriate governance’. In addition, ARTC provided a selection of procurement undertaken during 2015, which included:

- supplier name
- procurement method (for example, formal tender of single source offer)
- description of procurement
- procurement process
- number of tenders invited and response received
- outcome of procurement process.

3.3.2. 2–4 July 2018 workshop

Between 2 and 4 July 2018, the ACCC, WIK-Consult and TÜV Rheinland participated in a workshop hosted by ARTC in Newcastle. The purpose of this workshop was to provide ARTC, ACCC, WIK-Consult and TÜV Rheinland an opportunity to discuss in detail ARTC’s operating expenditure during 2015. As part of this workshop, ARTC provided presentations on:

- ARTC in the context of the Hunter Valley
- Network Control, business unit management and corporate overheads
- maintenance.

The ACCC acknowledges the time and resources provided by ARTC in hosting this workshop.

3.3.3. ARTC’s responses to 12 July 2018 follow up items from workshop

Following on from the workshop, the ACCC, WIK-Consult and TÜV Rheinland identified several issues requiring additional information from ARTC. On 12 July 2018, the ACCC and ARTC agreed on a list of items which required additional information (Table 11).

Table 11: Summary of 12 July 2018 follow up items

<table>
<thead>
<tr>
<th>Item</th>
<th>Information sought</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Actual on-cost labour rates and its makeup applied by ARTC during 2015.</td>
</tr>
<tr>
<td>2</td>
<td>The process ARTC undertakes to acquire insurance, the nature of the insurance ARTC holds by asset, the providers of insurers to ARTC, how regularly ARTC switches insurers and the calculations on how insurance is allocated to the Hunter Valley network.</td>
</tr>
<tr>
<td>3</td>
<td>Information on the total number of ARTC staff performing maintenance activities in-house.</td>
</tr>
<tr>
<td>Item</td>
<td>Information sought</td>
</tr>
<tr>
<td>------</td>
<td>--------------------</td>
</tr>
</tbody>
</table>
| 4    | Data for ARTC’s Hunter Valley physical and equipment assets for 2015, which would include any asset additions and disposals—including the:  
  - number of tracks and track length  
  - number of turnouts and crossings  
  - number of steel, concrete and wood underbridges, and length of each underbridge (or approx. length by category)  
  - number and length of tunnels  
  - number of signals  
  - electronic equipment for train communication  
  - number of level crossings. |
| 5    | Information on how the costs of ARTC’s provisioning centres, vehicles and maintenance equipment are allocated and where these costs are reported in the general ledger. |
| 6    | Information confirming that the criteria and thresholds applied to determine the costs used to establish fixed assets are the same in the general asset register as the RAB. |
| 7    | Explain how ARTC has determined the thresholds for defining minor capital expenses and confirm whether ARTC has changed these thresholds in previous compliance years, or intends to change these thresholds in future compliance years. |
| 8    | Information on the total spend by ARTC on procurement services for maintenance and overheads in 2015. |
| 9    | Revised response to item 6 of the 21 December 2017 information request, as ARTC informed the ACCC on 3 July 2018 that the general ledger extract for overheads provided on 14 June 2018 included labelling errors. |
| 10   | Information on the centrally coordinated functions for the Hunter Valley business unit, including Wayside and Stores functions. |
| 11   | Information demonstrating the frequency of ARTC’s maintenance inspections. |
| 12   | Information outlining reasons for applying the 10 per cent margin to RCRM. |
| 13   | With regards to developing the AMP for 2014-15 and 2015-16, information on the:  
  - Asset Management Policy  
  - Corporate and Divisional Plans  
  - Possession Plan  
  - Asset Strategies  
  - Engineering Standards  
  - Safety Management System  
  - Asset Management Register. |
| 14   | The 2014–15 and 2015–16 Annual Works Program (AWP) and budget as approved at the May ARTC Board meetings. |
ARTC provided a complete response to the 12 July 2018 follow-up items on 16 November 2018. Table 12 sets out for key information provided, the nature of information provided to the ACCC by ARTC.

**Table 12: Summary of ARTC’s responses to the 12 July 2018 follow-up items from workshop**

<table>
<thead>
<tr>
<th>Information provided</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour on-cost applied</td>
<td>ARTC provided a breakdown of components part of its applied labour on-cost rate in 2015. This includes annual leave, bonuses, long service leave, payroll tax, salary uplift, sick leave and workers compensation.</td>
</tr>
<tr>
<td>Insurance</td>
<td>ARTC outlined the process it undertakes for seeking insurance, who it held insurance policies with by class in 2015 and the allocation insurance premiums between the Interstate and Hunter Valley networks by class. Class includes assets (rail and non-rail), professional indemnity, corporate travel and motor vehicle fleets.</td>
</tr>
<tr>
<td>ARTC staff performing maintenance</td>
<td>ARTC provided organisation charts showing the number of staff performing either maintenance support or maintenance.</td>
</tr>
<tr>
<td>Hunter Valley physical and equipment assets</td>
<td>ARTC provided a summary of the number of turnouts, underbridges, tunnels, signals and level crossing by Segment.</td>
</tr>
<tr>
<td>Provisioning centres, vehicles and maintenance equipment</td>
<td>ARTC provided details on the cost centres for its provision centres, the number and type of owned and leased vehicles and allocation of costs.</td>
</tr>
<tr>
<td>Thresholds for fixed assets</td>
<td>ARTC provided details that the thresholds for fixed assets are the same for both the general ledger and RAB.</td>
</tr>
<tr>
<td>Thresholds for minor capital</td>
<td>ARTC stated that individual assets purchased with a cost up to $1000 are expensed for accounting and regulatory purposes. That is, these individual assets are classified as operating expenditure.</td>
</tr>
<tr>
<td>Procurement on maintenance</td>
<td>ARTC provided data on the total cost of procurement for maintenance during 2015.</td>
</tr>
<tr>
<td>Centrally coordinated functions for the Hunter Valley business unit</td>
<td>ARTC provided its organisation chart highlighting delivery units, functions and compliance categories related to track maintenance. In addition, ARTC provided a description for each delivery unit of their role in maintenance.</td>
</tr>
<tr>
<td>Frequency of maintenance inspections</td>
<td>ARTC provided details that its maintenance frequency and inspections are detailed in Technical Maintenance Plans (TMPs) as part of ARTC’s infrastructure standards. ATRC provided 2015 versions of relevant TMPs.</td>
</tr>
<tr>
<td>RCRM margin</td>
<td>ARTC provided additional information on the RCRM margin.</td>
</tr>
<tr>
<td>Information provided</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>ARTC Board approved AWP</td>
<td>ARTC provided a spreadsheet with the AWP approved by ARTC’s Board.</td>
</tr>
</tbody>
</table>

In regards to the RCRM margin and as part of its response to the 12 July 2018 follow-up items, ARTC noted section 1.1(j) of the HVAU which states:

*As an access provider, maintenance of, and investment in, the Network and Associated Facilities is a large component of ARTC’s current cost structure. These services are either outsourced, and managed under contracts entered into on commercial terms as a result of a competitive tender process, or, in ARTC’s view, otherwise managed on an efficient basis. ARTC has adopted this practice with a view to ensuring that the management, operation and maintenance of the Network and Associated Facilities by ARTC and ARTC’s cost structure is Efficient.*

ARTC stated:  

*It has been a long standing regulatory precedent that any outsourcing of maintenance practices as identified in [section] 1.1(j) are an efficient infrastructure practice. That is, the outsourcing of maintenance services is consistent with actions of a prudent service provider.*

Further, ARTC stated:  

*It is a matter of regulatory precedent that a company can choose to either create its own formal internal services division, which formally contracts with its related party asset owner at a margin deemed efficient. While ARTC has retained a maintenance services division within its existing structure, the nature of ARTC’s internal arrangement is not relevant to this decision as the test for efficiency is based on the costs incurred by a prudent service provider (not specifically by ARTC). The value of maintenance work, therefore, must be independent of the firm structure used for delivery of the services; as the efficient market price in a workably competitive environment cannot vary for different firms operating in that market depending on their structure. The opportunity cost for rail maintenance services is therefore equal to the efficient market price that arises in the workably competitive market for rail services – which is shown in the below examples to be cost plus 10 per cent.*

*A test to determine an efficient price in the market for outsourced maintenance services will include a margin with costs. ARTC has experience of both out and in sourcing maintenance teams in the management of its own network and also engaging with other network managers to provide outsourced services – this experience can inform the efficient price for maintenance services.*

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64 ARTC, Opex workshop – Additional questions: 14, Response to the ACCC’s 12 July 2018 follow up items from workshop, 14 September 2018, p. 1.
65 Ibid, pp. 1–2.
The market for rail maintenance services is a workably competitive market with, at the time of the 2011 HVAU and continuing today, numerous parties actively bidding for maintenance work in NSW including, inter alia, ARTC, Transfield Services, Downer EDI and John Holland. The examples below highlight that efficient cost of maintenance services at this time was cost plus 10 per cent, with recent examples confirming this continues to be the market price.

ARTC concluded that:

… a prudent operator, reflecting efficient infrastructure practice, incurs the efficient market cost determined in the workably competitive market for rail maintenance services, which is cost plus 10 per cent. ARTC has further demonstrated the basis for that 10 per cent margin reflects its own experience as a prudent operator in managing Alliance Contracts and also the margin it earned on external works. Since the commencement of the 2011 HVAU, ARTC has therefore applied this margin to the costs incurred on RCRM to reflect the costs incurred by a prudent service provider, managing the Network, acting efficiently.

The RCRM cost inclusive of 10 per cent margin therefore meets the requirements of 4.5(b) to be efficient.

3.3.4. ARTC’s 20 September 2018 submission

On 20 September 2018, ARTC provided the ACCC with a submission to the efficiency assessment of ARTC’s operating expenditure. As part of this submission, ARTC attached reports from two consultants it had engaged:

- Gattorna Alignment report entitled ‘The context for ARTC’s role in the Hunter Valley coal chain’
- Deloitte report entitled ‘Australian Rail Track Corporation Ltd – Operating and maintenance expenditure analysis’.

ARTC’s 20 September 2018 submission and consultant reports were provided outside of the ACCC’s formal information requests.

On the cost drivers for the Hunter Valley network, ARTC submitted:

The Hunter Valley Network was not purpose built for the traffic intensity and tonne axle loads that traverse the tracks and instead there has been a series of network upgrades to enable todays operation. This is particularly evident in Pricing Zone 3. Each of the Pricing Zones have distinct infrastructure configurations, geotechnical conditions and volume profiles that drive the costs within each zone. Mixed use of the Network means that ARTC cannot fully optimise its maintenance regime for heavy haul traffic. This multi-use dimension creates complexity and distinguishes the Hunter Valley Network from other Network comparators.

The need for alignment across the Coal Chain is a key driver for ARTC’s possession strategy that shapes the patterns of maintenance of the Hunter Valley Network. To deliver contracted capacity and minimise disruption requires ARTC to conduct its maintenance in condensed and planned time windows. With only so much time available in the delivery of committed capacity to its Customers, resources (people, materials and equipment) must be secured to maximise the work that is carried out in

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these windows. ARTC has been transparent in its information sessions for this Opex Review that, in some circumstances, this solution may not be the cheapest delivery method if reviewed in isolation. However, it provides overall value to Customers through availability of capacity across the Coal Chain. This is particularly important for the single line section of track in Pricing Zones 2 and 3 where demand is approaching the threshold of capacity.

2015 was not a typical year and cannot be easily compared against 2014 and prior years. ARTC was nearing the end of an extended period of infrastructure investment to enhance capacity to support the coal industry and had commenced a major transformation program to place Customers at the forefront of its business activities and performance metrics. The organisational restructure to establish the two Business Units resulted in roles moving from corporate to the Hunter Valley, and new roles established to drive Customer service outcomes to enhance the value proposition of the Hunter Valley Network.

On the relationship between coal chain alignment and maintenance, Gattorna Alignment stated:

A key tenet of the cooperative supply chain model employed for Hunter Valley coal is alignment of maintenance planning and activity along the chain. The bases for pursuing this objective is that:

- Maintenance on one part of the coal chain system can preclude another part from carrying any flow. As seen in the discussion above, the terminal can be prevented from receiving coal if key parts of the track are unavailable. And train movements stop if all terminals are closed.

- There are also key inter-linked relationships that determine the level of impact, and which thus must be factored into planning to resolve a best solution. The stockpile capacity and configuration at the terminal, for example, determines the number of days of vessel loading that can continue with no inbound flow. Currently the practical limit at Port Waratah terminals is about 3 days. The available space for parking up trains can also be a constraint on the extent of the track network closedown.

- There are natural lulls in coal supply and demand that can be utilised for maintenance within a coordinated approach. When a longwall finishes in an underground mine, for example, there is a 6-8 week window without supply while it is moved.

In terms of the efficiency of ARTC’s operating expenditure, Deloitte stated its purpose was:

…to provide a third party review of ARTC’s Opex and maintenance costs in relation to the Hunter Valley Coal Network for CAL15 in order to assess the efficiency of costs.

Deloitte summarised its approach into the following five steps:

- Data Gathering: collecting ARTC 2015 Opex and maintenance data, along with the relevant information

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69 Deloitte, Australian Rail Track Corporation Ltd – Operating and maintenance expenditure analysis, Report prepared for ARTC, 20 September 2018, p. 16.
Initial Top-down Analysis: high level overview and analysis of ARTC 2015 Opex and maintenance data

Review and Refinement: clarification of the 2015 Opex and maintenance data, including understanding any significant costs changes or outliers

Deep-dive Analysis: more detailed analysis and benchmarking of 2015 Opex and maintenance data against ARTC’s peers

Reporting: summarising the results of the analysis:

Deloitte’s results by operating expenditure category are summarised below.

Maintenance

On MPM, Deloitte noted: 70

Overall MPM expenditures increased at a CAGR of 19% for this period [CAL12-15], due to:

- On-going ballast cleaning work in Zones 1 and initial ballast cleaning in Zone 2
- Increased GTKs driving higher grinding, resurfacing, and component replacement costs
- Substantial increases in Zone 3 MPM costs to accommodate both increasing tonnages and higher axle loads.

On RCRM, Deloitte noted ‘RCRM costs reflect the network asset base within each zone and general year-on-year costs escalation of 4% cumulative annual growth rate’. 71

Overall, Deloitte concluded: 72

Taking into account ARTC’s commercial, operational and technical constraints, ARTC’s maintenance expenditure was found to be efficient and consistent with external benchmarks on a cost per Gross Tonne Kilometre (GTK) basis. ARTC’s asset management planning practices are consistent, at a high-level, with general industry approaches and practices. The maintenance program delivered required network quality and reliability performance. In particular, we observed that:

- Key CAL15 maintenance activity expenditures were reflective of industry norms, that is, planning guidelines and unit rates were consistent with industry approaches
- Overall maintenance expenditures appear consistent with external benchmarks on a cost per GTK basis as well as on a cost per net tonne basis.

Bottom-up analysis of key MPM activities and projects noted some areas where costs were higher than we would have expected. On further investigation these costs reflected either increased scope of work, weather related impacts or the delivery arrangements.

70 Ibid, p. 68
71 Ibid, p. 76
72 Ibid, p. 5
**Business unit management**

For business unit management costs, Deloitte noted:

*CAL15 Business Unit Management costs increased $2.9M year-on-year due to:*

- $1.2M increase for the transfer of Hunter Valley Logistics delivery unit from Hunter Valley Operations delivery unit to Hunter Valley Customer Service and Operations Management delivery unit, reflecting the Transformation and Growth Project
- $0.4M increase for an additional two employees to support Customer Contracts and Logistics teams
- Additional $0.3M for 5 employees transferred from Corporate Finance from July 2015
- $1.0M increase reflecting the transfer of Asset Delivery and Safety and Environmental roles which were previously allocated to the Hunter Valley Asset Management Delivery function. Further, a new General Manager Asset Delivery role commenced during 2015.
- $0.3M for consultancy costs relating to safety and leadership
- $0.5M decrease in costs associated with Hunter Valley Asset Management Delivery and Management Development.

On benchmarking business unit management costs, Deloitte stated:

*While Business Unit Management Costs have been reviewed, they have not been formally benchmarked due to the lack of relevant publically available comparators.*

**Corporate overheads**

For corporate overheads, Deloitte noted:

*Between CAL14 and CAL15, Corporate Overhead costs increased by $1.0M. The change was primarily due to the following cost increases:*

- Increase of $0.4M from the prior year due primarily due to an increase in the National ARTC train control communications costs, such as emergency radio communications costs
- Increase in insurance costs of $0.3M reflecting insurance premiums being directly costed on the basis of insured risk values to the Hunter Valley for each type of insurance taken out
- Cost increase of $0.3M primarily due to the Hunter Valley Coal Network’s share of additional professional fees incurred during 2015 for the Effectiveness and Efficiency review. Hunter Valley’s share of expenditure for this review was $0.3M.

On benchmarking corporate overheads, Deloitte stated:

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73 Ibid, p. 34.
74 Ibid, p. 35.
75 Ibid, pp. 34–5.
76 Ibid, pp. 35–6.
The ARTC Corporate Overhead cost allocation to the Hunter Valley Coal Network has been benchmarked against other rail networks’ costs. The benchmarking analysis is based on the most recent final decision by the respective regulator and has been used as a reference point to assess the reasonableness of the Opex.

The nature of the Hunter Valley Coal Network operating conditions results in scarcity of like-for-like comparators for the purpose of benchmarking analysis. As an operator of a coal network in Australia, Aurizon Network represents the closest comparator for overhead costs. The following figure compares CAL15 overhead costs per GTK for ARTC and Aurizon. It was found that ARTC’s overhead cost per GTK was lower at $0.04/GTK compared with $0.06/GTK.

Benchmarking against rail businesses that include passenger services shows that the ratio of overheads to revenue ranges between 4.8% and 7.5%, with the average being 5.6%1.

Under the allocation methodology that was used in CAL15, Hunter Valley Coal Network overhead costs to revenue ratio is 2.7%. Based on publicly available information, it was found that ARTC’s Hunter Valley Coal Network is more efficient compared to its peers, Aurizon and Brookfield Rail, both of which are railways that focus on freight and heavy haul and other passenger railways.

Overall, Deloitte concluded:77

The review of Hunter Valley Coal Network Corporate Overhead costs found that they were efficient when benchmarked against rail operators and a cross industry peer group. It was noted that:

- While costs have increased, ARTC’s overhead allocation to the Hunter Valley Coal Network, on a percentage of revenue basis, is efficient compared to its peers
- A subset of Hunter Valley Coal Network’s overhead costs, namely, Finance, Human Resources (HR), Property, Legal and Information Technology (IT) costs was benchmarked against a cross-industry peer group. These costs were also found to be efficient.

**Network Control**

On Network Control costs, Deloitte noted:78

Overall CAL15 Network Control costs increased $0.4M compared to CAL14 due to:

- $1.7M increase in the Operations line segment due applying the Hunter Valley boards allocator in CAL15 compared to a corporate boards allocator in CAL14 and filling five long term vacant roles in CAL15 to maintain continuous operations. The five vacant roles were in budget and filled to provide a fully resourced team across the coal boards and ensure continuity of operations and manage fatigue requirements. In 2015 there was a strong focus of the Network Control team on leadership and service delivery to customers, including sustainably achieving train flow requirements in line with the coal chain capacity uplift project and train control system continuity requirements

77 Ibid, p. 4.
78 Ibid, p. 35
• $1.2M decrease for the transfer of Hunter Valley Logistics delivery unit from Hunter Valley Operations delivery unit to Hunter Valley Customer Service and Operations Management delivery unit, reflecting the Transformation and Growth Project, with addition of operations performance officers and reporting role.

On benchmarking Network Control costs, Deloitte stated:\textsuperscript{79}

\begin{quote}
ARTC’s Network Control costs have been benchmarked against its closest comparator, Aurizon Network. Figure 3.6 benchmarks the ARTC costs against the Aurizon CAL15 actuals and the allowance approved by the Queensland Competition Authority (QCA) as part of the Aurizon Network’s 2016 Access Undertaking (UT4). It can be seen that ARTC’s cost are comparable on a GTK basis. Although GTK is a good reflector of the overall task and activity, it does not necessarily provide an accurate comparison of network density and complexity in the network management task. Our preferred comparative benchmark would be number of trains, path density or occupation, however these data sets were not readily available across other networks.
\end{quote}

Overall, Deloitte concluded:\textsuperscript{80}

\begin{quote}
The review of ARTC’s Network Control costs found that they are comparable to the costs of its closest peer, Aurizon Network.
\end{quote}

\textbf{3.3.5. ARTC’s response to the 27 November 2017 request for clarification}

On 27 November 2017, the ACCC sent a request for clarification which including seeking information on the following major incidents during 2015:

• Kankool derailment on 15 February 2015
• April 2015 flooding near Maitland
• Pages River derailment on 28 August 2015.

In particular, the ACCC sought:

• the effect these major incidents had on ARTC’s track infrastructure and provision of capacity
• the effect these major incidents had on ARTC’s operating expenses.

ARTC provided a completed response to the 27 November 2017 request for clarification on 28 November 2018. The ACCC notes that most of this request for clarification focused on capital expenditure related matters. In the interest of transparency,

\textsuperscript{79} Ibid, p. 38.
\textsuperscript{80} Ibid, p. 5.
Table 13 sets out the nature of ARTC’s responses to major incidents enquiries.

**Table 13: Summary of ARTC’s responses to major incidents enquiries**

<table>
<thead>
<tr>
<th>Major incident</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kankool derailment</td>
<td>ARTC provided a summary of the damage to track infrastructure from the derailment, including concrete sleepers, points, point machine and rail.</td>
</tr>
<tr>
<td>Flooding near Maitland</td>
<td>ARTC provided the flood damage report submitted to RCG.</td>
</tr>
<tr>
<td>Pages River derailment</td>
<td>ARTC provided a summary of the damage to track infrastructure from the derailment, including concrete sleepers and rail.</td>
</tr>
</tbody>
</table>

ARTC also provided for each of these major incidents the net operating expenditure (operating expenditure less estimated recovery cost through insurance and third party claims) incurred by ARTC.

### 3.4. WIK-Consult’s assessment

As outlined in section 1.5, the ACCC engaged WIK-Consult to undertake an assessment of the efficiency of ARTC’s operating expenditure in the Hunter Valley rail network. WIK-Consult undertook:

- a bottom-up mapping and reconciliation between ARTC’s general ledger accounts and the operating expenditure accounts submitted to the ACCC
- an assessment of whether operating expenditure was incurred on an efficient basis
- where operating expenditure was not incurred on an efficient basis, or where ARTC had not provided sufficient information to justify expenditure, a recommendation on an appropriate efficient operating expenditure for inclusion in the financial model
- a review and assessment of the cost casual links between activities undertaken and expenditures incurred at all levels of ARTC’s cost hierarchy
- a review and assessment of ARTC’s capitalisation policy
- a review and assessment of ARTC’s procurement policy.

#### 3.4.1. Maintenance

**Reconciliation**

To map and reconcile the operating expenditure in ARTC’s compliance submission, WIK-Consult undertook a detailed assessment of ARTC’s cost allocation model and disaggregated data from ARTC’s general ledger. WIK-Consult additionally reviewed supplementary information provided by ARTC, containing detailed descriptions in support of ARTC’s raw data extractions.

For the bottom-up assessment, WIK-Consult first checked for completeness and clarity in the information provided by ARTC, for example whether all line Segments, cost centres and activities in the ceiling test model were presented in the general ledger, and vice versa. Second, WIK-Consult constructed a matrix equivalent to ARTC’s ceiling test model which aggregated ARTC’s maintenance expenditure for the different levels of ARTC’s cost hierarchy. Third, WIK-Consult aggregated expenditures per line Segment/cost centre, and
per activity. This step allowed WIK-Consult to aggregate costs by pricing zone and by maintenance category, that is, MPM or RCRM.

WIK-Consult’s assessment found one major issue in respect of ARTC applying a margin to RCRM activities, and some minor consistency issues reconciling ARTC’s general ledger and its compliance submission. These issues are discussed in detail below.

**Margin**

WIK-Consult found that ARTC’s reported maintenance expenditures for RCRM activities include a 10 per cent margin on top of the costs in ARTC’s general ledger. ARTC stated:\(^{81}\)

> ARTC’s RCRM costs include a 10% margin to reflect the efficient market price of the maintenance services. The critical component of economic regulation is that regulated organisations are allowed to recover the efficient cost of a service, independent of their actual costs incurred. The efficient cost benchmark is what is chargeable in a workably competitive market, being the market for RCRM activities. At the time of the approval of the 2011 Hunter Valley Access Undertaking (HVAU), ARTC performed RCRM work on the Country Regional Network (CRN) in NSW at a margin of cost plus 10%. This efficient price benchmark was confirmed through the alliance contracts in force on ARTC’s interstate network which were cost plus 10%.

Further, ARTC stated:\(^ {82}\)

> It is a matter of regulatory precedent that a company can choose to either create its own formal internal services division, which formally contracts with its related party asset owner at a margin deemed efficient. While ARTC has retained a maintenance services division within its existing structure, the nature of ARTC’s internal arrangement is not relevant to this decision as the test for efficiency is based on the costs incurred by a prudent service provider (not specifically by ARTC).

While WIK-Consult agrees that the efficient market price in a workably competitive market should be independent of firm structure, WIK-Consult considered that ‘efficient cost’ and ‘efficient market price’ are not equivalent terms. WIK-Consult stated that an efficient market price includes an adequate long-term economic return, and:\(^ {83}\)

> …[i]n the context of the HVAU, ARTC does not provide rail maintenance services but below-rail services which already provide for an adequate return to ensure an efficient market price for below rail services. ...Hence, the application of a 10 per cent-margin on RCRM expenditures and the application of a rate of return results in a double mark-up.

Additionally, WIK-Consult found that approximately 40 per cent of RCRM activities are attributable to purchased services and goods. WIK-Consult considered that the application of a 10 per cent margin to purchased services which are already charged in a workably competitive market is unreasonable as it yields notional expenditures above rail expenditures.

WIK-Consult strongly advised to apply the real RCRM costs as reported in the general ledger accounts, rather than a hypothetical cost including a mark-up. Removing the margin

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\(^{81}\) ARTC, Request number: 7, Response to the ACCC’s 21 December 2017 request for information, 19 June 2018, p. 2.

\(^{82}\) ARTC, Opex workshop – Additional questions: 14, Response to the ACCC’s 12 July 2018 follow up items from workshop, 14 September 2018, p. 1.

\(^{83}\) WIK-Consult, Assessing the efficiency of Australian Rail Track Corporation’s operating expenditure for the 2015 calendar year, Report prepared for the ACCC, 20 December 2018, p. 24.
reduces the total reported RCRM expenditure by $1.9 million. This reduces the total reported RCRM expenditure from $22.0 million to $20.1 million.\footnote{These figures differ from those calculated in WIK-Consult’s report. These figures are calculated based on ARTC’s ceiling test model rather than ARTC’s general ledger because as discussed below, ARTC’s general ledger contains an error.}

**Consistency**

Besides the margin issued discussed above, WIK-Consult found the mapping and reconciliation of the data from ARTC’s general ledger account generally verified the maintenance reported in ARTC’s compliance submission, with some minor issues discussed below.

WIK-Consult found maintenance costs in the general ledger were slightly higher than in ARTC’s ceiling test model—a difference of $223 253. ARTC states that the discrepancy is due to a coding error in a previous compliance submission, and reduced maintenance costs in the 2015 compliance submission in order to avoid duplication.\footnote{ARTC, Request number: 7, Response to the ACCC’s 21 December 2017 request for information, 19 June 2018, p. 1.} WIK-Consult considered this explanation to be reasonable.

WIK-Consult found minor discrepancies at the line Segment level between the ceiling test model and general ledger. However, WIK-Consult noted that the difference has no negligible effect on Access Holders because the costs are allocated to line Segments within the same pricing zone. Further, WIK-Consult did not find any indications of systematic distortions, or double counting of maintenance expenditure.

Additionally, ARTC’s compliance submission and ceiling test model include maintenance costs for ‘incidents’ of $53 648, but WIK-Consult was unable to reconcile these costs against the general ledger.

Finally, WIK-Consult found minor maintenance expenditures that ARTC allocates to all line Segments in the ceiling test model, but which WIK-Consult considered should be attributed to Pricing Zone 1. These costs amount to $12 002. Additionally, WIK-Consult considered that costs associated with provisioning centres which are located in specific parts of the Hunter Valley network in order to provide maintenance to those geographic areas, should be allocated to line Segments in those specific pricing zones, rather than to all line Segments in the Hunter Valley network.

**Efficiency**

WIK-Consult undertook an assessment of the efficiency of ARTC’s maintenance activities, including a comparison of ARTC’s expenditures and practices with other rail networks. To assess ARTC’s maintenance program, WIK-Consult reviewed ARTC’s maintenance strategy documents, and asset management strategy and system documents, including a 10 year AMP.

**MPM**

WIK-Consult reviewed in detail, the following MPM activities:

- ballast cleaning
- ballast undercutting
- rail grinding.

WIK-Consult noted that ballast cleaning and rail grinding have consistently been within the top 6 maintenance activities by expenditure between 2012 and 2015. In 2015, ballast
undercutting was the fourth highest maintenance activity by expenditure, making up 6 per cent of total track maintenance expenditures. WIK-Consult stated that works related to ballast (including cleaning, undercutting, ballasting) make up the majority of expenses, at 40 per cent across all zones.

WIK-Consult states that although ballast cleaning contributes a large proportion of overall maintenance costs, it ensures a good track position and solid substructure, which is particularly important to support the high GTK and 30 TAL use of the network. Ballast cleaning is extremely important to avoid:

- high costs of RCRM
- speed restrictions
- reductions in the service life of permanent way material and components.

WIK-Consult noted that ARTC’s use of the shoulder ballast cleaning strategy is consistent with methods commonly applied throughout Europe, and considers this efficient and cost effective.

WIK-Consult noted that ballast undercutting expenditures increased substantially in 2015, particular in Pricing Zone 3. WIK-Consult notes that the overall increase was due to the centralisation of ballast undercutting activities within the asset development team. In Pricing Zone 3, WIK-Consult notes that the 30 TAL operations were introduced in 2015. Further, the heavy rainfalls in 2015 required an extensive assessment and activates to reduce mud holes in Pricing Zone 3.

WIK-Consult considered ARTC’s approach to ballast undercutting is sensible and efficient.

WIK-Consult additionally noted that ballast undercutting expenditures are related to short term RCRM measures, including mud hole rectification and drainage. WIK-Consult considered the combination of RCRM and ballast undercutting provides an effective and efficient method of removing mud hole induced defects.

To assess the efficiency of ARTC’s rail grinding expenditures, WIK-Consult reviewed ARTC’s procedures and manuals for rail grinding, including preventative and cyclical grinding. WIK-Consult considered that ARTC’s approach:

\[\text{...represents the state of the art procedure. Rail grinding is extremely important to avoid resulting defects first in the rails which will then cause mistakes in the track position which again will lead to further damages permanently and also cause damages of the wagons’ wheels.}\]

RCRM

WIK-Consult reviewed the following RCRM activities in detail:
- signalling maintenance
- track and civil infrastructure routine inspections.

In respect of signalling maintenance, WIK-Consult stated:

\[\text{ARTC’s general approach to maintenance activities related to signalling is sensible, efficient and quite extensive. ...In its intranet, ARTC provides an extensive amount}\]

\[86\text{WIK-Consult, Assessing the efficiency of Australian Rail Track Corporation’s operating expenditure for the 2015 calendar year, Report prepared for the ACCC, 20 December 2018, p. 39.}\]
\[87\text{Ibid, p. 44.}\]
of policies, regulations, manuals, guidelines, standards, engineering instructions, procedures, and specifications for its staff. This allows for an efficient and cost-effective implementation of maintenance activities.

In respect of routine inspections, WIK-Consult stated:\(^{88}\)

The intended methodology for track and infrastructure routine inspections represents the common and widely applied procedure which can be seen as the current best available method in the field of infrastructure monitoring.

**Recommendations for cost savings**

WIK-Consult found that a large proportion of maintenance expenditure is directly or indirectly related to the restoration of the track bed. WIK-Consult stated that this is partly due to the high GTK and high axle load of 30 TAL on the Hunter Valley network. However, it is also partly due to weak and often damp substructure and wet underground. Noting that large parts of the infrastructure were built in the early 20th century with specifications that differ from today’s requirements, WIK-Consult recommends a stronger subgrade, kept dry by good dewatering and drainage, provided it is supported by a Life-Cycle-Cost Analysis.

WIK-Consult stated:\(^{89}\)

Regarding potential cost savings it has to be mentioned that the largest potential for such savings can be gained in prolonging of the lay-days and the extension of the usable lifetime of the superstructure and its components as any kind of interruption of the rail traffic leads to a reduction in capacity and hence to economic losses. In order to avoid those losses, it is important to realise a good track position including an as good as possible rail head condition and a solid substructure which is designed and built to carry the actual and prospective traffic loads. This becomes even more important with increasing traffic loads regarding the number of trains, GTK and in particular axel loads.

### 3.4.2. Network Control

**Reconciliation**

To reconcile ARTC’s Network Control expenditure, WIK-Consult undertook a detailed assessment of ARTC’s compliance submission against its general ledger, and ARTC’s cost allocation model.

WIK-Consult found a minor discrepancy in the allocation of Network Control costs across each pricing zone when comparing ARTC’s compliance submission, general ledger and ceiling test model. Additionally, WIK-Consult found a minor discrepancy, with Network Control costs being approximately $21,000 lower in ARTC’s compliance submission compared with ARTC’s general ledger and ceiling test model.

With respect to the first issue, WIK-Consult found that the sequencing of ARTC’s allocation of Network Control costs differs from its cost allocation methodology. This can result in cost shifts between Pricing Zone 1 and Pricing Zone 2. Specifically, WIK-Consult understands that the sequence of the cost allocation methodology should be:

- **Step 1:** ARTC allocates general ledger expenditures to pricing zones in the Hunter Valley network based on the Network Control allocator—the share of Network Control boards

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\(^{88}\) Ibid, p. 45.

\(^{89}\) Ibid, pp. 45–6.
• Step 2: ARTC allocates expenditures within each pricing zone to line Segments based on the share of Train Km.

• Step 3: ARTC conducts the ceiling test based on the Constrained Network and unconstrained network.

However, WIK-Consult found that at step 1, ARTC is allocating general ledger expenditures to the aggregate of Pricing Zone 1 and 2, or Pricing Zone 3. At step 3, ARTC uses the aggregate expenditures of Pricing Zone 1 and 2 as an input for the Constrained Network, and the expenditures for Pricing Zone 3 for the unconstrained network.

WIK-Consult noted that if the same allocation factor is used for step 1 and step 2, or if the allocation factor has the same value, then there is no shifting of costs. However, if this is not the case, there is the potential for cost shifting between Pricing Zone 1 and Pricing Zone 2.

The second issue arises because in ARTC’s ceiling test model, it allocates the Network Control costs of three unconstrained Segments to Pricing Zone 1. These Segments are:

- Telarah to Farley
- Hanbury Jct to Kooragang East Jct
- Islington Jct to Scholey St Jct.

As noted above, for the 2015 compliance year, these issues result in only a slight discrepancy—of approximately $21 000.

**Efficiency**

WIK-Consult found that expenditures for Network Control were generally efficient. WIK-Consult noted that:

> Since 2008, ARTC is upgrading its train control and signalling systems and in 2013 the ARTC Network Control Optimisation (ANCO) project was approved by the Rail Capacity Group (RCG) to investigate and to attempt to resolve current and potential future issues caused by inefficiencies within the Hunter Valley Coal Chain… The implementation of new train control systems and automated signalling systems with upgrading from Relay Based Interlocking to Computer Based Interlocking systems has led to a modern work environment and an up-to-date train control technology.

WIK-Consult noted that in 2017, ARTC contracted for new computer based train management and coordination systems, which will be implemented in Network Control Centre North. WIK-Consult noted that the replacement of paper-based train graphs currently in use, with these new digital products will provide future cost savings.

**Cost allocation**

WIK-Consult undertook an assessment of the ARTC’s cost allocators, including consideration of whether each cost allocator was the most appropriate and practically available causal allocator.

As discussed above, ARTC first allocates Network Control costs to pricing zones based on Network Control boards. Second, ARTC allocates Network Control costs to line Segments within each pricing zone, based on the share of Train Km. WIK-Consult considers ARTC’s choice of cost allocators represents a reasonable method to reflect the cost causality.

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3.4.3. Overheads

**Reconciliation**

ARTC’s overheads operating expenditure is made up of:

- business unit management costs
- corporate overheads.

To reconcile ARTC’s overheads operating expenditure, WIK-Consult assessed detailed information provided by ARTC on its allocation model, as well as disaggregated data from its general ledger.

WIK-Consult found that expenditures for all overheads operating expenditure reconciled at a delivery unit level and at the pricing zone level. However, WIK-Consult found a minor difference between ARTC’s compliance submission and its general ledger.

In respect to ARTC’s business unit management operating expenditure, ARTC’s compliance submission allocates $3.5 million of the delivery unit ‘Management & Support’ to the Hunter Valley coal network. However, WIK-Consult found a total of $3.2 million of expenditures related to the Management & Support delivery unit in the general ledger. ARTC allocates 95 per cent of the costs of this delivery unit to the Hunter Valley coal network, which is $3.0 million. This results in ARTC’s compliance submission being $441 873 higher than WIK-Consult’s assessment based on ARTC’s general ledger.\(^{91}\)

In respect of ARTC’s corporate overheads costs, WIK-Consult found a minor discrepancy between ARTC’s compliance submission and its general ledger. WIK-Consult found ARTC’s compliance submission, and ceiling test model was $177 773 higher than ARTC’s general ledger. ARTC acknowledged the discrepancy was based on a minor spreadsheet error.\(^{92}\)

As discussed above, WIK-Consult found three line Segments in Pricing Zone 1 which are unconstrained in ARTC’s ceiling test model. WIK-Consult found that ARTC allocates the corporate overhead costs on these line Segments to the Constrained Network. WIK-Consult found that the impact of this cost allocation is less than $40 000.

**Efficiency**

To assess the efficiency of ARTC’s overheads, WIK-Consult compared 2015 expenditures with 2014 expenditures, having regard to the structural and systematic changes that ARTC experienced in 2015.

ARTC noted that it underwent a significant restructure in 2015, which involved shifting responsibilities and functions from a corporate head office, to two autonomous business units—the Hunter Valley business unit and the Interstate Network business unit. To support this restructure, separate organisational units were created and in some cases, transferred into the Hunter Valley business unit. WIK-Consult noted that this restructure impacted both direct and indirect operating expenditure, and led to an increase in overheads expenditure allocated to the Hunter Valley coal network. WIK-Consult found an increase in overheads expenditure of approximately $4 million between 2014 and 2015. However, ARTC considered that 2014 expenditures should be restated to provide a more accurate comparison point. ARTC’s estimate of the 2014 overhead expenditure adjusted to reflect the 2015 corporate restructure was $3.1 million.

\(^{91}\) ARTC, *Request number: 6*, Response to the ACCC’s 21 December 2017 request for information, 15 June 2018, p. 16.

\(^{92}\) Ibid.
WIK-Consult found that the increase in overheads expenditure between 2014 and 2015 was due to two factors.

Firstly due to an increase in direct costs due to the restructure. Specifically, an increase of 16 employees into the Hunter Valley business unit, as a result of the commercial, regulatory compliance and finance costs being reallocated.

Secondly, an increase in allocated overhead costs due to growth in the Hunter Valley coal network. WIK-Consult found that GTKs in the Hunter Valley coal network increased by 12.1 per cent, while Hunter Valley non-coal and Interstate decreased by 3.6 and 6.8 per cent respectively. Similarly Train Kms in the Hunter Valley coal network increased by 4.9 per cent, while Hunter Valley non-coal and Interstate decreased by 17.7 and 4.3 per cent respectively.

**Cost allocation**

WIK-Consult undertook an assessment of ARTC’s application of its cost allocation methodology, as well as assessing whether the allocator used by ARTC was the most appropriate and practically available choice.

WIK-Consult found that ARTC's technical implementation of collation and distribution of overhead costs to the Hunter Valley coal network was sophisticated.

WIK-Consult found the majority of ARTC’s cost allocators were appropriate, with the exception of the four cases, summarised in Table 14.

**Table 14: WIK-Consult’s assessment of ARTC’s cost allocators**

<table>
<thead>
<tr>
<th>Delivery unit</th>
<th>Description</th>
<th>ARTC</th>
<th>WIK-Consult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations Planning</td>
<td>Direct costs of train planning operations and managing the movement of rail traffic on standard gauge tracks in NSW, South Australia, Victoria and Western Australia.</td>
<td>GTK</td>
<td>Train Km&lt;br&gt;WIK-Consult noted that a train needs operational planning irrespective of whether it is loaded or unloaded.</td>
</tr>
<tr>
<td>Communications</td>
<td>Track related communications costs, including in-cab communications equipment radio.</td>
<td>GTK</td>
<td>Train Km&lt;br&gt;WIK-Consult noted that train communication is unlikely to be more expansive or frequent if a train is loaded.</td>
</tr>
<tr>
<td>Property</td>
<td>Provides services and advice to the business units relating to ARTC’s property portfolio of leased and licenced land, building and infrastructure.</td>
<td>GTK</td>
<td>Train Km&lt;br&gt;WIK-Consult stated there is no argument suggesting that a loaded train causes more property services compared with an unloaded train.</td>
</tr>
<tr>
<td>Plant Department</td>
<td>Includes heavy plant management, including shoulder ballast cleaner management.</td>
<td>Train Km</td>
<td>GTK&lt;br&gt;WIK-Consult considered activities grouped under this delivery unit as track maintenance related activities.</td>
</tr>
</tbody>
</table>
Based on the application of WIK-Consult’s recommended allocators, total overhead costs in the Hunter Valley coal network would decrease by approximately $1.3 million or 3.4 per cent.

3.4.4. Interrelationship between maintenance and capital costs

To assess the interrelationship between maintenance and capital costs, WIK-Consult reviewed ARTC’s asset management and maintenance plans, and ARTC’s capitalisation policy.

WIK-Consult considered that:

ARTC applies clear definitions and procedures to classify projects either as operational expenses or as capex projects. Based on the information available, there is neither any indication for double counting, i.e. that costs are reported as opex and simultaneously added to the RAB as a capex project, nor for wrong classifications of costs.

Recommendations for cost savings and consultation

WIK-Consult recommended a number of new investments and upgrades to existing infrastructure which may reduce maintenance requirements. However, WIK-Consult stated that any decision on major asset investments must be supported by a Life-Cycle-Cost-Analysis, which considers the costs and benefits over the long term. WIK-Consult’s recommendations are:

- head harden the rails to reduce the frequency of rail grinding
- implement a drainage system rather than ballast undercutting and ballast cleaning
- use of concrete rather than wooden sleepers and bearers
- use of concrete sleepers and bearers with soles to protect from ballast and extend its useful lifetime
- install of points/turnouts with movable frogs rather than using conventional points
- straightening of curves to reduce costs in rail grinding and greasing
- implement slab track instead of ballasted track.

WIK-Consult noted that ARTC is required under the HVAU to obtain endorsement from RCG of major asset renewal and replacement projects. However, there is no requirement for ARTC to provide detailed information on planned maintenance activities, or ARTC’s AMP. WIK-Consult acknowledged that ARTC has made some strides to increase transparency, such as including commentary regarding its forward maintenance program in the 2015–2024 Hunter Valley Corridor Capacity Strategy. However, WIK-Consult considered further emphasis on stakeholder engagement is importance, stating:

Due to the close relationship between capital works and maintenance activities, closer participation of stakeholders, for example via the HVCCC and/or the RCG, seems desirable. Particularly, as maintenance activities and expenditures vary over time, such participation may increase transparency.

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93 WIK-Consult, Assessing the efficiency of Australian Rail Track Corporation’s operating expenditure for the 2015 calendar year, Report prepared for the ACCC, 20 December 2018, p. 91.

94 Ibid, p. 92.
3.4.5.  **ARTC’s procurement of operating expenditure activities**

WIK-Consult assessed ARTC’s procurement of operating expenditure against the following factors:

- compliance with Commonwealth legislative requirements
- compliance with the contractual requirements in the HVAU
- successful implementation of an investment and maintenance strategy
- value for money processes
- emphasis on a competition-driven strategy.

ARTC provided details on 30 procured projects, covering a range of large (over $1 million), medium (between $300 thousand and $1 million) and small projects (less than $300 thousand). WIK-Consult considered that the information provided allowed for a detailed qualitative and quantitative assessment of the competitive environment, and competitive tender procedures, as well as value for money decisions.

WIK-Consult found that ARTC’s approach to tendering is very competitive, and in line with Commonwealth procurement principles to encourage competitive markets and apply non-discriminatory purchasing methods.

WIK-Consult considered that:

...ARTC applies very detailed and complex procurement strategies and methods, recorded in several internal directives, guidelines and regulations. The internal processes are very well defined and applied in every day works. ARTC’s overall approach to procuring suppliers for maintenance activities shows its deep understanding of the Hunter Valley coal chain operations, its clients’ needs, the current cost structures of suppliers and its network’s quality status.

WIK-Consult considered that this approach ensures the thoughtful application of the internal procurement guidelines in order to achieve value for money and efficient project implementation.

3.5.  **ACCC’s Draft Determination**

The ACCC’s consideration of the efficiency of ARTC’s operating expenditure is set out below under five categories:

- maintenance
- business unit management
- corporate overheads
- Network Control
- other matters.

3.5.1.  **Maintenance**

ARTC’s maintenance expenditure as reported in its compliance submission is summarised by Incremental and Fixed in Table 15, and by MPM and RCRM in Table 16.

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95 Ibid, p. 122.
Table 15: ARTC’s submission on maintenance for Fixed and Incremental ($)

<table>
<thead>
<tr>
<th>Maintenance</th>
<th>Constrained Network</th>
<th>Pricing Zone 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental</td>
<td>43 609 775</td>
<td>15 118 765</td>
<td>58 728 540</td>
</tr>
<tr>
<td>Fixed</td>
<td>22 801 179</td>
<td>12 125 869</td>
<td>34 927 048</td>
</tr>
<tr>
<td>Total</td>
<td>66 410 954</td>
<td>27 244 635</td>
<td>93 655 589</td>
</tr>
</tbody>
</table>

Note: Totals may not add due to rounding.

Table 16: ARTC’s submission on maintenance for MPM and RCRM ($)

<table>
<thead>
<tr>
<th>Maintenance</th>
<th>Constrained Network</th>
<th>Pricing Zone 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPM</td>
<td>52 460 137</td>
<td>21 568 230</td>
<td>74 028 367</td>
</tr>
<tr>
<td>RCRM</td>
<td>13 950 817</td>
<td>5 676 405</td>
<td>19 627 222</td>
</tr>
<tr>
<td>Total</td>
<td>66 410 954</td>
<td>27 244 635</td>
<td>93 655 589</td>
</tr>
</tbody>
</table>

Note: Totals may not add due to rounding.

To determine the efficiency of ARTC’s maintenance costs, the ACCC has had regard to ARTC’s compliance submission and supporting materials, Deloitte’s report and WIK-Consult’s report.

As part of WIK-Consult’s efficiency assessment, WIK-Consult reviewed ARTC’s costs in its compliance submission against its ceiling test model and general ledger. WIK-Consult’s assessment found one major issue in respect of ARTC applying a margin to RCRM activities, and some minor consistency issues reconciling ARTC’s general ledger and its compliance submission.

ARTC stated that although it retains a maintenance services division within its existing structure, the value of maintenance work is independent of the firm structure used to deliver the services.96 ARTC stated:97

ARTC’s RCRM costs include a 10% margin to reflect the efficient market price of the maintenance services. The critical component of economic regulation is that regulated organisations are allowed to recover the efficient cost of a service, independent of their actual costs incurred. The efficient cost benchmark is what is chargeable in a workably competitive market, being the market for RCRM services. At the time of the approval of the 2011 Hunter Valley Access Undertaking (HVAU), ARTC performed RCRM work on the Country Regional Network (CRN) in NSW at a margin of cost plus 10%. This efficient price benchmark was confirmed through the alliance contracts in force on ARTC’s interstate network which were cost plus 10%.

96 ARTC, Opex workshop – Additional questions: 14, Response to the ACCC’s 12 July 2018 follow up items from workshop, 14 September 2018, p. 1.
97 ARTC, Request number: 7, Response to the ACCC’s 21 December 2017 request for information, 19 June 2018, p. 2.
WIK-Consult found that this margin was not appropriate, stating:96

\[\text{[i]n the context of the HVAU, ARTC does not provide rail maintenance services but below-rail services which already provide for an adequate return to ensure an efficient market price for below rail services. …Hence, the application of a 10 per cent-margin on RCRM expenditures and the application of a rate of return results in a double mark-up.}\]

Further, WIK-Consult noted that around 40 per cent of ARTC’s RCRM expenditures were attributable to purchased services and goods in 2015.

The ACCC considers ARTC’s application of a margin on top of RCRM activities is inappropriate. The ACCC agrees with WIK-Consult’s assessment that in applying a margin, ARTC is receiving a double profit allowance—a mark-up on the efficient market price for below-rail services via the rate of return, as well as a mark-up on the price of maintenance services.

WIK-Consult additionally found that the data reported in ARTC’s compliance submission was generally verified in its general ledger, with the exception of the following minor inconsistencies:

- WIK-Consult found that for 15 line Segments, the expenditures reported in ARTC’s ceiling test model differed from its general ledger. This discrepancy resulted in a difference of $223,253.
- WIK-Consult found that ARTC’s compliance submission and ceiling test model included maintenance costs for ‘incidents’ of $53,648 but WIK-Consult was unable to reconcile these costs against the general ledger.

The ACCC seeks explanation from ARTC in respect of these inconsistencies.

Additionally, WIK-Consult found two maintenance activities which ARTC has allocated as indirect maintenance, which WIK-Consult considered should be allocated exclusively to Pricing Zone 1. In particular, the MPM activity ‘urban fencing – Replacement’, at cost $12,002. Similarly, WIK-Consult considered that ARTC should allocate the costs of provisioning centres that service specific geographic areas to the line Segments in those specific pricing zones, rather than treat these costs as indirect costs.

The ACCC agrees with WIK-Consult’s recommendation that these maintenance costs should be allocated to specific pricing zones. The ACCC expects that for future compliance assessments, ARTC adjust its ceiling test model to reflect these recommendations. The ACCC welcomes views from ARTC on this issue.

Between 2014 and 2015, ARTC notes that maintenance costs in the Constrained Network increased by 8.3 per cent. ARTC attributes this increase to the significant increase in ballast cleaning in Pricing Zone 1 in combination with the completion of the ballast cleaning program in Pricing Zone 2. ARTC states that increased rail traffic in the form of longer and heavier trains also lead to increases in the scope and cost of rail grinding and turnout steel replacement.99

Deloitte’s assessment found ARTC’s maintenance expenditure to be efficient and consistent with external benchmarks on a cost per GTK basis. Deloitte found that at a high level, ARTC’s asset management planning practices are consistent with general industry

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approaches and practices. Deloitte notes that ARTC’s maintenance program delivered network quality and reliability performance.\textsuperscript{100}

In respect of the efficiency of ARTC’s maintenance, WIK-Consult stated:\textsuperscript{101}

\begin{quote}
ARTC’s maintenance activities generally represent common and widely applied procedures which can be seen as the current best available methods. ARTC’s approaches appear efficient from a technical point of view. Therefore, WIK and TÜV reckon that the assessed projects and activities were realised on an efficient basis and the maintenance opex reported in the General Ledger accounts are considered efficient.
\end{quote}

Having regard to ARTC’s compliance submission, Deloitte’s assessment, and WIK-Consult’s assessment, the ACCC considers ARTC’s maintenance activities and costs are economically efficient.

The ACCC accepts ARTC’s maintenance costs for 2015 with the exception of the margin on RCRM activities. The ACCC’s Draft Determination for maintenance costs is summarised in Table 17 and Note: Totals may not add due to rounding.

\textbf{Table 17: ACCC’s Draft Determination on maintenance for Incremental and Fixed ($)}

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|}
\hline
Maintenance & Constrained Network & Pricing Zone 3 & Total \\
\hline
Incremental & 43 170 166 & 14 936 635 & 58 106 801 \\
\hline
Fixed & 21 973 541 & 11 790 900 & 33 764 441 \\
\hline
Total & 65 143 707 & 26 727 535 & 91 871 242 \\
\hline
\end{tabular}
\caption{ACCC’s Draft Determination on maintenance for Incremental and Fixed ($)}
\end{table}

\textit{Note: Totals may not add due to rounding.}

\textbf{Table 18: ACCC’s Draft Determination on maintenance for MPM and RCRM ($)}

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|}
\hline
Maintenance & Constrained Network & Pricing Zone 3 & Total \\
\hline
MPM & 52 460 137 & 21 568 230 & 74 028 367 \\
\hline
RCRM & 12 683 570 & 5 159 304 & 17 842 875 \\
\hline
Total & 65 143 707 & 26 727 535 & 91 871 242 \\
\hline
\end{tabular}
\caption{ACCC’s Draft Determination on maintenance for MPM and RCRM ($)}
\end{table}

\textit{Note: totals may not add due to rounding.}

In order to assess the efficiency of ARTC’s maintenance costs, WIK-Consult and the ACCC relied heavily on ARTC’s maintenance planning and strategy documents. In future compliance assessments, the ACCC will continue require these documents from ARTC to

\textsuperscript{100} Deloitte, \textit{Australian Rail Track Corporation Ltd – Operating and maintenance expenditure analysis}, Report prepared for ARTC, 20 September 2018, p. 5
\textsuperscript{101} WIK-Consult, \textit{Assessing the efficiency of Australian Rail Track Corporation’s operating expenditure for the 2015 calendar year}, Report prepared for the ACCC, 20 December 2018, p. II.
\textsuperscript{102} The ACCC’s calculation of RCRM expenditure (excluding the margin) differs from those in WIK-Consult’s report because WIK-Consult’s calculation includes non-cost maintenance costs.
inform the ACCC’s assessment. To expedite future compliance assessments, the ACCC asks ARTC to provide the following maintenance documents as part of its initial submission:

- 10 year AMP
- AWP and budget
- asset strategies for major maintenance activities undertaken
- approved annual possession program.

### 3.5.2. Business unit management

ARTC submitted business unit management costs over 2015 were $18.3 million for the Constrained Network and $5.4 million for Pricing Zone 3. In comparison to 2014, these costs increased by 10.3 per cent for the Constrained Network and 29.0 per cent for Pricing Zone 3.

In assessing the efficiency of these costs, the ACCC has considered:

- ARTC’s corporate restructure
- changes in GTKs and Train Km and their use as allocators.

First, the ACCC recognises that between 2014 and 2015 ARTC underwent a significant corporate restructure known as the *Transformation and Growth Project*. The ACCC notes that this restructure was a significant driver for the increase in business unit management cost between 2014 and 2015.

Deloitte details that the restructure was:

> ...in the direct response to feedback obtained from proactive engagement with ARTC customers, staff and leadership. During the engagement process, it was found that ARTC needed to:

- Have a stronger focus on customer success
- Put customer plans and needs at the forefront of considerations when developing strategic initiatives
- Be more innovative in terms of using systems and technology in order to improve the service offering to customers, rail reliability and ultimately, the optimisation of costs
- Be timely and clear in its responses to customer requests and initiatives.

The *Transformation and Growth Project* resulted in a large-scale transformation to augment ARTC’s operating model to place delivering value to the customer at the forefront of all its business activities and performance metrics. In particular, there was a dedicated focus on the proposed restructure of the business and its associated processes to enable a renewed focus on customer and service delivery.

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ARTC submitted that this change saw:  

...commercial, regulatory compliance and other functions (e.g. some elements of finance) [being] moved from corporate to the ARTC business units.

The ACCC also notes ARTC’s submission that this restructure meant:  

...management and administrative costs emanating from Newcastle can no longer be classified simply as an adjunct to maintenance costs and it is more appropriate to include these costs as a separate category of indirect costs, similar to Corporate Overheads, albeit that a substantial component of that cost remains related to the maintenance and operation of the network.

The ACCC notes ARTC’s responses to the 21 December 2017 information request provided further information on the motivation of the restructure and how direct and indirect costs changed. For example, ARTC provided information on the reallocation of roles between 2014 and 2015 among its delivery units. This showed that while the total number of FTEs across ARTC remained constant, the number of FTE allocated to the Hunter Valley business unit increased by 4 per cent.

The ACCC notes ARTC also provided a re-estimate of costs for 2014 if the 2015 corporate structure applied. This shows that business unit management costs across the Hunter Valley network would have been $1.2 million higher in 2014 under the 2015 corporate structure compared to the 2014 corporate structure.  

The ACCC seeks views from stakeholders on the corporate restructure, in respect of the increase in costs associated with the Hunter Valley network, and associated changes in the services and quality of services provided by ARTC.

Second, the ACCC notes the allocation of business unit management costs to Pricing Zones is determined by the changes in actual GTKs and Train Km. These cost allocations are determined in ARTC’s Overhead Allocation model. ARTC’s responses to the 21 December 2017 information request provided the differences in GTK and Train Km between 2014 and 2015 for:

- Hunter Valley Pricing Zone for coal
- Hunter Valley non-coal
- Interstate network.

For both GTK and Train Km, ARTC’s response shows that the Hunter Valley’s share of ARTC’s networks has increased, and Pricing Zone 3’s share of the Hunter Valley network increased in 2015. This means that the share of business unit costs allocated to Hunter Valley, and subsequently allocated to Pricing Zone 3, have both increased.

The ACCC’s review of the cost allocation calculations shows that these have broadly been implemented correctly. However, the ACCC notes the discrepancy between the ARTC’s compliance submission and general ledger for ‘Management & Support’ found by WIK-Consult’s. WIK-Consult identified a difference of $441,873 between the compliance submission and its assessment of the general ledger. The ACCC seeks a clarification on this matter.

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105 Ibid, p. 17.
106 ARTC, Request number: 10, Response to the ACCC’s 21 December 2017 request for information, 15 June 2018, p. 6.
Overall, the ACCC is satisfied that the business unit management cost of $18.3 million for the Constrained Network and $5.4 million for Pricing Zone 3 appear to be efficient. This view is subject to ARTC providing appropriate clarification on the discrepancy identified by WIK-Consult.

3.5.3. Corporate overheads

ARTC submitted corporate overhead costs over 2015 were $12.7 million for the Constrained Network and $3.6 million for Pricing Zone 3. In comparison to 2014, these costs increased by 4.3 per cent for the Constrained Network and 34.8 per cent for Pricing Zone 3.

In assessing the efficiency of these costs, the ACCC has considered:

- ARTC’s submission in respect of changes in Train Km and its use as allocators
- WIK-Consult’s assessment of ARTC’s cost allocators
- Deloitte’s report.

First, the ACCC notes ARTC’s submission that:

> Increased labour costs from wage increases were largely offset by a reduction in corporate headcount due to the restructure that placed commercial and other functions into the business units. However, even though the total cost pool was large the same as for 2014, Hunter Valley coal received a higher proportion of costs due to a higher proportion of Train Km compared to lower activity levels in ARTC’s interstate business and other non-coal traffics.

As noted in section 3.5.2 of the Draft Determination, ARTC’s responses to the 21 December 2017 information request provided the differences in Train Km between 2014 and 2015 for:

- Hunter Valley Pricing Zone for coal
- Hunter Valley non-coal
- Interstate network.

The ACCC notes that ARTC’s response confirms ARTC submission that the Hunter Valley coal’s share of ARTC’s networks Train Km increased. In addition, that Pricing Zone 3’s share of the Hunter Valley coal network Train Km increased in 2015. It follows that the share of corporate overhead costs allocated to Hunter Valley, and subsequently allocated to Pricing Zone 3, have increased.

Second, the ACCC notes that WIK-Consult found that ARTC’s corporate overheads broadly reconciled at a delivery unit level. In respect of cost allocators, WIK-Consult found that the majority of ARTC’s cost allocators were appropriate, with the exception of four allocators, summarised in

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Table 19: WIK-Consult’s assessment of ARTC’s cost allocators

<table>
<thead>
<tr>
<th>Delivery unit</th>
<th>Description</th>
<th>ARTC</th>
<th>WIK-Consult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations Planning</td>
<td>Direct costs of train planning operations and managing the movement of rail traffic on standard gauge tracks in NSW, South Australia, Victoria and Western Australia.</td>
<td>GTK</td>
<td>Train Km</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WIK-Consult considers a train needs operational planning irrespective of whether it is loaded or unloaded.</td>
</tr>
<tr>
<td>Communications</td>
<td>Track related communications costs, including in-cab communications equipment radio.</td>
<td>GTK</td>
<td>Train Km</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WIK-Consult considers a train communication is unlikely to be more expansive or frequent if a train is loaded.</td>
</tr>
<tr>
<td>Property</td>
<td>Provides services and advice to the business units relating to ARTC’s property portfolio of leased and licenced land, building and infrastructure.</td>
<td>GTK</td>
<td>Train Km</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WIK-Consult considers there is no argument suggesting that a loaded train causes more property services compared with an unloaded train.</td>
</tr>
<tr>
<td>Plant Department</td>
<td>Includes heavy plant management, including shoulder ballast cleaner management.</td>
<td>Train Km</td>
<td>GTK</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WIK-Consult considers activities grouped under this delivery unit as track maintenance related activities.</td>
</tr>
</tbody>
</table>

Based on the application of WIK-Consult’s recommended allocators, total overhead costs in the Hunter Valley coal network would decrease by approximately $1.3 million or 3.4 per cent.

The ACCC seeks explanation from ARTC about why it considers these four allocators are efficient, in reference to WIK-Consult’s assessment. The ACCC additionally notes that from 1 July 2017, a different cost allocation methodology will apply, which was incorporated into the HVAU as part of the 29 June 2017 variation of the HVAU. The ACCC seeks explanation from ARTC about how the four allocators identified by WIK-Consult above, may change from 1 July 2017. The ACCC additionally seeks views from stakeholders about whether these four allocators are appropriate and whether they should be changed in line with WIK-Consult’s recommendations.

The ACCC also notes that WIK-Consult identified the following three Segments in Pricing Zone 1, which are unconstrained in ARTC’s ceiling test model:

- Telarah to Farley
- Hanbury Jct to Kooragang East Jct
- Islington Jct to Scholey St Jct.

However ARTC allocates the corporate overhead costs of these Segments to the Constrained Network, less than $40 000. WIK-Consult considers these costs should be

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108 Schedule I of the HVAU, as varied on 29 June 2017.
allocated to the unconstrained networks. The ACCC seeks further explanation from ARTC about how it treats these three Segments in its financial model.

Third, the ACCC notes Deloitte’s benchmarking approach:

*The ARTC Corporate Overhead cost allocation to the Hunter Valley Coal Network has been benchmarked against other rail networks’ costs. The benchmarking analysis is based on the most recent final decision by the respective regulator and has been used as a reference point to assess the reasonableness of the Opex.*

*The nature of the Hunter Valley Coal Network operating conditions results in scarcity of like-for-like comparators for the purpose of benchmarking analysis. As an operator of a coal network in Australia, Aurizon Network represents the closest comparator for overhead costs. The following figure compares CAL15 overhead costs per GTK for ARTC and Aurizon. It was found that ARTC’s overhead cost per GTK was lower at $0.04/GTK compared with $0.06/GTK.*

*Benchmarking against rail businesses that include passenger services shows that the ratio of overheads to revenue ranges between 4.8% and 7.5%, with the average being 5.6%.*

*Under the allocation methodology that was used in CAL15, Hunter Valley Coal Network overhead costs to revenue ratio is 2.7%. Based on publicly available information, it was found that ARTC’s Hunter Valley Coal Network is more efficient compared to its peers, Aurizon and Brookfield Rail, both of which are railways that focus on freight and heavy haul and other passenger railways.*

The ACCC also notes Deloitte concluded:

*The review of Hunter Valley Coal Network Corporate Overhead costs found that they were efficient when benchmarked against rail operators and a cross industry peer group. It was noted that:*  
  
  *While costs have increased, ARTC’s overhead allocation to the Hunter Valley Coal Network, on a percentage of revenue basis, is efficient compared to its peers*  
  
  *A subset of Hunter Valley Coal Network’s overhead costs, namely, Finance, Human Resources (HR), Property, Legal and Information Technology (IT) costs was benchmarked against a cross-industry peer group. These costs were also found to be efficient.*

The ACCC notes that Deloitte’s approach and assessment appears robust.

Overall, the ACCC is satisfied that the corporate overhead cost of $12.7 million for the Constrained Network and $3.6 million for Pricing Zone 3 appear to be efficient. This view is subject to ARTC providing appropriate explanation about why the four allocators identified above are efficient, in reference to WIK-Consult’s assessment. The ACCC also seeks explanation from ARTC about how these four allocators may change for the equivalent cost categories in July 2017, following the variation to the HVAU on 29 June 2017. The ACCC seeks views from stakeholders on whether these four allocators are appropriate, and whether they should be changed in line with WIK-Consult’s recommendations.

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110 Ibid, p. 4.
3.5.4.  Network Control

ARTC submitted Network Control costs over 2015 were $9.7 million for the Constrained Network and $3.4 million for Pricing Zone 3. In comparison to 2014, these costs increased by 3.3 per cent for the Constrained Network and 3.5 per cent for Pricing Zone 3.

In assessing the efficiency of these costs, the ACCC has considered:

- WIK-Consult’s report
- Deloitte’s report.

First, the ACCC notes WIK-Consult’s assessment on the sequence ARTC adopted for the allocation of network control costs. WIK-Consult understand that the sequence of the cost allocation methodology should be:

- Step 1: ARTC allocates general ledger expenditures to pricing zones in the Hunter Valley network based on the Network Control allocator—the share of Network Control boards
- Step 2: ARTC allocates expenditures within each pricing zone to line Segments based on the share of Train Km.
- Step 3: ARTC conducts the ceiling test based on the Constrained Network and unconstrained network.

The ACCC notes WIK-Consult found that at step 1, ARTC is allocating general ledger expenditures to the aggregate of Pricing Zone 1 and 2, or Pricing Zone 3. At step 3, ARTC uses the aggregate expenditures of Pricing Zone 1 and 2 as an input for the Constrained Network, and the expenditures for Pricing Zone 3 for the unconstrained network.

The ACCC agrees with WIK-Consult that if the same allocation factor is used for step 1 and step 2, or if the allocation factor has the same value, then there is no shifting of costs. However, if this is not the case, there is the potential for cost shifting between Pricing Zone 1 and Pricing Zone 2. The ACCC seeks clarification from ARTC on this matter.

The ACCC also notes WIK-Consult identified the following three Segments in Pricing Zone 1, which are unconstrained in ARTC’s ceiling test model:

- Telarah to Farley
- Hanbury Jct to Kooragang East Jct
- Islington Jct to Scholey St Jct.

However ARTC allocates the Network Control costs of these Segments to the Constrained Network, approximately $21 000. WIK considers these costs should be allocated to the unconstrained networks. The ACCC seeks further explanation from ARTC about how it treats these three Segments in its financial model.

Second, the ACCC notes Deloitte’s benchmarking approach for network control costs:111

> ARTC’s Network Control costs have been benchmarked against its closest comparator, Aurizon Network. Figure 3.6 benchmarks the ARTC costs against the Aurizon CAL15 actuals and the allowance approved by the Queensland Competition Authority (QCA) as part of the Aurizon Network’s 2016 Access Undertaking (UT4). It can be seen that ARTC’s cost are comparable on a GTK basis. Although GTK is a good reflector of the overall task and activity, it does not necessarily provide an accurate comparison of network density and complexity in the network management

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111 Ibid, p. 38.
task. Our preferred comparative benchmark would be number of trains, path density or occupation, however these data sets were not readily available across other networks.

The ACCC notes Deloitte’s conclusion:112

The review of ARTC’s Network Control costs found that they are comparable to the costs of its closest peer, Aurizon Network.

The ACCC notes that Deloitte’s approach and assessment appears robust.

Overall, the ACCC is satisfied that the Network Control costs of $9.7 million for the Constrained Network and $3.4 million for Pricing Zone 3 appear to be efficient. This view is subject to ARTC providing appropriate clarification on the cost allocation sequence and identified discrepancy.

3.5.5. Other matters

The ACCC has identified the two following other matters which have implications for the efficiency of ARTC’s operating expenditure:

- procurement policy
- capitalisation policy.

**Procurement**

The ACCC notes procurement of goods and services is an important part of ARTC’s business. In the context of the Hunter Valley network this includes having maintenance performed and delivering capital projects approved by RCG. Therefore, ARTC’s policies and process which underlie how this procurement is undertaking is important to the efficiency of operating expenditure (as well as capital expenditure).

The ACCC notes on 27 September 2017, the Australian National Audit Office (ANAO) published an independent assessment into ARTC’s management of the pre-construction phase for the Inland Rail program. While focused on Inland Rail, the ANAO concluded:113

> In managing the pre-construction phase of the Inland Rail programme, the Australian Rail Track Corporation (ARTC) could have had a greater focus on achieving value for money in procurement activities. The ARTC identified the need to improve existing business functions and procurement practices throughout the pre-construction phase, and commenced initiatives to strengthen administration. These initiatives need to be fully implemented to support the ARTC in effectively managing the full Inland Rail programme in coming years and delivering value for money.

Further, the ANAO found:114

> Testing of a sample of 54 procurements for the 6. Inland Rail programme found a lack of consideration given to competition in the early phase of the programme, where a considerable proportion of procurements (17 per cent of the sample) were sole sourced. Procurement activities improved during the sampling period, as new systems, processes and practices were implemented. The ARTC’s established Information and Communications Technology (ICT) systems and procurement and

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112 Ibid, p. 5.
document management processes and practices were well short of the needs of the Inland Rail programme. The ARTC is further reviewing its procurement policies and procedures and supporting business functions for the full construction of Inland Rail.

In light of this, the ACCC sought information on ARTC’s procurement policies and procedures and their application to 2015 as part of the 21 December 2017 request for information. As noted previously, in response ARTC provided a copy of FCCC-01 Contract Management which outlines ‘internal procurement procedures and includes guidance on the best practice principles to ensure value for money and appropriate governance’. In addition, ARTC provided a selection of procurement undertaken during 2015, which included:

- supplier name
- procurement method (for example, formal tender of single source offer)
- description of procurement
- procurement process
- number of tenders invited and response received
- outcome of procurement process.

The ACCC notes for the selection of procurement undertaken, ARTC used a combination of standing offers, formal tenders and single source offers.

The ACCC notes WIK-Consult’s assessment that:\[115\]

...ARTC applies very detailed and complex procurement strategies and methods, recorded in several internal directives, guidelines and regulations. The internal processes are very well defined and applied in every day works. ARTC’s overall approach to procuring suppliers for maintenance activities shows its deep understanding of the Hunter Valley coal chain operations, its clients’ needs, the current cost structures of suppliers and its network’s quality status.

This approach ensures the thoughtful application of the internal procurement guidelines in order to achieve value for money and efficient project implementation.

The ACCC considers ARTC’s procurement polices during 2015 appear to have ensured efficient operating expenditure by ARTC. However, in light of ANAO’s conclusions, for future Annual Compliance assessment ARTC is to provide details on procurement undertaken for the Hunter Valley network. This would include:

- supplier name
- procurement method (for example, formal tender of single source offer)
- description of procurement
- procurement process
- number of tenders invited and response received
- outcome of procurement process.

In the case of single source offers, ARTC should provide information on why multiple tenders were not sought and how value for money and efficiency of operating expenditure were ensured.

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\[115\] WIK-Consult, Assessing the efficiency of Australian Rail Track Corporation’s operating expenditure for the 2015 calendar year, Report prepared for the ACCC, 20 December 2018, p. 122.
**Capitalisation policy**

A capitalisation policy sets out whether an expense is defined as capital expenditure or operating expenditure. In the context of the HVAU, this determines whether the expense is:

- included in the RAB Floor Limit and recouped over time by ARTC
- formed part of Economic Cost and recouped in the relevant year by ARTC.

The ACCC sought information on ARTC’s capitalisation policy as part of the 21 December 2017 request for information. As noted previously, in response ARTC provided a copy of *FCA-PO-004 Fixed Assets Policy* and a presentation provided to the RCG during December 2012.

The ACCC notes that WIK-Consult reviewed these documents and concluded: 116

> ARTC applies clear definitions and procedures to classify projects either as operational expenses or as capex projects. Based on the information available, there is neither any indication for double counting, i.e. that costs are reported as opex and simultaneously added to the RAB as a capex project, nor for wrong classifications of costs.

The ACCC considers that ARTC’s capitalisation policy appears to have ensured efficient operating expenditure by ARTC. In the interest of clarity and certainty, for future Annual Compliance assessment ARTC is to provide details on any changes made to the capitalisation policy.

The ACCC notes as part of a separate HVAU process, the Hunter Rail Access Task Force (HRATF)117 submitted:118

> We are also concerned that, in the absence of a cost allocation manual, there is no transparency around the capitalisation rules that are applied by ARTC in this regard. This had originally been seen as less important because those principles would form part of any new opex efficiency mechanism. However, given the need to progress the 2017 HVAU without a fully worked mechanism, we consider that the 2017 HVAU needs to impose an obligation on ARTC to prepare and submit (within a short period following commencement) a cost allocation manual that includes capitalisation rules. There needs to be a process for consultation, and a right for the ACCC to direct ARTC in relation to those rules. Any variations should also be subject to consultation and ACCC approval.

Therefore, the ACCC also seeks stakeholder views on whether any changes should be implemented by ARTC to ensure the capitalisation policy applied to the HVAU financial model is transparent and clear.

### 3.5.6. ACCC’s overall view on ARTC’s efficiency of operating expenditure

The ACCC’s assessment of ARTC’s efficiency of operating expenditure has had regard to the relevant factors in the definition of efficient in the HVAU.119

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116 Ibid, p. 91.
117 HRATF comprises Anglo American, Bloomfield Group, Glencore Coal, Idemitsu Australia Resources, NSW Energy Coal (BHP Billiton), Whitehaven Coal and Yancoal Australia.
119 ‘Efficient’ is defined under section 14.1 of the HVAU.
The ACCC considers that ARTC’s operating expenditure as submitted on 31 August 2017 has not been fully incurred on an efficient basis. In particular, the ACCC considers ARTC’s application of a 10 per cent margin on RCRM is not efficient. The ACCC’s views on ARTC’s efficient operating expenditure for recover is set out in Table 20 for the Constrained Network and Table 21 for Pricing Zone 3.

### Table 20: Operating expenditure for Constrained Network ($)

<table>
<thead>
<tr>
<th>Operating expenditure</th>
<th>ARTC submission</th>
<th>ACCC Draft Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance costs</td>
<td>66 410 954</td>
<td>65 143 707</td>
</tr>
<tr>
<td>Expensed project costs</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Net loss on disposals</td>
<td>2 664 867</td>
<td>2 664 867</td>
</tr>
<tr>
<td>Network control</td>
<td>9 702 875</td>
<td>9 702 875</td>
</tr>
<tr>
<td>Business unit management</td>
<td>18 315 152</td>
<td>18 315 152</td>
</tr>
<tr>
<td>Corporate overheads</td>
<td>12 724 871</td>
<td>12 724 871</td>
</tr>
<tr>
<td>Total operating expenditure</td>
<td>109 818 719</td>
<td>108 551 472</td>
</tr>
</tbody>
</table>

Note: Totals may not add due to rounding.

### Table 21: Operating expenditure for Pricing Zone 3 ($)

<table>
<thead>
<tr>
<th>Operating expenditure</th>
<th>ARTC submission</th>
<th>ACCC Draft Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance costs</td>
<td>27 244 635</td>
<td>26 727 535</td>
</tr>
<tr>
<td>Expensed project costs</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Net loss on disposals</td>
<td>4 977 677</td>
<td>4 977 677</td>
</tr>
<tr>
<td>Network control</td>
<td>3 445 010</td>
<td>3 445 010</td>
</tr>
<tr>
<td>Business unit management</td>
<td>5 419 719</td>
<td>5 419 719</td>
</tr>
<tr>
<td>Corporate overheads</td>
<td>3 621 526</td>
<td>3 621 526</td>
</tr>
<tr>
<td>Total operating expenditure</td>
<td>44 708 567</td>
<td>44 191 467</td>
</tr>
</tbody>
</table>

Note: Totals may not add due to rounding.

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121 Ibid, p. 4.
4. Incremental Costs

During the 2013 Annual Compliance assessment of the HVAU, the ACCC identified issues with ARTC’s calculations of the Floor Limit and Ceiling Limit (as per section 4.2 and 4.3 of the HVAU). This was in relation to the Incremental Cost of Pricing Zone 3 Access Holders’ use of Pricing Zone 1. For the Floor Limit, ARTC interpreted the Incremental Cost as Direct Cost, which was defined in the HVAU as:122

… maintenance expenditure, including major periodic maintenance that varies with usage of the Network, and may include other costs that vary with the usage of the Network but excluding Deprecation, assessed on an efficient basis.

As part of its assessment, the ACCC engaged WIK-Consult as an independent consultant to review and assess the application of Incremental Cost in the HVAU. WIK-Consult concluded that:123

… direct costs can only be an adequate approximation of short-run incremental costs. In the longer run, direct costs are only a subset of incremental costs. More costs could be avoided if a service or a segment was no longer provided. In particular, incremental costs include depreciation and costs of capital for assets if the specific assets are related to the provision of additional capacity, or are otherwise required because of network usage. In our understanding, the ARTC substantially underestimates incremental costs by equating them with short-run variable maintenance costs.

WIK-Consult observed that Incremental Costs are often assessed over the long term in economic literature and regulatory practice, whereas ARTC approximates Incremental Costs by short term direct costs. WIK-Consult’s stated approach estimates ‘incremental costs understood as costs that are avoidable in the long term’.124

The ACCC’s Final Determination for the 2013 Annual Compliance adopted the Incremental Cost method set out by WIK-Consult for Pricing Zone 3 Access Holders’ use of Pricing Zone 1 for usage related maintenance activities related and capacity enhancing minor and major capital expenditure projects, this comprises an Incremental Cost share and allocator (GTK or Train Km). For incremental capital costs (a subset of Incremental Cost for capital expenditure on Pricing Zone 1 that is capacity enhancing), the ACCC determined these are to be allocated on actual usage rather than contracted usage.

This method was subsequently adopted by ARTC in its submissions for the 2014 and 2015 Annual Compliance assessments. This chapter examines whether ARTC has implemented the Incremental Cost method correctly.

4.1. ARTC’s August 2017 compliance submission

ARTC noted:125

As for the 2014 compliance submission, for this 2015 compliance submission ARTC has applied the methodology set out in the ACCC 2013 Final Determination and the WIK Report which informed that decision and has generally adopted the incremental

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122 Section 14.1 of the HVAU.
123 WIK-Consult, Assessment of the Incremental Costs of Pricing Zone 3 Access Holders’ Use of Pricing Zone 1 and 2 of the Australian Rail Track Corporation’s Hunter Valley Rail Network, 30 September 2015, p. 20.
proportions for activities identified by WIK, except for minor exceptions where inconsistencies have been found. Where an activity has not been assessed by WIK, ARTC commissioned an independent assessment from engineering consulting firm Bull Head Services. The Bull Head Services report was provided as Attachment 4 to ARTC’s 2014 compliance assessment submission and is not reproduced here. To the extent that the ACCC’s 2014 Final Determination varied from the Bull Head Services report, the ACCC 2014 Decision has been applied.

ARTC submitted that incremental maintenance costs increased by 13 per cent from 2014 to 2015, due in large part to a significant increase in ballast cleaning activity in Pricing Zone 1.126

ARTC submitted that the treatment of Incremental Costs under the ACCC’s 2014 Final Determination has resulted in a significantly higher proportion of costs being classed as incremental compared with what was the case at the time of setting 2015 prices. As a result, ARTC notes that the ‘relationship between TOP and non-TOP prices set for the 2015 compliance period no longer bears a close relationship to the fixed and incremental costs for 2015 as had originally been intended’.127 ARTC submitted that in turn, this has resulted in a larger over-recovery of revenue from the Constrained Group of Mines than would otherwise have been the case.128

4.2. Stakeholder submissions

Anglo American submitted that it continues to support the ACCC’s previous analysis of the requirements in relation to the treatment of incremental capital costs and its allocation on the basis of actual usage rather than contracted usage. Anglo American submitted that it supports ARTC’s application of this method in a manner consistent with previous relevant ACCC decisions.129

Whitehaven submitted that the modification to the treatment of Incremental Cost, resulting from the ACCC’s 2013 Annual Compliance Final Determination, has resulted in a significantly higher portion of costs being allocated to Pricing Zone 3 producers.130

Whitehaven submitted that:

ARTC has indicated the use of principles from the ACCC Determination of the 2013 Compliance including interpretation of Incremental Costs from WIK consulting. Whitehaven is not in agreement with the principle of utilizing Actual tonnes rather than Contracted tonnes as it is contrary to the capacity framework principles.

4.3. Further information provided by ARTC

The ACCC did not seek any further information from ARTC on the application of the Incremental Cost method.

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126 Ibid, p. 17.
127 Ibid, p. 16.
128 Ibid.
129 Anglo American Metallurgical Coal, Submission to the Australian Competition and Consumer Commission: ARTC 2015 annual compliance submission, 12 October 2017, p. 3.
130 Whitehaven Coal, Submission to the 2015 Annual Compliance, 13 October 2017, p. 1.
4.4. ACCC’s Draft Determination

The ACCC considers ARTC has appropriately applied the Incremental Cost method for the 2015 Annual Compliance assessment. The method used by ARTC continues to reflect the method recommend by WIK-Consult and adopted by the ACCC in the Final Determination for the 2013 Annual Compliance assessment. In addition, ARTC has adopted the views of the ACCC in the Final Determination for the 2014 Annual Compliance assessment for incremental allocators applying to new capital expenditure in 2014.

The ACCC notes that both Anglo American and Whitehaven submitted on the principle of using actual usage rather than contracted usage for allocating incremental capital costs. Anglo American supported the principle of actual usage while Whitehaven supported contracted usage. On this matter, the ACCC notes that it accepted ARTC’s 28 September 2018 variation of the 2011 HVAU (September 2018 Variation), which allocates incremental capital costs on the basis of an Access Holders’ contracted usage rather than actual usage.

As discussed in the Decision on ARTC’s September 2018 Variation, the ACCC considers the allocation of incremental capital costs on the basis of contracted capacity is inconsistent with economic principles underlying the Final Determination of the 2013 Annual Compliance assessment. However, the majority of industry submitted their support for ARTC’s proposed amendments in respect of Economic Cost as part of the package of amendments in ARTC’s 21 December 2017 application to vary the 2011 HVAU, which was adopted in the September 2018 Variation. The provisions in the September 2018 Variation come into effect from 1 January 2019. For this 2015 compliance assessment, however, the ACCC accepts ARTC’s allocation on the basis of actual usage, consistent with compliance assessments for 2013 and 2014.

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132 ACCC, Decision: Australian Rail Track Corporation’s application to vary the 2011 Hunter Valley Access Undertaking, 29 November 2018, p. 38.
5. True-Up Test audit

The HVAU incorporates liability arrangements in the Indicative Access Holder Agreement that provides for the payment of rebates to users for ARTC’s failure to deliver contracted paths. The payment of these rebates occurs following the completion of an annual reconciliation process, which is informed by the True-Up Test.

The True-Up Test determines whether there was sufficient capacity available on ARTC’s rail network in a given period to meet all contracted entitlements, taking into account reductions in capacity caused by maintenance, usage by non-coal trains and other factors.

Section 4.10(f) of the HVAU requires an independent audit of ARTC’s compliance with the True-Up Test, to ensure the integrity of the test and to avoid perceptions of conflicts of interest on the part of ARTC.

ARTC engaged BDO (SA) Pty Ltd (BDO) as auditor for the True-Up Test, which the ACCC approved in accordance with section 4.10(f)(ii) and (iii) of the HVAU.

5.1. ARTC’s August 2017 compliance submission

ARTC submitted that a ‘True-Up Test was conducted for each month and quarter (as applicable) during the 2015 compliance period’. 133

BDO prepared a final audit report regarding ARTC’s True-Up Test for 2015, which was provided to the ACCC as part of ARTC’s compliance submission. ARTC submitted that: 134

During 2015, ARTC passed the True Up Test on each occasion except in Pricing Zone 3 for December. The December shortfall in Pricing Zone 3 was for 2 paths, however no accrued rebate resulted from this shortfall as no Access Holder in Pricing Zone 3 had an individual shortfall.

BDO identified several exceptions where the True-Up Test calculations had not been performed in accordance with Schedule 2 of the Access Holder Agreements. BDO notes that these exceptions do not result in a TOP rebate payment in any period. 135 ARTC has provided responses to each of these exceptions in its compliance submission to the ACCC. 136

ARTC submitted that BDO’s final audit report concluded that ARTC is not liable for any rebates under the True-Up Test for 2015. BDO’s report is available on the ACCC website.

5.2. Stakeholder submissions

Whitehaven noted ARTC’s comments that the True-Up Test was passed in all months and quarters of 2015. Whitehaven submitted that: 137

Under circumstances where ARTC can demonstrate the True-Up Test is passed in all circumstances, it demonstrates that ARTC should have additional capacity available to be contracted.

134 Ibid.
135 BDO, Independent compliance audit report to Australian Rail Track Corporation Ltd, Report prepared for ARTC, 16 June 2016, p. 2.
137 Whitehaven Coal, Submission to the 2015 Annual Compliance, 13 October 2017, p. 4.
5.3. Further information provided by ARTC

In the ACCC’s 27 November 2017 request for clarification, the ACCC sought information on how reports by the Australian Transport Safety Bureau (ATSB) into incidents are used in determining ARTC’s compliance with the system True-Up Test. This was asked in reference to the:

- Kankool derailment on 15 February 2015
- Pages River derailment on 28 August 2015.

In response, ARTC noted that the HVCCC has a role in reporting the cancellation losses for any events on the Hunter Valley network, and while investigations are underway, there is a default attribution of losses which remain subject to the outcome of the investigation. ARTC stated that in conducting the True-Up Test for the relevant months, ARTC reflected the attribution of losses consistent with the HVCCC reporting.

5.4. ACCC’s Draft Determination

The True-Up Test is subject to audit by an independent party with the appropriate qualifications in order to ensure the integrity of the test. The ACCC notes that BDO’s final audit report concludes that:

In our opinion, ARTC has complied, in all material respects, with Schedule 2 of the Access Holder Agreements under the HVAU for the year ended 31 December 2015.

The ACCC specifically notes BDO’s comments that:

A system availability shortfall of 2 was recorded for pricing zone 3 in December however no take or pay rebate was required as there were no individual access holder shortfalls for the month. There were no other system availability shortfalls during the year, meaning no take or pay rebates were required to be paid.

The ACCC notes Whitehaven’s submission that when the True-Up Test is passed in all circumstances, this demonstrates that ARTC should have additional capacity available to be contracted.

On the basis of BDO’s report, the ACCC considers that it is appropriate to accept the outcome of the True-Up Test, being that ARTC is not liable for any rebates for 2015.

The ACCC notes that BDO was engaged by ARTC as the auditor for the True-Up Test for 2016. This means that BDO would have been the auditor for the True-Up Test since 2012. For 2017 to 2019, ARTC has engaged RSM Australia as auditor for the True-Up Test. As stated in the ACCC’s Draft Decision for the 2017 HVAU, the ACCC considers regular changes in auditors continues to ensure the integrity of the True-Up Test and avoid perceptions of conflicts of interest on the part of ARTC.

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138 ARTC, Request number: 10 (treatment of major incidences), Response to the ACCC’s 27 November 2017 request for clarification, 22 November 2018, p. 3.
139 Ibid.
141 Ibid, p. 2.
142 Whitehaven Coal, Submission to the 2015 Annual Compliance, 13 October 2017, p. 4.
6. ACCC’s Draft Determination

This section sets out the ACCC’s Draft Determination regarding the Annual Compliance assessment under ARTC’s HVAU for 2015 year for the following components:

- RAB Floor Limit roll-forward for the entire network (section 6.1)
- RAB roll-forward for Pricing Zone 3 (section 6.2)
- Comparison of the RAB and RAB Floor Limit for Pricing Zone 3 (section 6.3)
- Reconciliation of revenue with the applicable Ceiling Limit (section 6.0)
- Allocation of ‘unders and overs’ amount to Access Holders (section 6.5).

In each of the sections below, values are set out relating to:

- ARTC’s compliance submission, provided to the ACCC in August 2017
- the ACCC’s Draft Determination.

6.1. RAB Floor Limit roll-forward

Section 4.10(d)(i) of the HVAU requires the ACCC to determine whether ARTC has undertaken the roll-forward of the RAB Floor Limit in accordance with the HVAU. The RAB Floor Limit is rolled forward for the following purposes:

- in Pricing Zones 1 and 2, for calculating components of full Economic Cost; and
- in Pricing Zone 3, for comparison with the RAB to determine if ‘loss capitalisation’ applies.

Section 4.4(b) of the HVAU states how the RAB Floor Limit is to be rolled forward annually.

6.1.1. ARTC’s Compliance Submission

Applying the RAB Floor Limit roll-forward formula, Table 22 shows ARTC’s calculations of the RAB Floor Limit closing value for the total Hunter Valley network, as well as the ACCC’s value for the Draft Determination.

<table>
<thead>
<tr>
<th>Table 22: RAB Floor Limit roll-forward for Hunter Valley network ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ARTC Submission</strong></td>
</tr>
<tr>
<td>Opening RAB Floor Limit for network</td>
</tr>
<tr>
<td>add CPI</td>
</tr>
<tr>
<td>add Net Capital Expenditure*</td>
</tr>
<tr>
<td>less Depreciation</td>
</tr>
<tr>
<td><strong>Closing RAB Floor Limit for Network</strong></td>
</tr>
</tbody>
</table>

Note: Totals may not add due to rounding. * Net Capital Expenditure is the sum of capex and interest during construction less disposals.

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Table 23 shows ARTC’s calculation of the RAB Floor Limit closing value for those Segments in Pricing Zone 3 for 2015 for the purpose of comparing it to the RAB.

**Table 23: RAB Floor Limit roll-forward for Pricing Zone 3**

<table>
<thead>
<tr>
<th></th>
<th>ARTC Submission ¹⁴⁵</th>
<th>ACCC Draft Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening RAB Floor Limit for Pricing Zone 3</td>
<td>671 459 067</td>
<td>671 459 067</td>
</tr>
<tr>
<td>add CPI</td>
<td>12 597 731</td>
<td>12 597 731</td>
</tr>
<tr>
<td>add Net Capital Expenditure*</td>
<td>55 556 802</td>
<td>54 597 253</td>
</tr>
<tr>
<td>less Depreciation</td>
<td>-40 651 141</td>
<td>-40 622 919</td>
</tr>
<tr>
<td>Closing RAB Floor Limit for Pricing Zone 3</td>
<td>698 962 460</td>
<td>698 031 133</td>
</tr>
</tbody>
</table>

* Net Capital Expenditure is the sum of capex and interest during construction less disposals.

Note: Totals may not add due to rounding.

6.1.2. **ACCC Draft Determination**

Based on ARTC’s compliance submission, the ACCC considers that ARTC has undertaken the roll-forward of the RAB Floor Limit in accordance with the HVAU for 2015 except for one issue in respect of interest during construction.

The closing RAB Floor Limit for the Hunter Valley network at 31 December 2015 for the ACCC’s Draft Determination is $2.2 billion and the closing RAB Floor Limit for Pricing Zone 3 is $698.0 million.

6.2. **RAB roll-forward for Pricing Zone 3**

Section 4.10(d)(i) of the HVAU requires the ACCC to determine whether ARTC has undertaken the roll-forward of the RAB in accordance with the HVAU. The RAB is rolled forward in Pricing Zone 3 for comparison with the RAB Floor Limit to determine if ‘loss capitalisation’ applies.

Section 4.4(a) of the HVAU outlines how the RAB is to be rolled forward annually.

6.2.1. **ARTC’s Compliance Submission**

In its compliance submission, ARTC applied the RAB roll-forward formula for the RAB in Pricing Zone 3. Table 24 shows the closing value of the RAB for Pricing Zone 3 as submitted by ARTC and the ACCC’s values for the Draft Determination for 2015.

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### Table 24: RAB roll-forward for Pricing Zone 3 ($)

<table>
<thead>
<tr>
<th></th>
<th>ARTC Submission(^{146})</th>
<th>ACCC Draft Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening RAB for Pricing Zone 3</td>
<td>745 320 126</td>
<td>748 320 126</td>
</tr>
<tr>
<td>add Return on Opening RAB</td>
<td>88 526 271</td>
<td>88 526 271</td>
</tr>
<tr>
<td>less net Revenue(^*)</td>
<td>−154 541 929</td>
<td>−154 611 642</td>
</tr>
<tr>
<td>add Operating Expenditure</td>
<td>44 708 567</td>
<td>44 191 467</td>
</tr>
<tr>
<td>add Net Capital Expenditure(^**)</td>
<td>55 556 802</td>
<td>54 597 253</td>
</tr>
<tr>
<td>add Return on Net Capital Expenditure</td>
<td>3 286 185</td>
<td>3 229 428</td>
</tr>
<tr>
<td>Closing RAB for Pricing Zone 3</td>
<td>785 856 022</td>
<td>784 252 903</td>
</tr>
</tbody>
</table>

\(^*\) net Revenue is the total access revenue paid by Pricing Zone 3 producers (for use of both Pricing Zone 1 and Pricing Zone 3) less the Incremental Cost of Pricing Zone 3 Access Holders’ use of Pricing Zone 1;\(^**\) Net Capital Expenditure is the sum of capex and interest during construction less disposals.

#### 6.2.2. ACCC Draft Determination

The ACCC has had regard to the formula in section 4.4(a) of the HVAU and its assessment of efficient costs and prudent capital expenditure. As discussed in chapters 2 and 3 of this document, the ACCC considers that the operating expenditure and interest during construction should be adjusted downward.

Accordingly, the ACCC considers that the closing RAB for Pricing Zone 3 as at 31 December 2015 is $784.3 million.

#### 6.3. Comparison of RAB and RAB Floor Limit for Pricing Zone 3

As discussed in sections chapters 2 and 3, the ACCC is of the view that the closing RAB value for Pricing Zone 3 for 2015 is $784.3 million and the closing RAB Floor Limit is $698.0 million.

Given that the RAB is greater than the RAB Floor Limit in Pricing Zone 3, ‘loss capitalisation’ applies and ARTC is not required to ensure that access revenue does not exceed the applicable Ceiling Limit (see section 4.3(b) of the HVAU).

The ACCC notes that given the difference between the RAB and RAB Floor Limit in the ACCC’s Draft Determination, the value of cumulative losses to be capitalised into the Pricing Zone 3 asset base as at the end of 2015 is $86.2 million, an increase of $9.4 million over the year.\(^{147}\) This change in the loss capitalisation account is illustrated in Figure 2.

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\(^{146}\) Ibid, p. 5.

\(^{147}\) Cumulative losses capitalised = Closing RAB – Closing RAB Floor Limit for Pricing Zone 3, which at the end of 2015 includes capitalised losses from 2011 to 2015.
The ACCC notes that the operating expenditure allocated to Pricing Zone 3 producers does not include any contributions to the fixed costs associated with their use of Pricing Zone 1. Fixed costs includes fixed maintenance and allocated overheads. For 2015, the fixed maintenance and allocated overheads for Pricing Zone 1 were $25.9 million. In addition, Pricing Zone 3 Access Holders account for around 20 per cent of the GTK and Train Km using Pricing Zone 1.

The ACCC raised this in discussions with ARTC and members of HRATF on 30 April 2018, who indicated this was not of concern while Pricing Zone 3 is unconstrained. That is, as the ACCC understands, all Access Holders are comfortable with Pricing Zone 3 Access Holders not contributing to fixed costs in Pricing Zone 1. The ACCC seeks stakeholder views to confirm this understanding.

The ACCC notes that ARTC will review the current pricing approach under section 2.3(d) of the current HVAU (as varied on 29 November 2018). The ACCC expects this review will include assessment of Access Holders’ contributions to costs in Pricing Zone 1. The outcome of this review will apply to a replacement HVAU, following the expiry of the current HVAU on 31 December 2021.

6.4. **Revenue reconciliation with Ceiling Limit for Constrained Network**

Section 4.10(d)(ii) of the HVAU requires the ACCC to determine whether ARTC has reconciled access revenue with the applicable Ceiling Limit.

The Ceiling Limit for Pricing Zones 1 and 2 requires that access revenue from any Access Holder or group of Access Holders must not exceed the Economic Cost of those Segments which are required on a stand-alone basis for the Access Holder or group of Access Holders (see section 4.3(a) of the HVAU).

ARTC’s ceiling test model calculates the amount of access revenue and the Economic Cost across the Segments utilised by a mine or combination of mines. The combination of mines that is closest to, or exceeds, the Economic Cost for the relevant Segments is called the
‘Constrained Group of Mines’ and the Segments comprise the ‘constrained’ part of the Hunter Valley coal network.

### 6.4.1. ARTC Compliance Submission

Table 25 sets out ARTC’s reconciliation of access revenue received with costs for the Constrained Group of Mines for 2015, as well as the values in the Draft Determination.

**Table 25: Ceiling Limit test for Constrained Network ($)**

<table>
<thead>
<tr>
<th></th>
<th>ARTC Submission&lt;sup&gt;148&lt;/sup&gt;</th>
<th>ACCC Draft Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Expenditure</td>
<td>109 818 718</td>
<td>108 551 472</td>
</tr>
<tr>
<td>add Depreciation</td>
<td>77 392 111</td>
<td>77 392 111</td>
</tr>
<tr>
<td>add Return on assets</td>
<td>118 530 872</td>
<td>118 530 872</td>
</tr>
<tr>
<td>Ceiling Limit for Constrained Group of Mines</td>
<td>305 741 701</td>
<td>304 474 454</td>
</tr>
<tr>
<td>Revenue received for Constrained Group of Mines</td>
<td>346 200 515</td>
<td>346 200 515</td>
</tr>
<tr>
<td>Difference (over amount)</td>
<td>40 458 814</td>
<td>41 726 061</td>
</tr>
</tbody>
</table>

*Note: Totals may not add due to rounding.*

ARTC noted that the over-recovery from the Constrained Network had increased from $19.2 million in 2014 to $40.5 million in 2015. ARTC attributed this increase to the following factors:

- some capital costs became treated as incremental and reallocated from the Constrained Network to Pricing Zone 3 following the Final Determination for the 2013 Annual Compliance assessment
- there was a net reduction of operating costs below estimates at the time access charges were set.<sup>149</sup>

### 6.4.2. ACCC Draft Determination

In making this Draft Determination the ACCC has had regard to the components of Economic Cost in section 4.5(a) of the HVAU, the inclusion of efficient operating expenditure (as discussed in chapter 3 of this document) and appropriate roll-forward of the RAB.

After making adjustments for the reasons outlined in chapters 2 and 3, the ACCC is of the view there is an over-recovery amount of $41.7 million for 2015. This is $1.3 million higher than the amount submitted by ARTC.


<sup>149</sup> Ibid, pp. 20–1.
6.5. Allocation of unders and overs to Access Holders

As required by section 4.9(b)(ii), ARTC is required to provide a spreadsheet to the ACCC (on a confidential basis) that sets out the allocation of the total 'unders and overs' amount for 2015.

Under section 4.10(d)(ii) of the HVAU the ACCC is to determine whether ARTC has allocated the total 'unders and overs' amount to Access Holders in accordance with the HVAU. The 'unders and overs' amount is determined through the reconciliation of access revenue received with the applicable Ceiling Limit for the Constrained Network as set out in section 6.4 above.

ARTC’s total over-recovery for the Constrained Network for 2015 is $41.7 million. The ACCC notes that the proportion of this amount that is allocated to each Constrained Coal Customer in accordance with section 4.9 of the HVAU is based on:

…the proportion of revenue paid for access rights over the Constrained Network by each Constrained Coal Customer, net of any rebate of the take or pay component of the Charges paid to that Constrained Coal Customer.

The ACCC has calculated the corresponding changes to the allocation of the amount over-recovered to each Constrained Coal Customer and advised the amounts to ARTC. For reasons of commercial confidentiality the individual amounts are not published with this Draft Determination.
Appendix A: Annual compliance assessment provisions in the HVAU

Subsection 4.10 of the HVAU provides for the ACCC to conduct an annual compliance assessment to determine whether ARTC has complied with 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 30 April each year 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 RAB Floor Limit in Pricing Zone 3, documentation demonstrating that Indicative Access Charges, or Interim Indicative Access Charges, as applicable, satisfies the requirements in section 4.3(b).

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 has been
endorsed by the RCG in accordance with section 9, the ACCC will not consider whether that capital expenditure is prudent;

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 in section 4.4(a),

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

Subsection 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.