

2017 Hunter Valley Coal Network Access Undertaking

Explanatory Guide

December 2016

ARTC



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1 Introduction

1.1 Purpose Of Explanatory Guide

The purpose of this Explanatory Guide (**Guide**) is to detail, and provide context that aids understanding of, the features of the Hunter Valley Coal Network Access Undertaking to commence 1 July 2017 (**2017 HVAU**) submitted to the Australian Competition & Consumer Commission (**ACCC**) in December 2016 for approval.

The undertaking currently in place (**2011 HVAU**) was due to expire on 30 June 2016. In December 2015, ARTC submitted to the ACCC for approval a new undertaking proposed to commence on 1 July 2016 (**Draft 2016 HVAU**). On 14 June 2016, ARTC withdrew its Draft 2016 HVAU from the ACCC's consideration and applied for an extension to the 2011 HVAU, which was approved by the ACCC on 22 June 2016. This extended the term of the HVAU 2011 until 31 December 2016.

On 18 October 2016, ARTC submitted a further extension application to the ACCC for approval to further extend the term of the 2011 HVAU until 30 June 2017. The extension application was approved by the ACCC on 23 November 2016. This means that the 2011 HVAU will be due to expire on 30 June 2017.

The 2017 HVAU is an evolution from the 2011 HVAU. Therefore, the focus of this Guide is to identify key changes to the 2017 HVAU compared to the 2011 HVAU, rather than attempt to explain the operation of the 2017 HVAU from first principles.

1.2 Status Of This Document

This Guide is intended as a public document and may be published by the ACCC at its discretion.

This Guide does not comprise part of the 2017 HVAU nor does it seek to repeat the contents thereof, but rather it seeks to aid understanding of the 2017 HVAU through provision of supplementary information and clarification. To the extent there may be any apparent inconsistency between this Guide and the 2017 HVAU, the 2017 HVAU shall prevail.

A number of terms used in this document are defined in the 2017 HVAU. Readers are directed to section 15 of the 2017 HVAU for those definitions. To the extent that there is any difference in the use of a term in this Guide and its definition in the 2017 HVAU, the definition in the 2017 HVAU prevails.

1.3 Outline Of Explanatory Guide

This Guide is set out as follows:

Section 1.4 provides background to the preparation of the 2017 HVAU including the consultation process that has taken place prior to submission of this application to the ACCC.

Section 2 outlines the key changes in the 2017 HVAU compared the 2011 HVAU. Sections 2.1 and 2.5.1 cover areas that impact across a number of parts of the undertaking. The remainder of the sub-sections discuss specific areas.

Section 3 discusses key changes to the schedules to the 2017 HVAU.

Section 4 reviews the key changes to the Indicative Access Holder Agreement (**2017 IAHA**). The 2017 IAHA forms Annexure A to the 2017 HVAU.

Section 5 reviews the key changes to the Schedules to the 2017 IAHA.

Appendix A discusses the change to 'path pricing' structure that simplifies pricing.

Appendix B details the consideration with regard to remaining mine life, a key input into the determination of depreciation charges.

Appendix C discusses the rate of return included in the 2017 HVAU.

Appendix D provides a detailed summary of the changes to the 2017 HVAU and 2017 IAHA.

Attachment 1 is a clean version of the 2017 HVAU.

Attachment 2 is the 2017 HVAU marked-up in comparison to the 2011 HVAU, as amended and approved by the ACCC on 25 June 2014.

Attachment 3 is a clean version of the 2017 IAHA.

Attachment 4 is the 2017 IAHA marked-up in comparison to the 2011 IAHA.

Attachment 5 is a clean version of the 2017 Indicative Operator Sub-Agreement (**2017 IOSA**). Note that there are no material changes being proposed to the IOSA.

Attachment 6 is the 2017 IOSA marked-up in comparison to the 2011 IOSA.

Attachment 7 is a paper provided by Synergies Economics Consultants discussing the parameters for the determination of the rate of return applicable to the 2017 HVAU.

Attachment 8 is a summary of the provisions ARTC expects will require amendment to implement the new opex mechanism.

1.4 Background

1.4.1 2011 HVAU

The 2011 HVAU was approved by the ACCC in June 2011 and applied from 1 July 2011. Subsequently, amendments to the 2011 HVAU were approved by the ACCC on two occasions in October 2012 and June 2014. The June 2014 amendment provided for inclusion of the part of ARTC's rail network between Gap and Turravan (near Narrabri) into the Network covered by the 2011 HVAU.

On 23 December 2015, ARTC submitted to the ACCC for approval a new voluntary access undertaking to replace the 2011 HVAU. To provide regulatory and pricing certainty while the Draft 2016 HVAU was continuing to be negotiated between ARTC and industry stakeholders (including the Hunter Rail Access Task Force (**HRATF**)), an extension application was submitted by ARTC to the ACCC to extend the 2011 HVAU for a further six months. The Draft 2016 HVAU application was withdrawn by ARTC on 14 June 2016 and the extension application was approved by the ACCC on 23 June 2016. The term of the 2011 HVAU was extended until 31 December 2016. The purpose of the first extension was to provide additional time for the parties to negotiate a new undertaking.

On 18 October 2016, ARTC submitted a further extension application to the ACCC for approval to further extend the term of the 2011 HVAU until 30 June 2017.

1.4.2 Application process

ARTC is submitting the new undertaking application as a package. ARTC believes that the terms of the 2017 HVAU represent a balance between requests by industry and ARTC's legitimate business interests. ARTC has proposed commercial parameters and legal terms which are to operate as a whole. If the ACCC does not accept or agree with one parameter, ARTC reserves its position in relation to any other aspect of the application submitted.

Further, ARTC is lodging a draft version of the 2017 HVAU and 2017 IAHA in December 2016 to allow the ACCC time to assess and decide on the elements of the HVAU application that are not related to the opex efficiency mechanism. In parallel with the ACCC's review, ARTC will develop the new opex efficiency mechanism. The intention is to lodge with the ACCC a revised and final suite of the 2017 HVAU documentation in April / May 2017 inclusive of the final opex efficiency mechanism. The ACCC can then consider the opex mechanism and the effects of that regime on the 2017 HVAU and 2017 IAHA.

The new opex mechanism will affect a number of provisions of the 2017 HVAU and 2017 IAHA including the HVAU objectives, the annual compliance process, the process for setting charges, the RCG's role and the provision of information pursuant to the undertaking. Where the new opex regime will likely significantly affect a provision in the 2017 HVAU or 2017 IAHA, ARTC has

preserved the drafting proposed in the Draft 2016 HVAU or Draft 2016 IAHA and included a note to the ACCC flagging that the provision will be re-examined in the final documentation proposed to be lodged in April / May 2017. Refer to Attachment 7 for a summary of the provisions ARTC will require amendment to implement the new opex mechanism.

1.4.3 General Approach

ARTC has approached the 2017 HVAU on the basis of evolving the undertaking from the 2011 HVAU rather than attempting to completely redesign it. This approach is a reflection of several factors, including:

- Commercial arrangements in the Hunter Valley - a number of Access Holder Agreements were entered into prior to the commencement of the 2017 HVAU and will continue into the period covered by the 2017 HVAU. It should be noted however, that the 2017 HVAU does not diminish existing contractual rights nor preclude the parties from agreeing to principles outside of the scope of the 2017 HVAU. ARTC's key objectives in relation to the 2017 HVAU (consistent with its lease objective) has been to actively cooperate and support industry arrangements and forums. ARTC has sought to incorporate into the 2017 HVAU, to the extent possible, principles which provide reasonable certainty and consistency with the existing commercial arrangements.
- Successful operation of 2011 HVAU - ARTC considers that the 2011 HVAU has generally worked well as a framework to provide certainty for Access Holders, Applicants and ARTC. It is noted that no disputes have been raised by Applicants under the operation of the 2011 HVAU. Given this view, it is appropriate to focus changes for the 2017 HVAU on those areas where ARTC or Access Holders believe that improvements can be made. Notwithstanding that the circumstances of the Network have evolved during the life of the 2011 HVAU, e.g. the Network has extended to include Gap to Turravan and the major additions to Capacity to meet increased demand have been completed, the underlying task and operation of the Network remains the same. Therefore, there is no compelling need to radically transform the regulatory framework that governs the commercial relationships between ARTC and Access Holders.
- Changing market conditions – in the development of the 2017 HVAU ARTC has sought to recognise the changing market conditions and ARTC's role as a service provider forming part of the Hunter Valley coal supply chain. In particular there has been a change in focus from capacity investment in the Hunter Valley coal network, which was a key driver for the 2011 HVAU, to consolidation, productivity improvement and reduction. ARTC has sought to recognise this in its development of the 2017 HVAU.

1.4.4 Preparation Of 2017 HVAU

In preparation of the 2017 HVAU, ARTC has engaged in an extensive consultation process with stakeholders and the ACCC.

In March 2015, ARTC published a stakeholder consultation paper,¹ seeking feedback in relation to the operation of the 2011 HVAU and to identify issues that would inform ARTC's development of the Draft 2016 HVAU. A number of stakeholders took the opportunity to provide valuable input into the process.

Subsequently, the majority of Access Holders formed the HRATF as a body that would facilitate the consultation process between ARTC and industry. The HRATF was able to present its position on a number of matters.

There were a number of issues that could not be agreed and finalised during consultation of the Draft 2016 HVAU. ARTC carefully considered these issues and believed that the Draft 2016 HVAU lodged with the ACCC was consistent with its stated objectives and represented a balance of wide-

¹ This paper can be accessed on ARTC's website at <https://www.artc.com.au/projects/2016-hvau/>.

ranging industry views, and sought to minimise those areas of difference prior to commencing a more formal public consultation by the ACCC.

In preparation of the Draft 2016 HVAU, ARTC formally met with the HRATF on four occasions and provided the group with a number of papers and drafting throughout the process. The meetings provided the opportunity for wide-ranging discussion regarding all elements of the undertaking, including the opportunity for the HRATF to table their own proposals with regard to particular issues. In addition, ARTC engaged in a weekly phone call with the HRATF's convenor.

As a result, the changes set out in the Draft 2016 HVAU were largely made to address concerns of industry with respect to the 2011 HVAU, to satisfy the needs of Access Holders and to identify improvements in the Hunter Valley Network to increase utilisation, network efficiency and performance without incurring significant capital expenditure.

ARTC has also consulted with a small number of other stakeholders prior to the submission of the Draft 2016 HVAU who were not represented by the HRATF through individual meetings prior to the lodgement of this application.

In developing the 2017 HVAU, ARTC has, where relevant and to the extent it considers it is able, taken into consideration the views expressed by stakeholders and the ACCC (generally and on the Draft 2016 HVAU). In particular, some of the changes included in the 2017 HVAU are in direct response to requests from the ACCC and Access Holders, particularly members of the HRATF. For example:

- in response to requests from Access Holders for a greater degree of transparency regarding ARTC's underlying cost base, ARTC has responded by increasing the role of the Rail Capacity Group (**RCG**) under the 2017 HVAU as a forum for ARTC to disclose much greater detail with regard to forecast costs, the reporting of performance against forecasts and innovation proposals;
- in response to a request by the ACCC, an information-gathering right has been given to the ACCC allowing the ACCC to request that ARTC provide information or documents that are required by the ACCC in order to enable it to exercise its powers or functions in relation to any material obligation, right or process under the 2017 HVAU;
- in response to a request by HRATF, ARTC has amended the calculation of the weighted average remaining mine life to include prospective mines;
- in response to requests by the ACCC and Access Holders, ARTC has made a firm commitment to the development of an opex regime to commence from the commencement of the 2017 HVAU;
- ARTC reflected the incremental cost methodology in accordance with the decision of the ACCC for the 2013 Compliance Assessment;
- in response to a strong preference by Pricing Zone 3 Access Holders for the retention of the loss capitalisation mechanism and given there are continuing capitalised losses, ARTC retained the mechanism in the 2017 HVAU;
- in response to requests from stakeholders, ARTC accepted a change to the term of the 2017 HVAU from the existing 5 year term under the 2011 HVAU to 9.5 years;
- at the request of the HRATF, ARTC has included a new provision at section 4.20 of the 2017 HVAU that provides for ARTC to facilitate the voluntary relinquishment of contracted Capacity by an Access Holder. This will assist Access Holders in managing their take or pay exposure by allowing Access Holders wishing to relinquish Capacity to trade that Capacity with another party seeking to contract additional Capacity;
- at the request of the ACCC, ARTC has also amended section 4.11 to require that the Auditor appointed to conduct the TUT Audit be appointed for up to three consecutive years (or such longer period as agreed by the ACCC); and
- at the request of members of the HRATF, the principles which underpin the consultation process between ARTC and the HVCCC have been strengthened to clarify the process, particularly with regard to any disagreement between ARTC and the HVCCC.

ARTC believes that the 2017 HVAU is consistent with its stated objectives and represents a balance of wide-ranging views of ARTC and industry.

2 Key Changes To The 2017 HVAU

2.1 Path Based Pricing & Removal Of Indicative Services

The 2011 HVAU recognised that different train configurations may represent the most efficient utilisation of Coal Chain Capacity on different parts of the Hunter Valley Network, given infrastructure constraints. The 2011 HVAU required ARTC to define an 'indicative service'. Characteristics of the 'indicative service' were intended to provide pricing signals to Access Holders regarding the efficient consumption of Coal Chain Capacity. Services with different characteristics to that of the indicative service were priced differentially, taking into account a number of matters that are set out in the 2011 HVAU.

Since the commencement of the 2011 HVAU, ARTC defined the initial indicative service in consultation with the HVCCC and industry following modelling of scenarios for a range of train configurations. The 2011 HVAU also required ARTC to develop and select characteristics of a 'final indicative service'. Notwithstanding that ARTC complied with the requirements of the 2011 HVAU for consultation with industry in 2014, it became clear that there remained divergent views within industry on what characteristics should constitute the final indicative service. With the consent of the ACCC, and based on the lack of consensus by industry, ARTC withdrew the variation to adopt the final indicative service.

Due to the divergent views within industry on the final indicative service, for the 2017 HVAU ARTC has chosen to move away from pricing based on the characteristics of an indicative service and has elected to adopt a 'path based' approach to pricing. This movement is consistent with developments across the 2017 HVAU to focus on the efficiency of the utilisation and costs of running the network. With increased focus on the efficient operation of available capacity in the network, methods must be developed to encourage the efficient utilisation of the available capacity, where that capacity is defined by the paths which are contracted to users. Given that speed of trains is controlled, the only variable open to producers to freight more coal on a given number of paths is to increase the volume per path. By pricing capacity on a volume basis, hauling more coal per train costs more such that there is a significant disincentive to increase the efficiency of path utilization; whereas by pricing purely on a path basis, independent of the volume freighted, the incentive is to increase the volume per path reducing the price per tonne and hence increasing the margin earned by the producer. Path based pricing therefore provides the incentive for producers to increase the efficient utilisation of their contracted commitments, therefore increasing the efficient utilization of the network.

A 'path based' price is made up of a fixed Take Or Pay (**TOP**) component, on a \$/Train kilometre (**Train Km**) basis, that applies to all train services within a specified range. Consistent with the 2011 HVAU Non-TOP pricing structure, the variable access charge component will continue to be charged on a gross tonne kilometre (**GTK**) basis based on actual usage, though without the application of the differentiation factors required under the 2011 HVAU.

Path based pricing allows for any train that comes within the criteria specified in the 'Services Envelope' to be priced the same, only taking into account any difference in the distance travelled on the Network. This has a number of advantages both for ARTC and Access Holders, not the least of which is that it significantly simplifies pricing for the majority of coal train services and is not reliant on ARTC imposing train service characteristics on Access Holders which it considers to represent the most efficient consumption of Coal Chain Capacity. In meetings with the HRATF, the majority of Access Holders have indicated support for the move to path based pricing, noting some have reserved their position.

A number of changes to the 2017 HVAU have been made to implement path based pricing. To ensure that a consistent pricing methodology is adopted across the Hunter Valley network, the 2017 HVAU categorises the charging formulae set out in the indicative Access Holder Agreement as a

new 'Tier 1 (Mandatory) Provision'. This means that these changes will be automatically incorporated into each existing Access Holder Agreement.

Under the 2017 HVAU, the rights to dispute a standard access charge published by ARTC, vote at the RCG and endorse a capacity project or innovation project have been amended to be on a contracted Train Kilometre basis, rather than on a 'GTK' basis. This is consistent with the adoption of path based pricing.

Analysis undertaken by Frontier Economics on behalf of the ACCC (and published on the ACCC website 5 July, 2017) has identified the range of impacts of Path Based Pricing on users. ARTC undertakes to consult with significantly impacted users through the consultation period to establish the importance of efficient capacity utilisation in the operation of the network and accommodate instances where that utilisation is constrained by matters beyond their control.

Path based pricing is described and discussed in Appendix A.

2.2 Section 1 Preamble

Section 1 remains largely the same as under the 2011 HVAU. The main changes to this section are in sections 1.1 and 1.2, relating to the Introduction and Objectives and a new section inserted at section 1.5.

2.2.1 Introduction and Objectives (Sections 1.1 and 1.2)

The changes made to sections 1.1 and 1.2 relating to the Introduction and Objectives, have been made at the request of stakeholders to reflect that the Network has now entered into a phase that is more directed towards overall efficiency and maintenance of existing Network capabilities rather than an emphasis under the 2011 HVAU towards investment in and expansion of the Network.

2.2.2 Request for information (Section 1.5)

At the request of the ACCC, a new information-gathering provision has been included at section 1.5 of the 2017 HVAU. This right provides the ACCC with broad information-gathering powers allowing the ACCC to request that ARTC provide information or documents that are required by the ACCC in order to enable it to exercise its powers or functions in relation to any material obligation, right or process under the 2017 HVAU.

This new information-gathering power goes beyond the ACCC's statutory information-gathering powers under section 155 of the *Competition and Consumer Act 2010* (Cth) (**CCA**).

ARTC has included a limited set of necessary exceptions to the ACCC's information-gathering power, such that ARTC is not required to provide the requested information or documents if:

- ARTC considers, acting reasonably, it would be onerous or oppressive to provide such information or documents;
- information or documents are not within ARTC's possession or control;
- information or documents are the subject of a legitimate claim of privilege; or
- information or documents are not necessary for the ACCC to exercise its powers or functions in relation to a material obligation, right or process under the 2017 HVAU.

ARTC will determine whether a request is "onerous or oppressive" in line with the case law precedents that provide clear guidance on the meanings of these terms.

2.3 Scope & Administration

2.3.1 Grant, Duration & Review Of Undertaking (Sections 2.2, 2.3)

The initial termination date under the 2017 HVAU is set at 31 December 2026, giving the undertaking an initial term of 9.5 years. There is a rolling 5 year extension process which is exercisable at ARTC's discretion and with the consent of the ACCC.

The 2011 HVAU had an initial term of 5 years. The change to a longer term was included by ARTC in response to requests from stakeholders. The HRATF supports a longer term undertaking.

The half year is to bring the undertaking into alignment with calendar years which is consistent with Access Holder Agreements. It also ensures that any future undertaking can commence at the beginning of a calendar year and thus simplify the transitional arrangements, as well as the implementation of amendments arising from the periodic reviews.

Periodic Review

Given the extended duration, the 2017 HVAU sets out a process for the periodic review of selected elements of the undertaking. The periodic review process is a mandatory obligation on ARTC and commences at a time 6 years before the then termination date with the objective that any amendments to the 2017 HVAU will be approved by the ACCC and take effect on the date which is 12 months after the Review Date (eg for the first review, it will take effect from 1 January 2022).

To provide ARTC with sufficient flexibility to respond to changing market conditions over an extended term and comfort to Access Holders, ARTC is required to review the following key terms of the 2017 HVAU:

- a) the weighted average mine life calculation to remove any Coal Mines that have been placed into care and maintenance or have not been granted a renewal or any licence, approval or other requirement, as well as any Prospective Mines that no longer satisfy the requirements of a Prospective Mine;
- b) the rate of return;
- c) loss capitalisation for Pricing Zone 3; and
- d) whether to extend the 2017 HVAU for a further 5 year term (i.e. to extend the then existing termination date by 5 years; e.g. at the first review, ARTC would consider whether to extend the term to 31 December 2031).

ARTC also has the discretion to undertake a review of other matters relevant at the time of the review.

As part of the mandatory review, ARTC is required to publish an issues paper and seek stakeholder views on the matters raised. The paper is required to include ARTC's preliminary view as to whether it will extend the undertaking. ARTC is required to consider any submissions received from stakeholders.

Following completion of the mandatory review, ARTC is obliged to seek ACCC approval to amend the undertaking, at least with regard to the calculation of depreciation and the rate of return. If the variation is rejected by the ACCC, ARTC may apply to the Australian Competition Tribunal to review the ACCC's rejection and if ARTC applies to the Australian Competition Tribunal, ARTC must accept and incorporate the outcome of the Tribunal's decision by submitting a revised variation application to the ACCC consistent with the Tribunal's decision.

It is intended that the outcomes of the review are implemented for the remaining 5 years of the 2017 HVAU term. Accordingly, irrespective of the timing of the ACCC's decision, the variation application and amended 2017 HVAU terms will apply on and from 1 January 5 years prior to the expiry of the undertaking.

Extension Decision

ARTC is required to consider an extension of the 2017 HVAU on a rolling 5 year basis. The option for ARTC to extend the 2017 HVAU with the consent of the ACCC is required to be made at the same time ARTC submits changes to the HVAU arising as a result of the mandatory review.

The purpose of the extension of the term is to provide certainty of the existence of an undertaking for an additional 5 years should circumstances be appropriate. ARTC adopted this approach specifically to address concerns by HRATF members that there could be contractual misalignment between Access Holder Agreements and the undertaking. HRATF have expressed a strong desire for an undertaking to remain in force.

The rolling nature of the term under the 2017 HVAU is consistent with the 10 year rolling nature of train paths under Access Holder Agreements (i.e. fixed for an initial term and which may be extended annually on a rolling basis).

The HRATF initially suggested a perpetual undertaking with no termination date. However, this is inconsistent with the terms of the CCA which require that an undertaking must specify an expiry date. In addition, ARTC believes that it would be inappropriate to adopt such a position as it would remove all flexibility for ARTC to respond to changing market conditions including where an undertaking may no longer be appropriate.

ARTC considers a 9.5 year commitment with a mandatory review and a reoccurring option to extend for an additional 5 years is reasonable in the circumstances. It provides an appropriate level of regulatory certainty while still retaining flexibility to amend the 2017 HVAU to address changes to market conditions. ARTC believes this provides stakeholders with an appropriate level of certainty because, if ARTC decides not to extend the term, stakeholders will have 5 years' notice and this will give time to ensure that appropriate arrangements are put in place noting that the NSW Rail Access Undertaking under section 6AA of the *Transport Administration Act 1988* (NSW) will reapply to the network.

The earliest commencement date is 1 July 2017 to coincide with the termination of the 2011 HVAU. The 2017 HVAU provides for an 'Effective Date' which relates to the date when the ACCC has approved the undertaking, whereas the 'Commencement Date' is set as 1 July 2017. This allows for the 2017 HVAU to operate retrospectively in case ACCC approval occurs after 1 July 2017.

As there are a number of matters such as pricing, billing and ARTC's contractual obligations that relate to at least whole months, this provides a point of considerable administrative convenience. For example, it will be necessary to conduct a part year compliance assessment under the 2017 HVAU for the remainder of calendar 2017 and these processes will be substantially more efficient to undertake if the transition occurs at the change of a month, and even more so as the transition occurs mid-year.

2.3.2 Variation of Undertaking (Section 2.4)

Section 2.4 of the 2017 HVAU remains unchanged.

2.3.3 Existing Access Holder Agreements (Section 2.5)

Section 2.5(b) has been deleted as it is a historical provision to ensure a smooth transition from the NSW Rail Access Undertaking to the 2011 HVAU and is now redundant.

Section 2.5 has also been amended to make it clear that existing Access Holder Agreements are subject to automatic modification for changes to Tier 1 provisions (see section 3 of this Guide for further details).

2.4 Negotiation (Section 3)

Section 3, dealing with the negotiation of Access Rights, remains largely as it is under the 2011 HVAU except for section 3.4(e), the new 3.4(f) and 3.7(a).

- Section 3.4(e) provides (amongst other things) that before or during any negotiation process for an Access Agreement, ARTC may require that the Applicant demonstrate its Solvency and that it has a legal ownership structure with a sufficient capital base of assets to meet the actual or potential liabilities under an Access Holders Agreement. The 2017 HVAU extends the prudential requirements under sections 3.4(e)(i) and (iv) to apply to a party being proposed as a parent guarantor, expressly requiring that they must meet the same requirements as an Applicant.
- The Material Default provision in 3.4(e)(ii) is expanded to cover a Former Related Access Holder. A Former Related Access Holder includes an Access Holder who held an Access Agreement with ARTC in the previous 2 years, for which a Related Entity (as that term is defined in the Corporations Act) of the Applicant was also a Related Entity of that previous Access Holder. The expansion of section 3.4(e)(ii) is to protect ARTC from having to

negotiate with, and provide Access to, what is often referred to as a 'phoenix corporation', being a situation where a new company presents itself seeking Access, having close links (often with the same directors) as a company that has previously defaulted on an agreement. Such a situation has arisen in recent years on ARTC's Interstate network, causing considerable difficulties.

In response to a concern raised by the HRATF, ARTC has included a new section 3.4(f) which excludes the phoenix corporation provision where a defaulting party has been purchased by an unrelated entity that was not itself in Material Default of an agreement with ARTC.

- ARTC has amended section 3.7(a) – refer to section 2.5.3 of this Explanatory Guide for further details.

2.5 Access Pricing Principles

2.5.1 Floor Limit & Ceiling Limits (Sections 4.2, 4.3)

Amendment to floor limit and ceiling test

A number of amendments have been proposed to the 2017 HVAU to address the consequences of the ACCC's final determination on the 2013 Compliance Assessment.

The amendments are intended to achieve the following for the term of the 2017 HVAU:

- enshrine the incremental cost methodology in accordance with the decision of the ACCC for the 2013 Compliance Assessment (with one change as discussed below);
- provide certainty to Pricing Zone 1 producers that a defined amount of revenue from Pricing Zone 3 producers will be allocated towards meeting the "Incremental Costs" (and not just variable or direct costs) caused by Pricing Zone 3 producers' usage of Zone 1;
- provide certainty to Zone 3 producers that their contribution to Zone 1 cannot exceed the "Incremental Costs" (and the remainder of revenue from Pricing Zone 3 producers will be allocated to meeting the costs of Pricing Zone 3); and
- provide ARTC with certainty that Pricing Zone 3 producers "Incremental Costs" in Pricing Zone 1 (which are no longer recovered from the Pricing Zone 1 producers) are recoverable as TOP charges from Pricing Zone 3 producers.

This has involved the following major changes (as well as other changes to simplify the HVAU):

- replacing the current cost categories in the 2011 HVAU with three simpler cost categories:
 - Incremental Maintenance Costs – these are variable maintenance costs (previously called Direct Costs);
 - Incremental Capital Costs – these are capital costs avoidable in the long term but exclude pre-2008 capital costs as per the WIK Consulting approach. There is one difference to the WIK approach in that the allocation of these costs is by reference to contracted commitments rather than actual volumes;
 - Fixed Costs which replaces the previous categories of Fixed Capital Costs and New Capital Costs.
- Incremental Costs are the sum of Incremental Maintenance Costs and Incremental Capital Costs. Fixed Costs are all costs other than Incremental Costs.
- creating two Constrained Networks (one for Pricing Zone 1 / 2 and one for Pricing Zone 3 once capitalised losses are fully recovered) and the application of a separate Ceiling Test and reconciliation for each; and
- removing the existing definition of Incremental Cost already in the 2011 HVAU.

ARTC has proposed the change to the allocator for incremental capital costs to address the following key consequences of the 2013 compliance determination:

- the fundamental departure from the established commercial framework for the Hunter Valley Coal Chain; and
- increased uncertainty for Access Holders and ARTC.

The ACCC, in its final determination for the 2011 HVAU and in the authorisation for the coal terminal capacity framework arrangements, specifically recognised the importance of contractual alignment as part of the long term solution for the Hunter Valley export supply chain. A key component of this contractual alignment related to the contracting structure, which included long term take or pay contracts. The ACCC indicated that it viewed this alignment as likely to promote the efficient operation, use and investment in the Hunter Valley rail network.

Take or pay contracts are intended to provide certainty for service providers to underpin the significant investments made in capacity infrastructure. For Access Holders, it provides certainty of access to capacity and limits their exposure to volume changes of other Access Holders. Since the commencement of the 2011 HVAU, ARTC has undertaken a significant program of infrastructure expansion works to meet the contracted capacity requirements of Access Holders on the basis of firm take or pay commitments.

The effect of the 2013 compliance determination was to require an incremental cost methodology in Pricing Zone 1, with incremental costs (including incremental capital costs) being allocated on the basis of actual volumes within the year (and therefore variable in nature). As a consequence, the relativity between the TOP and Non-TOP components of the access charges has changed in Pricing Zone 1. The TOP charge has historically been in the order of 85-90% of the access charges, however pricing reflecting the outcome of the 2013 compliance decisions has resulted in the TOP charge reducing to approximately 50% of the Pricing Zone 1 access charges. Access Holders are now exposed to volume reductions of other Access Holders which leads to a high degree of price uncertainty through the unders and overs process. Access Holders who are utilising train paths in accordance with their contractual commitments will fund the incremental capital costs of Access Holders who are not utilising their contracted train paths, notwithstanding they may have triggered the need for the capital investment. This introduces a different form of cross subsidisation where Access Holders using their contracted capacity entitlements cross subsidise those who are not, resulting in an ex-post volume and price risk which they can neither predict nor manage. In a scenario of lower than contract utilisation there are also risk implications for ARTC in that its cash flow will be impacted until the unders and overs process has concluded.

ARTC also considers that continuation of the actual usage allocator for incremental capital costs has the potential to hamper efficient investment going forward as there may be a reluctance for RCG members to endorse capital expenditure which is triggered by certain contractual commitments where there is a risk that those Access Holders can reduce their contribution to the capital cost (and increase the contributions of others) if their contracted capacity is not fully utilised.

The approach outlined above to allocate incremental capital costs on the basis of contractual commitments is intended to realign the HVAU with the commercial framework take or pay principles and reduce pricing uncertainty and volume risk for Access Holders. ARTC contends that this approach is more likely to promote the efficient operation of, use of and investment in the Hunter Valley rail network in line with the ACCC's determination for the 2011 HVAU.

ARTC has discussed this approach with its customers and there is broad support to realign with the commercial framework take or pay principles. Access Holders clearly understand that the implication of this will be to restore the approximate 85-90% portion of the overall pricing as TOP charges, with the allocation of capital costs not being variable within a year based on actual utilisation.

Removal Of Pricing Zones

ARTC considered the removal of Pricing Zones in the context of adopting a single price per path (\$/Train Km) for the TOP component of Access Charges or retaining the existing geographically

defined pricing zones but not differentiating access prices in each zone (i.e. the same TOP charge would apply in each zone). This would introduce a further degree of simplification to pricing.

However, notwithstanding some of the potential advantages, the structure of existing Access Holder Agreements would make the removal of Pricing Zones cumbersome to achieve. In the circumstances, and consistent with ARTC's objective to have consistency in the commercial arrangements, ARTC chose not to pursue this change.

Removal Of Loss Capitalisation (Section 4.3)

Loss capitalisation for Pricing Zone 3 was included in the 2011 HVAU to deal with the fact that large increases in Capacity in Pricing Zone 3 were required in order to allow for increased coal volumes. The nature of such increases is that it is necessary for the infrastructure to be in place ahead of when it is required. As such, the additional cost could not immediately be covered by Access Charges from the volumes existing at the time.

Under the 2011 HVAU, the loss capitalisation mechanism permitted the capitalisation of economic losses in Pricing Zone 3 into the regulatory asset base to enable long term economic cost recovery i.e. it provided for the recovery of any shortfall against economic cost in a future period. It moved revenue shortfalls in one year into the RAB and allowed it to be recovered in future years once volumes and/or the ability to pay increased sufficiently.

The major expansions in Capacity in Pricing Zone 3 are largely in place for the contracted volumes and no major Network investments are currently planned. Except for any adjustments arising through the ACCC's final decisions with regard to compliance assessments for 2013 through to the first half of 2016, ARTC anticipates that losses currently capitalised into the RAB for Pricing Zone 3 would have been recouped by the end of calendar 2016.

In light of these circumstances, ARTC considered removing the loss capitalisation provisions. Any losses outstanding at the termination of the 2011 HVAU would be dealt with through a transitional arrangement.

However, given there are continuing capitalised losses and a strong preference by Pricing Zone 3 Access Holders for the retention of the mechanism, ARTC has decided to leave the mechanism in place. ARTC has undertaken to review the loss capitalisation mechanism as part of the mandatory 5 year review process.

Exclusion of Innovation Payment (Section 4.3(c)(ii))

The 2017 HVAU contemplates a new incentive mechanism which would result in a payment where ARTC introduces an innovation (see 2017 HVAU section 14).

The resulting payment is excluded from the Ceiling Revenue, otherwise any benefit arising to ARTC would be offset by a reduction in Access revenue allowed under the Ceiling, thereby frustrating the intended incentive.

2.5.2 Regulatory Asset Base (Section 4.4)

The major changes to section 4.4 are provisions for the opening values for the RAB and RAB Floor Limit to roll-over from the 2011 HVAU (as extended) closing values.

In addition to this, some of the terms have been clarified to aid with readability and understanding, e.g. the Net Capex term has been broken into its components. It has not been the intention to modify the meanings of these terms from their current use.

2.5.3 Depreciation Of Segment Specific Assets (Section 4.7)

In response to HRATF's submissions on the Draft 2016 HVAU and the ACCC's preliminary views on the Draft 2016 HVAU, ARTC has amended section 4.7 of the 2017 HVAU from that proposed in the Draft 2016 HVAU to reflect the inclusion of Prospective Mines in the calculation of the weighted average mine life.

The proposed process for the inclusion of Prospective Mines in the calculation of the weighted average mine life occurs as follows:

- As part of an Applicant's application for an Access Agreement or during the term of an Access Holder's Access Agreement, the owner of a new mine or project may provide ARTC with information to enable ARTC to make an assessment as to whether the new mine or project constitutes a Prospective Mine and a statement of Marketable Coal Reserves (in accordance with the requirements set out in section 4.7(c)).
- As part of the process for finalising the Standard Access Charges, subject to ARTC receiving the information required for it to make an assessment as to whether a new mine or project is a Prospective Mine, ARTC will consider whether any coal mines have become Prospective Mines in the preceding financial year.
- If mines which meet the inclusion criteria for a "Prospective Mine" have been identified, ARTC will calculate the mine life of the new Prospective Mine and then recalculate the average remaining mine life for the Network:
 - taking into account the individual mine life calculated for the new Prospective Mine;
 - retaining the individual mine life calculated for each mine (other than the new Prospective Mine) as at the Commencement Date; and
 - using the assumptions and methodology used to calculate the average remaining mine life as at the Commencement Date.
- The updated remaining mine life will then be utilised for the next pricing period.
- The principles used for the determination of the mine life of a Prospective Mine are based on anticipated production level in addition to Proven and Probable Reserves.

Section 4.7 has also been amended to set a floor to the weighted average mine life of 16.5 years (as at 1 July 2016), such that if the inclusion of a Prospective Mine results in a weighted average mine life below the floor, the weighted average mine life is deemed to be 16.5 years (as at 1 July 2016).

Other changes to section 4.7 of the 2017 HVAU are for the purposes of clarification, e.g. the title has been changed to make it clear that the depreciation mechanism in this section applies to Segment Specific Assets only, and that a single mine life will be applied across the whole Network as is the current practice.

Further, as a result of the changes to section 4.7 to include Prospective Mines, ARTC has amended:

- section 2.3(a) to clarify the process for adjusting the weighted average mine life at the Review Date – refer to section 2.3.1 of this Explanatory Guide for further details;
- section 3.7(a) to include the requirement that an Applicant of a Prospective Mine provide the information required to enable ARTC to determine whether a project or mine constitutes a Prospective Mine; and
- section 4.18(d) to:
 - allow an Access Holder to provide the information before 1 July each year to prove the requirements of a Prospective Mine (where it did not do so as part of its application or where ARTC was not satisfied the criteria was met); and
 - include a requirement on ARTC, as part of the process to finalise the Standard Access Charges, to notify Access Holders of any changes to the calculation of the weighted average mine life (as adjusted under section 4.7).

2.5.4 Rate Of Return (Section 4.8)

The 2017 HVAU includes a rate of return of 6.51% real pre-tax and 7.86% nominal. See Appendix C for details.

2.5.5 Unders & Overs Accounting (Section 4.9)

The changes to section 4.9 dealing with the unders and overs accounting are restricted to:

- consequential changes arising from the change to path based pricing;
- exclusion of the Innovation Payment; and
- minor clarifications.

2.5.6 Annual Compliance (Section 4.10, 4.11)

The changes to the annual compliance section 4.10 are largely to deal with the 6 months from July to December 2017 as the first period under the 2017 HVAU to which a Compliance Assessment process will be required. In accordance with section 4.10(b), ARTC will agree with the ACCC the amendments to the documentation to be provided for that 6 month process prior to submission. This process is consistent with the timing proposed for the Compliance Assessments of the 2016 and 2017 calendar years under the Extension Application.

For ease of reference and flow, the annual True Up Test (**TUT**) audit has been moved from its former location at 4.10(f) to its own sub-section 4.11. A new 4.11(o) has been included to clarify the process for the TUT Audit for the 2017 calendar in accordance with the position proposed under the Extension Application. In particular, that the TUT Audit will be conducted for the entire 2017 year notwithstanding that the period from 1 January 2017 to 30 June 2017 was governed under an expired undertaking. At the request of the ACCC, ARTC has also amended section 4.11 to require that the Auditor appointed to conduct the TUT Audit be appointed for up to three consecutive years (or such longer period as agreed by the ACCC). This changes the 2011 HVAU position under which ARTC had the discretion to appoint the same auditor for any number of consecutive years.

Otherwise, this provision has not been changed apart from consequential amendments to the references.

2.5.7 Structure Of Charges – Coal Access Rights (Section 4.12 Formerly 4.11)

Section 4.12 (formerly section 4.11) has been amended to the \$/Train Km that will apply to TOP Charges under path based pricing. See comments in section 2.1 above.

2.5.8 Pricing Objectives (Section 4.14 Formerly 4.13)

Changes to section 4.14 are consequential amendments due to the amendments proposed to address issues raised by the ACCC's final determination on the 2013 Compliance Assessment.

2.5.9 Standard Access Charge (Section 4.15 Formerly 4.14)

The former section 4.14 set out the indicative Access Charges. Indicative Access Charges no longer apply under path based pricing. In their place, the term Standard Access Charge is used to refer to the TOP Charge and Non-TOP Charge for each Pricing Zone that will apply under path based pricing.

Similarly, references to indicative services have been removed as these no longer exist. In their place, the section now references the Services Envelope which identifies the limits that apply to the application of Standard Access Charges.

2.5.10 Charge Differentiation (Section 4.16 Formerly 4.15)

Section 4.16 has been reoriented to reflect path based pricing with the removal of indicative services and indicative prices and their replacement by the Services Envelope and Standard Access Charges. Charge differentiation now occurs only in respect to Services that operate outside of the Services Envelope.

A new section 4.16(b) has been added to cater for Services that fall within the Services Envelope but also operate on other networks which have significant operating restrictions that prevent them from operating a train configuration more akin to those typically operated in the Hunter Valley. This provides ARTC with the flexibility to set prices by reference to the constraints of interconnecting rail networks and has been inserted to address concerns from Access Holders operating on both the Hunter Valley network and another network.

With the move to path based pricing, the former sections 4.17, 4.18, 4.19 relating to indicative services have become redundant and have been removed.

For completeness, the former section 4.15(a)(iii) related to the grandfathering of certain train configurations is now redundant and has been removed.

2.5.11 Process For Finalising Standard Access Charges (Section 4.18 & 4.19 Formerly 4.20, 4.21)

Sections 4.18 and 4.19 (formerly 4.20 and 4.21) deal with the preparation and communication of Standard Access Charges. These sub-sections have been revised to adopt path based pricing and to take into account other consequential changes, e.g. the Relinquished Capacity provision and the inclusion of Prospective Mines in the calculation of the weighted average mine life.

The HRATF members expressed a concern that the provision of pricing by the end of October, as required under the 2011 HVAU, caused them difficulties in their internal budgetary processes. In order to assist, ARTC has moved the date for providing prices to 30 September of the year prior to year for which prices are to be provided. ARTC is confident that the change will not have a material impact on the accuracy of information available for the preparation of prices.

Also in response to requests from HRATF members, ARTC included a provision at section 4.19(iii)(B) in the Draft 2016 HVAU to provide an indicative forecast of prices for the two subsequent years (including a new Schedule F which sets out a pro-forma for the information to be supplied). It is ARTC's expectation that the new opex regime will render this sub-section and Schedule F redundant. ARTC has retained these provisions for the purposes of the draft 2017 HVAU being lodged but will amend them as appropriate in the revised version of the 2017 HVAU to be lodged.

2.5.12 Relinquished Capacity (Section 4.20)

At the request of the HRATF, ARTC has included a new provision at section 4.20 that provides for ARTC to facilitate the voluntary relinquishment of contracted Capacity by an Access Holder. There is an established principle under the 2011 HVAU, continued under the 2017 HVAU, that ARTC is not permitted to voluntarily waive TOP charges in a year on the basis that the shortfall in revenue would result in an 'under' for the year, which would then be socialised amongst all relevant Access Holders through the 'unders and overs' accounting process. ARTC is therefore unable to allow directly for the voluntary relinquishment of Capacity that would be to the detriment of other Access Holders.

However, ARTC is willing to assist Access Holders in managing their take or pay exposure by assisting Access Holders wishing to relinquish Capacity to trade that Capacity with another party seeking to contract additional Capacity. Any assignment of Capacity to be relinquished is required to be undertaken in accordance with clause 16.3 of the Indicative Access Holder Agreement.

2.6 Capacity Management

Section 5.8 of the 2017 HVAU relating to the assignment of Capacity losses has been removed as neither ARTC nor HRATF consider that the mechanism proposed in section 5.8, to deal with identifying and allocating losses of Capacity caused by Access Holders, is appropriate or effective. Otherwise section 5 has remained largely unchanged from the 2011 HVAU.

2.7 Investment & Industry Consultation

2.7.1 Investment Processes

Apart from the specific areas addressed below, ARTC is not proposing any substantial changes to the sections of the 2017 HVAU associated with the investment process (2017 HVAU sections 6 – 9).

2.7.2 Changes To RCG (Section 9.2)

The role of the RCG has been expanded to include a greater level of consultation and decision making. ARTC has reviewed the membership and operation for the RCG and concluded that it is

preferable to have all coal Access Holders as direct members rather than being represented by an elected representative member. Accordingly, section 9.2 now provides for this and the provisions relating to the representative member have been removed.

In keeping with the move to path based pricing and the adoption of Train Km as the primary unit for levying TOP Charges, the weighting for voting has been adjusted from GTK to Train Km.

Section 9.2(a) has also been amended to clarify that meetings do not have to be monthly. This amendment was included to avoid situations, e.g. through the Christmas period, when meetings held at strictly monthly intervals would be unduly restrictive.

2.7.3 Additional Maintenance Obligations (Section 9.2)

Stakeholder submissions in relation to the development of the Draft 2016 HVAU identified that Access Holders are seeking increased transparency of costs and allocation, pricing development and maintenance plans. In addition HRATF are seeking further commitments from ARTC with regard to disclosing maintenance forecasts, budgets, scope, planning and reporting. Industry made it clear that the RCG is an appropriate forum for the discussion and consultation of maintenance activities.

In response to stakeholder requests, ARTC strengthened the provisions in section 9.2 of the Draft 2016 HVAU for reporting to the RCG on maintenance plans and operating cost forecasts, and actual performance against these. It also deals with efficiency measures and general operational performance. ARTC has retained these amendments in the 2017 HVAU, however, it is ARTC's expectation that the new opex regime will impact these amendments.

2.7.4 Operating Costs & Incentive Proposal (Section 9.3)

ARTC has included a statement of intention in section 9.3 of the 2017 HVAU under which ARTC commits to implement a new opex mechanism in the undertaking intended to commence at the commencement of the 2017 HVAU.

The key elements of the proposed new opex mechanism include:

- **(ex-ante allowance)** an ex-ante operating cost allowance will be established through a forecast and benchmarking process;
- **(forecast period)** an initial forecast period will be established with a reset of the opex allowance after the initial period; and
- **(efficiency driver)** an efficiency incentive for ARTC based on a right to retain the benefit of any underspend relative to the allowance and an obligation to bear the cost of any overspend relative to the allowance.

Under the new section 9.3, ARTC is required to have implemented the new opex incentive mechanism by the Commencement Date of the 2017 HVAU. The drafting sets out:

- the principles which the proposal should contain based on the above elements; and
- the milestones for achieving the development of the mechanism.

The proposed milestones reflect a timetable which aims to achieve a revised HVAU lodgement date by early May in which the new opex mechanism will be included along with consequential changes to other related provisions.

To date, ARTC is continuing to engage with industry and the ACCC on its opex mechanism proposal and working with a smaller Customer Working Group on its development. It is intended that meetings will be held with all customers to provide updates as key milestones are met.

2.8 Performance Measurement (Section 13)

Access Holders have expressed a view that the existing suite of performance indicators do not provide significant value to their understanding of the operation of the network. In responding to this, the 2017 HVAU provides for the performance indicators to be reviewed and reported against

over the term of the HVAU with any variations to them being addressed through the normal variation process with the ACCC.

For completeness, the former sections 13.3, 13.4 and 13.5 of the 2011 HVAU have been removed. These provided for reviews of various components of the 2011 HVAU which have been completed and are no longer relevant.

2.9 Innovation Incentive Mechanism (Section 14)

Section 14 of the 2017 HVAU provides for ARTC to be rewarded for innovations that benefit Access Holders, including benefits that might manifest themselves in other parts of the coal chain. The objective of the mechanism is to provide an incentive to ARTC to identify, develop and implement projects or change practices or technologies which are innovative and not in the ordinary course of ARTC's business where ARTC would not otherwise have an incentive to do so under the undertaking.

For example, it might be that ARTC is able to undertake an investment or an operating practice that assists train operators reduce their costs; but which would not be an expenditure that ARTC would normally be able to recoup under the Ceiling Limit as it would not come under the stand alone requirements for the Network. Without this mechanism, ARTC would have no incentive to engage in the new investment or practice, to the detriment of the coal chain overall.

The mechanism provides for ARTC to bring a proposal to the RCG and agree a scheme of payments outside the Ceiling Limit where the RCG endorses a project. Section 14 sets out the information requirements that ARTC is required to provide to the RCG, principles for the pricing of the project and the process for endorsement by the RCG.

It is noted that an area of complexity exists in the charging for an innovation project in that there is the potential for a project to benefit only some Access Holders, in which case only those Access Holders should pay. However this gives rise to a potential free rider problem whereby some Access Holders may wish to obtain the benefit without contributing. These two issues are in tension. To address this, section 14.6 sets out an endorsement process that provides for a project expected to benefit all Access Holders to be endorsed when Access Holders with 70% of contracted Train Km vote in favour, but in the case where the benefits are expected to apply to only a subset of Access Holders then all of the identified group must endorse the project. Any recovery of an innovation payment will be done in accordance with the endorsed proposal. This provides a reasonable compromise that ARTC believes will allow the mechanism to be flexible and workable without being unduly onerous.

2.10 Definitions (Section 15 Formerly Section 14)

Section 16 contains definitions. The majority of these remain unchanged. However, there are a number of new terms included. See Appendix D for details of the changes to definitions.

3 Key Changes To Schedules

3.1 Schedule A1 Tier 1 Provisions

As the majority of Access Holder Agreements have a rolling 10 year term, it was acknowledged as part of the 2011 HVAU that there needed to be protections to deal with changes over time. Accordingly the 2011 HVAU and associated indicative Access Holder Agreement set out a mechanism allowing ARTC to roll Access Holders onto new terms in the event that the ACCC approves a new undertaking containing revised material terms which need to be the same for all Access Holders. This was done through the operation of 'Tier 1 clauses'. As part of the 2017 HVAU ARTC has added several clauses of the IAHA as Tier 1 clauses. These include:

New IAHA Clause 5.4A, Schedule 3 Clauses 4, 5 Relating To Innovation Incentive Charges

The new IAHA clause 5.4A provides for the payment of an Innovation Charge in accordance with an endorsed Innovation Proposal (as applicable). This payment will fall outside the revenue calculated in the Ceiling Limit and will be invoiced specifically.

IAHA Schedule 3 clauses 4 and 5 relate to this payment and is also new.

IAHA Schedule 3 Clauses Relating To Charges

IAHA Schedule 3 clauses 1 (TOP Charges), 2 (Non-Top Charges) and 3 (Ad Hoc Charges) require substantial modification to reflect the change in pricing structure to the new path based pricing. Going forward, it is important that all Access Holder Agreements are able to be modified to reflect changes to the pricing structure.

Removal Of IAHA Clause 16.8

Clause 16.8 relates to the reduction in time for the approval of trades. This provision was originally included as an obligation early in the operation of the 2011 HVAU. The task is now complete and this provision is redundant and has been removed. Therefore it is no longer required as a Tier 1 provision going forward.

3.2 Schedule A1 Tier 2 Provisions

Item 6 in the list of Tier 2 provisions, relating to the payment of Access Charges on the basis of take or pay charges etc, has been deleted from the list as the Schedule 3 clauses have now been moved to Tier 1 to reflect the need for uniform application of the basis for the application of Access Charges.

3.3 Annexure 1 To Schedule B

Annexure 1 to Schedule B is the Network map. The only change to this Annexure is to remove reference to the "New Segments".

3.4 Schedule D Performance Measurement

Minor drafting changes have also been made to remove references to indicative services and recognise the Services Envelope and other matters consequential to the adoption of path based pricing. References to incentives have also been removed to reflect that these are now dealt with separately.

3.5 Schedule F Forecast Indicative Prices

Schedule F is a new schedule that provides a pro-forma for the forecast prices now required under section 4.19(a)(iii)(B). As indicated above it is ARTC's expectation that the new opex regime will render this Schedule redundant. ARTC has retained the Schedule for the purposes of the 2017 HVAU but will amend it as appropriate in the revised version of the 2017 HVAU being lodged.

3.6 Schedule G (Formerly Schedule F) Principles To Guide ARTC/HVCCC Consultation

Schedule G sets out the principles which underpin the consultation process between ARTC and the HVCCC. At the request of members of the HRATF, these principles have been strengthened to clarify the process, particularly with regard to any disagreement between ARTC and the HVCCC. ARTC is not able to commit the HVCCC to any matter under the undertaking and therefore the matters that can be covered in this schedule are necessarily limited to those things to which ARTC can commit.

3.7 Schedule H (Formerly Schedule G) Annual Compliance Assessment Information Provision & Timing

The changes to Schedule H reflect the change in opening valuation for existing assets to the closing value as at 30 June 2017.

Other changes are consequential on changes in the main body of the undertaking or minor clarifications in drafting (e.g. references to the Ceiling test have been changed to Ceiling Limit as Ceiling test is an undefined term but was always intended as Ceiling Limit).

4 Key Changes To Indicative Access Holder Agreement

The majority of changes to the IAHA have been made to reflect changes to the 2017 HVAU.

4.1 Definitions (Clause 1)

Changes to the definitions largely reflect changes required as a consequence of changes to the 2017 HVAU.

4.2 Condition Precedent (Clause 2.2)

Clause 2.2 has been amended to require that Security provided by an Access Holder include the amount of GST payable on the TOP Charges. This ensures that the Security is in an amount sufficient to cover any GST payable by ARTC, should ARTC be required to draw down on the Security.

4.3 Removal Of Clause 3.3(e)

IAHA clause 3.3(e) related to a review of Tolerance levels that was to be conducted within 12 months of the commencement of the 2011 HVAU. This review has been conducted. The clause is now redundant and has been removed.

4.4 Changes to Clause 3.5

ARTC has amended clause 3.5 relating to the right of Access Holders to elect a quarterly allocation period to align with a customer's allocations under its terminal agreement with Port Waratah Coal Services.

These amendments are intended to provide for an assessment of the impact of quarterly allocation on Capacity, Coal Chain Capacity and the capacity entitlements of other Access Holders before ARTC decides whether to grant an Access Holder a quarterly allocation to align with Port Waratah Coal Services.

4.5 Changes to Clause 5.4

4.5.1 Change To Train Path Schedule Format (Clause 5.4(c), Schedule 3 & Train Path Schedule)

The table for the Train Path Schedule was previously contained in the body of the Schedule itself. In practice, this table is in the form of a spreadsheet which could not reasonably be represented within the format of the Train Path Schedule in a meaningful sense. This has now been removed from the body of the schedule to be an Annexure to the schedule, reflecting all executed Access Holder Agreements. This has an impact on the drafting of clause 5.4, Schedule 3 and the Train Path Schedule.

4.5.2 Change To TOP Rebate & Ad Hoc Charge Rebate (Clause 5.4)

To facilitate a transition between the 2011 HVAU and 2017 HVAU, clause 5.4 was inserted as part of the Extension Application to address the requirement to deal with two part year reconciliations. The 2017 IAHA drafting amends the wording proposed in the Extension Application to align with the revised terminology in the 2017 HVAU. The amendments do not change the approach taken in the Extension Application – ie that as part of the 2017 rebate process, ARTC will undertake a reconciliation of the 2016 rebates to take into account the revised rate of return and remaining mine life.

4.6 Innovation Charge (Clause 5.4A)

Clause 5.4A is a new clause dealing with the payment of the charge arising from an innovation project (see HVAU section 14). There is also a consequential change to Schedule 3 clause 4 (see comments in section 2.9 above for further details on the Innovation proposal).

4.7 Removal Of Specific Newspaper Reference (Clause 5.7(a))

Clause 5.7 sets out the interest charge rate applicable to overdue amounts. Previously this specified a rate published by the National Australia Bank in the Australian Financial Review. Given that the important matter is the fact of publication rather than the actual journal in which the publication occurs, this restriction has been deleted as irrelevant.

4.8 Credit Support (Clause 7)

The changes to clause 7.1 extend the new Prudential Requirements in section 3.4(e) of the 2017 HVAU to the IAHA. This change includes the requirement that a party providing a guarantee must be solvent and demonstrate it has an appropriate legal structure and capital base.

4.9 Pricing Differentiation (Clause 8.4)

Clause 8.4 previously prevented price discrimination where two like indicative services were being operated. This is no longer required as price discrimination of this nature cannot occur under path based pricing within the Services Envelope. Accordingly the drafting has been removed. The clause number has been retained to avoid renumbering later clauses.

4.10 Use Of Non-Compliant Services (Clause 11.5)

Notwithstanding that ARTC is no longer using train configurations which represent efficient utilisation of Coal Chain Capacity as a factor in determining prices, the Hunter Valley Network is still a key component of the Hunter Valley coal chain. To ensure coordinated capacity planning continues to occur to optimise coal chain performance, ARTC has retained the requirements under the IAHA for changes to Service characteristics to be approved. If an Access Holder was permitted to unilaterally change its train configurations (either permanently or temporarily) this could negatively impact on Capacity, Coal Chain Capacity or ARTC's ability to fulfil its obligations to other Access Holders. Notwithstanding this requirement, ARTC cannot unreasonably refuse to allow an Access Holder to change train configurations.

4.11 Removal Of Redundant Clause 16.8 Reduction In Time Period For ARTC Approval Of Trades

Clause 16.8 dealt with a requirement for ARTC to conduct a review of its administrative processes for the approval or disapproval of a trading application. That review has been conducted and the matter is no longer relevant. Accordingly, this clause has been removed.

5 Key Changes To IAHA Schedules

5.1 Schedule 2 True Up Test & Annual Reconciliation

5.2 The True Up Test remains unchanged. Schedule 3 Charges

A number of changes have been made to Schedule 3 to take into account:

- a) the change to path pricing; and
- b) the removal of the Train Path Schedule spreadsheet to an annexure.

Schedule 3 also provides for the charging of an Innovation Charge should this be approved by the RCG from time to time.

5.3 Train Path Schedule

As noted elsewhere, the spreadsheet setting out the details of the contracted Train Paths has been moved to an annexure to reflect current practice. The drafting changes of substance in the schedule reflect this change.

6 Indicative Operator Sub-Agreement

There are no changes of substance proposed to the Indicative Operator Sub-Agreement.

APPENDIX A PATH BASED PRICING

A.1. INTRODUCTION

For the 2017 HVAU, ARTC is moving to path based pricing. Specifically, the Take or Pay (**TOP**) component of prices will be set using the unit of train kilometres (**Train Km**) by Pricing Zone, rather than gross tonne kilometres (**GTK**) as occurs under the 2011 HVAU. Unlike pricing under the 2011 HVAU, TOP prices will not be differentiated on the basis of the characteristics of the train contracted to be operated, provided that the train operates within the Services Envelope.

Prices for the Non-TOP component of Access charges will remain on a GTK by Pricing Zone basis, but also unlike the 2011 HVAU, Non-TOP prices will not be differentiated on the basis of train characteristics for trains within the Services Envelope.

A.2. REASON FOR THE CHANGE

In choosing a pricing scheme, it is necessary to consider whether it sends appropriate signals to customers in relation to the efficient use of the Network. The 2011 HVAU used an indicative train service as the mechanism for achieving this. The intention was that the indicative service would have characteristics that maximised efficient use of the Network and Coal Chain Capacity as a whole.

One difficulty with this approach is that what maximises efficient use of the rail network does not necessarily maximise Coal Chain Capacity. The 2011 HVAU included a three stage process to move to the most efficient train configuration from a coal chain perspective, utilising modelling provided by the HVCCC. Unfortunately, ARTC was unable to achieve a consensus with stakeholders as to the characteristics of the indicative service, leaving pricing to be determined through the application of an early estimate of what that train configuration should be.

A further difficulty is that the pricing of trains that differed from the indicative service relied on the application of differentiation factors that, in some cases, involved a degree of judgement or were reliant on the HVCCC modelling. Some stakeholders had concerns that the available modelling had limitations that made it difficult to place a high degree reliance on it. Again, ARTC was unable to achieve a consensus view as to the most appropriate values for the differentiation factors.

Combined, these difficulties resulted in a level of uncertainty with regard to pricing going forward. It is ARTC's judgement that the factors that made a consensus unachievable will continue through at least the medium term future. Further, it is a legitimate concern that the conduct of more robust modelling sufficient to satisfy all concerns would be prohibitively expensive and time consuming such that it must be questioned whether it would be practical to achieve, particularly in a situation where industry is seeking to reduce costs at every opportunity. Therefore, in ARTC's opinion, it is unlikely that future attempts to determine the most appropriate indicative service and differentiation factors will be any more successful than the previous attempts.

It is also notable that the characteristics of coal trains in use throughout the Hunter Valley have evolved significantly since the commencement of the 2011 HVAU. These changes have occurred in the absence of any agreement on the characteristics that should apply to an indicative service and strongly suggest that there are other factors than the specification of an indicative service that drive train specifications. This suggests that the pricing signal that the indicative service is intended to provide is not having a significant impact on the choices of train specifications offered by train operators nor the purchase of train haulage services by Access Holders.

A further consideration in the choice of a pricing scheme is that of complexity. The scheme in operation under the 2011 HVAU has proved to be administratively complex for both ARTC and Access Holders. In choosing an alternative, ARTC has taken into account the benefits to all parties from having a simplified pricing scheme.

The move to path based pricing reflects a fundamentally different approach, one where ARTC is not taking an active role in promoting a train with particular characteristics, but rather allows Access

Holders to make their choice regarding train characteristics in light of their wider requirements and economic drivers – the price for access will largely be independent of train characteristics.

The adoption of path based pricing will reward the consumption of Capacity by higher payload trains compared to lower payload trains and to that extent provides an appropriate incentive to utilise the Network efficiently, but it removes the requirement for ARTC to form (and impose on Access Holders) a judgement as to what is the most appropriate train configuration, provided that the train falls within the Services Envelope. To the extent that train characteristics fall outside of the Services Envelope, if a train service is permitted to operate on the Network, it will be priced on the basis of the principles in the 2017 HVAU section 4.16.

A.3. DETAILS OF PRICING SCHEME

The TOP component of prices will be set as a \$/Train Km for each Pricing Zone regardless of train characteristics for those train configurations that fall within the Services Envelope.

The adoption of Train Km as a pricing unit is reflective of the length of journey for a train. This is necessary as a Train Path utilises the Network only for the Segments traversed. For example, the path required by a train from Ulan to the Kooragang Coal Terminal and Bloomfield to the same terminal are very different, even though they use a common portion of the Network between Thornton and the terminal. The adoption of a Train Km unit rate for each Pricing Zone overcomes the issue of paths covering different portions of the Network within a Pricing Zone.

The retention of the GTK based Non-TOP pricing component assists in providing a well-established method for identification of the Floor Limit – subject to any revisions required by the ACCC on completion of their revenue allocation review. The Floor Limit reflects the Incremental Maintenance Costs caused by each train and is a minimum price that can be applied to any traffic. As these costs are related to the maintenance of the network, and maintenance is, in broad terms, related to the gross tonnes traversing each part of the network, it is appropriate to retain a component of pricing that reflects GTK which is a measure of gross tonnes and distance.

The Non-TOP component of prices will be set as a \$/GTK for each Pricing Zone regardless of train characteristics for those train configurations that fall within the Services Envelope.

Non-TOP pricing under the 2011 HVAU is differentiated based on the characteristics of the train. Train parameters such as maximum axle load and maximum speed are assessed and applied to develop an index that varies the base Non-TOP charge that applies to the indicative service. For the 2017 HVAU the differentiation between train types is removed and a single GTK price is applied in each Pricing Zone. The rationale for doing this is three-fold:

- Indicative Service: One of the reasons for adopting a path price for the TOP component of charges is to remove the need to differentiate prices between different train configurations. In turn, this removes the need to define an indicative service. It would be counterproductive to remove differentiation for the main component of pricing but retain it and therefore still require the specification of an indicative service for the much smaller Non-TOP component.
- Simplicity: The removal of train characteristics as a determinant of prices will simplify the determination of prices, their communication to Access Holders and administration of the Access Holder Agreements.
- Materiality: An overwhelming proportion of trains movements (and therefore GTK) have a differentiation factor of less than 1.5% and therefore the revenue impact of differentiating prices on this component is negligible.

A.4. SERVICES ENVELOPE

The adoption of path based pricing will remove ARTC from taking an active role in differentiating between train types that operate within the Services Envelope. The Services Envelope incorporates those parameters that are necessary for the efficient operation of the Network, taking into account the existing physical characteristics of the infrastructure and ARTC's contractual commitments. At

the commencement of the 2017 HVAU, the Services Envelope will comprise the parameters set out in Table A 1.

Table A 1: Services Envelope Characteristics

	Pricing Zone 1	Pricing Zone 2	Pricing Zone 3
Maximum Length (m)	1, 543m	1, 543m	1,329m
Maximum Axle Load (t)	30t	30t	30t
Maximum Speed Empty	80 kph	80 kph	60 kph*
Maximum Speed Loaded	60 kph	60 kph	60 kph
Sectional Running Times (must meet)	As published on ARTC Website from time to time.	As published on ARTC Website from time to time.	As published on ARTC Website from time to time.

*60kph empty speed is in process of revision with the staged 30 tonne axel load programme implementation.

All train services currently contracted by ARTC meet these criteria.

Any Applicant or Access Holder may apply to operate train services that fall outside of the Services Envelope. Any such application would be subject to the Capacity and Coal Chain Capacity assessment process described in the 2017 HVAU. The pricing of a train service outside of the Services Envelope will be determined in accordance with the principles set out in 2017 HVAU section 4.16.

A.5. MANAGEMENT OF CAPACITY

Notwithstanding that there is no differentiation between train characteristics for the purposes of pricing, ARTC retains an obligation to manage the Network to ensure that all contracted Capacity will be able to be operated on the Network. To this end, ARTC will still require an Access Holder to nominate the characteristics of the trains intended to be operated and the Access Holder Agreement will continue to document the contracted Train Paths according to the nominated criteria.

An Access Holder may seek to amend the Train Paths nominated in its Access Holder Agreement, in accordance with IAHA clause 11.1 and ARTC may not unreasonably withhold its consent to vary the Train Path. However, it would be reasonable for ARTC to refuse consent where the proposed change in train characteristics would negatively impact on ARTC’s ability to provide contracted Train Paths to other Access Holders, or if the HVCCC advised ARTC that the change would have a negative impact on Coal Chain Capacity, regardless of whether the modified Train Path characteristics fall inside or outside of the Services Envelope.

A.6. PRICING & REVENUE

It is noted here for completeness, that the specification of prices on a Pricing Zone basis does not affect how the resulting revenues received are allocated between different Segments across the Network.

The Floor and Ceiling Limits reflect revenue collected across the entire journey for each train movement and do not prescribe how that revenue is to be recognised other than that in order to meet the Floor Limit, sufficient revenue must be applied to Segments to at least cover the Incremental Maintenance Costs imposed by that movement. The revenue limits apply in combinations of groups of traffics as well as to individual movements.

APPENDIX B REMAINING MINE LIFE ESTIMATE

Refer to attached.

APPENDIX C RATE OF RETURN PROPOSAL

The rate of return is a key parameter in determining the tariffs applicable to a regulated network. In the 2011 HVAU lodged with the ACCC, ARTC engaged with industry and agreed a rate of return to apply for the 5 year term being a pre-tax real weighted cost of capital (**WACC**) of 9.10%. ARTC undertook a similar process with industry for the purposes of the 2017 HVAU. In its submission of the 2016 HVAU, ARTC highlighted that despite an independent expert recommendation of 8.11% (pre-tax real) and an adjusted outcome of 6.84% (pre tax real) based on adjusted parameters to reflect stakeholder feedback, ARTC lodged that submission with a 6.74% (pre-tax real) WACC as a sign of its commitment to reach a workable solution with industry stakeholders. However, discussions over the period post that submission demonstrated that it was not possible to reach a negotiated settlement with industry.

On 7 July 2016, the ACCC published a letter to all stakeholders covering its preliminary (and non-binding) views of the 2016 HVAU with the pertinent conclusion being they felt 6.74% (pre-tax real) was too high.

ARTC has incorporated that feedback, as well as that received from industry in stakeholder negotiations to inform its updated WACC proposal as part of the 2017 HVAU submission.

The application of the various extensions to the 2011 HVAU result in the WACC agreed for the 2017 HVAU being retrospectively applied via reconciliations to the extension period under the 2011 HVAU (being from 1 July 2016 to 30 June 2017). Given that application, and the fact this period is not significantly temporally distant from the timing of the submission of this application, ARTC's calculation of the market based parameters for use in the WACC determination are based on the known market outcomes from the period up to 30 June 2016.

For the 2016 HVAU submission, ARTC engaged Synergies Economic Consulting as independent economic consultants to provide a review of the applicable WACC in July 2015 and updated ahead of the HVAU 2016 submission. ARTC have asked Synergies to review their previous report and provide an updated assessment of the applicable WACC for the 2017 HVAU. Their updated report is provided at Attachment 6 to this Explanatory Guide.

The key conclusion from this analysis is that a pre-tax real WACC of 7.73% is appropriate based upon an assessment of key parameters:

- **Market Risk Premium (MRP)**

It is most appropriate to use a forward looking Dividend Growth Model as well as historical returns which application results in an MRP of 7.50%.
- **Beta**

There has been no reduction in the asset risk exposure of ARTC in the Hunter Valley since the 2011 HVAU, so the asset beta which applied in the 2011 HVAU should be applied to the 2017 HVAU.
- **Gamma**

There have been three appeals to the Australian Competition Tribunal against the AER's assessment of higher gamma, and one against the ERA (aligned to the AER approach). The ACT has consistently for the applicant and lower gamma in three of the four cases. The most recent ACT decision places weight on a theoretical utilization approach, rather than market based assessments to define the value of gamma to investors. A key principle of all of the parameter determinations in this HVAU is that they are based on market assessments. This market approach must be applied consistently across all parameters and therefore a gamma of 0.25 is appropriate to ensure a consistent market based approach in deriving WACC parameters is used.
- **Inflation**

This is the area in which there has been significant change since the previous report with economic data highlighting that Australia is entering a phase of persistent low inflation.

Application of the current regulatory approach of utilising the mid-point of the RBA inflation target (2.5%) as the appropriate forecast for inflation will therefore significantly overestimate inflation and, given the risk free rate calculation is based on spot market data, result in a negative real risk free rate. Such a negative real rate result is contrary to the bond market realities and highlight the flaws in utilising the current methodology.

ARTC highlighted in its 2016 HVAU submission that a key consideration in its acceptance of the spot market determination of the risk free rate (as compared to the trailing average approach preferred by other regulators), was in the use of actual inflation that was reflected in the bond market outcomes driving the risk free rate. The recent downward direction in inflation has only highlighted the risk of using forecast inflation v spot market debt, as that combination would yield a negative real interest rate; a result contradictory to market outcomes in Australia.

ARTC is therefore proposing a reversion to the calculation of inflation based on the Fisher method (being that used by the AER up to the GFC) as comparing the difference between nominal and indexed bonds clearly defines the markets expectations for inflation for the period in which the debt rates are calculated.

The application of the Fisher equation was halted following a halt to the issuance of indexed bonds and declining liquidity in the secondary market. The issuance of indexed bonds recommenced in 2009 and in 2011-12, the Government announced it would support liquidity of the market, resulting in substantial increases in secondary, as well as primary, market liquidity.

If spot market rates are used to determine the risk free rate, then the only fair outcome to establish the relevant inflation supporting those rates is to use the implied inflation that the market itself has delivered; which can only be achieved through application of the Fisher equation. With substantial liquidity present in the market, there is no justifiable basis on which not to utilise this equation, especially given the current methodology results in real bond yields inconsistent with the market reality as well as entrenching inaccurate overestimates of inflation over the term of the HVAU.

In assessing the WACC to apply for the 2017 HVAU, ARTC has balanced the recommendations of Synergies with the understanding of the position of stakeholders, being both the ACCC and customers, and has been prepared to adjust its expectations on individual parameters, to deliver a WACC outcome that it can accept; consistent with stakeholder requirements.

In particular, ARTC is prepared to adjust the MRP consistent with previous ACCC rulings and reduce asset beta to provide an equity beta less than 1.0, whilst still maintaining a modest risk premium to the asset beta assigned to Aurizon on the Central Queensland Coal Network reflecting the higher risk nature of thermal coal which supports the Hunter Valley asset to Metallurgical Coal which supports the Aurizon network.

These parameter movements should be considered in light of providing a total WACC outcome which ARTC believes is acceptable. Should other parameters be fundamentally changed to deliver a lower WACC outcome than the 6.51% proposed herein, ARTC reserves the right to revert to the higher parameters proposed by Synergies to deliver its total WACC outcome.

The table below highlights the relevant parameters behind the Synergies recommended position of 7.73% (pre-tax real) and ARTC's proposed WACC of 6.51% (pre-tax real).

WACC Parameters	Synergies Recommends	ARTC Lodgement parameters
Rf (nominal)	2.14%	2.14%
Debt	52.50%	52.50%
Equity	47.50%	47.50%
D/E	1.11	1.11
Debt margin (nominal)	2.70%	2.70%
Debt raising costs	0.095%	0.095%
MRP	7.50%	6.50%
Inflation	1.27%	1.27%
Gamma	0.25	0.25
Tax rate	30%	30%
Domestic tax	23%	23%
Asset beta	0.54	0.475
Debt beta	0.00	0.00
Equity beta	1.13	0.99
ke	10.62%	8.60%
kd	4.94%	4.94%
Post tax nominal (vanilla) WACC	7.63%	6.68%
Pre tax nominal WACC	9.10%	7.86%
Pre tax real WACC	7.73%	6.51%

WACC Parameters	Synergies Recommends	ARTC Lodgement parameters
Rf (nominal)	2.14%	2.14%
Debt	52.50%	52.50%
Equity	47.50%	47.50%
D/E	1.11	1.11
Debt margin (nominal)	2.70%	2.70%
Debt raising costs	0.095%	0.095%
MRP	7.50%	6.50%
Inflation	1.27%	1.27%
Gamma	0.25	0.25
Tax rate	30%	30%
Domestic tax	23%	23%
Asset beta	0.54	0.475
Debt beta	0.00	0.00
Equity beta	1.13	0.99
ke	10.62%	8.60%
kd	4.94%	4.94%
Post tax nominal (vanilla) WACC	7.63%	6.68%
Pre tax nominal WACC	9.10%	7.86%
Pre tax real WACC	7.73%	6.51%

APPENDIX D SUMMARY OF AMENDMENTS TO THE 2017 HVAU & 2017 IAHA

This document provides a summary of the amendments proposed by ARTC to the 2011 HVAU which if accepted will form part of the 2017 HVAU.

Note: Not all changes made to the relevant documents which merely correct minor typographical, auto-referencing and formatting errors are documented in the tables below. However, every change made to the 2011 HVAU will be conceptually reflected in the below table.

1 Amendments to the HVAU

No	HVAU Section	Amendments	Explanation
1	1.1	<p>Introduction</p> <p>(d) <i>The predominant usage of the Network is for rail services to the Hunter Valley coal markets. Ssubject to legislative requirements in relation to other traffic, and in particular ARTC's obligations to provide and maintain priority for passenger services under the Transport Administration Act 1988 (NSW). ARTC recognises that the operation, <u>maintenance</u> of and investment in the development of, the Network is primarily to improve utilisation and performance of such rail services and to optimise coal export throughput in the Hunter Valley.</i></p> <p><u>(h) ARTC acknowledges that there is a Hunter Valley coal industry objective to ensure that Coal Chain Capacity is maintained, developed and utilised efficiently. ARTC will, subject to confidentiality obligations, work cooperatively with coal producers, the HVCCC and other parties as required to achieve this objective.</u></p> <p>(j) <i>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.</i></p>	<p>ARTC has made changes to section 1.1 to explicitly recognise the change in market conditions and stakeholder's focus from capacity investment and expansion in the Network to a focus on ensuring that the Coal Chain Capacity is maintained, developed and utilised efficiently.</p>

No	HVAU Section	Amendments	Explanation
		<p><i>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.</i></p>	
2	1.2	<p>Objectives</p> <p><i>(B) identifying improvements to the Network and Associated Facilities to facilitate optimal performance of the Hunter Valley Coal Chain; and</i></p>	<p>ARTC has made changes to section 1.2 to explicitly recognise the change in market conditions and Access Holder's focus from capacity investment and expansion in the Network to a focus on ensuring that the Coal Chain Capacity is maintained, developed, and utilised efficiently.</p>
3	1.5	<p>Request for information</p> <p><i>(a) The ACCC may, by written notice to ARTC, require ARTC to provide information or documents that are required by the ACCC to enable it to exercise its powers or functions in relation to a material obligation, right or process under this Undertaking.</i></p> <p><i>(b) The written notice must set out:</i></p> <p><i>(i) in reasonable detail:</i></p> <p><i>(A) the information or documents required by the ACCC; and</i></p> <p><i>(B) the reasons why the ACCC requires the information or documents.</i></p> <p><i>(ii) the form in which the information or documents must be provided; and</i></p> <p><i>(iii) the deadline for ARTC to provide the information or documents, which must be no less than 14 days from the date of ARTC's</i></p>	<p>At the request of the ACCC, a new information-gathering provision has been included at section 1.5 of the 2017 HVAU. This provides the ACCC with broader powers than that which the ACCC currently has under the CCA.</p>

No	HVAU Section	Amendments	Explanation
		<p><u>receipt of the notice.</u></p> <p><u>(c) ARTC is not required to provide information or documents:</u></p> <p><u>(i) that ARTC considers, acting reasonably, would be onerous or oppressive to provide;</u></p> <p><u>(ii) not within ARTC's possession or control;</u></p> <p><u>(iii) that are the subject of a legitimate claim of privilege; or</u></p> <p><u>(iv) that are not necessary for the ACCC to exercise its powers or functions in relation to a material obligation, right or process under this Undertaking including, but not limited to, information or documents related to the matters specified in section 2.1(c).</u></p>	

No	HVAU Section	Amendments	Explanation
4	2.2	<p>Grant and Duration of Undertaking</p> <p>(a) Subject to section 2.2(d)<u>2.2(e)</u>:</p> <p>(i) this Undertaking takes effect <u>on and from the later of 1 July 2017 and twenty one (21) days after the ACCC has published its decision to accept the Undertaking under section 44ZZA(3) of the CCA (“Effective Date”); and</u></p> <p>(ii) <u>on and from the Effective Date, all provisions of the Undertaking are taken to have commenced operation on 1 July 2011-2017 (“Commencement Date”); and</u></p> <p>(iii) to the extent that the provisions of the Undertaking are applicable to the New Segments, such provisions are taken to have commenced operation on the New Segments Commencement Date.</p> <p>(b) Subject to sections 4.10(g), 4.10(h) and 4.10(i), <u>The Undertaking will continue until the earlier to occur of:</u></p> <p>(i) 30 June 2017<u>31 December 2026 (Initial Term) as may be extended for Further Terms in accordance with section 2.3(e) (End Date); or</u></p> <p>(ii) <u>the withdrawal of this Undertaking in accordance with the CCA or section 2.2(c),</u></p> <p>being, the Term of the Undertaking, with the period from 1 July 2016 to 30 June 2017, being the “Extension Period”.</p> <p>Insertion of the following new definitions in clause 16.1:</p> <p>“End Date” has the meaning given in section 2.2(b)(i).</p> <p>“Further Term” means five (5) years.</p>	<p>The initial term of the 2017 HVAU is 9.5 years commencing on 1 July 2016. In proposing a 9.5 year term, ARTC is seeking to provide certainty for both industry and ARTC going forward. At Access Holder’s requests for a longer term, the initial term may be extended by ARTC on a rolling basis for an additional 5 years.</p> <p>References to New Segments were included into the 2011 HVAU as part of the variation to incorporate the Gap to Turrawan Segments of the Network. These provisions are now redundant as the Gap to Turrawan Segments form part of the Network.</p>

No	HVAU Section	Amendments	Explanation
		<p><i>“Initial Term” has the meaning given in section 2.2(b)(i).</i></p> <p>Deletion of definition of “Extension Period”.</p>	
5	2.3	<p>Mandatory review of Undertaking</p> <p>This clause provides for ARTC to undertake a mandatory review of the Undertaking every 6 years before the next Termination Date. Under the review:</p> <ul style="list-style-type: none"> • The weighted average remaining mine life, Rate of Return, loss capitalisation mechanism and extension of the Undertaking for a further 5 years must be considered. • An issues paper must be prepared by ARTC and stakeholders invited to comment on such matters and any other matters relating to the Undertaking (which ARTC must consider in good faith). • ARTC must undertake a variation application process with the ACCC to amend the Undertaking at least in respect of the weighted average remaining mine life and Rate of Return. • If the ACCC accepts the variation, the amended terms will take effect from the date 12 months after the commencement of the Review Date. If the ACCC refuses the variation, ARTC may apply to the Australian Competition Tribunal to review the decision and if ARTC applies to the Tribunal, it must submit a revised variation application in accordance with the decision of the Tribunal. • The option to extend the undertaking for an additional 5 years is at ARTC’s discretion. If ARTC decides not to extend the Undertaking, it must publish a report on its website with its reasons. <p>Insertion of the following new definition in clause 16.1:</p>	<p>ARTC recognises that over a 9.5 year period, there is some uncertainty over market conditions, commercial arrangements and industry structure. In order to address these concerns, ARTC has proposed to undertake a mandatory review of the key commercial terms of the 2017 HVAU. The review must commence 12 months prior to the 5th anniversary date with the objective that any amendments set out in the variation approved by the ACCC, or as decided by the Australian Competition Tribunal (if applicable), will take effect for the remaining 5 years of the term.</p> <p>As part of the review process ARTC must elect to extend the term for 5 years at ARTC’s discretion. This provides stakeholders with certainty of the existence of an undertaking for at least the immediate 5 years following its scheduled expiry (see section 2.3.1 of the Explanatory Guide).</p>

No	HVAU Section	Amendments	Explanation
		<p><i>“Review Date” means the date that is six (6) years prior to the expiry of the then current End Date;</i></p>	
6	2.5	<p>Existing agreements and rights</p> <p>(a) This Undertaking applies only to the negotiation of new Access Agreements and the negotiation of Access Rights in addition to those already the subject of an Access Agreement. <u>Subject to an Access Agreement being required to incorporate those clauses from the Indicative Access Holder Agreement identified as Tier 1 (mandatory) provisions for Coal in Schedule A:1 and Tier 1 (mandatory) Non-Coal provisions in Schedule A:2 (as applicable).</u> Nothing in this Undertaking can require a party to an existing Access Agreement to vary a term or provision of that agreement.</p> <p>(b) ARTC will reserve, at no charge, existing train paths used for non-coal traffic under agreements existing immediately before the Commencement Date. ARTC will reserve the existing train paths for the purpose of making them available to Applicants who submit an Access Application for Non-Coal Access Rights, to be used for substantially the same purpose and in respect of the same end-market as the existing train paths, within 30 Business Days from the Commencement Date. To avoid doubt, an Applicant seeking access to a reserved train path under this section will be offered an Access Agreement in accordance with section 3.14(b) and will be able to negotiate the terms and conditions of that Access Agreement in accordance with section 3 of the Undertaking.</p>	<p>Amendments to clarify that clauses under the IAHA identified as ‘Tier 1’ provisions are to be automatically incorporated into existing AHAs. This is consistent with the intent of ‘Tier 1’ provisions and clause 19.1 of the IAHA.</p> <p>Deletion of the word “existing” as this is not necessary given that the term Access Holder Agreement is defined.</p>
7	2.7(a)	<p>Contact Details</p> <p>Amendments to ARTC’s contact details.</p>	<p>This change has been made to update ARTC’s contact details to the Hunter Valley business unit.</p>
8	2.7(b)	<p>Contact Details</p>	<p>ARTC proposes to introduce path based</p>

No	HVAU Section	Amendments	Explanation
	<p>3.14(b)(i)(A), 3.14(c)(i), 4.9(e), 4.10(a)(iii), 9.9(b) and (c), 4.16(a), (d), (e) and (f), 4.18 and 4.19</p>	<p>(a) <u>Standard Indicative</u> Access Charges for <u>Services within the Indicative Services Envelope</u>;</p> <p>(b) prices for which Access has been granted to Services <u>outside of the other than Indicative Services Envelope</u>, together with a general description of the Services to which such prices relate;</p> <p>(c) <u>indicative section running times for Services which have the Indicative Services Envelope characteristics</u>;</p> <p>Consequential amendments consistent with the above have been made to sections 3.14(b)(i)(A), 3.14(c)(i), 4.9(e), 4.10(a)(iii), 9.9(b) and (c), 4.16(a), (d), (e) and (f), 4.18 and 4.19.</p> <p>Insertion of the following new definitions in clause 16.1:</p> <ul style="list-style-type: none"> • “Services Envelope” means the assumptions and characteristics of a Service set out in section 4.15; • “Standard Access Charges” means the Charges for Services with characteristics within the Services Envelope determined by ARTC under section 4.15 from time to time; 	<p>pricing and move away from pricing based on the characteristics of an indicative services (see section 2.1 of the Explanatory Guide). Amendments remove the 2011 HVAU concept of:</p> <ul style="list-style-type: none"> • ‘Indicative Service’ and replaces it with ‘Services within the Services Envelope’; and • ‘Indicative Access Charges’ and replaces it with ‘Standard Access Charge’
9	3.4	<p>Parties to negotiate</p> <p>(e) At any time, before or during the negotiation process, ARTC may require the Applicant to demonstrate to ARTC’s reasonable satisfaction that it is able to meet the following prudential requirements (“Prudential Requirements”):</p> <p>(i) the Applicant <u>and any proposed guarantor under a Parent Guarantee must be Solvent</u>;</p> <p>(ii) <u>subject to sub-section (f), the Applicant, or a Related Body Corporate or Former Related Access Holder of the Applicant, must not be</u></p>	<p>If an Applicant proposes to provide a Parent Guarantee under the IAHA as credit support, then ARTC requires under amendments to (e)(i) and (iv) that the proposed guarantor is:</p> <ul style="list-style-type: none"> • solvent; and • able to demonstrate that it has a legal ownership structure with sufficient capital base and assets to meet the actual or potential liabilities under the

No	HVAU Section	Amendments	Explanation
		<p>currently, or have been in the previous (2) <u>two</u> years, in Material Default of any agreement with ARTC, or any agreement in accordance with which access to rail infrastructure not managed by ARTC has been provided to the Applicant or a Related Body Corporate <u>or Former Related Access Holder</u> of the Applicant;</p> <p>(iii) <i>the Applicant has an Acceptable Credit Rating or will agree to provide credit support in the form of a Security or a Parent Guarantee before the Access Agreement becomes effective; and</i></p> <p>(iv) <i>the Applicant must be able to demonstrate to ARTC (<u>acting reasonably</u>) that it (<u>or any proposed guarantor under a Parent Guarantee</u>) has a legal ownership structure with a sufficient capital base and assets of value to meet the actual or potential liabilities under an Access Agreement, including timely payment of access charges and payment of insurance premiums and deductibles under the required policies of insurance.</i></p> <p><u>(f) The prudential requirement in sub-section (e)(ii) does not apply to the extent the entity in Material Default is not the Applicant and was not a Related Body Corporate or Former Related Access Holder of the Applicant at the time of the Material Default.</u></p> <p>Insertion of the following new definitions in clause 16.1:</p> <ul style="list-style-type: none"> • <i>“Former Related Access Holder” means a previous Access Holder who held an Access Agreement with ARTC in the previous 2 years, for which a Related Entity of the Applicant was also a Related Entity of that previous Access Holder;</i> • <i>“Prudential Requirements” has the meaning given in section 3.4(e);</i> • <i>“Related Entity” has the meaning given to Related Entity in the Corporations Act 2001 (Cth);</i> 	<p>proposed Parent Guarantee.</p> <p>Amendments under (e)(ii) and (f) require that, in addition to the Applicant, a Former Related Access Holder must not be in Material Default under a rail access agreement in the past 2 years. This was considered necessary to prevent ‘Phoenix Corporations’ who have previously been in Material Default reapplying for access under the façade of being a new Applicant (see section 2.4 of the Explanatory Guide).</p>

No	HVAU Section	Amendments	Explanation
10	3.7	<p>Access Application</p> <p><i>(x) where an Applicant is seeking Coal Access Rights in respect of a new mine or project which the Applicant considers meets the requirements of a Prospective Mine for the purposes of section 4.7, it may provide ARTC with:</i></p> <p><i>(i) information to support that position and enable ARTC to make an assessment as to whether the Applicant's mine or project constitutes a Prospective Mine; and</i></p> <p><i>(ii) a statement of Marketable Coal Reserves in accordance with section 4.7(c)(ii).</i></p>	<p>Provision included to allow an Applicant to provide evidence necessary to demonstrate satisfaction of Prospective Mine criteria.</p>
11	4.2	<p>Floor Revenue Limit</p> <p>(a) Access revenue from:</p> <p>(a) every in the case of each Access Holder, must at least meet the Direct Incremental Maintenance Cost imposed by that Access Holder; and</p> <p>(b) For each Segment or group of Segments, Access revenue from Access Holders should, as an objective, meet the Incremental Cost of those Segments ("Floor Limit") in the case of a Pricing Zone 3 Access Holder and a Constrained Coal Customer, must also at least meet the Incremental Capital Cost imposed by that Pricing Zone 3 Access Holder or Constrained Coal Customer.</p> <p><u>the "Floor Limit".</u></p>	<p>Proposed amendment to section 4.2(a) to clarify that the Floor Limit is set by reference to:</p> <ul style="list-style-type: none"> the Incremental Maintenance Costs imposed by every Access Holder; and the Incremental Capital Costs imposed by Zone 3 Access Holders (in Pricing Zone 1 and 3) and Constrained Coal Customers. <p>This means non-coal traffic and traffic originating outside of the Network must contribute at least its maintenance cost impacts and coal traffic (originating and terminating within the Network) must contribute at least its Incremental Costs (being maintenance costs and avoidable</p>

No	HVAU Section	Amendments	Explanation
			<p>capital costs as per the ACCC 2013 Compliance determination).</p> <p>Proposed deletion of section 4.2(b) given the changes to section 4.2(a) requires the contribution of either Incremental Maintenance Costs or Incremental Cost (ie the Incremental Maintenance Cost plus Incremental Capital Cost) depending on the Access Holder.</p>
12	4.3	<p>Ceiling Revenue Limits</p> <p>(a) In relation to Segments <i>identified as forming part of</i> Pricing Zone 1 and 2 in Schedule E, Access revenue from any Access Holder, or group of Access Holders must not exceed the <i>Ceiling Limit for those Segments</i> Economic Cost of those Segments which are required on a stand-alone basis for the Access Holder or group of Access Holders (“Ceiling Limit”).</p> <p>(b) In relation to In relation to Segments <i>identified as forming part of</i> Pricing Zone 3 in Schedule E, Access revenue from any Access Holder, or group of Access Holders must not exceed the Ceiling Limit <i>for those Segments</i> where the RAB for those Segments is equal to, or falls below, the RAB Floor Limit for those Segments at the end of calendar year (t-1).</p> <p>(c) <u>Access revenue from an Access Holder for a Train Path in excess of its Floor Limit for that Train Path can only be reconciled against one Ceiling Limit.</u></p> <p><u>(d)</u> Access revenue for the purposes of this section 4.3 does not include:</p> <p>(i) <u>Access revenue from Access Holders required to meet their Floor Limit; or</u></p>	<p>Reference to Schedule E is redundant given definition of ‘Pricing Zone’.</p> <p>New definition of Ceiling Limit to clarify that there are two Ceiling Limits and that the Ceiling Limit for Zone 3 is determined on the same basis.</p> <p>New (c) ensure that’s access revenue cannot be applied towards both ceilings.</p> <p>New (d)(i) clarifies that Access revenue contributed to meet their Floor Limit is not part of the reconciliation noting that such costs are not part of the Economic Cost of a</p>

No	HVAU Section	Amendments	Explanation
		<p>(ii) Access revenue returned to a Contributor as a result of the operation of a user funding agreement between the Contributor and ARTC.</p> <p>(e) <u>In allocating revenue from Pricing Zone 3 Access Holders to Segments, ARTC will first allocate to each Segment traversed the Incremental Cost attributed to that Pricing Zone 3 Access Holder. ARTC will allocate the remaining revenue to Segments in Pricing Zone 3. ARTC will not allocate revenue from Pricing Zone 3 Access Holders to Segments in Pricing Zone 1 in excess of Incremental Costs caused by those Pricing Zone 3 Access Holders in Pricing Zone 1 Segments.</u></p>	<p>Segment for a Constrained Network.</p> <p>New (e) ensures that traffics operating in Pricing Zone 3 only pay the Incremental Cost of their usage in Pricing Zone 1.</p>
13	4.4	<p>Regulatory Asset Base</p> <p>(b) The initial value of the RAB (“Initial RAB”) will be:</p> <p>(i) in relation to those Segments that have been ascribed a regulatory asset value in accordance with the NSW Rail Access Undertaking <u>2011 Hunter Valley Access Undertaking</u> in force at the time immediately preceding the Commencement Date, set at the value of those Segments determined in accordance with the <u>2011 Hunter Valley Access Undertaking</u> NSW Rail Access Undertaking as at the Commencement Date and if the date those values took effect is earlier than the Commencement Date, that part of the Initial RAB will be <u>and</u> rolled forward to the Commencement Date in accordance with the asset valuation roll forward principles under the <u>2011 Hunter Valley Access Undertaking and as approved by the ACCC under section 15.1(b)(i) NSW Rail Access Undertaking as at August 2010 or as otherwise agreed between ARTC and the Independent Pricing and Regulatory Tribunal to determine an opening Initial RAB; and</u></p>	<p>Amendments clarify that the initial RAB value will be determined in a matter consistent with the roll forward principles in the 2011 HVAU, and that the ACCC will need to approve this value following completion of the compliance assessment for the transition period.</p> <p>Changes to (b)(ii) make clear that if additional segments are in the future incorporated into the Hunter Valley network then they will initially be valued using the depreciated optimised replacement cost method. This is consistent with the methodology used to incorporate the Gap to Turrawan section in 2014.</p> <p>As the regulatory asset base for pricing zones 1 and 2 have a different value, and are rolled forward separately, to pricing zone</p>

No	HVAU Section	Amendments	Explanation
		<p>(ii) <i>in relation to other segments S <u>not forming part of the Network as at the Commencement Date</u>, initially valued using the depreciated optimised replacement cost method of valuing assets, and approved by the ACCC. The optimised replacement cost means the cost of replacement by commercially efficient application of best known currently available technology based on existing capacity and performance characteristics of the asset.</i></p> <p><u>(c) The initial value of the RAB Floor Limit (“Initial RAB Floor Limit”) will be:</u></p> <p><u>(i) in relation to those Segments that have been ascribed a regulatory asset value in accordance with the 2011 Hunter Valley Access Undertaking in force at the time immediately preceding the Commencement Date, set at the value of those Segments determined in accordance with the 2011 Hunter Valley Access Undertaking and rolled forward to the Commencement Date in accordance with the asset valuation roll forward principles under the 2011 Hunter Valley Access Undertaking; and</u></p> <p><u>(ii) in relation to other segments not forming part of the Network as at the Commencement Date, initially valued using the depreciated optimised replacement cost method of valuing assets, and approved by the ACCC. The optimised replacement cost means the cost of replacement by commercially efficient application of best known currently available technology based on existing capacity and performance characteristics of the asset.</u></p>	<p>3 a new (c) has been inserted to enable the separate roll forward of the RAB Floor Limit.</p> <p>For completeness, historical references to the NSW Rail Access Undertaking and roll forward of the regulatory asset value under the NSW Rail Access Undertaking to the 2011 HVAU have been removed.</p>
14	4.4(d)	<p>Determination of RAB for Pricing Zone 3</p> <p><i>RAB_{t-1 end} is the RAB at the end of the preceding calendar year (t-1).</i></p> <p><i>RAB_{t-1 start} is the RAB at the start of the preceding calendar year (t-1).</i></p>	<p>The definition of Net Capex has been amended to aid in its interpretation. Further change to remove the word ‘preceding’ is to correct an error as the relevant calculation is being undertaken for t-1. These</p>

No	HVAU Section	Amendments	Explanation
		<p><i>RoR is the nominal pre tax Rate of Return.</i></p> <p><i>Out-turn Revenue_{t-1} is the total Access revenue earned by ARTC in the preceding calendar year (t-1) but will not include:</i></p> <ul style="list-style-type: none"> (a) <i>a Capital Contribution received from an Applicant or an Access Holder; or</i> (b) <i>Access revenue returned to a Contributor as a result of the operation of a user funding agreement between the Contributor and ARTC.</i> <p><i>Out-turn Opext-1 is the total operating expenditure incurred by ARTC in the preceding calendar year (t-1), on an Efficient basis, determined in accordance with sections 4.5(a)(i), (iv) to 4.5(a)(iv) and 4.5(b).</i></p> <p><i>Net Capex t-1 is the net additions to the RAB in the preceding calendar year (t-1) <u>which is calculated as:</u></i></p> <ul style="list-style-type: none"> (a) <i><u>the Prudent Capital Expenditure incurred by ARTC in the calendar year (t-1); plus, that is out turn Capital Expenditure by ARTC less the written down value of any disposals during the preceding calendar year (t-1) on a Prudent basis, including</u></i> (b) <i>interest cost incurred during construction up until 1 July in the calendar year the asset was commissioned, capitalised in the year the asset was commissioned and determined by reference to the relevant form of the Rate of Return (to the extent that Capital Expenditure is incurred on a Prudent basis, including interest cost); <u>less</u></i> (c) <i><u>the opening escalated value reduced by accumulated depreciation, of any assets disposed of in the calendar year (t-1).</u></i> <p><i><u>To avoid doubt, Net Capex_{t-1} does not, but will not include Capital Contributions.</u></i></p>	<p>amendments are not intended to change the current application of the RAB roll forward.</p>
15	4.4(e)	Determination of RAB Floor Limit	The definition of Net Capex has been amended to aid in its interpretation. Change

No	HVAU Section	Amendments	Explanation
		<p>The RAB Floor Limit for a Segment or group of Segments will be:</p> <p>(i) as at the Commencement Date or the New Segments Commencement Date (as applicable), the Initial RAB <u>Blue Limit</u>;</p> <p>(ii) rolled forward annually according to the following methodology</p> $RAB\ Floor\ Limit_{t\ start} = RAB\ Floor\ Limit_{t-1\ end} = (1 + CPI_{t-1}) \times RAB\ Floor\ Limit_{t-1\ start} + Net\ Capex_{t-1} - Depreciation_{t-1}$ <p>where:</p> <p>RAB Floor Limit_{t start} is the RAB Floor Limit at the start of the relevant calendar year (t) (which, for the <u>first year in which following</u> the Commencement Date <u>occurs</u> or the New Segments Commencement Date (as applicable), would be the Initial RAB).</p> <p>RAB Floor Limit_{t-1 end} is the RAB Floor Limit at the end of the preceding calendar year (t-1).</p> <p>RAB Floor Limit_{t-1 start} is the RAB Floor Limit at the start of the preceding calendar year (t-1).</p> <p>CPI_{t-1} is the inflation rate for the preceding calendar year (t-1), determined by reference to the CPI for the September quarter of that year.</p> <p>Net Capex_{t-1} is the net additions to the RAB Floor Limit in the preceding calendar year (t-1) <u>which is calculated as:</u></p> <p>(iii) <u>the Prudent Capital Expenditure incurred by ARTC in the calendar year (t-1); plus</u></p> <p>(iv) that is out-turn Capital Expenditure by ARTC less the written down value of any disposals during the preceding calendar year (t-1) on a Prudent basis, including interest cost incurred during construction up until 1 July in the calendar year the asset was commissioned, capitalised in the year the asset was commissioned and determined by reference to the relevant form of the</p>	<p>to remove the word 'preceding' is to correct an error as the relevant calculation is being undertaken for t-1. These amendments are not intended to change the current application of the RAB Floor Limit roll forward.</p> <p>Historical references to New Segments, which were included into the 2011 HVAU as part of the variation to incorporate the Gap to Turrawan Segments of the Network, have been removed as they are now redundant.</p>

No	HVAU Section	Amendments	Explanation
		<p><i>Rate of Return (to the extent that Capital Expenditure is incurred on a Prudent basis, including interest cost); less, but will not include Capital Contributions.</i></p> <p>(v) <i><u>the opening escalated value reduced by accumulated depreciation, of any assets disposed of in the calendar year (t-1).</u></i></p> <p><i><u>To avoid doubt, Net Capext-1 does not include Capital Contributions.</u></i></p> <p><i>Depreciation_{t-1} is Depreciation applicable to the RAB Floor Limit in the preceding calendar year (t-1).</i></p>	
16	4.5	<p>Economic Cost</p> <p>(a) For the purposes of this section 4, Economic Cost of a Segment means:</p> <ul style="list-style-type: none"> (i) <i>Segment Specific Costs;</i> (ii) <i>Depreciation of Segment Specific Assets, where the value of those assets is determined in accordance with section 4.4(c);</i> (iii) <i>a return on Segment Specific Assets, being determined by applying a real pre-tax Rate of Return to (RAB Floor Limit_{t-1} start + RAB Floor Limit_{t-1} end) * 0.5, where the value of the RAB Floor Limit is determined in accordance with section 4.4(c);</i> (iv) <i>an allocation of Non-Segment Specific Costs;</i> (v) <i>an allocation of depreciation of Non-Segment Specific Assets, determined on a straight line basis, by reference to a reasonable estimate of the economic useful life of Non-Segment Specific Assets, and determined from the time the assets become serviceable; <u>and</u></i> (vi) <i>an allocation of return on Non-Segment Specific Assets, being determined by applying a real pre-tax Rate of Return to the value of</i> 	

No	HVAU Section	Amendments	Explanation
		<p><i>Non-Segment Specific Assets, from the time the assets become serviceable, where the value of those assets will include the capitalisation of interest cost incurred during construction up until the time the assets become serviceable, capitalised at that time and determined by reference to the relevant Rate of Return.</i> and</p> <p>(vi) — the costs described in sub-sections (a)(i) to (vi) as applicable to Additional Capacity.</p> <p>(b) <i>All costs described in sub-sections (a)(i), (iv), (v) and (vi), all applicable costs described in sub-section (a)(vii), and all operating expenditure in section 4.4(b) and 4.4(d) are to be assessed on an Efficient basis.</i></p> <p>(c) <i>All costs are to be assessed on a sStand aAlone bBasis.</i></p> <p>(d) <i><u>For the purposes of allocating:</u></i></p> <p><i><u>(i) Incremental Maintenance Costs, such costs will be allocated on the basis of the actual gtkm usage weighted for axle load; and</u></i></p> <p><i><u>(ii) Incremental Capital Costs, such costs will be allocated on the basis of contracted KM for Access Holders to whom section 4.2(b) applies.</u></i></p>	<p>Proposed deletion of sub-section (vii) as this clause is redundant.</p> <p>Amendments define the concept of ‘Stand Alone Basis’.</p> <p>New (d) inserted to clarify the basis on which Incremental Capital Costs and Incremental Maintenance Costs are calculated, in order to draw the distinction between calculations based on actual usage versus contracted usage. This is a departure from the WIK approach used in the 2013 Compliance Assessment where capital costs were allocated on the basis of throughput.</p>

<p>17</p>	<p>4.7</p>	<p>Depreciation of Segment Specific Assets</p> <p>For the purposes of calculating the Depreciation allowance <u>for Segment Specific Assets</u> in any calendar year:</p> <p>(a) Depreciation is to be calculated for each calendar year using a straight line methodology (unless otherwise agreed with an Access Holder and approved by the ACCC) with respect to specific assets and the estimate of the remaining useful life of the assets.</p> <p>(b) <u>As at 1 July 2016, the weighted average remaining mine life for the Network is 16.5 years, subject to an adjustment</u> The useful life of a Segment or group of Segments is to be determined in accordance with section 4.7(f) having regard to: <u>or a review in accordance with section 2.3.</u></p> <p>(c) <u>The remaining mine life of a Prospective Mine is to be determined having regard to:</u></p> <p>(i) the average remaining mine life of coal mines utilising the Pricing Zone of which that Segment or group of Segments forms part; <u>production levels of saleable coal for a Prospective Mine anticipated during the Term based on the greater of:</u></p> <p>(A) <u>the average yearly production determined by the tonnages calculated by reference to the Path Usages and Service Assumptions for the Prospective Mine under the Access Holder Agreement with ARTC; and</u></p> <p>(B) <u>the approved annual production limits specified in the mining licence for the Prospective Mine granted pursuant to the Mining Act 1992 (NSW); and</u></p> <p>(ii) average mine production levels anticipated during the Term having regard to Coal Chain Capacity at any time; and <u>the proven and probable Marketable Coal Reserves estimated for a Prospective Mine based on the following information provided by the owner of the Prospective Mine, subject to the proven and probable reserves being discounted to account for reserves risks:</u></p>	<p>In response to HRAFT and the ACCC's views on the Draft 2016 HVAU, ARTC has amended section 4.7 of the 2017 HVAU to include Prospective Mines in the calculation of the weighted average mine life.</p> <p>Refer to section 2.5.3 of this Explanatory Guide for further detail.</p>
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		<p>(A) <u>a JORC Code statement prepared by a Competent Person (as that term is defined in the JORC Code); or</u></p> <p>(B) <u>a statement prepared in accordance with the JORC Code, with reference to the current edition of “Australian Guidelines for the Estimating and Reporting of Inventory Coal, Coal Resources and Coal Reserves” or, if that document is discontinued, any replacement document that substantially serves the same purpose.</u></p> <p>(iii) marketable coal reserves estimated for each mine existing at the time of the determination or expected to commence during the 5 year period following the time of the determination.</p> <p>(d) <u>The weighted average remaining mine life of Coal Mines utilising a Pricing Zone will be determined by ARTC on a Network wide basis may vary between Pricing Zones as approved by the ACCC.</u></p> <p>(e) <u>Depreciation is to be charged each year on the inflation adjusted opening balance of the RAB Floor Limit and on the Prudent Capital Expenditure associated with all of the assets commissioned in that year, charged for a period of half of that year.</u></p> <p>(f) <u>As part of the process for finalising the Standard Access Charges pursuant to section 4.18, ARTC will:</u></p> <p>(i) <u>subject to being provided with all necessary information under section 3.7(a)(x) or 4.18(a) (as applicable), consider whether any coal mines have become Prospective Mines in the preceding financial year;</u></p> <p>(ii) <u>if a new Prospective Mine has been identified in accordance with sub-paragraph (i), calculate the individual mine life of the new Prospective Mine and, subject to section 4.7(g), recalculate the weighted average mine life for the Network:</u></p> <p>(A) <u>taking into account the individual mine life calculated for the new Prospective Mine;</u></p> <p>(B) <u>retaining the individual mine life calculated for each Coal</u></p>	
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		<p><u>Mine (other than the new Prospective Mine) as at the Commencement Date; and</u></p> <p><u>(C) using the assumptions and methodology used to calculate the average remaining mine life as at the Commencement Date; and</u></p> <p><u>(iii) determine the Standard Access Charges under section 4.18 taking into account any changes to weighted average remaining mine life as adjusted under this section.</u></p> <p><u>To avoid doubt, where a new Prospective Mine is identified and ARTC is required to recalculate the weighted average remaining mine life in accordance with this paragraph (d), all variables used to calculate the average remaining mine life will remain unchanged from those used to determine the average remaining mine life that applied as at the Commencement Date, other than the addition of the individual mine life calculated for the Prospective Mines identified.</u></p> <p><u>(g) During the Initial Term, the weighted average remaining mine life for the Network will be the greater of 16.5 years (as at 1 July 2016) and the figure recalculated in accordance with section 4.7(f).</u></p> <p>Insertion of the following new definitions in section 16.1:</p> <ul style="list-style-type: none"> • “Coal Mine” means an Operating Mine or Prospective Mine; • “JORC Code” means the Australasian Joint Ore Reserves Committee’s code for reporting or mineral resources and ore reserves; • “Marketable Coal Reserves” has the meaning given in the “Australian Guidelines for the Estimating and Reporting of Inventory Coal, Coal Resources and Coal Reserves” or, if that document is discontinued, any replacement document that substantially serves the same purpose; • “Operating Mine” means a mine that has entered into production and from which coal is being sold in commercial quantities as at the Commencement 	
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		<p><i>Date;</i></p> <ul style="list-style-type: none"> • <i>“Prospective Mine” means a mine or project in relation to which:</i> <ul style="list-style-type: none"> a) <i>the proponent can reasonably demonstrate to ARTC that all reasonably necessary project approvals have been obtained, including an approved and current mining lease has been granted pursuant to the Mining Act 1992 (NSW), under which the holder is granted the exclusive right to mine for minerals over a specific area of land on which the coal mine is located; and</i> b) <i>an Access Holder Agreement has been executed with ARTC for Train Paths where the Prospective Mine is the designated load point;</i> 	
18	4.8	<p>Rate of return</p> <p><i>For the Term of the Undertaking, the real pre-tax Rate of Return is 9.10<u>6.51</u>% and the nominal pre-tax Rate of Return is 7.86<u>11.83</u>%.</i></p> <p>Deletion of consequential definition of “Interim ROR” and amendment to definition of “Rate of Return”.</p>	<p>Insertion of ARTC’s proposed rate of return. Refer to Appendix C for more details.</p> <p>Deletion of sub-paragraph (b) given this clause was inserted as part of the Extension Application to address the rate of return applicable to the Extension Period.</p>
19	4.9	<p>Unders and overs accounting</p> <p>(a) <i>Unders or overs accounting is the outcome of the reconciliation of Access revenue with applicable Ceiling Limits undertaken by ARTC as part of the annual ACCC compliance assessment under section 4.10. ARTC will calculate the total unders or overs amount <u>for each Ceiling Limit</u> as part of its submission to the ACCC (section 4.10(a)(ii)). The amount may need to be adjusted in accordance with a determination by the ACCC.</i></p> <p>(b) <i>For each Constrained Coal Customer, ARTC will:</i></p> <ul style="list-style-type: none"> (i) <i>establish a Constrained Coal Customer Account;</i> 	<p>Clarify that there are two Constrained Networks (ie Zone 1/2 and Zone 3 once capitalised losses are fully recovered – see changes to definitions below) and there will be separate unders or overs calculated for each Ceiling Limit for each Constrained Network.</p>

		<ul style="list-style-type: none"> (ii) <i>determine the annual allocation of the total unders or overs amount <u>for each Ceiling Limit</u> to each <u>applicable</u> Constrained Coal Customer in accordance with the methodology specified at (iii);</i> (iii) <i>determine an allocation of the total unders or overs amount <u>for each Ceiling Limit</u>, for each <u>applicable</u> Constrained Coal Customer based on the proportion of <u>Access</u> revenue, paid for Access Rights over the <u>relevant</u> Constrained Network <u>to which the Ceiling Limit applies</u>, by each Constrained Coal Customer, net of any rebate of the take or pay component of the Charges paid to that Constrained Coal Customer following the application of the system wide true-up tests and the annual individual reconciliation, and where applicable, in accordance with the equitable allocation to be carried out under section 10.2. <u>To avoid doubt, a separate unders or overs accounting will be conducted for each Ceiling Limit in respect of each applicable Constrained Coal Customer on the basis of the relevant Constrained Network</u>;</i> (iv) <i>add or subtract the annual allocation for the calendar year from the opening balance in each applicable Constrained Coal Customer Account in determining the closing balance of the applicable Constrained Coal Customer Account for that calendar year;</i> (v) <i>advise each Constrained Coal Customer of the details of its Constrained Coal Customer Account; and</i> (vi) <i>reconcile the Constrained Coal Customer Accounts by one of two methods, being:</i> <ul style="list-style-type: none"> (A) <i>ARTC bringing the closing balance of each Constrained Coal Customer Account back to zero by refunding or collecting the applicable amount to or from, respectively, each Constrained Coal Customer; or</i> (B) <i>mutual agreement between the parties, which must result in an outcome that is equitable for all Constrained Coal Customers.</i> <p>(c) <i>For clarity, any refund provided to a Constrained Coal Customer under</i></p>	
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		<p>section 4.9(b)(vi)(A) will not exceed the total payments made by the Constrained Coal Customer in excess of Direct Costs <u>their Floor Limit for the Segments in the relevant Constrained Network</u> in a calendar year.</p>	<p>Reflects changes to section 4.2(a).</p>
20	4.9	<p>Unders and overs accounting</p> <p>(e) A waiver of TOP Charges by ARTC under clause 11 of the Indicative Access Holder Agreement (including to facilitate a permanent change to the Service Assumptions for a Train Path as contemplated at clause 11.5(c)(iii) of the Indicative Access Holder Agreement) that would result in the use of a Service by that Access Holder or, in ARTC's reasonable opinion, a non-indicative Service by that Access Holder which provides for more efficient use of Capacity or Coal Chain Capacity will, for the purposes of subsection (d), be deemed to:</p>	<p>Amendments to remove pricing based on the characteristics of an indicative services (see section 2.1 of the Explanatory Guide and row 8 above).</p>
21	4.10	<p>Annual ACCC compliance assessment</p> <p>(a) ARTC will submit to the ACCC by 30 April each year in respect of the previous calendar year, <u>and for the part-year in which this Undertaking commences, the Months in the period from 1 July 2017 to 31 December 2017:</u></p> <p>(i) documentation detailing roll-forward of the RAB and the RAB Floor Limit, and comparisons between RAB and RAB Floor Limit;</p> <p>(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</p> <p>(iii) where documentation in (i) above demonstrates that RAB is above RAB Floor Limit in Pricing Zone 3, documentation demonstrating that Indicative Standard Access Charges, or Interim Access Charges, as applicable, satisfies <u>satisfy</u> the requirements in</p>	<p>Amendment to address the transitional arrangements for the first year of the 2017 HVAU being a part-year.</p>

		<p style="text-align: center;">section 4.3(b).</p> <p>(b) <i>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-H.</i></p> <p>(c) <i>If the ACCC reasonably considers that it requires additional information, other than that provided by ARTC in accordance with Schedule G-H, 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-H and upon receipt of such a request ARTC will use reasonable endeavours to provide the information to the ACCC as soon as reasonably practicable.</i></p> <p>...</p> <p>(e) <i>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.;</i></p> <p>(f)(f) <i>The ACCC will publish its findings on its website and/or circulate to Access Holders in relation to the matters for its determination.; and</i></p> <p>(g)(g) <i>ARTC will revise the closing RAB and manage Constrained Coal Customer Accounts in accordance with any determination by the ACCC.</i></p> <p>(h)(h) <i>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></p> <p>...</p> <p><u>(i) <i>in the case of the compliance assessment for the part-year in which the Commencement Date occurs, relevant references in this section to the “previous calendar year”, “preceding calendar year”, “calendar year” and items referable to, or matters to be determined on, an annual basis in the Undertaking will be interpreted on a half yearly basis.</i></u></p>	<p>Consequential interpretation changes as a result of changes to paragraph (a) to deal with the part year in which the undertaking commences.</p>
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<p>22</p>	<p>4.11</p>	<p>Annual TUT Audit – Amendments to cross references and paragraphs (e) and (f) and deletion of clauses 4.11(o) to (r). Insertion of new paragraph (o):</p> <p><u>(e) Subject to the Auditor continuing to meet the requirements in section 4.11(b) for the period of appointment, ARTC may appoint the Auditor to conduct the TUT Audit for up to three consecutive calendar years (or such longer period as otherwise agreed by the ACCC).</u></p> <p><u>(f) Subject to paragraph (e), a person who is, or who has been, appointed as Auditor is eligible for re-appointment as Auditor, and will not be taken to fail the independence requirement on the sole basis that the person was previously appointed as Auditor under this section 4.11.</u></p> <p><u>(o) For the purposes of the 2017 calendar year, the TUT Audit will be undertaken in accordance with this Undertaking notwithstanding that the period from 1 January 2017 to 30 June 2017 was governed under an expired Undertaking.</u></p> <p>Deletion of consequential definitions of “New Undertaking” and “Initial 2016 Period”.</p>	<p>Amendments to correct cross referencing errors arising as a result of making the ‘Annual TUT’ provisions a new section 4.11.</p> <p>Deletion of sub-paragraphs (o) to (r) given these clauses were inserted as part of the Extension Application to address the compliance assessment process for the Extension Period.</p> <p>Amendment to appointment of Auditor to limit the number of consecutive years the same Auditor can be appointed.</p> <p>Insertion of new paragraph (o) to clarify that the TUT Audit for the 2017 calendar year will be undertaken for the entirety of the new notwithstanding that the period from 1 January 2017 to 30 June 2017 was governed under an expired undertaking.</p>
<p>23</p>	<p>4.12 / 4.13</p>	<p>Structure of Charges – Coal Access Rights</p> <p><i>(a)(ii) a take or pay component (<u>\$/KM for a Pricing Zone</u>) for the Access Rights contracted for under the Access Holder Agreement irrespective of whether the Access Holder uses all or any of the Access Rights.</i></p> <p>Structure of Charges – Non-Coal Access Rights</p> <p><i>(a)(ii) a flagfall component, which is fixed and specific to each Train service type and Segment (<u>\$/KMkm</u>); and</i></p>	<p>Amendments to introduce path based pricing on a \$/km basis (see section 2.1 of the Explanatory Guide and row 8 above).</p>

<p>24</p>	<p>4.14</p>	<p>Pricing Objectives</p> <p>(a) <i>In determining Charges, ARTC will <u>have the following objectives</u> have regard to separate cost elements as follows:</i></p> <p>(i) variable component of costs (“VCC”) being Direct Costs <u>achieving the full recovery of Incremental Maintenance Costs from all Access Holders on the basis of the actual gtkm usage weighted for axle load; and</u></p> <p>(ii) fixed component of costs (“FCC”) being fixed operating costs and Depreciation of, and return on, assets existing as at the Commencement Date and the New Segments Commencement Date (as applicable); and <u>through the application of the take or pay (“TOP”) component of Charges, achieving the maximum permitted recovery of Incremental Capital Costs and Fixed Costs.</u></p> <p>(iii) new capital component of costs (“NCC”) being Depreciation of, and return on, assets commissioned during the Term.</p> <p>(b) In determining Charges, ARTC will have regard to the following objectives:</p> <p>(i) achieving full recovery of VCC from all Access Holders on the basis of actual network usage;</p> <p>(ii) achieving maximum recovery of (or contribution to) FCC and NCC from all users;</p> <p>(iii) providing certainty to ARTC through the application of a take or pay (“TOP”) component to fully recover NCC over the economic life of new investments, and recover some or all of FCC from applicable Access Holders (coal users) on the basis of forecasted network usage, or otherwise recover some or all of FCC on the basis of actual network usage;</p> <p>(iv) the proportion of FCC recovered through a TOP component to be consistently applied to all Access Holders holding Coal Access Rights within a Pricing Zone; and</p> <p>(b) <u>In determining charges, ARTC will have regard to the objective of providing</u></p>	<p>“Direct Costs” have been redefined as “Incremental Maintenance Costs” to better align with terminology used elsewhere. This definitional amendment is not intended to change the existing meaning, nor has the treatment of these costs changed. Amendments have been made throughout the HVAU to replace the words “Direct Costs” with “Incremental Maintenance Costs”.</p> <p>ARTC has amended this clause with the intention of combining the elements and objectives relating to ToP and Non-ToP charges under sub-sections (a) and (b) to remove the duplication and repetition between the sub-sections.</p> <p>The effect of this removes the definitions of VCC, NCC and FCC, and replaces them with the concept of Incremental Capital Costs and Fixed Costs.</p>
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		<p><i>for an open and equitable mechanism for the application of TOP Charges.</i></p> <p>Consequential deletions of the terms “FCC”, “NCC” and “VCC”.</p>	
25	4.15	<p>Standard Access Charge</p> <p>Amendments to introduce path based pricing and to remove the 2011 HVAU concepts of:</p> <ul style="list-style-type: none"> • ‘Indicative Service’ and replaces it with ‘Services within the Services Envelope’. Service Envelope characteristics are set out in subsection 5.15(c); and • ‘Indicative Access Charges’ and replaces it with ‘Standard Access Charges’ 	<p>See section 2.1 of the Explanatory Guide and row 8 above.</p> <p>For completeness historical concepts set out in sections 4.17 (Initial Indicative Service and Initial Indicate Access Charges), 4.18 (Determination of the Final Indicative Services) and 4.19 (Interim Services and Interim Access Charges) of the 2011 HVAU and associated definitions of Final Indicative Services, Indicative Access Charges, Indicative Services, Initial Indicative Access Charges, Initial Indicative Services, Initial Period, Interim Access Charges, Interim Services and Interim Period have been deleted.</p> <p>Pricing has been deleted from clause 4.15 for the purposes of the first draft of the 2017 HVAU being submitted as the new opex mechanism will have an impact on the final pricing.</p>
26	4.16	<p>Charge differentiation</p> <p><i>(b) In formulating Charges for Coal Access Rights, notwithstanding that a Service may be within or outside of the Services Envelope, if:</i></p> <p><i>(i) the relevant Service intended to utilise the Access Rights sought operates on the Network and an Other Network; and</i></p> <p><i>(ii) the Other Network is not capable of operating Services that have a</i></p>	<p>Amendments to permit ARTC to set prices having regard to the operating restrictions of interconnecting networks (see section 2.5.11 of the Explanatory Guide). This is intended to assist producers transition between the current pricing model based on an indicative service and the introduction of path based</p>

		<p><u>maximum axle load or train length that is specified by the Services Envelope.</u></p> <p><u>ARTC will have regard to the particular characteristics of the Other Network required to utilise the Access Rights sought and the characteristics of Services capable of being operated on the Other Network.</u></p> <p>Insertion of the following new definitions in clause 16.1:</p> <p>“Other Network” means:</p> <p>(a) <i>the Interstate Network; or</i></p> <p>(b) <i>a network of railway lines connected to the Network that is not owned or controlled by an Access Holder, or a Related Body Corporate of an Access Holder, holding Access Rights in respect of the Network;</i></p>	pricing.
27	4.16	<p>(vi) — for the purpose of assisting transition between regulatory and contractual arrangements and to remove uncertainty to support investment decisions relating to Trains, charge the same price for the two primary existing services using the Network as at the Commencement Date in accordance with sub-paragraphs (A) and (B) below during the Regulatory Transition Period:</p> <p>(A) — the Charges for the services described in section 4.19(c) as Interim Service 1 and Interim Service 2 in Pricing Zone 1 may be the same, and the Charges for Interim Service 1 and Interim Service 2 in Pricing Zone 2 may be the same, notwithstanding those services will no longer constitute Interim Services after the Interim Period; and</p> <p>(B) — for the purposes of this section 4.15(a)(iii), Charges are taken to mean the unit TOP price and unit Non-TOP price.</p>	Provision set out in section 4.16(a)(iii) of the 2011 HVAU was to assist the transition between the NSW Rail Access Undertaking and the 2011 HVAU. This provision is now redundant and has been deleted.
28	4.18	<p>Process of finalising Standard Access Charge</p> <p>(a) <i>Before 1 July of each year:</i></p>	At the request of Access Holders, subsection 4.18(a) and (c) have been amended to include a process for Access

		<p><u>(i) any Access Holder who considers that its mine or project meets the requirements of a Prospective Mine for the purposes of section 4.7, and either has not provided such information pursuant to section 3.7(a)(x), or despite providing such information pursuant to section 3.7(a)(x), has not met the requirements to constitute a Prospective Mine, may provide ARTC with:</u></p> <p><u>(A) information to support that position and enable ARTC to make an assessment as to whether the Applicant's mine or project constitutes a Prospective Mine; and</u></p> <p><u>(B) a statement of Marketable Coal Reserves in accordance with section 4.7(c)(ii); and</u></p> <p><u>(ii) ARTC may seek from each Access Holder, to the extent necessary, any proposed variations to the Access Holder's eContracted eCoal volumes-KM and tonnage requirement for the following calendar year and each of the next 9 calendar years including any proposed reduction in the Access Holder's Contracted Coal KM to be relinquished and recontracted (Relinquished Capacity) in accordance with the principles set out in section 4.19 and 4.20.</u></p> <p>(b) Each calendar year, ARTC will determine its annual forecast of costs for the Network in each Pricing Zone which are to be recovered by ARTC in the next calendar year.</p> <p>(c) The Indicative-Standard Access Charges will be based on the eContracted eCoal volumes-KM for that calendar year, any additional volumes-KMs that ARTC considers likely to be eContracted eCoal volumes-KM for that relevant year <u>taking into account any Relinquished Capacity ARTC considers likely to be recontracted</u>, and ARTC's forecast costs as determined under sub-section (b).</p> <p>(d) Subject to sub-section (e), ARTC will notify by <u>30 September</u> 1 November of each calendar year <u>for the following calendar year:</u></p> <p>(i) the aggregate coal volumes <u>and KMs</u> which will include</p>	<p>Holders to notify ARTC of capacity which it proposes to relinquish and permanently assign to another Access Holder (see section 2.5.12 of the Explanatory Guide and row 30 below).</p> <p>In addition subsection 4.18(d) has been amended to require ARTC to notify Access Holders of prices by 30 September each year. This has been amended at the request of Access Holders to ensure consistency with their internal budgeting process. 4.18(d) is also amended to require ARTC to notify Access Holders of any revisions to the average remaining mine life, if changed due to the inclusion of a Prospective Mine.</p> <p>Other changes to section 4.18 required to implement path based pricing, remove historical and redundant concepts in connection with the Indicative Services and include the ability for Access Holder to provide information to demonstrate their mine or project is a Prospective Mine.</p>
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		<p>reasonably expected volumes and eContracted eCoal volumes <u>KM</u>, ARTC's annual forecast costs as determined under sub-section (b) to those Access Holder holding Coal Access Rights in each Pricing Zone;</p> <p>(ii) the Indicative-Standard Access Charges to those Access Holders holding Coal Access Rights for Indicative-Services <u>within the Services Envelope</u>; and</p> <p>(iii) ARTC's forecast RAB value of the aggregate of Segments in Pricing Zone 3 as at both the start and the end of the next calendar year to those Access Holders holding Coal Access Rights in Pricing Zone 3; <u>and</u></p> <p><u>(iv) the revised weighted average mine life if adjusted in accordance with section 4.7.</u></p> <p>(e) ARTC will not be required to provide information on aggregate coal volumes <u>or KMs</u> if it reasonably considers that the provision of such information will allow an Access Holder to determine the individual eContracted eCoal volumes-KM, volumes or anticipated coal volumes <u>or Contracted Coal KM</u> of another Access Holder.</p> <p>(f) If Access Holders holding two thirds or more of the eContracted Coal gtkm <u>KM</u> for Indicative-all Services <u>within the Services Envelope</u> in the relevant Pricing Zone for the next calendar year give ARTC a Dispute Notice within twenty (20) Business Days of being notified of the Indicative-Standard Access Charges setting out that they disagree with the Indicative-Standard Access Charges for that Pricing Zone, then the dispute will be resolved by arbitration under section 3.15(f). If less than two thirds of those Access Holders give a Dispute Notice within the required time for a Pricing Zone, the Indicative-Standard Access Charges as notified for that Pricing Zone are final and not subject to arbitration under section 3.15(f). Additional Capacity in the Pricing Zone which has been contracted on a conditional basis and which will not be commissioned in the next calendar year will not count towards the two thirds test.</p> <p>(g) ARTC will promptly publish the final Indicative-Standard Access Charges on</p>	
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		<p>its website in the format set out in section 4.14(c):</p> <ul style="list-style-type: none"> (i) (if there is no arbitration - following the end of the twenty (20) Business Day dispute period; or (ii) if there is an arbitration - following the determination by the arbitrator. <p>(h) All references to Indicative Services and Indicative Access Charges in this section 4.20 will be read as</p> <ul style="list-style-type: none"> (i) Interim Services and Interim Access Charges respectively during the Interim Period; and (ii) Initial Indicative Services and Initial Indicative Access Charges respectively during the Initial Period. <p>(i) To avoid doubt, the requirement in section 4.20(f) to give ARTC a Dispute Notice if Access Holders holding two thirds or more contracted gtkm in the relevant pricing zone dispute Interim Access Charges or Initial Indicative Access Charges applies separately to Access Holders operating Interim Services and Initial Indicative Services in the relevant Pricing Zone (as applicable).</p>	
29	4.19	<p>Provision of forecast information, <u>pricing</u> and coal volumes</p> <p>(a) In addition to the information provided to each Access Holder of Coal Access Rights under section 4.18(d), ARTC will provide to each Access Holder of Coal Access Rights before 1 November 30 September of each calendar year:</p> <ul style="list-style-type: none"> (i) subject to section 4.18(e): <ul style="list-style-type: none"> (A) the aggregate annual coal volumes contracted by Access Holders for each of the next 10 calendar years; (B) the forecast range of Standard Access Charges for each of the 2 calendar years following the year for which Standard Access Charges are notified under section 	<p>Subsection 4.19(a) has been amended to require ARTC to notify Access Holders of prices by 30 September each year. This has been amended at the request of Access Holders to ensure consistency with their internal budgeting process.</p> <p>To assist Access Holders in their internal budgeting process, amendments in subsection (a)(iii)(B) require ARTC to provide forecast Standard Access Charges for the following two calendar years in a specified format (see section 2.5.12 of the</p>

		<p style="text-align: center;"><u>4.18(d) provided in the format set out in Schedule F; and</u></p> <p>(b) The 10-year information provided by ARTC under this section:</p> <p>(i) will include information for the calendar year for which Indicative Standard Access Charges or the Interim Access Charges, as applicable, are determined and information provided for under section 4.18(d); <u>and</u></p> <p>(ii) <u>is a forecast only based on the information available to ARTC and ARTC's reasonable expectation at the time the information is provided and is not binding on ARTC.</u></p>	Explanatory Guide).
30	4.20	<p>Facilitating assignments of Relinquished Capacity</p> <p>Insertion of a new regime which requires ARTC to use reasonable endeavours to facilitate the permanent assignment of capacity notified by Access Holders to Access Holders seeking to increase their contracted capacity as part of ARTC's annual process for finalising the Standard Access Charges. This regime includes the following key principles:</p> <ul style="list-style-type: none"> • notification by ARTC to all existing and prospective Access Holders of the aggregate capacity to be relinquished and requesting expressions of interests for the capacity; • facilitation by ARTC of negotiations for the assignment of the Relinquished Capacity; • requirement that Relinquished Capacity must be assigned or traded by an Access Holder to a third party in accordance with the assignment or trading provisions of that Access Agreement; and • acknowledgement that to the extent an Access Holder that nominated Relinquished Capacity is unable to assign or trade that capacity to a third party, then that Access Holder remains liable to ARTC for the TOP Charges. 	At the request of Access Holders, subsection 4.18(a) and (c) have been amended to include a process for Access Holders to notify ARTC of capacity which it proposes to relinquish and permanently assign to another Access Holder (see section 2.5.12 of the Explanatory Guide).

31	4.22	Extension Period Access Charges – deletion of section in its entirety.	Deletion of this section given this clause was inserted as part of the Extension Application to address the pricing which applied to the Extension Period.
32	4.23	Tier 1 change to system wide true up test for 2016 and 2017 Calendar Years – deletion of section in its entirety.	Deletion of this section given clause 5.4 of the IAHA has been amended pursuant to the variation applications.
33	5.8	Review of mechanism to identify and assign Capacity losses - Deletion of section in its entirety.	The review under section 5.8 has been completed and, as such, the provision is no longer required.
34	7.1 / 7.2 / 7.4 / 8.5 / 9.1	<p>Purpose</p> <p>(c) This section 7 does not prevent the industry consultation process set out in sections 8 and 9 being used for purposes other than relating to Additional Capacity.</p> <p>Overview of framework</p> <p><i>(c) Under funding option – If ARTC elects not to fund all or part of a Project (whether or not endorsed by the RCG or the ACCC), then users will have the right to fund that investment and ARTC will have an obligation to undertake that Project as agreed pursuant to a user funding agreement or as a result of an arbitration. The user funding arrangements are set out in section 10.</i></p> <p>Step 2 – Industry consultation for a project</p> <p><i>(a) The industry consultation process must be used for Projects creating Additional Capacity and may be used by ARTC for projects which do not involve the creation of Additional Capacity (including Innovation Projects).</i></p>	<p>Amendments make clear that the industry consultation process may be used for an Innovation Project.</p> <p>Consequential change made to the title of sections 8.2 and 8.5 to remove references to Additional Capacity.</p>

		<p>Projects identified by ARTC</p> <p><i>ARTC may at any time prepare a Concept Assessment Report in relation to a project, for RCG endorsement to proceed to project feasibility (including an Innovation Project). The Pproject may, but does not need to be, a project identified in the Hunter Valley corridor capacity strategy.</i></p> <p>Overview</p> <p>(b) <i>ARTC may also use the industry consultation process to obtain endorsement for projects to the extent they do not involve Additional Capacity (for example an Innovation Project or for asset replacement, cost reduction or safety related projects).</i></p>	
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<p>35</p>	<p>9.1</p>	<p>Overview</p> <p>(c) <i>The objectives of the consultation process are to:</i></p> <p>(ii) <i>provide a process for the applicable industry participants to participate in the development and management of projects and to endorse:</i></p> <p>(A) <i>Capital Expenditure incurred by ARTC in providing Additional Capacity or incurred in relation to the Network as Prudent; and</i></p> <p>(B) <i>stages of Innovation Projects and related incentives to be earned by ARTC.</i></p> <p>....</p> <p>(f) <i>Any endorsed costs incurred in complying with the provisions of this section 9:</i></p> <p>(i) <i>for a Project, will normally be included in the RAB where a project is commissioned, or otherwise expensed in the year incurred; and</i></p> <p>(ii) <i>for an Innovation Project, will be recovered in accordance with the relevant Innovation Proposal prepared by ARTC under section 14.</i></p>	<p>Consequential changes as a result of the incorporation of an innovation incentive mechanism (see section 2.7.4 of the Explanatory Guide).</p>
<p>36</p>	<p>9.2</p>	<p>The RCG</p> <p>(a) <i>ARTC will convene, and conduct, regular monthly meetings with the RCG (unless ARTC reasonably considers that a meeting for a month is not required) for the purpose of:</i></p> <p>(i) <i>consulting with applicable industry representatives the RCG -and obtaining endorsement of Capital Expenditure associated with Additional Capacity, or other Capital Expenditure on the Network;</i></p> <p><i>(ii) if requested by ARTC at a stage in the consultation process, consulting with the RCG and obtaining endorsement by the RCG of capital costs being treated as Fixed Costs rather than</i></p>	<p>Amendments to subsection 9.2(a) and (b) are to provide additional flexibility in convening meetings and to avoid having to call a meeting where it is not required or difficult due to Christmas periods (see section 2.7.2 of the Explanatory Guide) and as a result of the insertion of the innovation proposal regime.</p> <p>Insertion of new section 9.2(ii) to incorporate the ability of the RCG to endorse any capital costs being treated as Fixed Costs rather</p>

		<p><u>Incremental Capital Costs:</u></p> <p>...</p>	than Incremental Capital Costs.
37		<p>The RCG</p> <p>(b)(c) At the commencement of this Undertaking, the RCG will comprise the following membership (as selected by the relevant industry participants). One representative of:</p> <p>(i) each Access Holder <u>who holds Coal Access Rights</u> who holds the largest volume of contracted coal gtkm in each Pricing Zone;</p> <p>(ii) any other Access Holder with more than 7% of contracted coal gtkm on the Network who is not already eligible to appoint a representative under sub-section (i);</p> <p>(iii) all Access Holders with less than 7% of contracted coal gtkm on the Network and the Representative may split its vote according to the percentage of contracted coal gtkm held by each represented party if requested;</p> <p>(iiv) each Operator, in its capacity as an Operator, with more than 10% of eContracted eCoal gtkmKM on the Network who is not an Access Holder with more than 10% of eContracted eCoal gtkmKM on the Network (in a non-voting capacity); and</p> <p>....</p> <p>(e)(e) Only those RCG members who are represent Access Holders will be entitled to vote and <u>where the Access Holder is an Operator, the</u> each-RCG member will vote in accordance with the wishes of Access Holders that it is representing, or, where the Access Holder is an Operator, those Coal Customers on whose behalf the Access Rights are held.</p> <p>(e)(f) Subject to sub-section (g), RCG member voting will be weighted on the basis of eContracted eCoal gtkmKM for the current calendar year and the next nine calendar years, in the Pricing Zone in which a project is proposed</p>	<p>Changes to permit all Access Holders to be a member of the RCG in their own right and removal of the 7% threshold which triggered full RCG membership (see section 2.7.2 of the Explanatory Guide).</p> <p>Amendments to subsection 9.2(c)(ii), (f) and (g) are to update the voting entitlements of RCG members to reflect the introduction of path based pricing and that TOP Charges will be on a \$/KM basis.</p>

		<p>to occur.</p> <p>(f)(g) In determining voting entitlement <u>of a RCG member under this Undertaking</u>, other than for the purposes of endorsing project assessment at section 9.4(d) and any stage beyond that, ARTC may, at its discretion, include any coal KMgtkm in the Pricing Zone which ARTC reasonably expects will become eContracted eCoal gtkmKM, for the current calendar year or for any of the following nine calendar years, immediately following the completion of the proposed project. To avoid doubt ARTC may, in exercising this discretion, determine that a prospective access holder which is not a current member of RCG has a voting entitlement.</p>	
38	9.2	<p>The RCG</p> <p><u>Except in respect of an Innovation Project:</u></p> <p>(i) ARTC may elect to continue to the next stage of project development without RCG endorsement. Where this occurs, ARTC may elect to seek endorsement of the expenditure from the ACCC in respect of Pproject development and delivery to the extent not endorsed by the RCG.</p> <p>(ii) Expenditure incurred by ARTC on pProject development or delivery will be included in the RAB or expensed when incurred as endorsed by the ACCC. ARTC may seek the ACCC's endorsement in advance of, or subsequent to, incurring the expenditure.</p>	<p>RCG support and endorsement is required for an Innovation Project to be implemented, and ARTC to receive compensation for any Innovation Project. Accordingly, amendments to prohibit ARTC from proceeding with such a project without RCG endorsement on its own accord and/or with endorsement by the ACCC.</p>
39	9.3	<p>New opex efficiency regime</p> <p><u>(a) By the Commencement Date, ARTC and the ACCC, in consultation with Access Holders, will have accepted and implemented a new operating expenditure efficiency mechanism ("Opex Regime") to apply to the Network.</u></p> <p><u>(b) The Opex Regime will be based on the following principles:</u></p> <p><u>(i) an ex-ante operating cost allowance ("Allowance") established through a forecast and benchmarking process, involving:</u></p>	<p>In response to a request by the ACCC, ARTC has amended section 9.3 of the 2017 HVAU to reflect the new opex regime that ARTC is proposing to submit in the revised version of the 2017 HVAU to be lodged with the ACCC in <u>April / May H1</u> 2017.</p>

		<p><u>(A) for maintenance and operating costs, a review of the forecast expenditure against historical actual expenditure and benchmarking against similar rail operations;</u></p> <p><u>(B) for corporate overheads, a review based on efficient corporate overhead costs of a stand-alone provider; and</u></p> <p><u>(C) a mechanism for cost pass-throughs and a review of the Allowance with respect to specified circumstances.</u></p> <p><u>(ii) an initial forecast period, and a reset of the Allowance following the initial period; and</u></p> <p><u>(iii) an efficiency incentive for ARTC based on a right to retain the benefit of any underspend relative to the Allowance and an obligation to bear the cost of any overspend relative to the Allowance.</u></p> <p><u>(c) Subject to paragraph (f), ARTC agrees to develop the Opex Regime in accordance with the milestones set out in Annexure B – Opex Regime milestones.</u></p> <p><u>(d) In developing the Opex Regime, ARTC agrees to regularly consult with Access Holders in relation to the development and progression of the Opex Regime. ARTC will arrange meetings with Access Holders in order to provide material updates on or issues with respect to the development of the Opex Regime.</u></p> <p><u>(e) ARTC will in good faith consider comments provided by Access Holders prior to the Commencement Date (including during the meetings referred to in paragraph (d)).</u></p> <p><u>(f) At the Commencement Date, it is intended that this Undertaking will include the detailed Opex Regime. ARTC will not be in breach of the Undertaking if it is accepted in its current form and at the Commencement Date, it has not met a milestone set out in Annexure B – Opex Regime milestones.</u></p>	
40	9.9	Endorsement of project development states for Additional Capacity	Amendments to subsection 9.2(c)(ii), (f) and

		<p>(a) Where Additional Capacity is provided in relation to a particular Pricing Zone, the endorsement of coal producers that hold Coal Access Rights under an Access Holder Agreement and any coal gtkm included under clause section 9.2(g), either directly or through RCG representatives, with over at least 50% of eContracted eCoal gtkmKM in that Pricing Zone will constitute endorsement by the RCG of that stage of project development.</p> <p>(b) Where Additional Capacity (delivered by way of a single project or series of projects) is provided in relation to a particular Pricing Zone, and that Additional Capacity results in an increase in the Indicative-Standard Access Charge for that Pricing Zone by more than 10%, the endorsement of Coal Customers that hold Coal Access Rights under an Access Holder Agreement and any coal gtkm included under clause section 9.2(g), either directly or through RCG representatives, with over at least 70% of eContracted eCoal gtkmKM in that Pricing Zone and any coal km included under section 9.2(g) will constitute endorsement by the RCG of that stage of project development.</p>	<p>(g) are to update the voting entitlements of RCG members to reflect the introduction of path based pricing and that TOP Charges will be on a \$/KM basis.</p> <p>Replacement of “over” with “at least” to clarify that once the relevant threshold is met, rather than exceeded, RCG will be considered to have been obtained.</p>
41	13.1	<p>Network Key Performance Indicator</p> <p>(a) ARTC will report on its website performance against the Network Key Performance Indicators set out in Schedule D, at the frequency referred to in Schedule D. To avoid doubt, in reporting on the performance against the Network Key Performance Indicators, ARTC will not report on the performance of individual Access Holders or Operators.</p> <p>(b) ARTC's obligation to report performance under this section 13 will not arise until the completion of the first full period in respect of which performance is measured, this means that:</p> <p>(i) ARTC will not report quarterly performance until the completion of the first full quarter after the Commencement Date or New Segments Commencement Date in respect of the New Segments (as applicable); and</p> <p>(ii) ARTC will not report annual performance until the completion of the first full calendar year after the Commencement Date or New</p>	<p>References to New Segments have been deleted as they were included into the 2011 HVAU as part of the variation to incorporate the Gap to Turrawan Segments of the Network and are now redundant. These provisions are now redundant as the Gap to Turrawan Segments form part of the Network.</p>

		Segments Commencement Date in respect of the New Segments (as applicable).	
42	13.2	<p>Negotiation of key performance indicators for each Access Agreement</p> <p><i>(b)(iii)(C) any particular incentives and measures of ARTC's performance contained in the Indicative Access Holder Agreement including the application of the system wide-true-up tests, and</i></p>	To ensure consistency with other references in the 2017 HVAU of true-up test and the title of Schedule of Schedule 2 of the IAHA, the word "wide" has been deleted.
43	13.3	<p>Development of non TUT related performance Incentives - Deletion of section in its entirety.</p>	The review under section 13.3 has been completed.
44	13.4	<p>Review of system wide TUT - Deletion of section in its entirety.</p>	The review under section 13.4 has been completed and, as such, the provision is no longer required.
45	13.3	<p>Development of TUT related performance Incentives - Deletion of section in its entirety.</p>	The review under section 13.5 has been completed and, as such, the provision is no longer required.
46	14	<p>Innovation Project</p> <p>Insertion of a new regime for the development and implementation of Innovation Projects, which includes the following key principles:</p> <ul style="list-style-type: none"> the objective of the mechanism being to incentivise ARTC to identify, develop and implement project or change practices in relation to the network which are innovative and not in the ordinary course of ARTC's business and provide benefits to Access Holders where ARTC would not otherwise have such an incentive; endorsement of the proposal by the RCG which must address a prescribed 	<p>Following consultation with HRATF and in response to industry's concerns that the 2011 HVAU has limited incentive for ARTC to drive efficiency, an innovation regime has been inserted into HVAU as a mechanism to incentivise ARTC to develop, assess and maximise cost efficient practices in the Network.</p> <p>Revenue earned by ARTC as a result of the successful implementation of an Innovation</p>

		<p>criteria;</p> <ul style="list-style-type: none"> • key prescribed pricing principles that ARTC must have regard to in determining the incentive to be earned by ARTC for an Innovation Project; and • endorsement for the charging by ARTC of an Innovation Payment. <p>Examples of such projects being the funding for research and development in network management projects which have the potential to reduce long term operational costs, a project that increases the capability of the Network but in a manner that defers or displaces capex, a project where some or all of the benefits obtained are external to the Network (such that it would not be considered Prudent or Efficient ordinarily).</p> <p>Insertion of the following new definitions in clause 16.1:</p> <ul style="list-style-type: none"> • <i>“Innovation Payment” has the meaning given in section 14.5(a);</i> • <i>“Innovation Project” means a project developed by ARTC in accordance with section 14;</i> • <i>“Innovation Proposal” has the meaning given in section 14.3;</i> 	<p>Proposal is excluded from the unders and overs mechanism in section 4 (see section 2.9 of the Explanatory Guide).</p> <p>Consequential changes made to sections 7.4(a), 8.5 and 9.1(b) to make clear that projects (undefined) includes ‘Innovation Projects’.</p>
47	16.1	<p>Definitions</p> <p>In addition to the definitions referred to above, amendment to definitions and new definitions in section 16.1:</p>	
		<p>Amendment to all references to Port of Newcastle in HVAU to “port of Newcastle”.</p>	<p>ARTC has reverted to the 2011 HVAU description of the port as “port of Newcastle” given it understands that the move to destination specific train paths is no longer being pursued.</p>
		<p><i>“Ceiling Limit” means the Economic Cost of those Segments which are required on a Stand Alone Basis for a relevant Access Holder or group of Access Holders (“Ceiling</i></p>	<p>See discussion of changes in section 4.3</p>

		<u>Limit</u>) has the meaning given in section 4.3;	
		<p>“Constrained Coal Customer” means an Access Holder:</p> <p>(a) who holds Coal Access Rights under a current written a Access A agreement with ARTC; and</p> <p>(b) who <u>made payments paid to ARTC, in addition to the payments made for Incremental Costs, for access to the relevant Constrained Network and such payments, other than for Direct Costs, formed part of the annual coal Aaccess revenue for the Constrained Group of Mines;</u></p> <p><u>and, to avoid doubt, an Access Holder for a Train Path that does not originate in the Network, or terminates outside the Network, cannot be a Constrained Coal Customer;</u></p>	<p>The words “other than for Direct Costs” create ambiguity. Proposed amendments re-draft the clause to clarify the intention of the definition, being to refer to payments beyond those that are paid towards Incremental Costs.</p> <p>The proviso clarifies that Access Holders with coal trains originating on the Interstate Network or terminating outside the Network are not covered by the Ceiling Test.</p>
		<p>“Constrained Group of Mines” means the group of mines and unloading points that are serviced by Coal Trains where the operation of those Coal Trains is:</p> <p>(a) <u>for the Constrained Network relating to Pricing Zone 1 and Pricing Zone 2, is entirely with those Pricing Zones;</u></p> <p>(b) <u>for the Constrained Network relating to Pricing Zone 3, originates in Pricing Zone 3 even if the unloading point is outside that Pricing Zone,</u></p> <p>entirely within the Constrained Network, and where access revenue on those Segments forming the a Constrained Network is:</p> <p>(a) closest to if less than; or</p> <p>(b) exceeds by the largest amount,</p> <p>the Economic Cost for that e Constrained Network;</p>	<p>Changes clarify there are two Constrained Networks (ie Zone 1/2 and Zone 3 once capitalised losses are fully recovered).</p>
		<p>“Constrained Network” means the group of Segments within <u>either:</u></p> <p>(a) <u>Pricing Zone 1 and 2; and</u></p>	<p>Amendments define the concept of ‘Stand Alone Basis’ and clarify that the Network comprises of two Constrained Networks (ie Zone 1/2 and Zone 3 once capitalised</p>

	<p><u>(b) Pricing Zone 3,</u> the Network bounded by the mine loading points and the Newcastle port where Access revenue on those Segments is likely to reach or exceed <u>the Economic Cost</u> for those Segments on a sStand aAlone bBasis;</p>	<p>losses are fully recovered).</p>
	<p>Deletion of the definition of “Direct Costs”.</p>	<p>Change in terminology from “Direct Costs” to “Incremental Maintenance Costs”. Consequential deletion of the defined term “Direct Costs” (in sections 1.1(g) and 10.2).</p>
	<p>Insertion of new definition of “Fixed Costs”: <u>“Fixed Costs” means those costs associated with a Segment or group of Segments other than Incremental Costs;</u></p>	<p>Proposed new definition.</p>
	<p>Insertion of new definition of “Incremental Capital Cost”: <u>“Incremental Capital Cost” means the capital costs that are reasonably identifiable as avoidable in the long term but excludes:</u> <u>(a) all capital costs incurred before 1 July 2008; and</u> <u>(b) any capital costs specifically endorsed by the RCG as being Fixed Costs;</u></p>	<p>Proposed amendments are consistent with the ACCC’s view that the incremental costs are ‘the avoidable costs from a long term perspective’. The reference to “reasonably identifiable” is intended to introduce an element of practicability to the assessment. The exclusion of pre-2008 capital reflects the WIK approach in the 2013 Compliance Assessment. The reference to the RCG gives flexibility for the RCG to agree a particular regulatory treatment of capital for new projects.</p>
	<p>“Incremental Cost” means all costs that could be avoided in the medium term if a Segment was removed from the Network;<u>Incremental Capital Costs and Incremental</u></p>	<p>Changes are consistent with the ACCC 2013 Compliance Determination.</p>

		<u>Maintenance Costs:</u>	
		<i>“Incremental Maintenance Cost” means 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 <u>Segment</u>;</i>	Change in terminology from “Direct Costs” to “Incremental Maintenance Costs”. Consequential deletion of the defined term “Direct Costs”. Reference to other costs now deleted given more precise definitions relating to what constitutes Incremental Costs.
		Insertion of new definition of “Pricing Zone 3 Access Holder”: <u>“Pricing Zone 3 Access Holder” means an Access Holder with Coal Access Rights relating to a Train Path traversing Segments in both Pricing Zone 1 and 3 but only to the extent that of Train Path;</u>	New definition to capture Zone 3 producers who are exporting from PWCS and/or NCIG).
		<i>“Proposed Auditor” has the meaning given in section 4.11(a).</i>	Although a capitalised term in the 2011 HVAU, a definition was not provided in clause 16.1. Amendment made for completeness and consistency.
		<i>“Segment Specific Assets” means assets that:</i> <i>(a) form part of <u>the RAB and RAB Floor Limit (as applicable)</u> and are subject to section 4.4 of the Undertaking; and</i> <i>either</i> <i>(b) ARTC can directly identify with a Segment because those assets are physically or functionally part of a Segment; or,</i> <i>(c) ARTC has otherwise directly identified with a Segment having regard to recovery of relevant costs associated with those assets consistent with the</i>	Amendment to the definition of Segment Specific Assets to correct an error as references to the RAB Floor Limit were incorrectly omitted.

		<i>beneficial use of those assets;</i>	
		<i>“Segment Specific Costs” means operating costs that ARTC can directly identify with a Segment <u>and, for the avoidance of doubt, includes any loss or gain incurred on the disposal of an asset;</u></i>	Clarification to make clear that Segment Specific Costs includes any loss or gain incurred on the disposal of an asset.
		<p>Insertion of new definition of “Stand-Alone Basis”:</p> <p><i><u>“Stand-Alone Basis” means the Economic Cost of a Segment excluding:</u></i></p> <p><i><u>(a) the Incremental Maintenance Costs imposed by all Access Holders not holding Coal Access Rights; and</u></i></p> <p><i><u>(b) the Incremental Costs imposed by all Access Holders holding Coal Access Rights who would not be Constrained Coal Customers if that Segment formed part of the relevant Constrained Network.</u></i></p>	<p>This addresses the ACCC’s concern that ARTC has been using ‘Direct Costs as a proxy for Incremental Costs’ in the context of the Ceiling Test.</p> <p>Clarifies that “stand alone” costs of a Segment excludes variable costs for non-coal traffics <u>and</u> the Incremental Maintenance Costs and Incremental Capital Costs of unconstrained traffic.</p> <p>Paragraph (b) is phrased this way because when working out the constrained network under the combinatorial ceiling test, it is not known who will be the constrained coal customers until that test is done.</p>
		<p>Re-insertion of the definition of “Systems Assumptions Document”:</p> <p><i><u>“System Assumptions Document” means the document prepared by the HVCCC in consultation with ARTC and operators of coal terminals at the Port of Newcastle that details System Assumptions and simulation model outputs for the relevant Coal Chain Capacity scenarios;</u></i></p>	Re-insertion of definition of “System Assumptions Document” as this was erroneously deleted from the 2016 HVAU.

<p>48</p>	<p>Schedule A:1 – Element of Coal Access Agreements</p>	<p><i>Amendments to the following Tier 1 (mandatory) provisions:</i></p> <p><u>1</u> IAHA Clause 1.1: Definition of ‘Access Undertaking’ and each definition relevant to each Tier 1 (mandatory provision) set out in items 2 to 24 below</p> <p><u>8</u> IAHA Clause 3.13(d): Key Performance Indicators</p> <p><u>10</u> IAHA Clause 5.4A: Payment of Innovation Charge</p> <p>19 IAHA Clause 16.8: Reduction in time period for ARTC approval of trades</p> <p><u>23</u> IAHA Schedule 2: System true-up test (all clauses)</p> <p><u>24</u> IAHA Schedule 3: Charges (all clauses) Clause 4.1(c) Determination of TOP PricePZ and Non-TOP PricePZ, – dispute resolution provisions</p> <p><i>* Except if the Access Holder Agreement is for Access Rights to transport coal to a destination other than the Port of Newcastle, in which case:</i></p> <ul style="list-style-type: none"> the Tier 1 (mandatory) provisions are items 1, 23, 4,5, 6, 7, 8, 9, 10, <u>11</u>, 12, 13, <u>15</u>, <u>16</u>, 20, 22, 23, <u>24</u> and <u>25</u>; and items 23, 45, 79, 11, 14, 15, 16, 17, 18, 19, <u>20</u> and 21 will be treated as Tier 2 (negotiable) provisions. <p><i>Deletion of the following Tier 2 (negotiable) provision:</i></p> <p>6 Access Holders paying a Charge for Coal Access Rights based on a combination of actual usage (being a function of distance and gross mass (\$/gtkm) for a Pricing Zone) and on a take or pay basis.</p>	<p>Item 1 has been inserted to ensure that new and amended definitions which are relevant to ‘Tier 1’ Provisions are automatically incorporated into each Access Holder Agreement (see section 3.1 of the Explanatory Guide).</p> <p>Item 8 has been inserted to reflect the amendments to clause 3.13 under the IAHA. On the basis that the Network Key Areas may be reviewed on an annual basis, ARTC considers that reviewing the key performance indicators with each Access Holder should only be required every 2 years, rather than annually.</p> <p>Item 10 has been inserted to ensure that ARTC is able to recover from Access Holders Innovation Incentive Charges to the extent endorsed under the RCG.</p> <p>Amendment to item 23 is for clarification purposes.</p> <p>Amendment to item 24 is to ensure that path based pricing is implemented on an industry wide basis.</p> <p>Consequential changes to changes to the Tier 1 and Tier 2 provisions for Coal Access Agreements which are not for export purposes and Tier 2 provisions for export Coal Access Agreements.</p>
<p>49</p>	<p>Schedule D</p>	<p>Performance Measurement</p> <p>ARTC has inserted a new performance measurement regime. Amendments to the</p>	<p>Proposed Network Key Result Area regime provides flexibility for the Network Key</p>

		Network Key Result Areas can be made by agreement with the ACCC.	Result Areas to be assessed year to year and if agreed with the ACCC, amended as required.
50	Schedule F	<p>Forecast Standard Access Charge</p> <p>Insertion of a new Schedule F – Forecast Standard Access Charge, which sets out the format of the non-binding forecasts of the range of Standard Access Charges ARTC is required to provide under clause 4.19(a)(iii)(B).</p> <p>Consequential changes to clause 2(b)(ii) and 2(c) and Table 1 as a result of changes to the Floor Limit and Ceiling Limits.</p>	This is a consequential change as a result of the new section 4.19(a)(iii)(B) requirements.
51	Schedule G	<p>Principles to guide ARTC/ HVCCC Consultation</p> <p>Amendments to Schedule G as follows:</p> <p><u>1</u> <i>Where ARTC is required to consult with the HVCCC under this Undertaking or IAHA and a specific process is not set out in that provision, ARTC will use reasonable endeavours to follow the following steps set out in this Schedule G to the extent practical and in light of the specific circumstances:</i></p> <p><u>2</u> <i>ARTC will use reasonable endeavours to work with the HVCCC to establish and monitor suitable mechanisms that assist them to carry out their respective roles under this Undertaking in an effective, timely and consistent manner.</i></p> <p>3 <i>ARTC will request the HVCCC to provide ARTC with its view by a specified date, as reasonably determined by ARTC or as otherwise agreed between ARTC and the HVCCC.</i></p> <p>4 <i>Where the HVCCC provides its view by the notified date, ARTC will consider that view in good faith.</i></p> <p><u>5</u> <i>Where ARTC disagrees with the view and there is sufficient time for the HVCCC to reconsider its view, as reasonably determined by ARTC, ARTC will provide its reasons to the HVCCC and will ask the HVCCC to reconsider</i></p>	Following consultation with the HRATF and in order to address requests by the HRATF to strengthen the principles governing ARTC / HVCCC consultation, amendments to Schedule G have been made to incorporate further principles and guidance (see section 3.6 of the Explanatory Guide).

		<p><i>in light of ARTC's reasons by a specified date, as reasonably determined by ARTC.</i></p> <p><u>36</u> <i>If ARTC disagrees with a view of the HVCCC which materially affects an Access Holder's or a group of Access Holders' rights under their respective Access Holder Agreements, ARTC will notify the affected Access Holders of, and provide its reasons for, its disagreement with the HVCCC's view.</i></p> <p><u>7</u> <i>Where the HVCCC provides its revised view by the notified date, ARTC will consider the revised view expressed by the HVCCC in good faith. If ARTC has a disagreement with the views expressed by the HVCCC for any reasons:</i></p> <p><i>(a) ARTC and the HVCCC will use reasonable endeavours, acting in good faith, to resolve the issue by joint discussions; and</i></p> <p><i>(b) if following joint discussion, ARTC materially disagrees with the views expressed by the HVCCC then ARTC will publish the HVCCC views it disagrees with and the reasons for its view.</i></p> <p><u>8</u> <i>Subject to any confidentiality restrictions, ARTC and the HVCCC will provide all information that is reasonably required to allow the other party to implement any element of this Schedule G.</i></p> <p><u>9</u> <i>ARTC will ensure that key ARTC personnel are aware of their responsibilities under this Schedule G and any processes agreed between the HVCCC and ARTC.</i></p> <p><u>410</u> <i>Ultimately, ARTC is not obliged to follow the HVCCC's recommendation.</i></p>	
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<p>52</p>	<p>Schedule H</p>	<p>Annual Compliance Assessment - information provision and timing</p> <p>(2)(b) <i>documentation demonstrating ARTC's compliance with the annual RAB and RAB Floor Limit roll forward as set out at section 4.4 of this Undertaking, including:</i></p> <p>(v) <i>evidence of disposals value including any endorsement by the RCG of any proposed disposals, and where possible, appropriate references to the original value of the assetBooz Allen Hamilton DORC database which established the regulatory asset base value as at 1 July 1999, and any references to the depreciated optimised replacement cost in relation to assets in Segments not ascribed a regulatory asset value in accordance with the NSW Rail Access Undertaking in force at the time immediately preceding the Commencement Date of this Undertaking, and approved by the ACCC from time to time, and demonstrating adjustments to derive the current value of disposals;</i></p> <p>(d) <i>where the documentation shows RAB to be greater than the RAB Floor Limit in Pricing Zone 3, documentation setting out the Interim Access Charge or IndicativeStandard Access Charge, as applicable for Pricing Zone 3 in that calendar year and the previous calendar year.</i></p>	<p>Changes to item 2(b)(iv) removes the historical valuation methodology used in the transition from the NSW Rail Access Undertaking to the 2011 HVAU.</p> <p>Consequential changes to item (d) to remove historical references to the Interim Access Charge and Indicative Access Charge.</p> <p>For completeness, amendment to Table 1 to the replace the words “ceiling test” with the defined term “Ceiling Limits” and “unders or overs amount” with “unders or overs amounts”.</p>
<p>53</p>	<p>Schedule I</p>	<p>Parent Guarantee</p> <p><i>Agreement means the [Access Holder Agreement/Operator Sub-Agreement] for Indicative Services in the Hunter Valley.</i></p>	<p>Consequential amendment as a result of the removal of the Indicative Service regime.</p>

2 Amendments to the AHA

No	Clause	Proposed amendment	Reason for amendment
1	1.1	<p><i>Access Undertaking means:</i></p> <p>(a) <i>the undertaking accepted by the ACCC from time to time under Division 6 of Part IIIA of the CCA that covers the Network, or</i></p> <p><u>(b)</u> <i>if the ACCC has accepted an undertaking under Division 6 of Part IIIA of the CCA that covers the Network which has expired and:</i></p> <p>(i) <u><i>the NSW Rail Access Undertaking is in force; or</i></u></p> <p>(ii) <i>there is no access undertaking currently in force,</i></p> <p><i>the access protocols published by the ARTC after consultation with access holders, under which ARTC agrees to <u>supplement the NSW Rail Access Undertaking in force or offer access to the Network (as applicable) from time to time;</u></i></p>	<p>Amendments to clarify that the definition of “Access Undertaking” includes the NSW Rail Access 2017 HVAU in circumstances where an undertaking accepted by the ACCC has expired. In such circumstances ARTC will be required to supplement the NSW Rail Access Undertaking to the extent required for the operation of the AHA.</p>

No	Clause	Proposed amendment	Reason for amendment
		<i>Charges means the TOP Charge, Non-TOP Charges, and Ad Hoc Charges. <u>Innovation Charge</u> calculated in accordance with Schedule 3;</i>	Consequential changes as a result of the introduction of the Innovation Proposal under section 14 of the 2017 HVAU.
		<i>Contract Year means a year commencing 1 January and ending 31 December except that if this agreement does not start or end on those dates respectively, the first Contract Year will be from the Commencement Date to 31 December of that year and the last Contract Year will be from 1 January to the date this agreement ends;</i>	Correction of a typographical error.
		<i><u>Innovation Charge means the innovation charge in respect of an innovation project developed by ARTC and endorsed by the RCG determined under clause 4 of Schedule 3.</u></i>	Consequential change as a result of the introduction of the Innovation Proposal under section 14 of the 2017 HVAU.
		<i>Key Performance Indicators means those performance measures identified in Schedule 4;</i>	Deletion of the definition of “Key Performance Indicators” and the associated Schedule 4 (Key Performance Indicators) as this concept has been replaced in the 2017 HVAU with “Network Key Result Areas”.
		<i>Network Key Performance Indicators <u>Result Areas</u> means the performance indicators <u>key result areas</u> included in Schedule D of the Access Undertaking;</i>	Consequential change as a result of amendments to the Network Key Result Areas set out in Schedule D of the 2017 HVAU.

No	Clause	Proposed amendment	Reason for amendment
		<p>c) <i>Non-Compliant Service means:</i></p> <p>(a) <i>a Service using a Train Path that fails to comply with the applicable Service Assumptions prescribed for that Train Path in the <u>each</u> Train Path Schedule; and</i></p>	<p>Amendment to make clear that the IAHA may have more than one Train Path Schedule attached. This is consistent with executed Access Holders Agreements.</p>
		<p><u><i>Prudential Requirements has the meaning given in the Access Undertaking;</i></u></p>	<p>Consequential change as a result of amendment to clause 2.2 (see row 2 below).</p>
		<p><u><i>Services Envelope means the assumptions and characteristics of Services described as the Services Envelope in the Access Undertaking;</i></u></p>	<p>Consequential changes as a result of the implementation of path based pricing.</p> <p>For completeness definitions of ‘Indicative Access Charge’, ‘Indicative Services’, ‘Interim Indicative Access Charge’ and ‘Interim Indicative Services’ have been removed as they are no longer required under path based pricing.</p>
		<p><u><i>Standard Access Charges means the access charges for Services within the Services Envelope as determined in accordance with the Access Undertaking;</i></u></p>	<p>Consequential changes as a result of the implementation of bath based pricing.</p>
2	<p>1.1, 3.2, 3.3, 3.14, 16.4, Schedule 3, Train Path Schedule</p>	<p>Amendment to all references to Port of Newcastle in AHA to “port of Newcastle”.</p>	<p>ARTC has reverted to the 2011 HVAU description of the port as “port of Newcastle” given it understands that the move to destination specific train paths is no longer being pursued.</p>

No	Clause	Proposed amendment	Reason for amendment
3	1.1, Schedule 3	Deletion of references to “columns of the Train Paths Schedule Spreadsheet”.	ARTC intends to update the TPS Spreadsheet. Accordingly, the references to specified columns may not be consistent with the final format of the spreadsheet. To avoid inconsistencies, ARTC has removed the references to the columns.
4	2.2	<p>Conditions precedent</p> <p><u>(a)</u> <i>If, at the Commencement Date, the Access Holder (i) <u>does not meet the Prudential Requirements under the Access Undertaking and it has a credit rating below the Acceptable Credit Rating and the Access Holder has not delivered a Parent Guarantee or Security for an amount of at least three months’ TOP Charges (including any GST payable on such amount) to ARTC, then clauses 3 to 11 do not take effect until this condition precedent is satisfied.</u></i></p> <p>(a)<u>(b)</u> <i>The condition precedent <u>in paragraph (a)</u> is for the benefit of ARTC and may only be waived by ARTC.</i></p> <p>(b)<u>(c)</u> <i>If the condition precedent is not satisfied within one month of the Commencement Date, ARTC may terminate this agreement on written notice to the Access Holder.</i></p> <p>Consequential insertion of the following new definition:</p> <ul style="list-style-type: none"> Prudential Requirements has the meaning given in the Access Undertaking; 	<p>The amendment to:</p> <ul style="list-style-type: none"> clause (a)(i) is made as a result of a consequential changes to the prudential requirements set out in 2017 HVAU (see row 9 above in section 1); clause (a)(ii) is made to clarify that the Security will include the amount of GST payable on the TOP Charges.
5	3.3	<p>Determination of Monthly Tolerance Cap and Tolerance</p> <p>(e) <i>Within twelve months from the date an Access Undertaking is accepted by the ACCC covering the Network first comes into effect, ARTC will commence a consultation with access holders on the level of Tolerance available and will</i></p>	The review under clause 3.3 has been completed and, as such, the provision is no longer required.

No	Clause	Proposed amendment	Reason for amendment
		<p>provide a report to the RCG summarising the results of this review. The purpose of this review is to consider the impact of the level of tolerance on Coal Chain Capacity.</p>	
6	3.5	<p>Identification of Allocation Period</p> <p>(b) For each subsequent Contract Year, if the Access Holder and its Associates qualify to be issued with quarterly <u>have aggregate</u> load point allocations for less than or equal to three Mtpa to the terminals operated by PWCS for any Contract Year from 1 January 2012 until the expiry of this agreement, then the Access Holder is eligible to submit a written request <u>elect, by notice in writing</u> to ARTC, an <u>for</u> Allocation Period of a Quarter for that Contract Year.</p> <p>(c) If the Access Holder wishes to <u>elect request</u> an Allocation Period of a Quarter for a Contract Year, the Access Holder must:</p> <p>(i) submit an election notice <u>a written request</u> to ARTC by 31 August of the preceding Contract Year establishing to ARTC's reasonable satisfaction that its aggregate nominations at the terminals operated by PWCS (taking into account any renewals and extensions) is less than or equal to the applicable maximum amount specified in clause 3.5(b) <u>advising that it qualifies to be issued with quarterly load point allocations</u> for that Contract Year; and</p> <p>(ii) provide ARTC with a copy of an executed contract with PWCS by 10 December of the preceding Contract Year confirming that it has aggregate <u>been issued with quarterly</u> load point allocations less than or equal to the applicable maximum amount specified in clause 3.5(b) for that Contract Year.</p>	<p>Reference to 1 January 2012 is redundant and has been removed.</p> <p>ARTC has amended clause 3.5 relating to the right of access holders to elect a quarterly allocation period to align with a customer's allocations under its terminal agreement with Port Waratah Coal Services.</p> <p>These amendments are intended to provide for an assessment of the impact of quarterly allocation on Capacity, Coal Chain Capacity and the capacity entitlements of other access holders before ARTC decides whether to grant an Access Holder a quarterly allocation to align with Port Waratah Coal Services.</p>

No	Clause	Proposed amendment	Reason for amendment
		<p><u>(d) ARTC may in its absolute discretion grant the Access Holder an Allocation Period of a Quarter for that Contract Year. In deciding whether to grant the Access Holder an Allocation Period of a Quarter for that Contract Year ARTC may:</u></p> <p><u>(i) _____ have regard to the Service Assumptions, Capacity and the Capacity entitlements of its other access holders; and</u></p> <p><u>(ii) _____ have regard to and is entitled to rely on recommendations of the HVCCC in relation to the impact on Capacity and Coal Chain Capacity.</u></p> <p>(e) The Access Holder will use its reasonable endeavours to achieve an even spread of Path Usages during each Period and over the Contract Year.</p> <p>(f) To avoid doubt, all Train Path Schedules will have the same Allocation Period in a Contract Year and if ARTC does not grant the Access Holder does not meet the criteria in clause 3.5(b), or if the Access Holder does not elect an Allocation Period of a Quarter in accordance with clause 3.5(c) the Allocation Period for that Contract Year will be a Month.</p>	
7	3.13	<p>Key Performance Indicators<u>Network Key Result Areas</u></p> <p>(a) If requested by the Access Holder, ARTC will report actual performance against each of the Key Performance Indicators<u>Network Key Result Areas</u>, within a reasonable period following the completion of the reporting period specified in Schedule 4, as determined by ARTC having regard to the specific characteristics of each indicator.</p> <p>(b) The parties will meet regularly, and in any case at least once each Contract Year, for the purpose of discussing actual performance against the Key Performance Indicators<u>Network Key Result Areas</u> in Schedule 4.</p>	<p>On the basis that the Network Key Result Areas may be reviewed on an annual basis, ARTC considers that reviewing the Key Performance Indicators under the IAHA with each producer on an annual basis to be administratively burdensome. ARTC considers that the review of these indicators every two years is sufficient.</p>

No	Clause	Proposed amendment	Reason for amendment
		<p>(c) <i>If requested by a party, the other party agrees to include one or more Operators in a review of performance against the Key Performance Indicators Network Key Result Areas, as contemplated at clause 13.3(a).</i></p> <p>(d) <i>The Key Performance Indicators Network Key Result Areas will be reviewed in good faith by ARTC and the Access Holder at least once every two Contract Years and, in any case, promptly following a review of the Network Key Performance Indicators.</i></p>	
8	3.14	<p>Network Exit Capability</p> <p>(b) <i>To avoid doubt, the Access Holder's obligation to pay TOP Charges <u>and Innovation Charges (as applicable)</u> is <u>are</u> not reduced as a result of ARTC not making available Path Usages under clause 3.14(a).</i></p>	Amendments to make clear that, similar to the TOP Charge, the Innovation Charge is not reduced as a result of ARTC not making a Path Usage available where the Access Holder has insufficient network exit capability.
9	4.5	<p>No valid Operator nomination</p> <p>(a) <i>The Access Holder agrees that ARTC has no obligation to make a Train Path or Path Usage available for use where:</i></p> <p>(i) <i>the Access Holder has failed to nominate an Accredited Operator for that Train Path or Path Usage;</i></p> <p>(ii) <i>the nominated Operator is not, or is no longer, an Accredited Operator, or its Operator Sub-Agreement is conditional or has been suspended, terminated or expired; or</i></p> <p>(iii) <i>the Operator seeking to use a Path Usage is not the Operator notified under the Daily Train Plan for that Train Path or Path Usage unless ARTC has given its consent to the change (not to be unreasonably withheld),</i></p>	Amendments to make clear that, similar to the TOP Charge, the Innovation Charge is still payable if ARTC is relieved from providing a Train Path as a result of the Access Holder's failure as set out in clause 4.5.

No	Clause	Proposed amendment	Reason for amendment
		<p>and the occurrence of any of these events does not relieve the Access Holder's obligation to pay the TOP Charges <u>and Innovation Charges (as applicable)</u>.</p>	
10	5.4	<p>Calculation of TOP Rebate and Ad-Hoc Charge Rebate</p> <p><u>(i)</u> Subject to clause 5.4(j), in calculating the average Ad Hoc Charges under clause 5.4(b) and the Aggregate Train Path TOP Charges under clause 5.4(c):</p> <p>(i) for the 2016 Contract Year ("Original 2016 Rebates"), for the purposes of the period from 1 July 2016 to 31 December 2016 ("Second 2016 Period"), the Ad Hoc Charges and Train Path TOP Charges (as applicable) will be calculated based on <u>the rate of return ("Interim ROR") and the existing average remaining mine life ("Interim RML") which applied to the Second 2016 Period under the expired applicable to the Extension Period under the Access Undertaking; and</u></p> <p>(ii) for the 2017 Contract Year ("2017 Rebate Process"), for the purposes of the period from 1 January 2017 to 30 June 2017 (<u>governed under the expired Access Undertaking</u>), the Ad Hoc Charges and Train Path TOP Charges (as applicable) will be calculated based on the revised Rate of Return ("New ROR") and average remaining mine life ("New RML") approved by the ACCC under the aNew <u>Access Undertaking that is accepted by the ACCC and takes effect on 1 July 2017.</u></p> <p><u>(j)</u> Subject to clause 5.4(k), as part of the 2017 Rebate Process, ARTC agrees to recalculate the Original 2016 Rebates by replacing:</p> <p>(i) the Interim ROR with the <u>Rate of Return</u>New ROR; and</p>	<p>Clause 5.4 has been amended to address the requirement to deal with two part year reconciliations. Refer to section 4.5.2 of this Explanatory Guide for more detail.</p>

No	Clause	Proposed amendment	Reason for amendment
		<p>(i) the <i>Interim RML</i> average remaining mine life that applied to the <i>Extension Period under the Access Undertaking</i> with the New RML, for the Second 2016 Period (<i>the “Revised 2016 Rebates”</i>).</p> <p>(k) Any difference in the outcome between the Original 2016 Rebates and the Revised 2016 Rebates will be dealt with as part of the 2017 Rebate Process either as an increase or decrease to the rebates payable in respect of the 2017 Contract Year.</p> <p>Consequential changes to the definitions include:</p> <ul style="list-style-type: none"> • Amendment to definition of “Interim ROR” • Insertion of new definitions for the terms “Interim RML” and “Rate of Return” • Deletion of definition of “New ROR” and “New Undertaking” 	
11	5.4A	<p>Payment of Innovation Charge</p> <p>Insertion of provisions to govern the payment by Access Holders of innovation charges calculated in accordance with an Innovation Proposal endorsed by the RCG in accordance with the 2017 HVAU. The parties acknowledge that this charge does not constitute Access revenue received by ARTC for the purposes of annual compliance</p> <p>Consistent with the payment of TOP charges an Access Holders is prohibited from disputing an invoice in the absence of manifest errors.</p>	Amendments required to provide a mechanism for ARTC to recover Innovation Charges (see section 4.5 of the Explanatory Guide).
12	5.7	<p>Interest</p> <p><i>The interest rate will be 2 percentage points above the:</i></p> <p>(a) <i>bench mark lending rate charged by the National Australia Bank or its</i></p>	The Financial Review does not publish the benchmark lending rate for NAB. This amendment is consistent with all existing access holder agreements.

No	Clause	Proposed amendment	Reason for amendment
		<p><i>successors (“NAB”), as published in the Australian Financial Review newspaper, at the time of such default; or</i></p>	
13	7.1	<p>Obligation to grant Credit Support – credit rating test</p> <p>(a) <i>If, at any time after the Commencement Date, the Access Holder does not have an Acceptable Credit Rating <u>meet the Prudential Requirements</u>, then ARTC may request the Access Holder to provide Credit Support on seven days’ notice. If the Access Holder elects to provide Security, then that Security must be for an amount of at least three months’ TOP Charges</i></p> <p>....</p> <p>(d) <i>If the Access Holder’s credit rating is upgraded to an Acceptable Credit Rating <u>and the Access Holder meets the Prudential Requirements</u>, ARTC will return the Credit Support provided under clause 2 or this clause 7.1.</i></p> <p>Consequential insertion of the following new definition:</p> <ul style="list-style-type: none"> <i>Prudential Requirements has the meaning given in the Access Undertaking;</i> 	<p>These amendments are made as a result of equivalent changes to the credit support regime under the HVAU (see row 9 in section 1 above and section 4.7 of the Explanatory Guide).</p>
14	8.4	<p>Conduct of ARTC</p> <p>Deletion of clause 8.4 (Conduct of ARTC) and insertion of the word “Not used”.</p>	<p>Deletion of this clause is a consequential result of the deletion of the Indicative Services regime.</p>
15	11.1	<p>Permanent variations to Train Paths</p> <p>(b)(i)(C) <i>if the Requesting Party is ARTC, whether ARTC will relieve the Access Holder of its obligation to pay TOP Charges <u>and Innovation Charges to the extent applicable</u>;</i></p> <p>...</p>	<p>Consequential amendments as a result of the incorporation of the Innovation Charge.</p>

No	Clause	Proposed amendment	Reason for amendment
		<p>(e) <i>The Notified Party's response as to whether it consents or not under clause 11.1(b)(ii) to the Requesting Party's notice given under clause 11.1(b)(i) and if the Notified Party is ARTC, its response as to whether it will adjust the Access Holder's TOP Charges <u>(and to the extent applicable, the Innovation Charges)</u>, will be given to the Requesting Party within 28 days of such notice being received by the Notified Party or within such shorter time if reasonably practicable. If the Notified Party's response is to refuse consent, the Notified Party will within such time also provide full reasons for refusal in writing to the Requesting Party.</i></p> <p>(f) <i>Unless clause 11.1(c) applies or unless otherwise agreed by ARTC (in its absolute discretion), a variation agreed under this clause 11.1 will not relieve the Access Holder of its obligations to pay the TOP Charges <u>and Innovation Charges (as applicable)</u>.</i></p> <p>(g) <i>If ARTC has advised the Access Holder, in accordance with clause 11.1(d) that it will not adjust the Access Holder's TOP Charges, <u>and to the extent applicable, any Innovation Charges</u>, then the Access Holder is entitled to withdraw a notice provided under clause 11.1(b)(i), notwithstanding that ARTC may have consented to that notice.</i></p>	
16	11.4	<p>Removal of Path Usages for Under-utilisation</p> <p>(e) <i>If ARTC elects to delete any Path Usage under clause 11.4(a) then the Access Holder's obligations to pay the TOP Charges from the date of deletion will, <u>and the Access Holder's obligation to pay the Innovation Charges may subject to the methodology for calculating such a Charge</u>, be reduced to reflect the removal of the Path Usage</i></p>	Consequential amendments as a result of the incorporation of the Innovation Charge.

No	Clause	Proposed amendment	Reason for amendment
17	11.5	<p>Use of Non-Compliant Services</p> <p>(b) <i>If ARTC consents to the use or operation of a Non-Compliant Service <u>and that Non-Compliant Service is outside of the Services Envelope</u>, ARTC may (but is not required to) update the TOP Charges <u>and Innovation Charges (as applicable)</u> to be payable by the Access Holder to reflect the characteristics of the Non-Compliant Service used or operated by the Access Holder.</i></p>	<p>Services within the Services Envelope will not have an increase in TOP Charge. Accordingly this provision only applies to Services outside of the Services Envelope.</p>
		<p>Permanent change to Service Assumptions</p> <p>(c)(iii) the variation of the Service Assumptions does not lead to a reduction in TOP Charges <u>and Innovation Charges (as applicable)</u> that would otherwise be payable.</p>	<p>Amendments to take into account the Innovation Charges.</p>
		<p>Clause 11.5(d) is deleted in its entirety:</p> <p>(d) — Despite clause 11.5(c)(iii), ARTC will not unreasonably withhold its consent to a permanent change to the Service Assumptions for a Train Path that would lead to a reduction in TOP Charges if, in ARTC’s reasonable opinion reached in consultation with the HVCCG, the variation involves the transfer to a Service which provides for more efficient use of Capacity and Coal Chain Capacity.</p>	<p>Generally, and as a result of implementing path based pricing, reductions in TOP Charges will only occur if an Access Holder permanently changes its Services Assumptions from a train consisting outside of the Services Envelope to a train consisting within the Services Envelope. Trains outside of the Services Envelope will not provide for a more efficient use of Capacity and Coal Chain Capacity.</p>

No	Clause	Proposed amendment	Reason for amendment
		<p>(d) <i>If the Service Assumptions applicable to a Train Path have been permanently amended under clause 11.5(c), the Access Holder agrees that the applicable Train Path Schedule will be amended to reflect the new Service Assumptions and the TOP Charges and Innovation Charges (as applicable) payable by the Access Holder under clause 5.2 will be updated to reflect the new Service Assumptions.</i></p>	Consequential amendments as a result of the incorporation of the Innovation Charge.
		<p>(e) <i>ARTC reasonably considers that there is a material difference in the TOP Charges, Innovation Charges (as applicable) paid by the Access Holder for those Path Usages and the TOP Charges and Innovation Charges -that would otherwise be payable for those Path Usages had the Service Assumptions reflected the characteristics of the Non-Compliant Service or the Services used are Non-Compliant Services due to the train type used to operate the Services,</i></p>	Consequential amendments as a result of the incorporation of the Innovation Charge.
		<p>d) (g) <i>adjust the TOP Charges and Innovation Charges (as applicable) to be paid by the Access Holder having regard to:</i></p> <p><i>(A) the characteristics of the Non-Compliant Service when compared with the Service Assumptions set out in the applicable Train Path Schedule;</i> <i>and</i> <i>(B) the factors which impact on ARTC's business and Coal Chain Capacity which ARTC is able to have regard to in formulating its Charges</i></p>	Consequential amendments as a result of the incorporation of the Innovation Charge.
		<p>(h) <i>To avoid doubt, the Access Holder's obligation to pay TOP Charges and Innovation Charges (as applicable) will be updated to reflect the revisions to the Service Assumptions made under clause 11.5(g)(i).</i></p>	Consequential amendments as a result of the incorporation of the Innovation Charge.

No	Clause	Proposed amendment	Reason for amendment
		<p>(i)(i) <i>the Access Holder's obligation to pay TOP Charges and Innovation Charges (as applicable) in respect of that deleted Path Usage is unaffected.</i></p>	<p>Consequential amendments as a result of the incorporation of the Innovation Charge.</p>
18	11.6	<p>Cancellation of services</p> <p>(g) <i>To avoid doubt, the Access Holder's obligation to pay TOP Charges and Innovation Charges (as applicable) will be unaffected by the removal of Base Path Usages under this clause 11.6.</i></p>	<p>Amendment to make clear that if a Base Path Usage is removed under clause 11.6 as a result of an Access Holder's cancellation then the obligation to pay the Innovation Charge will not be reduced.</p>
19	12.3	<p>ARTC termination rights</p> <p>(b) <i>If ARTC terminates a Train Path Schedule or this agreement under this clause 12.3, then neither party has any Liability for the failure to provide any Path Usages on the relevant Train Paths or the applicable TOP Charges and Innovation Charges (as applicable) following the termination.</i></p>	<p>Consequential amendments as a result of the incorporation of the Innovation Charge.</p>
20	12.5	<p>Suspension for lack of ARTC Accreditation</p> <p><i>If ARTC's Accreditation is suspended or cancelled for a continuous period of longer than one month, the Access Holder has the right to suspend its payment of the TOP Charges and Innovation Charges (as applicable) for the period commencing from the date of suspension or cancellation of Accreditation until ARTC's Accreditation is restored.</i></p>	<p>Consequential amendments as a result of the incorporation of the Innovation Charge.</p>
21	12.7	<p>Effect of termination or suspension</p> <p>(b) <i>If ARTC elects to suspend a Train Path Schedule or this agreement, the Access Holder is still obliged to pay the TOP Charges and Innovation</i></p>	<p>Consequential amendments as a result of the incorporation of the Innovation Charge.</p>

No	Clause	Proposed amendment	Reason for amendment
		<p><i><u>Charges (as applicable)</u> during the period of suspension. If the Access Holder elects to suspend a Train Path Schedule or this agreement, then the Access Holder has no obligation to pay the TOP Charges <u>and Innovation Charges (as applicable)</u> for the period of suspension.</i></p>	
22	13.3	<p>Mutual exclusion of consequential loss</p> <p><i>Other than for liability for TOP Charges under clauses 12.8 and <u>TOP Charges and Innovation Charges (as applicable)</u> under 16.3 or the indemnities given under clauses 4.6 and 13.5, neither party will be liable to the other party for any Consequential Loss relating to this agreement however arising (including under this agreement, in tort including negligence, or for breach of any statutory duty).</i></p>	Consequential amendments as a result of the incorporation of the Innovation Charge.
23	16.3	<p>Permanent assignment and trades</p> <p>e) <i>(a)(i) the incoming party wishes to vary the Train Paths following the assignment or novation and those variations involve lower take or pay charges than the TOP Charges and Innovation Charges (as applicable) under this agreement, then:</i></p> <p><i>(A) ARTC will calculate the difference between the present value of TOP Charges <u>and Innovation Charges (as applicable)</u> it would have received from the Access Holder over the remaining term of the relevant Train Path Schedule but for the assignment or novation and the present value of the expected take or pay charges it will receive following assignment and novation where the TOP Charges <u>and Innovation Charges (as applicable)</u> will be assumed over the relevant period to be equal to those applying, and the discount rate to be used will be the rate of return approved under the Access Undertaking, at the time of the assignment or novation.</i></p>	Consequential amendments as a result of the incorporation of the Innovation Charge.

No	Clause	Proposed amendment	Reason for amendment
24	16.4	<i>(b)(i) the Former Access Holder remains liable to ARTC for the TOP Charges <u>and Innovation Charges (as applicable)</u> for the traded Path Usage</i>	Consequential amendments as a result of the incorporation of the Innovation Charge.
25	16.8	Reduction in time period for ARTC approval of trade Deletion of clause 16.8 (Reduction in time period for ARTC approval of trades).	The review under clause 16.8 has been completed and, as such, the provision is no longer required. For completeness, consequential deletion of references to clause 16.8 in clause 16.4(d)(iii).
26	17.1	Suspension of obligations <i>The obligations of a party (other than an obligation to pay money, including a TOP Charge <u>and Innovation Charge (as applicable)</u>) are suspended during the time and to the extent that a party is prevented from or delayed in complying with its obligations for reasons of Force Majeure.</i>	Amendments to make clear that other non-usage based charges are not suspended during a Force Majeure Event.
27	20.1	Notice <i>(c) _____ sent by facsimile transmission, to the facsimile number described below; <u>or</u> (d) _____ sent by email.</i>	Amendment to allow for notices by email.
28	20.2	<i>(c) _____ sent by facsimile (and is other than a notice of termination or suspension of this entire agreement), on the next Business Day after being sent if following transmission the sender receives a transmission confirmation report or if the</i>	Consequential change due to amendments to clause 20.1.

No	Clause	Proposed amendment	Reason for amendment
		<p><i>sender's machine is not so equipped to issue a transmission confirmation report then upon the sender receiving acknowledgment of receipt; <u>or</u></i></p> <p><i><u>(d) sent by email, 2 hours after the sent time (as recorded on the sender's email server) unless the sender receives a notice from the recipient's email server that the message has not been delivered to the recipient.</u></i></p>	
29	20.3	<p>Notice</p> <p>Amendments to ARTC contact details.</p>	This change has been made to update ARTC's contact details to the Hunter Valley business unit.
30	21.1	<p>General</p> <p>Subject to any variation of this agreement made in accordance with clause 19, the variation or waiver of a provision of this agreement, or a party's consent to a departure from a provision by another party, will be ineffective unless in writing, signed by the parties.</p>	Typographical correction.
31	Schedule 3 Clause 1, 2 and 3	<p>Charges</p> <p>Replacement of gtkm based pricing with a path based pricing mechanism for TOP Charges including changes to the formula for calculating Train Path TOP Charges have been made.</p> <p>Replacement of "Port" with "port of Newcastle"</p>	ARTC proposes introduce path based pricing and move away from pricing based on the characteristics of an indicative services. The current TOP pricing structure has been amended from gtkm to a path based price which is made up of a fixed TOP component on a \$/km basis (see section 5.2 of the Explanatory Guide).
32	Schedule 3 - Charges	<p>Non-TOP Charges</p> <p><i>NTP_{PZ} is the Non-TOP Price for each specified Operator Service for each Pricing Zone</i></p>	Consistent with the current non-TOP pricing structure, the variable component

No	Clause	Proposed amendment	Reason for amendment
	Clause 2	<p><i>(in c/GTK):</i></p> <p>(A) (a) <i>for a Train Path included in a Train Path Schedule:</i></p> <p style="padding-left: 40px;">(i) <i>for the first Contract Year of this agreement - the amount set out in column 11 the Train Path Schedule Spreadsheet attached as Annexure B, 11 of the applicable tranches of Path Usages tables referred to in clause 3 of the relevant Train Path Schedule for each Pricing Zone spanned by the Train Path; and</i></p> <p style="padding-left: 40px;">(ii) <i>for each following Contract Year - determined in accordance with clause 4 of Schedule 3; or</i></p>	<p>has not been amended.</p> <p>Amendment from “Operator” to “Service” corrects a previous error as ARTC does not differentiate pricing on the basis of the identity of an Operator.</p> <p>References to the Train Path Schedule Spread Sheet attached as Annexure B is consistent with all existing access holder agreements. Due to the complexity of the information required for each tranche of Path Usages the tables in clause 3 of the indicative access holder agreement under the 2011 HVAU was never utilised. Rather ARTC elected, with the consent of Access Holders to attach a detailed spreadsheet. Similar changes have been to clause 5.4(c) and throughout the Train Path Schedule.</p>
33	Schedule 3 – Charges Clause 4	<p>Innovation Charge</p> <p>Insertion of a new regime for the payment of innovation charges as determined under the Access Undertaking.</p>	<p>Amendments required to provide a mechanism for ARTC to recover Innovation Charges from Access Holders (see section 4.5 of the Explanatory Guide).</p>
34	Schedule 3 – Charges Clause 6	<p>Determination of TOP Price and Non-TOP Price</p> <p>Amendments to clause 6 (Determination of TOP Price and Non-TOP Price) to replace the Indicative Services regime with a Services Envelope regime.</p>	<p>These amendments are made as a result of the insertion of the new Services Envelope regime under the 2017 HVAU.</p>

No	Clause	Proposed amendment	Reason for amendment
		<p>Amendment to clause 6.1(d) as follows:</p> <p>(d) <i>Before the start of each Contract Year, the Access Holder must provide forecast Train Paths, Service Assumptions for each tranche of Path Usages and coal volumes and likely distribution of volumes across its Operators in a timely manner following a request by ARTC for the purpose of assisting ARTC to determine the Non-TOP Price in each Pricing Zones.</i></p>	<p>Consequential changes as a result of the amendment of the TOP Charge from a gtkm basis to a \$/km.</p>
35	Train Path Schedule Clause 1 and 3.2	<p>Definitions</p> <p>Amendments made to the definitions of “Effective Date”, “Project Completion Conditions Precedent” and “Start Date” to provide for the insertion of correct references to the Train Path Schedule Spreadsheet.</p> <p>Similar changes have been made in clauses 5.4(c), 1.2 of Schedule 3 and 2.1 of Schedule 3.</p>	<p>The table setting out the details of each train path has been removed and attached as spreadsheet at Annexure B. This is consistent with all existing Access Holder Agreement, as in practice the Train Path Schedule Spreadsheets are a commercial document and for contract management purposes are easier to manage as a spreadsheet, rather than embedded into the IAHA.</p>
36	Train Path Schedule Clause 3	<p>Train Path</p> <p>Amendments made to clause 3 as a result of the adoption of a new pricing metrics based on kms travelled.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>GCT_{xx}</p> </div> <p style="text-align: right;">Amendment to third row, second column of table as follows:</p>	<p>Consequential changes due to adoption of new path based pricing regime.</p>

No	Clause	Proposed amendment	Reason for amendment
		Replacement of "Port" with "port of Newcastle".	
37	Train Path Schedule Clause 4.4	<p>Project Completion Condition Precedent</p> <p>The following amendment is made:</p> <p>(a) ARTC's obligation to first make available the Path Usages in clause 3.3 of this Schedule and the Access Holder's entitlement to have access to those Path Usages is conditional upon:</p> <p>(i) Completion of the <u>projects specified for each tranche of Path Usages in the Train Path Schedule Spreadsheet</u> following projects ("listed projects"):</p> <p>[];</p> <p>[]; and the</p> <p>[];</p>	<p>Amendments reflect that the Train Path Schedule Spreadsheet sets out the Project Completion Condition Precedent. This is consistent with all existing Access Holders Agreements.</p>

3 Amendments to the OSA

No	Clause	Proposed amendment	Reason for amendment
1	Title	Deletion of the word “Indicative” in the title of the agreement.	Consequential deletion as a result of the replacement of the Interim Services regime with a Services Envelope regime.
2	3.10	Amendment to terminology in clause 3.10.	Consequential change as a result of amendments to the terminology of key performance indicators to the Network Key Result Areas in the 2017 HVAU.
3	23.3	Notice Amendments to ARTC contact details.	This change has been made to update ARTC’s contact details to the Hunter Valley business unit.

ATTACHMENT 1 2017 HVAU (CLEAN VERSION)

ATTACHMENT 2

MARK-UP 2017 HVAU COMPARISON TO 2011 HVAU

ATTACHMENT 3

2017 IAHA (CLEAN VERSION)

ATTACHMENT 4

MARK-UP 2017 IAHA COMPARISON TO 2011 IAHA

ATTACHMENT 5

2017 IOSA (CLEAN VERSION)

ATTACHMENT 6

MARK-UP 2017 OSA COMPARISON TO 2011 OSA

ATTACHMENT 7 DETERMINATION OF RATE OF RETURN

This attachment is a report prepared by Synergies Economic Consulting for ARTC discussing matters relating to the determination of a rate of return to apply to the 2017 HVAU.

ATTACHMENT 8 OPEX CHANGES

This attachment provides a summary of the provisions that ARTC expects will require amendment to implement the new opex mechanism.