

**AUSTRALIAN RAIL TRACK CORPORATION LTD**  
**HUNTER VALLEY ACCESS UNDERTAKING 2009**  
**EXPLANATORY GUIDE**



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## 1. INTRODUCTION

This Explanatory Guide is presented as a companion to the 2009 ARTC Hunter Valley Access Undertaking (**HVAU**) submitted to the Australian Competition and Consumer Commission (**ACCC**) to expand on the content of the HVAU and provide context where appropriate that aids understanding of the key features of the HVAU.

The HVAU stipulates the processes, responsibilities and obligations of ARTC and an applicant seeking access to the ARTC Hunter Valley network.

Once accepted by the ACCC the terms of the HVAU will be binding and enforceable by law on ARTC. It should be noted however, that the HVAU does not diminish existing contractual rights nor preclude parties agreeing to principles outside the scope of the undertaking.

This Guide does not comprise part of the HVAU nor does it seek to repeat the contents thereof, but rather to aid understanding through provision of supplementary information and clarification. To the extent there may be any apparent inconsistency between this Guide and the HVAU, the HVAU shall prevail. ARTC may, during the term of the HVAU update this Guide, without reference to the ACCC, if feedback suggests it is warranted. Terms used in this Guide are as per definitions in the HVAU unless otherwise obvious from the context.

The ACCC has previously accepted access undertakings submitted by ARTC in relation to the interstate rail network owned or operated under lease by ARTC outside of New South Wales. Most recently, on 30 July 2008, the ACCC accepted ARTC's Interstate Rail Access Undertaking (**2008AU**) submitted on 15 July 2008. This replaced the access undertaking submitted by ARTC in 2002 in relation to the interstate rail network managed by ARTC at that time.

In September 2004, ARTC commenced a 60 year lease of certain parts of the New South Wales rail network, including the interstate rail network in that state covered by the 2008AU, and the Hunter Valley network covered by the HVAU. Since that time the NSW rail network has been covered by the NSW Rail Access Undertaking (**NSWRAU**)<sup>1</sup>. Under the terms of ARTC's lease, the provisions of the NSWRAU would be applicable to the network leased by ARTC until an undertaking submitted by ARTC to the ACCC is approved by the ACCC. As such, the 2008AU now also applies to parts of the interstate rail network in NSW.

A substantial majority of access revenue derived by ARTC on the interstate network is sourced in competitive markets, where strong intermodal competition, primarily from road, constrains both freight and access pricing in competing rail services. For rail to effectively compete against road, rail must offer a level of service that is competitive and sustainable.

The predominant usage of the Hunter Valley network is for rail haulage of export coal from mines in the Hunter Valley to the Port of Newcastle; this involves very different commercial and operational arrangements that to the interstate network. Accordingly, ARTC has decided to submit a separate access undertaking to apply to this part of ARTC's network. Having said this, ARTC considers it important to maintain consistent access arrangements to the extent possible on its network, and to this end it has sought to adopt many elements of the 2008AU in the HVAU.

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<sup>1</sup> [http://www.artc.com.au/docs/nsw/network\\_access/info\\_pack/regulatory\\_framework/nsw\\_rail\\_access\\_undertaking.pdf](http://www.artc.com.au/docs/nsw/network_access/info_pack/regulatory_framework/nsw_rail_access_undertaking.pdf)

ARTC's key objectives in relation to the Hunter Valley network (consistent with lease objectives) has been to actively cooperate and support industry arrangements and forums seeking to optimise coal supply chain capacity such as the Hunter Valley Coal Chain Logistics Team (**HVCCLT**), and to deliver rail capacity (in the context of the broader coal chain) to meet industry demand. To this end, ARTC recognises the successful outcomes that have been achieved through the activities of the HVCCLT, a supply chain coordination group established through voluntary participation of export coal chain service providers. ARTC has developed the HVAU with these objectives in mind.

ARTC recognises the conditions that currently exist in the Hunter Valley where demand for coal export through the Port of Newcastle is constrained by the supply chain system capacity. ARTC supports the efforts that have been made by Governments and the industry to develop both short and long term solutions to improve the performance of the export coal supply chain.

In developing the HVAU, ARTC has, where relevant and to the extent it considers able taken into consideration the views expressed by stakeholders during these processes. In particular, ARTC has recognised the role of the Hunter Valley Coal Chain Coordinator (**HVCCC**) in the integrated and coordinated capacity planning and identifying, and facilitating expansion of, coal chain capacity.

ARTC has also sought to incorporate in the HVAU, to the extent possible, principles for access which provide reasonable certainty and flexibility that are aligned to the most recently proposed principles included in the Implementation Memorandum lodged with the ACCC by the relevant port companies on 6 April 2009. ARTC recognises that the ACCC is still considering the capacity framework set out in the Implementation Memorandum and that much work remains to be done to implement that framework. As such, ARTC sees some uncertainty going forward in relation to the operational and commercial arrangements applying to the Hunter Valley coal network, and recognises the difficulties in seeking to align arrangements proposed in the HVAU with those applying to the ports and other parts of the Hunter Valley coal chain.

ARTC is a vertically separated track manager. As such, the structural incentives normally present in a vertically integrated access environment do not exist on the network managed by ARTC, and are not present in either the 2008AU or HVAU.

As the network proposed to be covered by the HVAU forms part of the network leased by ARTC in NSW, ARTC has also sought to recognise any specific obligations arising from the NSW lease.

## 2. ARTC's ROLE & OBJECTIVES

### 2.1 Overview of ARTC

Australian Rail Track Corporation Ltd (**ARTC**) is a company under the Corporations Act, whose shares are held by the Commonwealth of Australia.

ARTC commenced operations in 1998 with the following charter:

- Improve performance and efficiency of interstate rail infrastructure
- Increase capacity utilization
- Listen, understand and respond to the market
- Operate on sound commercial principles
- Provide shareholders with a sustainable return on capital invested

ARTC currently has responsibility for the management of around 10,000 route kilometres of standard gauge track, in South Australia, Victoria, NSW and Western Australia. ARTC owns the following rail corridors:

- Adelaide – Wolseley
- Adelaide – Pt Augusta – Kalgoorlie
- Pt Augusta – Whyalla
- Broken Hill – Crystal Brook
- Tarcoola – Alice Springs (long term lease to Asia Pacific Transport, operators of the Alice Springs – Darwin Railway)
- Parts of the Adelaide metropolitan track between Dry Creek and Outer Harbour.

In Victoria, ARTC leases the two mainline interstate standard gauge corridors from the Victorian Government, being:

- Melbourne – Wolseley
- Melbourne – Albury

ARTC also has a lease of the Maroona – Portland branch line in Victoria, and manages access to the connection from the interstate mainline network to the Appleton Dock precinct in Melbourne.

ARTC has recently commenced a 60 year lease of the following parts of the NSW rail network:

- Albury – Macarthur
- Woodville Junction (Newcastle) – Queensland Border
- Cootamundra – Broken Hill
- Parkes (Goobang Junction) - Werris Creek/Ulan
- Hunter Valley rail network (Newcastle ports – Werris Creek/Ulan)
- Port Botany

Over these corridors, ARTC is responsible for:

- Selling access to train operators
- Development of new business
- Capital investment
- Operational management
- Management of infrastructure maintenance

The remainder of the interstate network is still controlled by various State Government agencies or private entities, as follows:

- Brisbane – Queensland border (Queensland Rail (QR))
- Kalgoorlie – Perth (WestNet Rail, owned by Babcock and Brown, which has a long term lease arrangement with the West Australian Government)
- Those parts of the interstate network within the Sydney Metropolitan Commuter Network (Macarthur – Chullora – Woodville Junction (Newcastle) (RailCorp))

ARTC also manages, on behalf of the NSW Government, the remainder of the regional rail network in NSW outside of the Sydney Metropolitan Commuter Network.

## **2.2 ARTC's objectives in the Hunter Valley**

ARTC's stated objectives in the Hunter Valley are to:

- actively cooperate with and support industry arrangements and forums seeking to optimise coal supply chain capacity; and
- deliver rail capacity to meet industry demand.

More specifically, ARTC's responsibilities in the Hunter Valley include:

- selling rail access to train operators;
- pricing access to train operators;
- capital investment;
- operational management; and
- management of infrastructure maintenance.

### **3. 2008 ARTC INTERSTATE ACCESS UNDERTAKING**

#### **3.1 History of the 2008 Interstate Access Undertaking**

ARTC submitted a voluntary access undertaking in accordance with Part IIIA of the Trade Practices Act (1974) (**TPA**) to the ACCC on 15 July 2008, which was accepted on 30 July 2008. This followed expiry of the previous ARTC 2002 Access Undertaking on 31 May 2007. The 2008AU applies to the interstate network controlled by ARTC, and sets out the framework under which access to that network can be negotiated with ARTC in a fair and balanced way.

ARTC sought, in its development of the 2008AU, to:

1. Build upon the provisions of the 2002 ARTC Access Undertaking applicable to ARTC's network at the time, which covered a substantial portion of the East-West rail network. ARTC considered that the 2002 ARTC Access Undertaking was largely a formalised recognition of the approach to access, pricing and operations that had been applied by ARTC for several years prior to 2002, and had been applied since. ARTC saw no compelling reason to substantially adjust the 'formula' for access to the network to that created by the 2002 ARTC Access Undertaking. ARTC sought to extend this approach to the North-South interstate network, in order to achieve greater consistency over the bulk of the national interstate rail network as had been outlined to the industry prior to ARTC's take-up of the NSW Lease.
2. Continue to adopt a level of regulatory 'intensity' or 'heavy handedness' that is appropriate in the circumstance of vertically separated network where market power is not substantial.
3. Recognise specific obligations for ARTC arising from its lease in NSW.
4. Recognise changes in the commercial, competitive and operating characteristics of the markets serviced by the interstate rail network over the previous six years.

In order to achieve a key objective of increasing utilization of the interstate rail network, ARTC has adopted a strategy of growing the use of rail for the movement of interstate freight in Australia by improving rail's competitiveness within the broader freight transport logistics framework. Rail's competitiveness is also a function of the activity of rail transport operators (ARTC's customers) and the extent to which rail is able to effectively integrate and communicate with other elements of the transport and distribution supply chain within various interstate and international transport markets.

ARTC's strategy of growing freight volume on rail also underpins ARTC's approach to pricing as described in the 2008AU. ARTC has sought to set access pricing at a level that will assist rail to be competitive with road in markets served by the interstate network. With the current level of utilisation of ARTC's network, however, pricing at this level results in the amount of revenue collected by ARTC not being sufficient for the long-term economic sustainability of its network. It is ARTC's strategy to grow volumes in the long term, such that rail can be competitive and achieve long-term sustainability of its asset.



The 2008AU adopts a hybrid rail access model that incorporates certain aspects of both the traditional ex ante and ex post models for determination of access terms and conditions. The ex ante model contemplates the up-front determination of generic terms and conditions, whilst the ex post model contemplates determination of access terms and conditions in the context of an access dispute on an ex post basis (a negotiate/arbitrate model). The 2008AU seeks to provide certainty to users and access seekers by providing for indicative terms and conditions, including pricing and pricing variation, that cover the predominant service on the interstate network, which can also act as a starting point for negotiation for non-standard services, that is underpinned by a dispute resolution process. ARTC committed that the same pricing would be available to any train operator, regardless of ownership, operating under the substantially the same terms and conditions, and in the same end market as another train operator. To provide further certainty, the 2008AU also provides up-front for publishing of all pricing and other information.

ARTC sees these principles as providing confidence and encouragement to potential access seekers that they will be able to use the network on an even playing field with other access users and seekers. ARTC is seeking to introduce many of these principles in the HVAU.

### **3.2 Broad elements of the 2008 Interstate Access Undertaking**

Broad elements and treatments in the 2008AU include:

- **The 2008AU codifies underlying principles:**
  - The majority of ARTC revenue is earned through the transport of interstate freight, in markets which are subject to a substantial degree of competition from other modes of transport.
  - ARTC is not vertically integrated. The vast majority of its revenue is derived through providing access to its network for operations by other parties.
  - Charges set by ARTC in the marketplace result in revenues that fall significantly below a level that would allow for the business to earn an adequate long-term economic rate of return. To mitigate this, ARTC seeks to grow volumes on the network.
  - ARTC has adopted the concepts of equity and transparency as key elements of its pricing policy, in order to stimulate market confidence and growth in the rail industry.
- **Scope and Administration**
  - Applies only to those parts of the interstate network owned or leased by ARTC. Will apply to the Southern Sydney Freight Line (SSFL) when commissioned.
  - The 2008AU has a term of 10 years, where ARTC will conduct a review of operation, in consultation with customers after 5 years.
  - The 2008AU does not affect existing access contracts.

- ARTC will publish comprehensive information on its website to assist access seekers in the access negotiation process. This includes:
  - Network description
  - Prices
  - Terms and Conditions
  - Network Management Principles
  - Capacity and Usage
  - Performance Indicators
  
- **Negotiation and Dispute Resolution**
  - Both parties to negotiate in good faith.
  - Framework includes preliminary meetings & information exchange, access application, indicative access proposal, negotiation to develop and agreement for execution, and dispute resolution procedures.
  - Timeframes apply to all steps in the process.
  - Confidentiality provisions apply.
  - Either party may seek dispute resolution at any time during negotiation.
  - The dispute resolution process:
    - follows a negotiate/mediate/arbitrate model
    - provides for the ACCC to act as arbitrator
    - has time constraints on all steps
    - allows for the publishing of arbitration outcomes
    - requires the arbitrator to consider matters consistent with Part IIIA and the Competition Principles Agreement.
  
- **Pricing Principles**
  - ARTC pricing must be such that revenue collected on any segment from all users falls between floor and ceiling revenue limits.
  - The floor revenue limit is the incremental cost of a segment, being the costs which would have been avoided if the segment were (theoretically) removed. Incremental cost includes segment specific costs and an allocation of non-segment specific costs but excludes depreciation and a return on assets.
  - The ceiling revenue limit is the economic cost of a segment, which includes all segment specific costs, an allocation of non-segment specific costs, depreciation of relevant assets and a return on relevant assets.
  - The rate of return is ARTC Weighted Average Cost of Capital (**WACC**) as approved by the ACCC.

- Assets are valued using the Depreciated Optimised Replacement Cost (**DORC**) methodology. Valuations are annually adjusted for CPI, capital expenditure and relevant depreciation.
- Charges comprise a variable component (\$/gtkm) and a flagfall component (\$/km).
- Indicative access charges are available for any seeker wishing to operate indicative services (110kph, 21T axle/load, 1500m length east of Adelaide, 1800m west of Adelaide) under the indicative terms and conditions.
- Indicative access charges for the indicative service may be varied annually. Cumulative variations may be less than, and at no time will exceed CPI applied cumulatively from the start of two separate 5 year periods covering the term.
- Pricing for other than indicative services will be based on:
  - indicative access charges;
  - service characteristics;
  - commercial impacts on ARTC;
  - logistical impacts on ARTC; and
  - cost of any additional capacity required.
- Pricing will not be differentiated based on the identity of the applicant, nor where the service characteristics are alike and the services are operating in the same end market.
- **Capacity Management**
  - ARTC will undertake capacity analysis in preparing an indicative access proposal.
  - Where two or more applicants seek mutually exclusive capacity, ARTC will seek to satisfy both requirements. If this is not achievable, access will be given to the applicant agreeing to terms and conditions most favourable to ARTC (normally an NPV test).
  - ARTC has the right to reclaim under-utilised capacity.
  - Capacity may be assigned by one user to another with ARTC's approval.
- **Network Connections and Additional Capacity**
  - ARTC will consent to connection to the network provided certain conditions are met (approvals, standards, will not reduce capacity, costs met by proponent).
  - ARTC will consent to a request for additional capacity from applicant(s) if it is safe, meets standards, is commercially viable to ARTC or the costs are met by the applicant(s).

- ARTC's costs could be met by reimbursement as incurred, or through increased charges.
- ARTC may apply to the ACCC to approve additional capacity considered worthwhile and beneficial to the industry.
- ARTC will provide an opportunity to exchange views on additional capacity with customers.
- An investment program covering through to 2011-12, and estimated at around \$1.6bn was incorporated in the 2008AU. An investment program for the following 5 years will be submitted for inclusion in the 2008AU by ARTC in late 2011 or earlier.
- **Network Transit Management**
  - Objective is to exit trains from the network according to their contracted exit time.
  - Where conflicts arise, trains will be managed according to defined and open Network Management Principles.
  - Focus is to give priority to the service running on time, where the operator has not caused any delay to the train.
- **Performance Indicators**
  - To be published quarterly (or annually where appropriate)
  - To relate to service reliability, network availability, transit time, track condition and ARTC unit costs.
  - To relate to both ARTC and operator performance
  - Reporting will be periodically and independently audited.
- **Indicative Access Agreement**
  - Forms part of the undertaking.
  - Offered to an applicant seeking to operate services meeting certain prudential criteria and where there is sufficient existing capacity or ARTC has agreed to provide additional capacity. Indicative access charges will apply.
  - Otherwise, acts as baseline terms and conditions available to an access seeker and enforceable upon ARTC.
  - The access seeker and ARTC may agree alternative terms and conditions, but the 2008AU prescribes those elements which are essential in any access agreement, unless ARTC agrees otherwise.

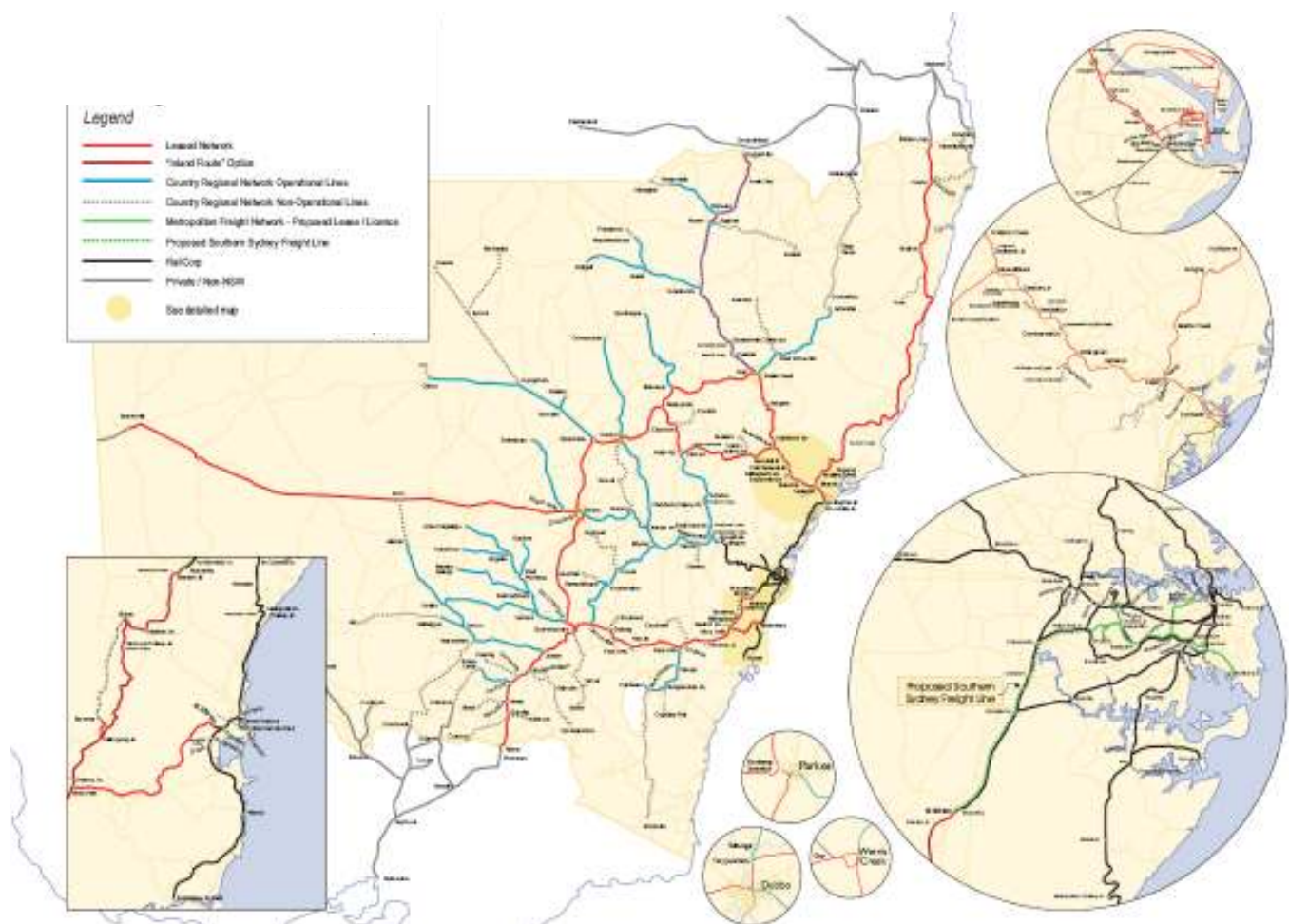
As a result of the six years of operation under the above principles, ARTC saw no reason to deviate substantially from the model adopted in the 2002 Access Undertaking, nor many of the processes and treatments provided for. ARTC, wherever possible, adopted substantially the same approach in the development of 2008AU, but recognised that a number of specific requirements (needing alternative or additional treatments in an undertaking) exist to satisfactorily address the market and legislative circumstances on the expanded ARTC network to which the 2008AU applies.

ARTC supports the application of consistent regulatory principles on its network. ARTC believes that there are many elements of the 2008AU that can be successfully applied to the Hunter Valley rail network, and has sought, where appropriate, to incorporate these in the HVAU. Having said this, ARTC also recognise that there are also elements that are not appropriately applied to coal operations on the Hunter Valley network.

#### 4. ARTC's LEASE OF CERTAIN PARTS OF THE NSW RAIL NETWORK

On 5 September 2004, ARTC commenced operations in NSW under a 60 year lease with the NSW Government of certain parts of the NSW rail network. The lease essentially includes the interstate rail network outside of the Sydney metropolitan commuter network from Macarthur to Newcastle, the Hunter Valley coal network, and some parts of the regional rail network that may form part of a future Melbourne – Brisbane inland route. Figure 1 below shows those parts of the network that are covered by the lease, as well as those parts of the NSW Country Regional Network (**CRN**) that are not included in the lease, but are managed by ARTC on behalf of the NSW Government.

Figure 1 – NSW rail networks



ARTC proposes to include in the HVAU the following parts of the leased network.

- Newcastle Ports (coal lines) - Muswellbrook
- Muswellbrook – Ulan
- Muswellbrook - Gap

#### 4.1 Hunter Valley Investment Strategy

ARTC has, together with relevant industry stakeholders, developed and regularly updated an investment strategy for Hunter Valley coal network. The latest development, '2008-18 Hunter Valley Corridor Capacity Strategy', is soon to be released for industry consultation. This strategy recognises existing capacity constraints in the Hunter Valley coal supply chain, as well as forecasted demand for coal throughput. The strategy contemplates substantial investment in the below rail elements of that supply chain managed by ARTC and covered by the HVAU.

This investment strategy contemplates a range of projects in various parts of the network covered by the HVAU, and is particularly focussed on delivering sufficient capacity to meet demand forecasts for mines north and west of Muswellbrook. Approximate expenditure forecasts that ARTC has considered with the industry to date are shown in Table 1.

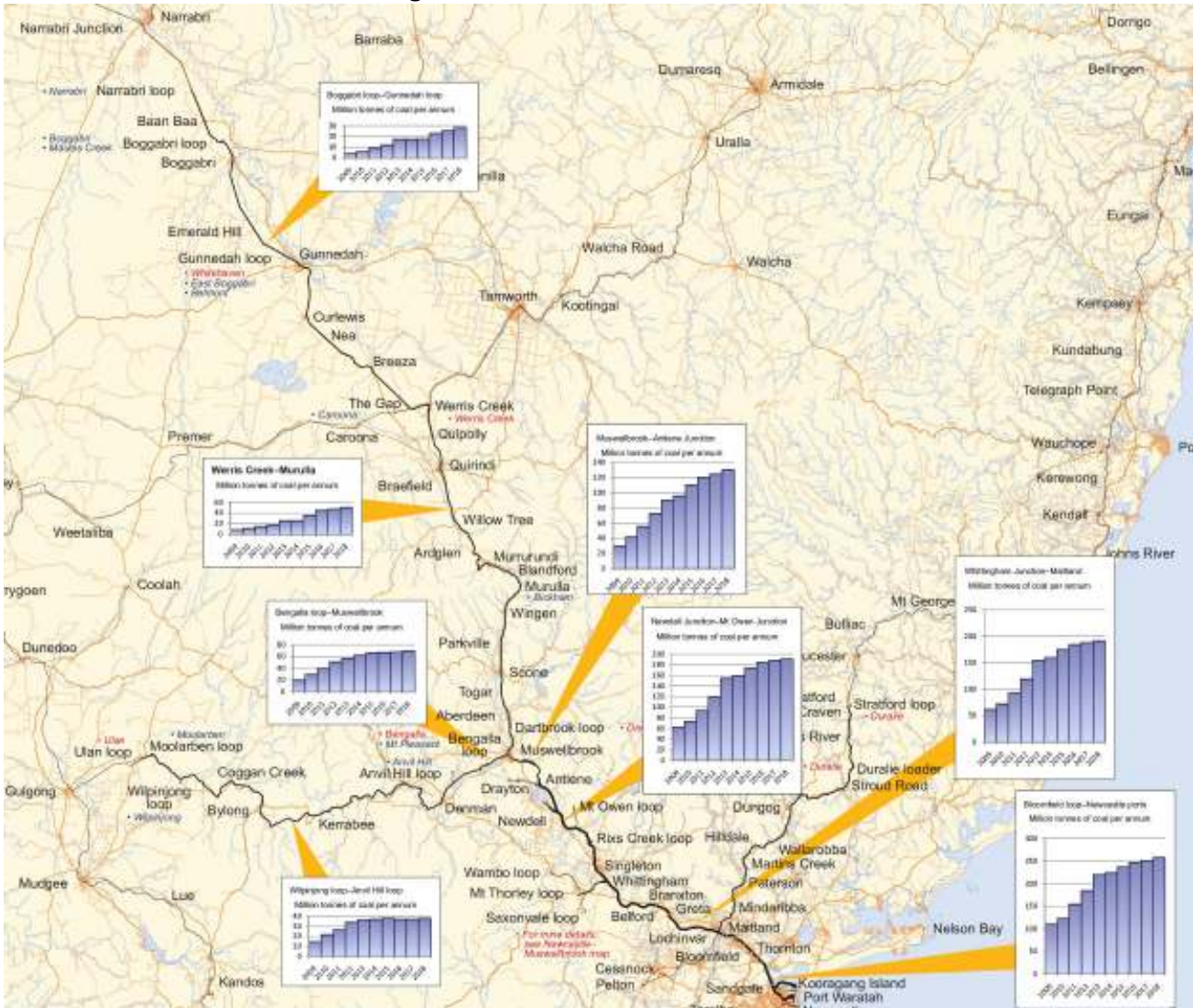
**Table 1 – Hunter Valley coal network expenditure forecasts**

<b>Line Segment</b>	<b>Investment Expenditure Forecast (\$m)*</b>
Ports-Muswellbrook	600
Muswellbrook – Gap	380
Muswellbrook - Ulan	70

The investment contemplated is expected to increase the existing asset valuation for regulatory purposes three to four fold over the next five years.

The most recent coal demand forecasts (driving the need for system and rail capacity) are shown at Figure 2.

**Figure 2 – Coal demand forecasts**



#### 4.2 Existing Regulatory Arrangements in NSW

Since September 2004, the NSWRAU has been in operation. Under the terms of ARTC's lease in NSW, ARTC is required to submit draft access undertaking or undertakings to the ACCC in relation to the leased network. Until undertakings are approved by the ACCC, ARTC will comply with the NSW access undertaking in force from time to time.

The NSW lease also specifically provides for acknowledgement by the lessors, State Rail Corporation of NSW and Rail Infrastructure Corporation that ARTC intends to seek, as part of its pricing principles that may apply to the leased network from time to time, the right to recover reasonable additional costs of any change in law effective after 5 September 2004 relating to passenger priority in NSW through access prices from any beneficiary of that change in law.



### 4.3 The NSW Rail Access Undertaking

The NSWRAU commenced in September 2004. It replaced the NSW Rail Access Regime previously in place, with changes largely to reflect the different operating arrangements in NSW resulting from ARTC's lease, and to relieve the access provider from certain compliance obligations outside the Hunter Valley coal network, where access revenue was demonstrably less than 80% of the applicable ceiling limit.

The NSWRAU has not been certified as an effective access regime under Part IIIA of the TPA.

It is generally recognised that whilst the NSWRAU applies to the NSW rail network in its entirety, its application in terms of most compliance obligations and constraint on access pricing primarily focuses around the Hunter Valley coal network. This network specifically identified includes the following parts of the ARTC leased network.

- Islington – Maitland (coal lines only)
- Maitland – Dartbrook mine.
- Muswellbrook – Ulan mine.
- Maitland - Craven mine (forming part of the Sydney to Brisbane interstate corridor)

At this time, access revenue related to coal usage only falls well short of full economic cost on the Maitland – Craven mine segment. Subject to regulatory confirmation, access revenue recovered, full economic cost on the Muswellbrook – Ulan mine segment in 2007-08 for the first time.

With the exception of the Maitland – Craven line and Newcastle Ports to Islington shared lines, which form part of the interstate network, ARTC has excluded the Hunter Valley coal network from the scope of the 2008AU.

The NSWRAU, whilst a single document, seeks to recognise the different commercial characteristics of the Hunter Valley coal network from other parts of the NSW rail network. Regulatory application, in practice, with respect to the Hunter Valley coal network is far greater than that applying on the interstate rail network in NSW. The NSWRAU, both in terms of its level of prescription and its practical application has lesser overall requirements than that incorporated in the 2008AU.

It should be noted that the Hunter Valley coal network, whilst predominantly serving the export and domestic coal markets, is also used by a number of other services operating in the general freight, agricultural products and passenger transport markets. These services consume capacity on the Hunter Valley coal network, usually in the form of scheduled train paths. The remaining rail capacity, other than that required for network maintenance purposes is available for the transport of export and domestic coal.

Key features of the NSWRAU are described below.<sup>2</sup>

- **Pricing Principles**

- Floor and Ceiling Test - Pricing must be negotiated such that:
  - Access revenue from any access seeker must at least meet the direct cost imposed by that access seeker. In addition, for any sector or group of sectors, revenue from access seekers should, as an objective meet full incremental cost.
  - For any access seeker, or group of access seekers, access revenue must not exceed the full economic cost of the sectors required on a stand-alone basis for the access seeker or group of access seekers.

Hunter Valley network sectors applicable under the NSWRAU are detailed at **Attachment A**.

- Regulatory Asset Base – The regulatory asset based commenced with an opening value approved by the NSW Minister for Transport in 2001, and is rolled forward to current valuation by the annual application of CPI, additions to the network, capital expenditure and depreciation. Assets are initially valued on the basis of Depreciated Optimised Replacement Cost.
- Capital Expenditure – Only capital expenditure that is prudently incurred and relates to coal traffic on a stand-alone basis is to be included. Prudence must have regard to minimum demand requirements over a five year period, and must be based on a prescribed consultation process where:
  - The infrastructure owner must
    - work with access seekers to identify and prioritise network investments, and refine works programs, and formally evaluate significant future investments in consultation with access seekers;
    - identify capital expenditure forecasts over a five year period;
    - explain input to and outputs from evaluations;
    - provide an assessment of the impact of the capital expenditure on the regulatory asset base; and
    - establish a process for access seeker input.
- Depreciation – Depreciation is calculated on a straight line basis and based on the remaining mine life of coal mines using a sector. Remaining mine life was approved at 35 years in 2004 and reviewed every five years. IPART is currently reviewing remaining mine life to apply from 1 July 2009.
- Rate of Return – Rate of Return is approved by the regulator every five years. Approved at 7.33% real, pre-tax in 2004. IPART is currently reviewing the Rate of Return to apply from 1 July 2009.

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<sup>2</sup> Definition of terms used can be found in the NSW Rail Access Undertaking pursuant to Schedule 6AA of the Transport Administration Act 1988 (NSW).

- Compliance – The infrastructure owner is required to annually demonstrate compliance with the ceiling test and regulatory asset base roll-forward. The regulator is to publish findings. Any deviation around the maximum rate of return is to be managed through an unders and overs account established for each applicable access seeker.
- **Access Agreements**
  - Any agreement must cover certain specified matters and conform to the pricing principles.
- **Arbitration**
  - The Independent Pricing and Regulatory Tribunal of NSW (IPART) is the arbitrator.
  - IPART will also determine Rate of Return, estimated remaining mine life, and undertake compliance assessment.
- **Infrastructure Owner Obligations**
  - Provide access consistent with the undertaking.
  - Use reasonable endeavours to accommodate access and new investment.
  - Maintain passenger priority.
  - Structure its accounts to facilitate effective dispute resolution, transparency and effective access.
  - Separate accounts to below rail activities and other activities.
  - Provide an information pack containing prescribed information to an access seeker.
- **Application**
  - The infrastructure owner is not required to demonstrate compliance with the ceiling test or asset roll forward where it can be demonstrated to the regulators reasonable satisfaction that access revenue does not exceed more than 80% of full economic cost of the relevant network.

## **5. OVERVIEW OF THE HUNTER VALLEY COAL CHAIN**

### **5.1 Hunter Valley coal supply chain**

The Hunter Valley coal chain is a complex export system comprising:

- 35 coal mines owned by 14 individual coal producers;
- 24 points at various mines for loading coal onto trains;
- approximately 28 trains (owned by two above rail operators), making an average of two trips per day;
- more than 80 different export blends of coal;
- five berths and ship loaders at the port; and
- total stockpile capacity of 3.4 million tonnes at the Port of Newcastle, which allows approximately 1.5 million tonnes of workable stockpile space for port operations.

The Hunter Valley coal chain is located near Newcastle in NSW and is spread over a 350 km area from around Gunnedah in the north, Ulan in the west and Newstan in the south. A map of the Hunter Valley coal network is provided at Figure 3.

Around 90-95% of coal transported on the Hunter Valley coal network is exported through the Newcastle ports and, of this, around 80% of coal exported from the Hunter Valley is thermal (or steaming) coal primarily used for electricity generation. The remaining 20 per cent of exports is coking (or metallurgical) coal which is used to manufacture steel.

The majority of coal from the Hunter Valley is exported to Japan (approximately 62 per cent), Korea (approximately 15 per cent) and Taiwan (approximately 13 per cent).

The remaining coal utilising the Hunter Valley coal network is largely for the domestic electricity markets with coal transported to power stations within the Hunter Valley, and south of Newcastle.

**Figure 3 – Map of Hunter Valley coal network**



## 5.2 Parties operating in the Hunter Valley Coal Supply Chain

### Coal Producers

The major coal producers in the Hunter Valley, which utilise approximately 70 per cent of the coal chain capacity, are:

- Coal & Allied Industries Limited, a subsidiary of Rio Tinto (part of Rio Tinto Coal Australia). Coal & Allied owns three main mining operations in the Hunter Valley, being Hunter Valley Operations, Mount Thorley Operations/Warkworth Mine and Bengalla Mine;
- Xstrata Coal NSW Pty Ltd, a subsidiary of Xstrata plc. Xstrata owns (either through joint ventures or companies), manages and operates 10 mining operations in the Hunter Valley;
- Anglo Coal Australia Pty Ltd, a subsidiary of Anglo American plc. Anglo has a majority interest in Dartbrook and Drayton mines; and
- Hunter Valley Energy Coal Limited (a wholly owned subsidiary of BHP Billiton).

The remaining 30 per cent of coal exported is produced by the smaller coal producers including:

- AMCI Holdings Australia Pty Limited;
- Bloomfield Collieries Pty Limited;
- Camberwell Coal Pty Limited;
- Centennial Coal Company Limited;
- Donaldson Coal Pty Limited;

- Excel Mining Ltd;
- Gloucester Coal Ltd;
- Muswellbrook Coal Co Ltd;
- Southland Coal Pty Ltd;
- White Mining Limited; and
- Idemitsu.

Other coal mining companies are likely to enter the Hunter Valley coal market during the term of the HVAU including Shenhua Energy.

Most newer entrants are likely to enter the Hunter Valley coal market through operations in the outer regions north of Werris Creek and west of Ulan.

### **Above-rail operators**

There are two operators currently providing rail haulage services to Hunter Valley coal producers – QR National and Pacific National (owned by the Asciano Group).

#### ***QR National***

QR National commenced operations in the Hunter Valley in 2005. It currently operates 6 trains and has approximately a 20% share of the Hunter Valley rail haulage market (2007-08), delivering around 20 million tonnes of coal in 2007-08.

QR National currently has rail haulage contracts with 5 coal producers (covering 11 mines) for coal exports from the Hunter Valley.

#### ***Pacific National***

Pacific National is fully owned by the Asciano Group and hauls around 80% of coal in the Hunter Valley (2007-08), representing approximately 90 million tonnes of coal per annum. Pacific National moves coal from 17 customers in the Hunter Valley across distances generally ranging from 20km to 320km.

### **Port Operators**

Port operations are carried out at terminals located in the Port of Newcastle by Port Waratah Coal Services (**PWCS**) although, in the future, Newcastle Coal Infrastructure Group (**NCIG**) plans to also offer port terminal services.

The coal export facilities currently consist of two coal loading terminals, located on either side of the South Channel of the Hunter River. These are known as the Kooragang Coal Terminal (**KCT**), on Kooragang Island and the Carrington Coal Terminal (**CCT**). Each of those terminals comprises equipment for the delivery and storage of coal to the terminal and for the loading of coal onto vessels.

## **PWCS**

PWCS owns and operates the Carrington and Kooragang Island coal loading terminals at the Port of Newcastle. It is an incorporated joint venture between a number of coal producers and other participants in the Hunter Valley coal industry, including exporters and importers of coal from the Hunter Valley.

PWCS provides coal handling services to Hunter Valley coal exporters, including receiving and unloading coal, stockpiling of coal and loading coal into vessels for export. PWCS terminals (described further below) consist of rail receipt infrastructure, stockpiling areas, coal reclaimers and a dedicated conveyor system which carries the coal to shiploaders.

PWCS currently has five shipping berths (two at Carrington and three at the Kooragang Island). Part of the land on which PWCS' terminals are situated is owned by the NSW Government and leased to PWCS. ARTC understands that the lease of the Kooragang Island terminal and the lease of the Carrington terminal currently require the facilities to be operated as a 'common user facility'.

Currently, any party who wishes to use the port to load coal may do so, provided they sign a Coal Handling Service Agreement. This agreement sets out the terms on which PWCS will provide coal handling services to its customers.

PWCS' current total coal loading capacity is 102 million tonnes per annum, with expansion underway to increase capacity to 113 million tonnes per annum by mid-2009. PWCS has development approval to complete construction of its Kooragang Terminal Master Plan and to operate at 145 million tonnes per annum.

### ***Carrington Coal Terminal***

CCT is located on 40 hectares of land in the Carrington suburb of Newcastle. CCT commenced operations in 1976 with an initial shiploading capacity of 16 mtpa. Subsequent expansions at Carrington increased shiploading capacity to its current level of 25 mtpa. Coal can be received by rail and road although the majority of coal is delivered by rail through two rail receipt facilities. Vessels arriving at CCT are loaded utilising two shiploaders. Depending on the coal and vessel requirements, either single head or dual head shiploading may be used (single head being one shiploader loading one vessel per berth, dual head being two shiploaders loading one vessel at one berth). All shiploaders and reclaimers have a capacity of 2,500 tonnes per hour (**tph**). Both the receipt and the shiploading systems utilise surge bins as part of the process to maintain consistent throughput rates.

**Table 2 - Carrington terminal capacity**

<b>Activity</b>	<b>Capacity</b>
Coal receival	1 x 4,400 tph rail capacity, 1 x 4,600 tph rail capacity, 1 x 2,500 tph road capacity
Coal stockpiles	4 x 1.0 kilometres x 40 metres, 1,000,000 tonnes max capacity, 600,000 tonnes working capacity
Coal stacking	4 x 2,500 tph stacking capacity
Coal loading	4 x 2,500 tph reclaiming capacity, 2 x 2,500 tph shiploading capacity, 1.4 – 2.4 metres wide, 2.75 – 5.0 m/sec conveyor belts
Berths	Berth space for 2 vessels, 16.5 metres depth at berth, 15.2 metres approach to channel
Vessel capacity	180,000 dwt max, 290 metres max length, 47 metres max beam, 20,000 dwt min capacity

***Kooragang Coal Terminal***

KCT, located on 160 hectares of land on Kooragang Island, NSW, began operating in 1984. Originally managed by BHP Billiton, PWCS purchased the Kooragang facility in 1990. In the period from 1994-2008, PWCS invested over one billion dollars to expand the capacity of this terminal. The shiploading capacity currently is 77 mtpa. All of the coal received at Kooragang is delivered by rail into three rail receival facilities located on the northern edge of the terminal. A feature of the Kooragang shiploading system is the use of buffer bins, into which coal is diverted during time of hatch changing or other short term interruptions during loading. This permits operation of the rail mounted shiploaders at a peak rate of up to 10,500 tph for each loader.

**Table 3 – Kooragang Terminal Capacity**

Coal receival	1 x 6,600 tph rail capacity, 2 x 8,500 tph rail capacity
Coal stockpiles	2 x 2.5 kilometres x 56 metres, 2 x 1.3 kilometres x 56 metres, 3,600,000 tonnes max capacity, 1,800,000 tonnes working capacity
Coal stacking	2 x 6,600 tph stacking capacity, 2 x 7,200 tph stacking capacity, 2 x 8,500 tph stacking capacity
Coal loading	3 x 8,000 tph reclaiming capacity, 3 x 10,500 tph shiploading capacity, 2.0 – 3.2 metres wide, 5.0 – 5.5 m/sec conveyor belts
Berths	Berth space for 3 vessels, 16.5 metres depth at berth, 15.2 metres approach to channel
Vessel capacity	232,000 dwt max, 300 metres max length, 50 metres max beam, 40,000 dwt min capacity



The distribution of loading between CCT and KCT is dependent on a number of factors:

- 'Capesize' class vessels usually berth at KCT due to their larger size. However, they are also able to load at the CCT. 'Handysize' class vessels are loaded at CCT also due to their size. 'Panamax' class vessels may be loaded at either KCT or CCT.
- Coal which is to be delivered by road may only be delivered to CCT, and therefore any vessels which are to be loaded with road coal must be loaded at CCT.
- If the vessel to be loaded is 'geared', that is, it has equipment on deck, then the vessel will usually be scheduled to berth at CCT, as the shiploaders at CCT are smaller and are therefore more easily able to move in and about equipment on the deck of a vessel.
- Remaining vessels are then scheduled to ensure an even queue of vessels is maintained between the KCT and CCT. If the queue for one of the terminals is substantially longer than for the other terminal, the schedule may be amended to ensure that the queues are kept reasonably even.

## **NCIG**

NCIG is an incorporated joint venture between six Hunter Valley Coal producers – BHP Billiton (Hunter Valley Energy Coal), Centennial Coal Company Limited, Peabody Energy Coal (Excel Coal Limited), Whitehaven Coal and Felix Resources.

NCIG was formed in 2004 following the NSW Government's invitation for submissions to develop an additional coal loading terminal at the Port of Newcastle.

The first stage of NCIG's terminal, with a capacity to load 30 million tonnes of coal per annum, is currently under construction and is expected to be operational in the first quarter of 2010. All capacity for this first stage has been contracted to NCIG shareholders. NCIG-member producers currently export coal through PWCS' terminals.

The NCIG terminal will consist of rail infrastructure, a coal storage area, wharf facilities and shiploaders. There will be two shipping berths constructed as part of NCIG's first stage of development. A third shipping berth is proposed to be built in the second stage of development (with capacity up to 66 million tonnes per annum).

### **Long term solution to capacity constraints at the Port of Newcastle**

As the ACCC is well aware, there have been excess demand for port terminal services at PWCS and the ACCC has authorised capacity rationing mechanisms. On 6 April 2009, the Newcastle Port Corporation, PWCS and NCIG lodged an Implementation Memorandum (**IM**) to provide a framework for the implementation of a long term solution for access to and expansion of export capacity at the Port of Newcastle. ARTC will not seek to summarise the proposed capacity framework but provides further comments on aligning the HVAU with this framework in **Attachment H**.

## Customers

Most coal produced in the Hunter Valley is sold directly by coal mines (producers) to overseas buyers. About 20 per cent of coal is sold by traders who do not mine coal but act as agents or intermediaries in coal sales.

### 5.3 The Hunter Valley Coal Chain Logistics Team

Hunter Valley Coal Chain Logistics Team (**HVCCLT**) is a cooperative organisation, created in 2003, that is responsible for planning all coal exports from the Hunter Valley.

Membership of the HVCCLT is open to any future operators of transport and port infrastructure in the Hunter Valley coal chain. The current members are:

- Asciano and QR National – above rail providers;
- ARTC, Rail Infrastructure Corporation and Railcorp – track owners;
- Port Waratah Coal Services – current terminal operator;
- Newcastle Port Corporation

The objectives of the HVCCLT are two-fold – to maximise daily coal export volumes and to coordinate planning for the provision of future coal chain infrastructure. A minimum of 14 days notice is received for the arrival of a vessel at the Port of Newcastle. The HVCCLT coordinates vessel berthing, stockpile layouts and train sequencing with the aim of fulfilling customers' orders in the shortest possible timeframe.

As part of the 2008 Greiner Review of the Hunter Valley coal chain it was identified that the HVCCLT requires greater access to information in order to effectively perform its planning and coordination functions. A model is currently under development for the HVCCLT to be incorporated as an independent entity (the Hunter Valley Coal Chain Coordinator or **HVCCC**).

Until that occurs, it is expected that the HVCCLT will perform the functions intended of the HVCCC. ARTC has recognised this in the HVAU, adopting a wide definition of the HVCCC:

*“HVCCC” means Hunter Valley Coal Chain Coordinator or any body having responsibility from time to time for co-ordinating the operation and capacity development of the Hunter Valley Coal Chain, as determined by ARTC*

### 5.4 Master Train Plan and Daily Train Plan - current practice

ARTC produces a Master Train Plan (or long term train schedule) based on the assets in place at that time. This is updated regularly throughout the year. This Master Train Plan outlines to the industry the frequency and location of train paths that the track infrastructure can support.

Each day ARTC provides an update specific for the next 24/48hrs, outlining any changes to the Master Train Plan due to track maintenance and train movements other than coal. This is provided to the HVCCLT and indicates train paths available for coal.

ARTC's logistics planners located at the HVCCLT (work in conjunction with other HVCCLT service providers) to programs coal trains (loaded and empty) on available coal train paths having regard for maximising coal chain throughput given vessel arrivals at the port. This advice is provided to ARTC in the form of a coal delivery schedule.

ARTC develops the Daily Train Plan based on the Master Train Plan, HVCCLT advice (coal delivery schedule) and the Network Management Principles.

## **6. DEVELOPMENT OF THE HUNTER VALLEY ACCESS UNDERTAKING**

### **6.1 ARTC approach**

In developing the HVAU, the following circumstances have been considered by ARTC.

- 2008AU – ARTC is committed to achieving an optimum level of consistency in access regulation between the interstate and Hunter Valley rail networks under its control. This does not mean that ARTC is necessarily seeking to establish uniform regulation over the two networks as ARTC recognises that both commercial and operational differences exist between the networks. Nevertheless, ARTC has sought to apply the same framework for access negotiation, arbitration, pricing, capacity management, and access terms and conditions wherever appropriate. Importantly, outside of access for Hunter Valley coal services, ARTC prefers that access to ARTC's interstate and Hunter Valley coal network be arranged through a single access agreement. It is also ARTC's preference that single access arrangements for access for Hunter Valley coal users to both networks can be arranged.
- Capacity Investment in the Hunter Valley coal network – ARTC recognises the importance to the Hunter Valley coal industry that sufficient system capacity is in place in a timely manner to enable forecasted demand for Hunter Valley coal to be met. This creates further risk to investors in coal infrastructure which must be recognised, and compensated or mitigated in order for investment in infrastructure capacity to be encouraged. Existing arrangements for investment in below rail infrastructure underpinned by the NSWRAU, whilst well intentioned, has not been sufficient to encourage appropriate investment. ARTC has sought to recognise this in its development of the HVAU.
- Hunter Valley Coal Chain – ARTC recognises the benefit to the efficient operation and competitiveness of the Hunter Valley coal network, of coordination between participants in the Hunter Valley coal supply chain. ARTC supports the existing framework for voluntary and cooperative participation in the coordination of logistics and network planning in the Hunter Valley and will continue to do so. ARTC has sought to recognise this in its development of the HVAU, its participation in the development of the Coal Chain Contractual Alignment Guiding Principles and its recognition of the role of the HVCCC.
- Commercial Arrangements in the Hunter Valley – ARTC recognises that coal producers are seeking greater certainty of access to sufficient capacity to meet demand for coal, and wish to directly contract for access rights to enable a stronger commitment towards the delivery of that capacity. ARTC also recognises that coal producers need sufficient flexibility in capacity utilisation to manage fluctuations in demand including such things as shipping arrivals and mine breakdowns. There is however a trade off between certainty and flexibility. It should be noted that providing a high degree of flexibility and certainty of capacity often translates to a need for higher rail and system capacity and investment. ARTC has sought to recognise this in its development of the HVAU.

## 6.2 Consultation with industry

As part of the development of the HVAU, ARTC has conducted a process of consultation with industry stakeholders, including ARTC customers, as well as industry representative groups, the HVCCLT, government bodies and other rail infrastructure managers.

A consultation draft undertaking was initially provided to stakeholders (and the ACCC) in July 2008, and published, for comment through submission. The July 2008 consultation draft undertaking was based on the approved 2008AU, amended as appropriate for the Hunter Valley circumstances. To promote informed consultation, all participating stakeholders were invited to an information session with ARTC on 24 July 2008. The purpose of the information session was to provide a more detailed explanation of the more significant differences in the HVAU as compared with the 2008AU and the reasons for the differences. The session also provided participants with an opportunity to seek further explanation of proposals and to elaborate on any comments made in submissions.

Following this information and first round of submissions, ARTC agreed to a proposal by the NSW Minerals Council, specifically a group known as the Hunter Valley Rail Access Taskforce (**HVRATF**), to engage in more detailed consultation with that group on the basis that it represented a unified view of the 14 coal producers in the Hunter Valley. ARTC also agreed to delay submitting the HVAU to the ACCC (originally planned for August/September 2008) in order to undertake more extensive consultation.

Between August 2008 and December 2008, ARTC engaged in several workshops with the HVRATF (predominantly), individual producers, other coal chain service providers including rail and port operators and the HVCCLT. During this period, ARTC received and considered a number of proposals primarily in the areas of capacity management and pricing, and also provided detailed responses and examples to stakeholders.

During this period, ARTC substantially modified fundamental aspects of the original consultation draft in order to address various stakeholder concerns and issues. Given the number of stakeholders involved and the variety of interests they represent, the views expressed were not consistent throughout the industry, and seemingly not even consistent within particular parts of the industry including the group of producers, and rail operators. This made the task of balancing the needs of all stakeholders, as well as ARTC's own needs very difficult.

A second draft of the HVAU, incorporating mark-ups of changes to the first consultation draft, as well as further explanation of more substantial changes, was provided to stakeholders (and the ACCC) in early February 2009, and published for further industry consultation. A further information session for industry was held in mid February 2009 and further submissions were received. Again, further workshops were held with some stakeholders, specifically the HVCCLT and the HVRATF to consider the changes. This has led to further substantial changes to the HVAU to address industry concerns. Once again, industry views were not necessarily consistent.

As a result, the HVAU lodged with the ACCC has been significantly transformed from the consultation document of July last year. The changes have largely been made to address the concerns of the industry with ARTC's initial proposals, and to satisfy the needs of the producers for both certainty of access to capacity *and* flexibility in the utilisation of that access. These changes have in many cases come at the expense of consistency with

provisions of the 2008AU (which is not unexpected given the different arrangements in the Hunter Valley). The arrangements now proposed are significantly different from existing commercial arrangements in the Hunter Valley and in many cases are unique and unproven. ARTC accepts that this creates some risk for all participants including ARTC going forward, and will need to be carefully managed.

There were a number of issues that could not be agreed and finalised during consultation. ARTC has carefully considered these issues and believes that the HVAU lodged with the ACCC is consistent with its stated objectives and represents a balance of wide ranging industry views, and seeks to minimise those areas of difference prior to commencing a more formal public consultation by the ACCC. These issues and ARTC's approach are discussed in detail in **section 7**.

An overview of the consultation process with industry undertaken by ARTC is set out in Table 4.

**Table 4 – Consultation on the HVAU**

July 2008	First draft of HVAU, AHA and OSA released to stakeholders
24 July 2008	Public presentation of documents in Sydney
August 2008	Submissions received from industry on the first draft of the HVAU
September / October 2008	Meetings with HVRATF, PN, QR and HVCCLT. As a result of these meetings, ARTC provided further information, particularly in relation to pricing under the HVAU.
November 2008	Further submissions received from HVRATF and PN
December 2008 – January 2009	Series of meetings with HVRATF to discuss the HVAU
February 2009	Second draft of HVAU, AHA and OSA released to stakeholders
19 February 2009	Public presentation of documents in Sydney
February/ March 2009	Submissions received Further Meetings with HVCCLT and HVRATF
April 2009	HVAU lodged with the ACCC

## 7. KEY ELEMENTS OF HVAU

This section contains an overview and explanation of what ARTC considers to be the most important elements of the HVAU, the Indicative Access Holder Agreement (“**AHA**”) and standard Operator Sub-Agreement (“**OSA**”) and discusses issues arising out of consultation.

### 7.1 Scope of the HVAU

ARTC’s objective is to have its rail networks governed by consistent access undertakings and contractual arrangements to the maximum extent considered appropriate. As there are fundamental differences between the interstate network and the Hunter Valley network, ARTC has proceeded with different access undertakings for each network. However, the HVAU, the AHA and the OSA are based on the 2008AU governing the interstate network already approved by the ACCC and ARTC is seeking to ensure consistency where possible. In taking this approach, ARTC has provided for a much more detailed access regime than currently applies to the Hunter Valley network under the NSWRAU.

The HVAU represents a significant change to the access regulation applying to the Hunter Valley and ARTC has carefully considered the following issues arising from this change:

- managing access to interconnected networks under multiple undertakings; and
- the scope of the indicative services and prices under the HVAU.

#### **Multiple undertakings**

Currently, the Hunter Valley network (as described in **Attachment A**) is regulated by IPART under the NSWRAU. The HVAU covers the network set out in **Attachment B**. The HVAU is narrower in scope than the NSWRAU in that it does not cover a number of network segments which are now covered by the 2008AU.

Following approval of the HVAU, ARTC’s network will be regulated by three access undertakings:

- the 2008AU covers the interstate network;
- the HVAU will cover the Hunter Valley network; and
- the remainder of the NSW network will continue to be covered by the NSWRAU, largely being the branch line network including some lines leased by ARTC and lines managed by ARTC on behalf of the NSW government.

ARTC’s lease of certain parts of the NSW network provides for ARTC to operate in accordance with the NSWRAU until such time as an undertaking is approved by the ACCC. In time, it is expected that ARTC will have two access undertakings regulated by the ACCC.

ARTC recognises that having more than one undertaking governing interconnected networks may create some issues for the small number of access seekers and users of multiple networks. In particular, the key issues are negotiating access under multiple undertakings and contract management but ARTC considers that those issues are manageable in practice.

- There are a small number of rail operators who use both the interstate network and the Hunter Valley network and they would have to apply for access under different undertakings. There is also the potential for access disputes to arise under each.
- In fact, these users have entered, or are in the process of entering, into access contracts under the 2008AU so in practice, it will simply be a case of applying under the HVAU and any disputes will be under the HVAU. Even if an access seeker sought and disputed access under both the 2008AU and the HVAU concurrently, the ACCC is the arbitrator under each undertaking and such disputes could be joined or managed efficiently.
- ARTC's interstate network is adjoined by other tracks covered by different regulatory frameworks at many locations. The interfaces have been dealt with and ARTC is not aware of significant issues arising with developing required access arrangements in these circumstances.
- ARTC does not consider the small number of ARTC leased lines which may continue to be governed by the NSWRAU for a period of time to be a significant issue. They are used by a very small number of operators and economic cost recovery is very low. ARTC considers that even in the very unlikely event that an access dispute arose in relation to these lines, there is sufficient flexibility under the NSWRAU to deal with a dispute efficiently in the context of a broader access application.
- For non-coal access rights on the Hunter Valley, ARTC intends to offer an agreement based on the indicative access agreement under the 2008AU which ARTC considers is not inconsistent with the requirements of the HVAU as it applies to non-coal usage. ARTC expects that an operator using the interstate and Hunter Valley networks will have a single agreement with ARTC for non-coal traffic on the interstate network and on the Hunter Valley network.
- In terms of contracts, coal access rights on the Hunter Valley Network will be subject to a tailored contractual regime as discussed below. Therefore, a separate set of agreements will be required for coal traffic on the Hunter Valley network covered by the HVAU and, depending on circumstances, ARTC would prefer to include in that agreement any coal access rights required to parts of the interstate network to the extent that is necessary. To the extent this is not possible, then there will be a small number of coal trains which cross from the interstate network into the Hunter Valley network which will be governed by different agreements depending on which network they are running at the time.

Multiple undertakings are unavoidable given the differences between the interstate and Hunter Valley networks and inevitably this gives rise to some complexity for ARTC and users of both networks. However, they are manageable. These issues are already being managed in relation to the 2008AU and the NSWRAU and the replacement of the latter with the HVAU will give rise to access undertakings which are more consistent.



## Scope of indicative services

The HVAU includes indicative services and prices for coal access rights only. The predominant use of the network is for haulage of coal and those users provide the majority of the revenue.

ARTC considered whether to include indicative prices and services for non-coal access rights but has decided not to for the following reasons.

- There are a number of different types of less significant non-coal services operated in the Hunter Valley. No single type of non-coal service could be considered to be substantial enough to warrant indicative pricing under the HVAU.
- The NSWRAU does not do so and ARTC is not aware of any issues relating to the obtaining and provision of non-coal access rights under the NSWRAU arrangements.
- The only service on ARTC's interstate network that warrant indicative pricing are intermodal related services. There are other traffics on ARTC's interstate network that could be considered more substantial than Hunter Valley non-coal traffics.
- In any event, ARTC publishes currently available market terms and conditions (including pricing) for non-coal access. This is no different to treatment on the ARTC's interstate network for non-indicative services.
- In the circumstances, the additional complexity of including indicative prices and services and a separate indicative non-coal access agreement is not warranted.

## 7.2 Alignment with coal chain capacity

ARTC recognises the importance to coal producers in the Hunter Valley in aligning their contracts with the Hunter Valley coal chain service providers. ARTC considered the outcomes of the Greiner process in early 2008 in the development of the initial consultation draft and during industry consultation.

ARTC has also participated in the Contractual Alignment Group which developed the contractual alignment guiding principles in Schedule 5 of the Implementation Memorandum (IM) lodged with the ACCC by PWCS on 6 April 2009. **Attachment H** includes a detailed comparison of the HVAU against those guiding principles and provides comments on how the HVAU and the current port authorisation process can be aligned.

In summary, the HVAU provides for alignment and recognition of coal chain capacity in the following key ways.

- The HVAU requires an applicant to show that it has sufficient network exit capability to match the requested track access. Accordingly, for export coal, applicants will need to establish they have matching port capacity. This is particularly critical for the initial allocation of track access under the HVAU. This is discussed in **section 7.3**.
- The HVAU explicitly recognises the role of the HVCCC in the assessment of coal chain capacity, the initial granting of track access rights and the ongoing optimisation of coal chain performance. This is discussed in **section 7.4**.

- The role of the HVCCC and the RCG in aligning coal chain expansions and the endorsement of planned track capacity expansions. This is discussed in **section 7.5**.
- Finally, the monthly system wide true up test undertaken by ARTC is designed to test whether ARTC has met its contracted commitments by comparing network availability (after taking into account system and member losses) with access holder's contracted requirements (ie the test is against realistic rather than theoretical capacity). This is discussed later in **section 7.10**.

The HVAU is based on the assumption that the HVCCC is established and the current process for determining coal chain capacity and a coal chain master plan is continued. With access to information from ARTC, the relevant port companies and the producers, as well as appropriate modelling tools, the HVCCC will be in the best position to undertake these functions to ensure alignment and maximisation of coal chain throughput. Having said that, the definition of HVCCC in the HVAU, AHA and OSA contemplates another body with a similar mandate.

### **7.3 Port capacity and initial allocation**

ARTC will only negotiate track access rights with an applicant seeking to transport coal to the Port of Newcastle where that applicant already has a contract to offload the anticipated coal or is in negotiations with the port company to obtain this capability (section 3, HVAU). Applicants seeking to transport coal to locations other than the Port of Newcastle will be required to establish that they have sufficient "network exit capability" - i.e. an ability to offload the coal transported.

The requirement for contracted port capacity is also reflected in the Train Path Schedule of the AHA which makes the provision of track access (whether current capacity or future additional capacity) conditional on the access holder first establishing that it has sufficient port capacity.

PWCS will expand from 102 MT to 113 MT per annum in 2009 and NCIG will commence operation with 30 MT of capacity per annum in 2010. PWCS will follow an agreed allocation mechanism for 2009/2010. ARTC believes that there is sufficient track capacity for 2009 and 2010 to match the port capacity allocated under the IM for those years (after taking into account system losses). ARTC is working with the HVCCLT to confirm this through system modelling.

Importantly, by allocating track access for 2009 and 2010 in accordance with port allocations, it avoids the need for any initial queuing mechanism and ensures alignment. Post-2010, it is anticipated that new track capacity will be required to match port expansions. As discussed below in **section 7.4**, this will be identified through the processing of access applications with the assistance of the HVCCC and will require producers to contract for the construction of additional track capacity to meet their requirements.

The HVAU provides that where there are mutually exclusive access applications ARTC will allocate the capacity to the applicant who accepts an access agreement which is most favourable to ARTC (generally this will be based on a NPV of returns test) (section 3.13, HVAU). This is considered to be unlikely to occur given that the HVAU is designed to ensure that track access is expanded to meet port capacity.

However, non-coal applicants are unlikely to be able to compete against coal applicants under the NPV of returns test. Following consultation ARTC agreed there was a need to recognise existing non-coal use of the network and the public policy issues that may arise if this historical access was curtailed. Accordingly, applicants may reserve access rights used for non-coal traffic to the extent it existed immediately before the commencement of the HVAU and is to be used for substantially the same purpose and in respect of the same traffic as the existing access rights. This reservation period lasts for 30 business days from the commencement of the HVAU (section 2.5(b), HVAU).

#### **7.4 Role of the HVCCC**

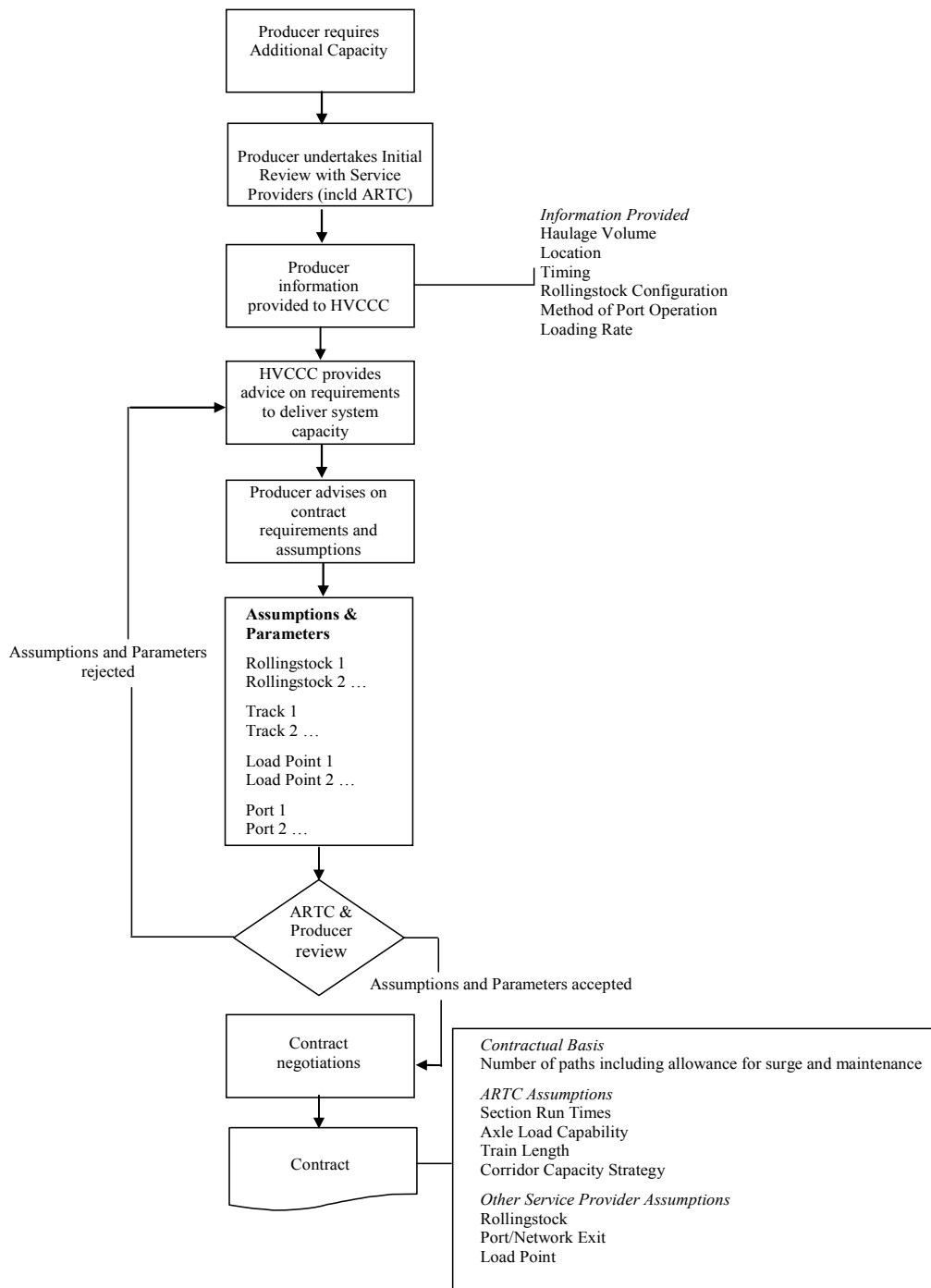
The HVAU recognises the role of the HVCCC in assessing and managing coal chain capacity in a number of areas. Critically, the HVAU provides for:

- all applications for coal access rights to be assessed by the HVCCC for the purposes of enabling the applicant to understand the availability of, and impact on, coal chain capacity and achieve contractual alignment; and
- the HVCCC to manage the day to day coal train scheduling process to align with cargo assembling and vessel arrivals at the port (as is currently done by the HVCCLT).

#### **Applications for access rights – role of the HVCCC**

The consultation process proposed in the HVAU for negotiating track access rights aims to assist applicants in aligning their contractual requirements. The consultation process is depicted in the following diagram.

**Figure 4 – Consultation process for access**



As can be seen from the diagram above, the following steps will be carried out to ensure contractual alignment:

- ARTC will take part in an initial review with other service providers, and with an applicant for coal access rights to assist the applicant in providing the necessary information to the HVCCC to determine the applicant’s contractual requirements (section 3.6 of the HVAU).
- The HVCCC will advise the applicant on the requirements of each of the service providers (e.g. no of path usages for ARTC) necessary to deliver the coal chain

capacity sought by the applicant having regard to the applicant's volumes, load point capabilities, rolling stock configurations, mode of port operations etc (**System Assumptions**).

- It is possible that this analysis will show that there is insufficient coal chain capacity without expansion of one component, eg one or more of additional rolling stock, additional path usages or upgraded load points. This analysis should also assist to understand the most efficient trade offs to achieve the desired volume. For example, it might be cheaper to upgrade the load points than contract for more rolling stock or build additional rail loops.
- The applicant will provide ARTC and the other service providers of their contract requirements and assumptions together with the HVCCC advice.
- ARTC will review the assumptions and parameters with the applicant. If ARTC does not agree with the assumed impact of the access rights sought on coal chain capacity or track capacity, ARTC will ask the applicant to go back and undertake a further review with the HVCCC (section 3.9(d), HVAU). This is critical – ARTC must be of the view that it has the track capacity to meet the contracted requirements of the applicant.
- Once the assumptions and parameters are agreed, ARTC and the applicant will engage in contract negotiations which will reflect the System Assumptions relating to track. The applicant will similarly negotiate with other service providers to ensure that the whole package of System Assumptions is reflected in its suite of contracts with service providers.
- Where an applicant is requesting track capacity that cannot be currently delivered, ARTC will consult with the HVCCC and the RCG as discussed in **section 7.5**.

During the consultation process, it was queried why ARTC is relying on the HVCCC to determine the path usages necessary to achieve the coal chain throughput desired by a coal producer. As explained above, coal chain throughput depends on a number of variables over which ARTC has no control such as rolling stock configuration and operating parameters, system losses caused by other parties and agreed operating modes. ARTC considers that the HVCCC has the information and experience for this role and is the appropriate body to assist applicants in determining contractual alignment.

### **Coal train scheduling – role of the HVCCC**

In terms of operational responsibility, ARTC intends that the HVCCC will undertake daily coal train scheduling as the HVCCLT does now.

- ARTC will provide the Master Train Plan to the HVCCC which takes into account all contracted commitments to assist the HVCCC with daily planning of coal trains to meet the cargo assemblies and vessel arrivals at the port (section 7 of the HVAU);
- ARTC intends to provide the HVCCC with business rules in relation to this step to ensure that ARTC's contractual commitments are included in the HVCCC planning process;

- ARTC will then take the Master Train Plan and the HVCCC inputs to form the Daily Train Plan.

During consultation, it was queried why the HVCCC is responsible for day-to-day scheduling of trains given that it is ARTC's responsibility to develop the Daily Train Plan. ARTC is ultimately responsible for the Daily Train Plan which covers services carrying coal and non-coal freight (as well as passengers). However, the HVAU provides for the HVCCC to undertake day to day scheduling of coal services on the Hunter Valley network which will be in a better position to optimise the throughput of the entire Hunter Valley Coal Chain. This approach is similar to the one which is occurring now. The HVCCLT has been very successful in improving throughput and ARTC believes that this co-ordinated planning and scheduling process should continue. However, ARTC is still ultimately responsible for meeting its contracted track commitments.

ARTC has been upfront with producers that in moving to directly contracted track access rights to meet producers' requirements for contractual certainty, it is possible that some flexibility of path allocation will be lost and that this could impact on coal chain capacity. To the extent this does occur, it will at least provide for accountability and ensure that the correct signals for capacity consumption and expansions are sent, particularly once the indicative track access prices are set by reference to an efficient benchmark (ie once the interim indicative prices cease).

## **7.5 Capacity expansion - role of RCG and commercial viability**

The HVAU contemplates capacity expansions arising in three ways, either through the coal chain master planning process, or at the request of an applicant (or group of applicants) or as identified by ARTC.

### **Additional capacity recommended by the HVCCC or identified by ARTC**

ARTC must cooperate with the HVCCC in planning expansions of track capacity and coal chain capacity. This is covered in clause 6.3 of the HVAU.

Where the HVCCC recommends an investment to provide additional capacity on the network or it is identified by ARTC, ARTC will undertake consultation with the Rail Capacity Group (**RCG**). Following advice from the HVRATF, ARTC has amended the HVAU to provide for the RCG to be the industry consultation and endorsement forum in respect of capital expenditure decisions.

The composition of the RCG is set out in section 6.4 of the HVAU and is consistent with the submissions by HVRATF. It will include representatives of access holders and operators, although only access holders will be entitled to vote. While it is not necessary that RCG members be participants in the HVCCC, there will be cross membership.

In terms of track capacity planning, ARTC will prepare an annual Hunter Valley corridor capacity strategy which will be based on the rolling annual capacity forecast developed by the RCG. It will, among other things, be aligned with Newcastle Port terminal capacity forecasts (section 6.4(c), HVAU).

The RCG will be involved at each stage of capacity expansion, from initial concept assessment through to project close out. The consultation process is depicted in the

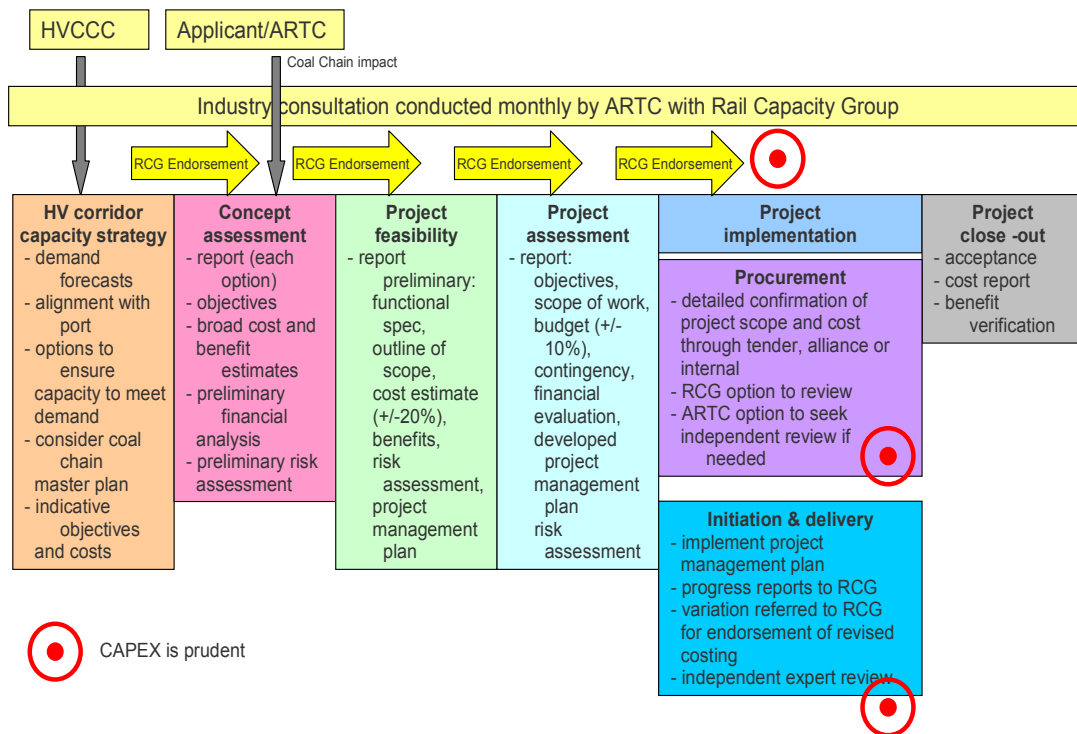
diagram below. ARTC will prepare a report to be provided to the RCG for each option endorsed by RCG at the previous stage.

This provides the opportunity for RCG to formally endorse each stage of a capacity expansion which will enable RCG to:

- endorse a budget for the next stage of development prior to it proceeding;
- endorse expenditure incurred by ARTC at the previous stage to be expensed or capitalised.

Where the RCG has endorsed expenditure, it is deemed to be prudent in accordance with the HVAU and can be included in the RAB. When expenditure is not endorsed by the RCG, ARTC will have the ability to seek endorsement/approval through an independent expert or the ACCC.

**Figure 5 – RCG consultation process**



**Additional capacity sought by an applicant**

An applicant or group of applicants can request additional capacity which has not been included in the corridor capacity strategy (section 6.2 of the HVAU). ARTC will still consult with the RCG on the additional capacity because it may impact on the system.

During consultation, concerns were raised as to whether the RCG might stymie or unreasonably delay projects sought by individual applicants. If the RCG is not willing to endorse the additional capacity at any given stage, ARTC and the applicants may still proceed with the projects outside the RCG process although such expenditure will not be deemed prudent and will not automatically be included in the RAB. The assumption is that, in these circumstances, either the applicants would enter into arrangements with ARTC to pay for the additional capacity themselves or ARTC or the applicant could seek ACCC

endorsement of the additional capacity, enabling its inclusion in the RAB if approved. This does not obviate the need to ensure that such additional capacity is integrated into the planning process and operations of the coal chain.

### **Future projects and commercial viability**

The HVAU and the AHA (clause 6, Train Path Schedule) envision that access holders may contract for future capacity conditional on the completion of projects identified in the AHA. It is possible that this contracting for capacity could be many years in advance. This raises a number of issues which ARTC has sought to address in clause 6 of the Train Path Schedule in the AHA.

#### *RCG endorsement*

These projects will generally need to undergo RCG endorsement as discussed above to obtain certainty that the related capital costs will go into the RAB. Accordingly, ARTC's obligation to complete the projects is conditional on RCG endorsement.

#### *Changes to projects*

It may arise later that projects initially contemplated to create additional capacity are not necessary and that additional capacity can be met by a more cost effective set of projects or that additional projects are needed. The AHA provides that the listed projects in the contract can be added to or replaced with agreement of the access holder or the endorsement of the RCG or the ACCC as prudent. ARTC believes this provides necessary flexibility but with the protection that the change must be found to be prudent by the RCG or the ACCC. This reflects the fact that the AHA is an agreement to provide access and not a construction contract.

#### *Commercial viability*

ARTC's commitment is subject to a commercial viability requirement. ARTC is potentially committing to a very large capital program to provide the access rights sought - when the Access Holder Agreements are taken as a whole. This is potentially a significant funding commitment which is likely to require at least some debt funding. As the recent global financial crisis has shown, it is possible that funding may not be available or available only at prices which make the investments uneconomic when compared to the rate of return. Should ARTC form the view that it is an investment is no longer economic and is unable to obtain funding on a reasonable basis (having regard to the approved rate of return), then it must promptly inform the access holder and enter into good faith negotiations to secure alternative funding arrangements.

This requirement was raised as an issue during consultation - if the project is endorsed by the RCG as prudent and ARTC has long term take or pay contracts, then a project should be commercially viable. ARTC agrees that this is correct up to a point but does not take into account the availability of funding at commercially reasonable levels which is a different issue. ARTC notes that clause 4.2(c) of the Implementation Memorandum lodged with the ACCC by the relevant port companies on 6 April 2009 includes a similar concept for PWCS to be relieved of expansion obligations with the Minister's consent if it is unable to obtain finance.



The Train Path Schedule is indicative only. If the applicant agrees to pay for a particular project itself, then this schedule would also need to be renegotiated to reflect the access holder's commitment to fund the project.

#### *Commitment to project delivery*

The industry has raised that ARTC needs to have greater commitment to delivering projects on time. ARTC does have an incentive in that cost overruns will be subject to prudence review by either the RCG or the ACCC and will also not obtain any revenue under the agreements until projects are completed. ARTC has considered the issue at length but does not believe that additional risk is consistent with the rate of return sought or the comprehensive and open involvement in the consultation process of the RCG in relation to additional capacity. ARTC's approach is to provide an open consultative process through the stages of each project.

Firstly, the requested rate of return does not reflect an assumption of construction risk. Alternatively ARTC could, for example, agree to pay liquidated damages for delay, in which case ARTC would seek to pass on that risk to its contractors who will price the project for the additional risk, meaning that projects will generally be more expensive to reflect this additional risk pricing of ARTC's contractors, irrespective of whether a delay in project delivery arose.

Secondly, the RCG process envisages an open book process with the industry where each stage is subject to scrutiny and endorsement of the RCG. The RCG will be involved in each step and regularly updated. Further, if the RCG believes that the project warrants timing incentives, eg liquidated damages, then this can be dealt with in the initial tendering stages of the project so that the pricing impacts can be understood. If it is, ARTC can then contract on this basis and the benefits, eg damages, can be passed through.

## **7.6 Nature of the access rights – the Operational Tolerance model**

### **Train Paths and Path Usages**

ARTC will provide and charge for access by reference to train paths. A train path is a route between A and B - and in the case of coal to be transported to a port, a route from a port terminal to the mine load point (empty) and from the mine load point to the discharge point at the port terminal (loaded). Following consultation, ARTC introduced into the AHA, the concept of a path usage being the right to run a service on that train path to distinguish between the use of a train path and the train path or route itself.

During consultation, it was raised why ARTC was not selling track access rights by reference to tonnes throughput. As discussed above, tonnes throughput is a combination of load point capabilities, track availability and capability, rolling stock configurations and port receipt rates. ARTC has no control over those matters other than track availability and capability. During the Greiner process, a working group sought to obtain consensus on defining a 'standard tonne' or 'reference tonne' but this was not achieved. Further, ARTC's processes and systems are based on train paths and this is consistent with the approach in the 2008AU.

To aid understanding of the elements contained in this section, as well as the application of the true-up test and TOP rebate determination, a diagram showing coal access rights

associated with train paths and the access holder's accompanying obligations is provided at **Attachment C**.

### **Monthly base**

Under the AHA, ARTC will commit to provide an annual number of path usages (**Annual Contracted Path Usages**) for each of the access holder's train paths.

The Annual Contract Path Usages will be distributed across each month in the year (**Monthly Base Path Usages**) prior to each calendar year to take into account major network outages.

ARTC will be in a position to determine the Monthly Base Path Usages once it has identified the months in which major network outages are planned (**Maintenance Months**) and the path usages lost as a result of maintenance (**Maintenance Losses**). Prior to the beginning of the year, ARTC will consult with the HVCCC and the relevant port companies, in determining its annual maintenance assumptions and identifying the Maintenance Months to minimise coal chain system losses.

In allocating the Maintenance Losses and therefore determining the monthly distribution, ARTC will take into account the following principles:

- all access holders with access rights in a pricing zone will bear an equitable share of the Maintenance Losses for that month;
- ARTC will seek to increase an access holder's entitlement to path usages above the Monthly Average Path Usages in other months to make up for the reduction for Maintenance Losses in the Maintenance Month;
- the Monthly Base Path Usages for an access holder for each month must in aggregate equal the Annual Contracted Path Usages for that access holder.

This "sculpting" of the Annual Contracted Path Usages was developed after ARTC was advised that assuming an even distribution of usage of track access was unrealistic. It is designed to broadly match expected variations in coal chain capacity as a result of major planned outages by track and port.

In determining the TOP charges, it will be assumed that the Annual Contracted Path Usages are spread evenly through the year. That is, an applicant's monthly TOP charge will reflect the TOP charge that would be payable for one twelfth of its Annual Contracted Path Usages. This simplifies the billing process for both ARTC and the access holder, and smooths revenue. Essentially the TOP charge is aligned to the Monthly Average Path Usages.

## **Monthly tolerance**

In addition to the Monthly Base Path Usages for each train path, each access holder with coal access rights will be entitled to additional path usages in the relevant pricing zone as part of its “monthly tolerance”. ARTC has provided for monthly tolerance in response to coal producers’ requests for a degree of flexibility in contracting for their path usages.

The monthly tolerance available to each access holder will be determined consistently across access holders in accordance with the formula in clause 3.3 of the AHA. The monthly tolerance available will be the greater of 13 path usages in that pricing zone or 10% of the access holder’s monthly average path usages in that pricing zone.

ARTC has considered in some detail the appropriate size of the tolerance to be available to access holders. Thirteen path usages, which reflects the typical number of path usages required to deliver one ship load of coal, is likely to provide a small producer with ample flexibility but ARTC was advised by the HVRATF that this was insufficient for larger producers which may have more than one ship arrive out of schedule. Accordingly, ARTC has added the additional 10% limb.

The purpose of the monthly tolerance is to enable an access holder to adjust its contracted path usages from one month to the next, rather than provide additional path usages on top of the annual contracted requirement. Accordingly, an access holder will not be entitled to any path usages as part of its monthly tolerance where that access holder has already used its Annual Contracted Path Usages.

An access holder’s entitlement to use its monthly tolerance is subject to the monthly tolerance cap for a pricing zone not being exceeded. Without this cap, ARTC would have to build capacity to allow for the theoretical possibility that all access holders might exercise their maximum monthly tolerance in a month. This would not be efficient and unlikely to be desirable to access holders. The monthly tolerance is provided to deal with variations in vessel timing and without a cap there would be unnecessary overbuilding in track capacity which would not be reflected at the port and would not lead to any significant increase in throughput. ARTC would expect to align the monthly tolerance cap with the extent to which access holders were willing to fund the building of additional capacity to address variations in vessel timing.

## **Development and refinement of the Operational Tolerance model**

The Operational Tolerance model described above has developed as a result of the consultation process.

Initially, ARTC proposed that it would provide a contracted average minimum number of path usages per month with the average to be determined over the quarter. However, the HVRATF advised that this did not give sufficient certainty for those producers wishing to undertake even railing to NCIG.

Accordingly, in the February 2009 version of the AHA, ARTC proposed two options, for:

- at least the average number of path usages per day, with the average to be determined over a month (for example, 30 path usages per month, and at least one per day); or

- at least the average number of path usages per month with the average to be determined over a quarter.

ARTC had proposed the first option to deal with the campaign railing planned for NCIG and the second option for coal producers exporting coal through PWCS. ARTC was, however, informed by producers that this commitment did not provide enough flexibility to manage variations in port usage over a month (in the case of large producers) or over a quarter (in the case of small producers). In particular, producers sought to have the track access rights include flex mechanisms similar to the very large flexing arrangements available at the port.

The Operational Tolerance model was developed after a number of discussions with the HVCCLT. ARTC has recognised that it is not possible to provide both the maximum flexibility and the maximum certainty ideally sought by producers, for example, allowing an access holder to switch 50 path usages from February to March and guaranteeing the access holder that it can use the 50 path usages “switched” from February in March. Such flexibility would only be possible if ARTC expanded the Hunter Valley network to the point where there was enough additional capacity to enable each access holder to use the maximum number of path usages it would ever require, each month. This would result in excessive, inefficient capacity.

### **Further development**

There are two aspects of the Operational Tolerance model which need to be further developed.

First, the Operational Tolerance model has been developed on the basis of campaign railing used for PWCS. ARTC recognises that this model may not give producers who are even railing to NCIG the certainty they need because the commitment is not sufficiently granular. ARTC is working with the HVCCLT to understand how the introduction of NCIG will impact on track usage and path distribution. At this stage, and without some practical experience, ARTC was unable to commit to a model in the AHA. It was particularly concerned that committing to daily path usages for NCIG users may in fact give rise to a de facto priority to track access rights over PWCS users. ARTC is committed to developing a model to meet the needs of NCIG users and consulting with the industry, but ARTC does not believe that this needs to delay approval of the HVAU.

Second, the sculpting of the Annual Contracted Path Usages to obtain the Monthly Base Path Usages needs to be aligned with the producers’ vessel nomination expectations for the upcoming year to ensure as much alignment as possible between monthly track access rights and port access rights. This is something that should be co-ordinated through the HVCCC and it is premature to anticipate those arrangements in advance of its establishment and the implementation of the long term port solution.

## **7.7 Contract model – separating coal access rights from operation**

Consistent with the Greiner outcomes, ARTC has introduced a new contractual framework where coal producers can contract directly for track access.

Under the HVAU, coal producers, as well as above rail providers (operators) will be able to directly contract for track access rights to the Hunter Valley network for the purposes of transporting coal (ie via the Access Holder Agreement). Separate agreements will be

entered into by ARTC and accredited operators, nominated by the access holder, to operate trains on their behalf on the network (ie the OSA).

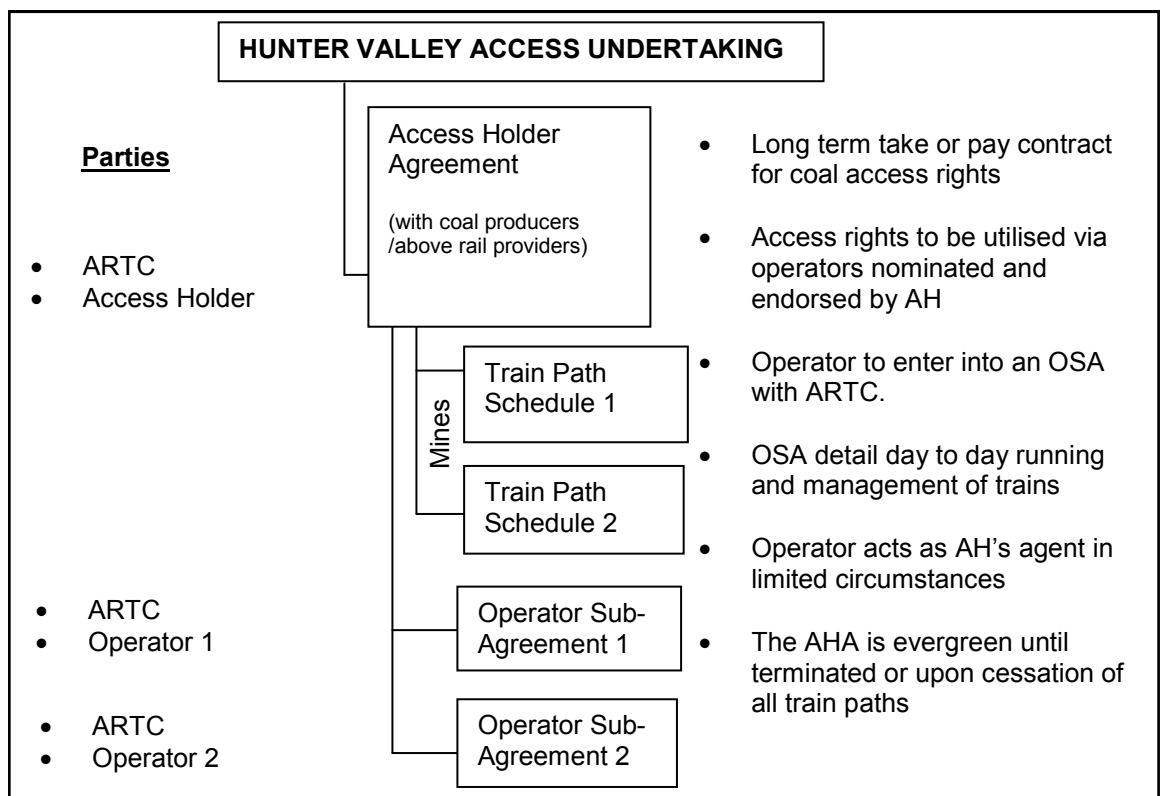
This model exists alongside the current model where access rights are generally held by above rail service providers. ARTC expects that this will remain the common contractual model in the case of non-coal access rights, although the HVAU does provide that ARTC will enter into an access agreement with an applicant which is not an accredited operator provided the applicant will procure the services of an accredited operator and all the terms and conditions of the access agreement are met by the applicant or the operator (section 1.3(c), HVAU).

The principal objective in directly contracting with producers is for ARTC to obtain greater producer commitment to the long term investments in capacity that will be needed to meet demand, as well as to provide coal producers with a greater degree of control over the transportation of their coal and the alignment of their contracts across the coal chain.

**Overview**

The following diagram provides an overview of the contract model for coal access rights.

**Figure 6 – Overview of the AHA/OSA contract model**



As shown by the diagram, the key features of the proposal are as follows:

- ARTC will enter into Access Holder Agreements with coal producers or above rail operators, under which ARTC will grant track access rights to the Hunter Valley network.

- An access holder will be required to nominate an accredited operator(s) to use the train paths contracted under the Access Holder Agreement. Where the access holder is an above rail operator, the access holder and operator can be the same entity.
- An access holder may nominate more than one operator for each train path.
- The nominated operators will be required to execute an OSA which governs the running of trains for the access holder on that access holder's contracted train paths. The access holder must endorse each OSA and the OSA will be an annexure to the Access Holder Agreement.
- Each operator is an agent of the access holder for limited purposes. This is designed to ensure that ARTC can deal with the operator (rather than the access holder) for day to day operation of the network and the running of trains (eg giving of instructions and train manifests). The access holder is not responsible for the operator's breaches of the OSA (unless directed by the access holder). For example, the access holder will not be liable to ARTC under the Access Holder Agreement where its operator has caused an incident on the network.
- These arrangements only apply to coal. The provision of track access rights for other commodities will continue to be contracted for in the current manner (unless an access seeker requests otherwise).

#### **AHA/OSA model versus other models**

In developing the model under which producers can directly contract for track access, ARTC considered a number of options, including the existing contract models of Queensland Rail Network Pty Ltd (**QR Network**) and the new contractual models proposed by QR Network as part of its 2009 undertaking before adopting the model described above.

The existing QR model under which producers could directly contract for access rights required the producer to subcontract out the operation to the operator and to be entirely responsible for the actions of their operators, including accepting liability for breaches of rail safety and incidents. There was no direct relationship between the track provider and the operator. ARTC understands that producers have not taken up this option because of the liability issues. ARTC has deliberately developed the AHA/OSA model to overcome this issue by having a triangular relationship, including a direct agreement between ARTC and the operator. The access holder will only be liable for an operator's actions in limited circumstances.

The model proposed by ARTC in the HVAU is similar to the new model proposed by QR Network. Both models separate access rights from operational matters with one contract dealing with capacity management (the AHA or Capacity Access Agreement in QR Network's model) and another contract covering operational elements (the Operator Sub Agreement or Train Operations Agreement in QR Network's model). Similarly, in both models, the operator agreement will be linked to the access holder agreement. The key difference is that under QR Network's proposal, an operator may have a single Train Operations Agreement linked to capacity contracted under a number of Capacity Access Agreements while ARTC is proposing a separate OSA to be endorsed and attached to each Access Holder Agreement.

During consultation, the above rail operators have raised concerns about the administrative burden of negotiating and managing a number of OSAs. As the counterparty, ARTC will also have this issue. Some operators have proposed an alternative “driver’s licence” model under which the operator signs just one OSA with ARTC which entitles them to run on the Hunter Valley Network. Access holders are then free to use the operator services. This has some similarities to the proposed QR model above.

ARTC has given serious consideration to using a “driver’s licence” model but has decided that the AHA/OSA model is preferable for the following reasons despite the potential of a larger administrative burden.

- ARTC considers that a separate OSA, to be endorsed and agreed under each Access Holder Agreement is important to ensure contractual alignment. If an access holder negotiates additional or amended terms regarding the use of its train paths in the Access Holder Agreement, such amendments can be reflected in the individual OSA attached to that agreement. An operator may impact on the utilisation of an access holder’s train paths and it is important that an access holder has a degree of control over how their access rights are actually used given the long term take or pay commitment to be taken on. It also ensures there is consistency between an Access Holder Agreement and its related OSAs.
- In contrast, under the driver’s licence model, ARTC could not agree any changes to the Access Holder Agreement which are inconsistent with an operator’s driver’s licence. ARTC believes this is inconsistent with the fundamental change being sought to be achieved. Producers through the Access Holder Agreements should now be driving the contractual arrangements and alignment in the coal chain rather than being locked into arrangements agreed between two service providers, namely ARTC and the operators.
- The OSA also gives greater flexibility and reduces the risk of one operator obtaining an advantage over others. A driver’s licence model can only work if the operators are all placed on the same terms, otherwise an operator with greater bargaining power may seek a contractual benefit under its driver’s licence which allows it to capture more of the above rail market. ARTC would have to carefully consider any variation to the driver’s licence to ensure this does not occur. However, ARTC does not consider it realistic to think that one set of terms can apply equally to all operators.
- In contrast, under the AHA/OSA model, the OSA is subservient to the Access Holder Agreement. The access holder has the ability to negotiate or be involved in the negotiation, of all aspects of their access rights and to capture the value of its access application for the benefit of any operator it chooses.

If access holders have little appetite for tailored Access Holder Agreements/OSAs, then ARTC expects that the model will work in a very similar manner to the driver’s licence model. ARTC will agree an OSA with each operator and that OSA will then simply be duplicated for each of the relevant Access Holder Agreements. This is not prevented under the proposed arrangements. That is, there will only be one negotiation with each operator. Nevertheless, the model proposed in the HVAU provides a degree of flexibility in the event that in the future an access holder has particular requirements which require amendments to the OSA.

ARTC expects that there will be fundamental changes to how the Hunter Valley operates during the term of the HVAU and this flexibility should be retained.

## **7.8 AHA term and structure – interaction with mine life**

As discussed above, ARTC is committing to provide train paths. Each train path is a route between A and B - and in the case of coal to be transported to a port, a route from a port terminal to the mine load point (empty) and from a mine load point to the discharge point at the port terminal (loaded). The rights attaching to each of these train paths are detailed in the train path schedules to the AHA, and there is one train path schedule per mine.

ARTC considers that the modular approach with a separate train path schedule for each mine has a number of advantages:

- each schedule can commence and terminate at a different time to allow matching with mine life;
- each schedule can include terms specific to those train paths/mine. For example, one schedule can be conditional upon the completion of commissioned extensions to the track.

### **Term**

The grant of train paths are “evergreen” (ie not for a fixed term or estimated mine life) but subject to “no fault” termination rights of each party after the initial term.

Neither party can terminate train paths within the initial term (other than for a breach). The initial term will generally be at least 10 years except where remaining mine life is shorter. An access holder may terminate on 5 years’ notice but notice cannot be given until the expiry of the initial term.

The ten plus five year initial term, forming part of the indicative terms only, reflects a minimum period of TOP revenue to provide ARTC with sufficient certainty. ARTC is willing to negotiate shorter or longer terms depending on the life of the mine. However, where a shorter term (outside of the indicative arrangements) is sought to match mine life, the grant of train paths would be on a fixed basis with no guarantee of renewal. This is to discourage shorter term contracts being sought in the case of a mine with a longer life.

ARTC may terminate after the expiry of the initial term if the mine served by a train path has ceased operation on 3 months’ notice. While it is expected that access holders will terminate if mining ceases, the latter right is necessary to ensure that the contracted train paths are not hoarded.

ARTC initially proposed a 10 year rolling term which would have required 10 years notice to terminate but producers advised that this did not give sufficient ability to match contracted track access with the mine life. In response, ARTC therefore proposed an evergreen term with an ability to terminate on 5 years notice after the 10 year initial term. HVRATF suggested 3 years notice but this meant ARTC was taking on greater stranding risk given that most rail infrastructure will last longer than 13 years and will not be fully recovered within that time. ARTC considers a 15 year commitment reasonable in circumstances – effectively a sharing of the risk.



ARTC now notes that the IM provides for “10 year evergreen” Long Term Ship or Pay Contracts. It is not entirely clear what is meant by this but it appears broadly consistent with ARTC’s proposal.

**Train Path Schedules**

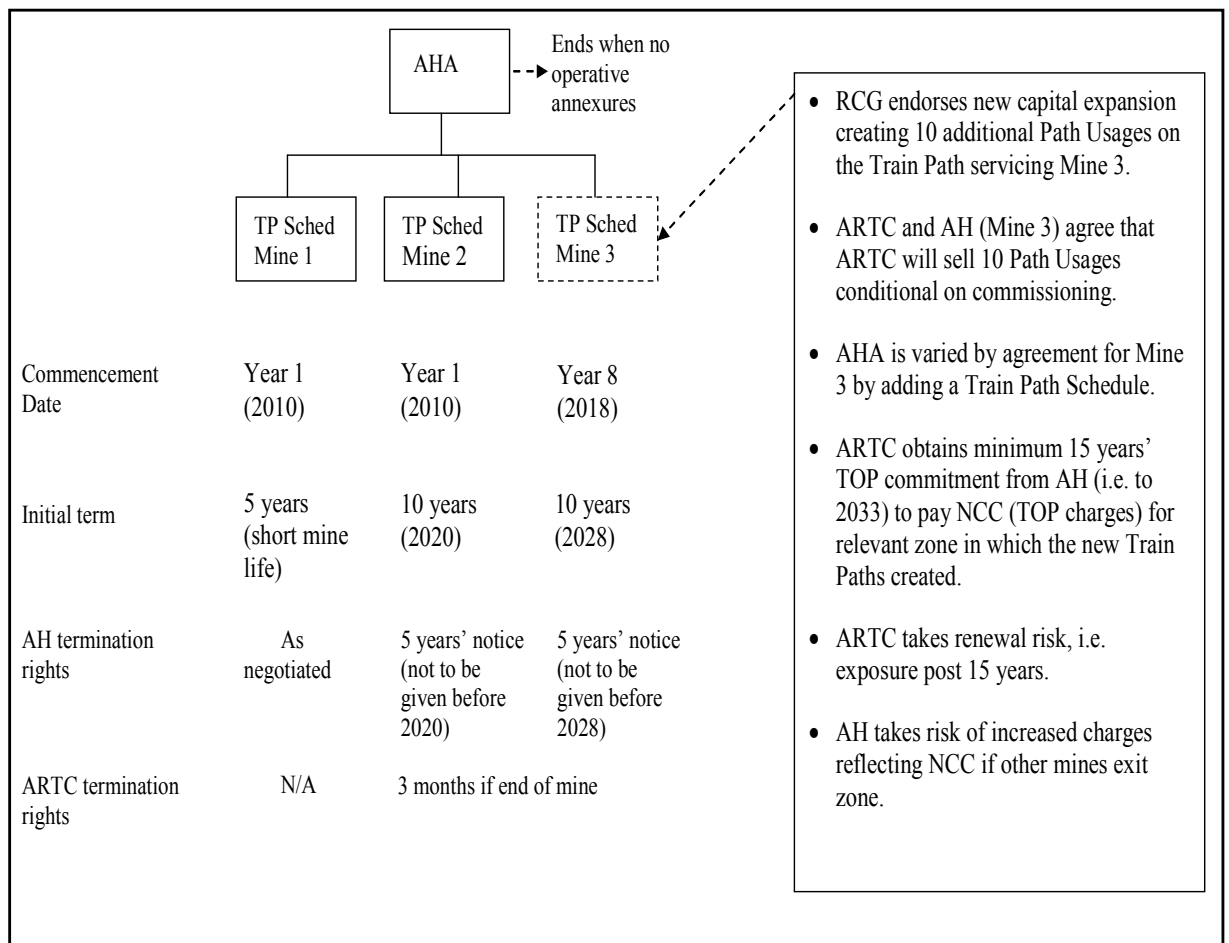
The termination rights set out above apply to each Train Path Schedule.

The term of the (indicative) AHA itself will be “evergreen” and will not expire until there are no applicable schedules remaining (i.e. no train paths in operation).

An access holder who contracts for new train paths resulting from new capital projects will have its Access Holder Agreement amended to include a new a Train Path Schedule relating to those train paths. The initial term of that schedule will be generally be 10 years. The TOP price to be paid by those access holders will be reflected in the new annexure prior to the train paths becoming available.

This is demonstrated in the diagram below.

**Figure 7 – Overview of AHA and Train Path Schedules**



## **Long term contract protection**

Given that most Access Holder Agreements are likely to be evergreen, there needs to be protections to deal with changes overtime.

In the event that the ACCC approves a new access undertaking or the HVAU expires without replacement, then the Access Holder Agreement will contain mechanisms allowing ARTC to roll access holders on to new terms approved by the ACCC (except to the extent that the existing terms reflect negotiated outcomes rather than standard terms) subject to appropriate dispute resolution mechanisms.

The Access Holder Agreement will also contain a mechanism to provide that in the event there is a change in law which varies the obligations of ARTC or the access holder which cannot be excluded, the parties will agree to negotiate in good faith to agree amendments to the Access Holder Agreement with the fallback of dispute resolution.

## **7.9 Liability allocation**

### **Access Holder Agreement**

Under the AHA, ARTC's sole liability for failing to make available contracted coal access rights is a TOP rebate. This is effectively capped at the amount of the TOP charges paid by an access holder in a year. ARTC's liability to pay TOP rebates is determined in accordance with a system wide true up test detailed below in **section 7.10**.

ARTC is not in a position to assume liability for damages beyond the TOP rebates arising out of failure to make access available given the relative differences in ARTC's requested rate of return and the potential monetary exposure to access holders. It is quite usual for a service provider in these circumstances to cap its liability at the amount of charges received in a year.

Clause 12 of the AHA provides for a number of mutual releases, exclusions and liability caps. Importantly, the parties release each other from incidents. ARTC's understands that access holders do not want to have liability for train derailments or accidents as this is the responsibility of the operator and ARTC. Accordingly, liability for incidents is dealt with in the OSA. The assumption is that access holders are not responsible for incidents because they do not directly control the rolling stock or its operation. It was raised in consultation that access holders can cause incidents at the interconnection of mine rail spurs and the ARTC network. Liability in such cases is dealt with in the connection agreements between ARTC and the access holders rather than in the AHA.

### **Operator Sub-Agreement**

The liability regime in clause 15 of the OSA is based on the regime included in Indicative Access Agreement included in the 2008AU but has been modified in respect of how it deals with third party claims. The history of why this change is necessary and the process leading to it needs to be explained.

Under the liability regime in the 2008AU, ARTC and the operator allocate all liability arising out of an incident (including third party claims) between them based on principles set out in clause 15. In effect, this is a contract based liability regime which displaces ordinary general law principles (such as negligence) relating to liability. The intent was to reduce disputes

which would arise if liability was based on general principles, eg arguments and claims as to negligence.

Clause 15 of the OSA was drafted on the assumption that operators do not accept liability to third parties and therefore any third party loss allocated under the clause 15 regime would be loss that arises as a result of breach of contract or negligence by the operator. If ARTC was negligent, then the operator's customer could pursue ARTC at general law.

Following approval of the 2008AU, ARTC became aware that an operator was contractually accepting the risk of loss for goods it carries regardless of the cause of the loss. Accordingly, ARTC could become liable for loss of goods of an operator's customer under the clause 15 regime even though the operator was not liable to that customer under ordinary general law principles and ARTC was not liable to that customer at general law. ARTC was very concerned about the potential exposure this involved.

Accordingly, in October 2008, ARTC applied to the ACCC to vary this liability regime by removing contractual liability to third parties. The ACCC released a draft decision rejecting this variation for various reasons. One issue raised was that ARTC had not done sufficient consultation - it became clear to ARTC from submissions that the intent of the variation had been misunderstood by some operators. Accordingly, ARTC withdrew the application.

ARTC has reconsidered the liability regime under clause 15 as a result of those submissions and is proposing changes to exclude all third party claims from the contractual liability regime and leave them to be dealt with in accordance with general law principles. ARTC is in the process of consulting with operators about these changes for the purposes of making them to existing track access agreements entered into under the 2008AU.

Therefore, under the HVAU and specifically, under the OSA, ARTC has sought to deal with the liability between ARTC and the operator in the following ways:

- the clause 15 liability regime applies to loss or damage to property of ARTC or the operator;
- claims from third parties (including the access holder) are excluded from the liability regime;
- a mutual exclusion for consequential loss (other than third party liability);
- third party liabilities are recoverable from the other party in accordance with clause 15.6 (discussed further below); and
- a mutual exclusion for any consequential loss arising other than from Incidents.

ARTC and the operator still remain liable to a third party (eg a customer) at general law, eg for breach of contract or negligence. However:

- ARTC and the operator can only seek contribution from the other for a third party liability on the basis of negligence or breach of statutory duty of the other party (ie not contract claims); and

- before ARTC or an operator can seek contribution from the other in relation third party claims made against them, they must first take the benefit of any liability limitations available to them.

The proposed OSA liability regime does not exclude any rights of a third party to claim directly against ARTC in the event of loss or damage of its goods. (However, access holders are subject to the AHA liability regime discussed above). ARTC will remain liable to third parties in the event that the third party can establish a legitimate claim based on the principles of general law, such as negligence or breach of statutory duty.

As discussed above, ARTC is still in discussions with certain operators on the new clause 15 in relation to the interstate network. Once it has tested the new clause with these operators, ARTC proposes to consult with all operators and have consistency between the 2008AU and the HVAU on this regime.

### **7.10 True-up test: rebate**

Under the AHA, ARTC's sole liability for failing to make available contracted coal access rights is a TOP rebate. This is effectively capped at the amount of the TOP charges paid by an access holder in a year.

ARTC's liability to pay TOP rebates is determined in accordance with the true up tests detailed below.

#### **Overview**

ARTC is proposing a two stage true-up test to determine an access holder's entitlement to a rebate of TOP charges paid.

First, ARTC will carry out a pricing zone-wide true up on a monthly basis (the system-wide monthly true-up test) to assess whether ARTC made available the path usages it contracted to provide in that month, including monthly commitment, tolerance and paths removed for maintenance. Where the capability of the network to make path usages available in a pricing zone in a month is less than the paths required in that month (for all actual or contracted claims on network capacity) - i.e. the system availability shortfall is greater than zero, an access holder with a train path in that pricing zone will accrue a TOP rebate if it has not used its contracted entitlement. TOP rebates are not paid out on a monthly basis but are accrued throughout the year.

Second, ARTC will carry out an annual individual reconciliation to determine whether an access holder has used its annual contracted path entitlement. If an access holder has used or exceeded its annual contracted path requirement, the access holder will not be entitled to a rebate of its TOP charges - effectively any TOP rebates accrued from the application of the pricing zone wide monthly test will no longer apply. If an access holder has not used its annual contracted path requirement, the access holder will be entitled to a rebate. The rebate the access holder is entitled to will be either: the TOP charges associated with the difference between the access holder's annual contracted path requirement and annual path usage, or the sum of the TOP rebates accrued under the monthly system wide true-up test, whichever is the lowest.

A diagram addressing the application of the system-wide monthly true-up test and TOP rebate determination, as well as the coal access rights associated with train paths and the access holder’s accompanying obligations is provided at **Attachment C**.

The purpose of the tests are to incentivise ARTC to only contract for track capacity which is realistically available, ie the availability of the network in the month must meet the contracted commitments and ad hoc usages plus an allowance for path usages lost as a result of member losses including maintenance losses and system losses from other service providers.

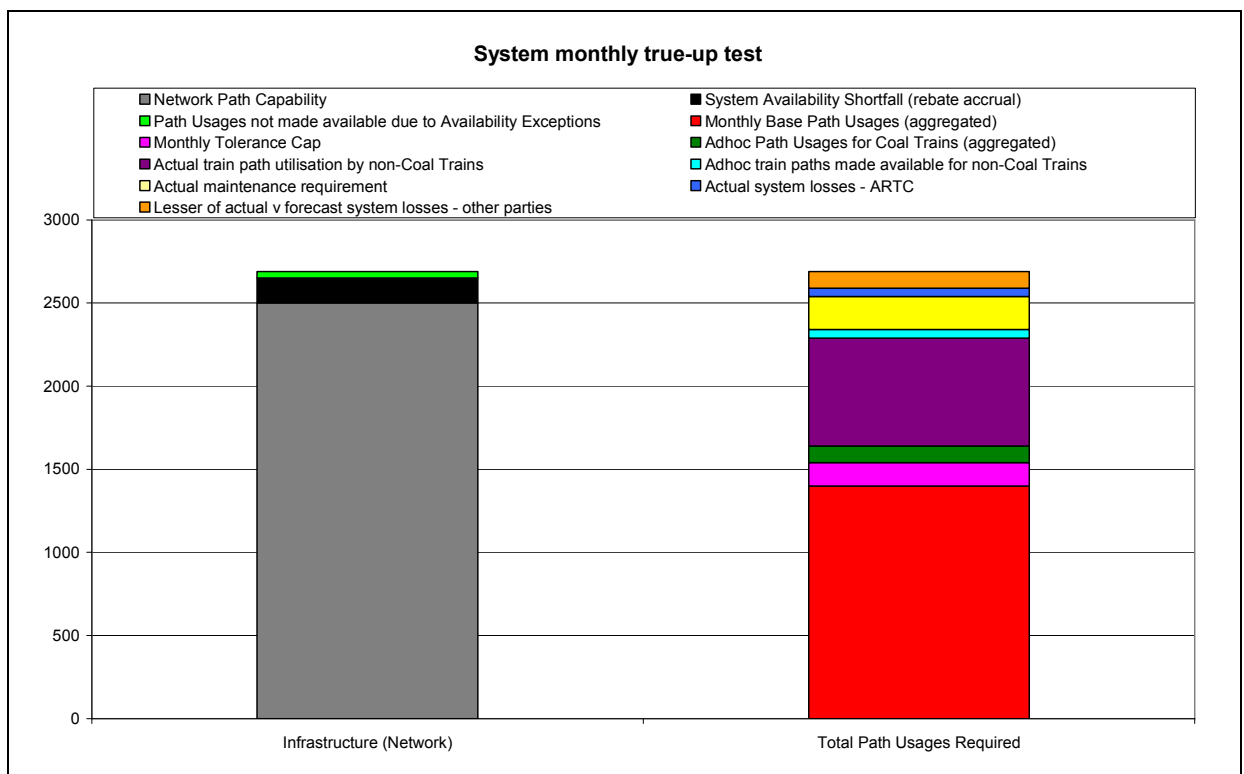
The true-up provisions are identified in the HVAU as an essential element of all AHAs. This is because, unless these provisions are identical and applied consistently, the true-up test would be unworkable.

**Monthly system wide true-up test**

The system wide true-up test set out in schedule 2 of the AHA aims to assess whether the actual capability of the network in the pricing zone during a month was sufficient to meet the path usages required by access holders in that pricing zone under their access holder agreements.

The test is depicted in the following diagram.

**Figure 8 – System wide true up test**



In simple terms, a rebate will be accrued if the right hand bar for a pricing zone is greater than the left hand bar (less the black component and capacity lost as a result of the availability exceptions (effectively matters beyond ARTC’s control which are not otherwise

already allowed for in the right hand bar)). The black component represents the balancing mechanism and equals the system availability shortfall.

The right hand bar represents an aggregation of the path usages required to meet contracted commitments, ad hoc usages and allowances for losses. The left hand bar represents the availability of the network plus capacity lost as a result of permitted availability exceptions.

An access holder will not, however, accrue a take or pay rebate in respect of a train path where the access holder has used its contracted monthly path usages for that train path and its monthly tolerance (subject to the Monthly Tolerance Cap) in the applicable pricing zone. In these circumstances, the access holder has obtained the path usages it has contracted for.

The take or pay rebate accrued by an access holder for each train path in the pricing zone will be a proportion of the access holder's monthly take or pay charge for that train path in that pricing zone.

The proportion that will be applied to the access holder's monthly take or pay charge to determine the rebate reflects the extent to which the system availability shortfall (i.e. the difference between the total paths required and network path capability) affected those access holders holding coal access rights in that pricing zone who didn't use their monthly entitlement (including tolerance). This is calculated by dividing the system availability shortfall by ARTC's total monthly coal commitment in that pricing zone (excluding the entitlements of those access holders who received their monthly entitlement).

For example, assume ARTC made 500 path usages available in pricing zone 2 and the total path usages required were 700 (including contracted commitments, ad hoc usages and allowances for member losses). If the aggregate monthly base path usages and monthly tolerance cap in the zone for those access holders with coal access rights that did not receive their contracted monthly entitlement (including tolerance) was 600 path usages, an access holder who has not used their contracted path usages would receive a rebate equivalent to one third of their take or pay charges for that train path in that pricing zone (that is, 700 minus 500, divided by 600).

### **Annual reconciliation**

ARTC will carry out an annual reconciliation of take or pay charges following the end of the calendar year and no rebates will be made until the annual reconciliation is carried out (clause 5.4 of the AHA).

If an access holder's actual annual path usages for a train path were less than the access holder's annual contracted path usages for that train path, the access holder will be entitled to a rebate at the end of ARTC's financial year.

The rebate will be determined in accordance with the following principles:

- If the difference between the access holder's annual contracted path usages and the path usages actually used by the access holder on the train path, multiplied by the take or pay charge associated with the path usages not utilised, is less or equal to the sum of the monthly system rebates accrued by the access holder under the

monthly true-up test, the access holder will receive a rebate equal to the difference between its annual contracted path usages and its actual annual path usage, multiplied by the applicable take or pay charge;

- If the difference between the access holder's annual contracted path usages and the actual path usages utilised by the access holder on that train path, multiplied by the take or pay charge associated with the path usages not utilised, is greater than the monthly system rebates accrued by the access holder under the monthly true-up test, the access holder will receive a rebate equal to the sum of the monthly system rebates accrued by the access holder under the monthly true-up test.
- No rebate for take or pay charges will be payable to an access holder where the access holder's actual annual path usage is equal or greater to the access holder's annual path usage requirement. If this is the case, the access holder received its annual requirement as contracted for.

ARTC will not recover rebates through the unders and overs mechanism. It is lost revenue.

### **Rationale**

ARTC has proceeded with a system wide true up test because it is virtually impossible to measure whether ARTC has made contracted path usages available to an individual access holder when those path usages can be requested anytime in the month (ie the path usages are not contracted to be provided for at particular times as under the 2008AU). When an access holder has not utilised all of its contracted path usages, it is equally difficult to establish whether the shortfall results from path usages not being made available by ARTC, or from the path usages not being required by the access holder.

In theory, all access holders could request their path usages at the same time but this is very unlikely to occur because path usages will be requested in order to assemble cargo for nominated vessels (at least for PWCS). Therefore, the vessel arrivals at the ports will generally determine who is seeking track access rights at any particular time in a month. Accordingly, there is a natural distribution of requests occurring which will broadly be consistent with the port access. This means that measuring the shortfall over the month, and providing rebates in the same proportion that the shortfall bears to the monthly coal commitment to those access holders who have not used their contracted monthly entitlement provides a proxy mechanism for assessing the impact on individuals.

ARTC accepts that a system wide mechanism is not a perfect proxy and that in any one month, it is possible that an access holder who has not been able to use its path usages *at the time it wants them* may not be entitled to a rebate. However, it will also work in reverse – there will be occasions where an access holder will receive a rebate even though it did not require its full entitlement in that month. In any case, ARTC has not been able to develop a more exact mechanism which can be administered for a reasonable cost. It believes the system wide true up test and the annual reconciliation provides a reasonable balance in the circumstances.

### **7.11 Trading**

In clauses 16.3 and 16.4 of the AHA, ARTC has provided for permanent and temporary trading of path usages. As the trading principles will need to be applied uniformly across

access holders in order for the trading regime to work, ARTC has recognised the trading provisions in clause 16.4 of the AHA as an essential element of an Access Holder Agreement.

There are three principles underlying the trading mechanism:

- a trade of path usages can affect coal chain capacity and ARTC's ability to meet its contracted commitments and therefore there must be some regulation of trading;
- permanent trading of path usages will give rise to a direct relationship between ARTC and the new access holder for those paths;
- temporary trades of path usages are akin to a subcontract between the transferor and transferee of those path usages and ARTC will still generally deal with the transferor in relation to those paths.

### **Permanent trades**

When an access holder seeks to permanently trade or assign a train path or a path usages, the new access holder will be required to amend their existing Access Holder Agreement, or enter into a new Access Holder Agreement for the traded train paths on terms consistent with the terms of the original Access Holder Agreement covering the traded train paths. Where the new access holder seeks to vary the terms on which the train paths are provided and the variation involves lower take or pay charges than those agreed to be paid under the original Access Holder Agreement, then either the former access holder or the new access holder will need to enter into arrangements with ARTC for the payment of the difference. The principle is that ARTC would be no worse off as a result of a permanent trade.

### **Temporary trades**

A temporary trade is defined as the temporary assignment, sale, trade or sub-licence of a path usage for a period of less than 12 months.

Two classes of temporary trades are envisaged:

- trades meeting the conditions set out below which can take place without ARTC's consent (although ARTC will need to be given advance notice); and
- trades which do not meet the necessary conditions and which cannot take place until ARTC has considered the impact of the trade and provided consent.

A trade must meet the following conditions before it can take place without ARTC consent:

- the former access holder remains liable to ARTC for the TOP charges and the new access holder will be liable for the non-TOP charges;
- two week's notice - or such lesser period as notified by ARTC - must be given to ARTC;



- the new entry point for the traded path usages must be closer to the Port of Newcastle (i.e. the trade can only go from west to east) and the new entry point must be within the same or a closer pricing zone than the former entry point;
- the former and the new access holder each warrant that the trade will not adversely impact coal chain capacity and agree that ARTC is entitled to rely on this warranty;
- the new access holder must only use an operator who has an unconditional operator sub-agreement with ARTC and which is endorsed by that access holder;
- the new access holder's operator must comply with the service assumptions relating to the traded train path.

Where a trade does not meet these conditions, ARTC will consider the impact of the trade on coal chain capacity and on the rights of other access holders. ARTC will not unreasonably refuse an access holder's request to trade a train path subject to being given at least two week's notice or such lesser period as notified by ARTC from time to time.

### **Rationale**

Unlike other services traded, train paths and path usages are not fungible - no two train paths are identical with different load points as well as potentially different service assumptions and discharge points. This means that transferring path usages from one train path to another needs to be subject to careful limitations to avoid the trade having an adverse effect on coal chain capacity.

In considering the most efficient and effective way of ensuring trades do not have an adverse effect on either coal chain capacity or the access rights of other access holders, ARTC considered a number of options including:

- requiring an assessment by ARTC (or HVCCC) of all proposed trades to determine the impact on the coal chain (the so-called "hands-on" approach);
- limiting trades to trades of "like for like" train paths.

Neither of these models was considered effective. In order to "guarantee" that a trade would not have an effect on coal chain capacity or the access rights of other users, the notion of a "like for like" train path would need to be so narrowly defined as to render the trading scheme redundant. In many cases, the trade would need the same network entry (and exit) point as well as identical operational specifications.

The option of requiring an individual assessment by ARTC (or by the HVCCC) in respect of all requests to trade a train path was considered unnecessary and unwieldy, imposing what producers and potential access holders would consider an unnecessary delay.

The dual approach proposed in the HVAU addresses these potential concerns and caters for two different classes of trades.

First, those trades which are from west to east (i.e. the new access holder's entry point is closer to the Port of Newcastle than the former access holder) and where the new and former access holders are prepared to warrant that the trade will not have an adverse effect

on coal chain capacity. In this scenario, the trade can take place automatically, provided ARTC has two weeks advance notice of the trade or such other period as agreed;

Second, those trades which are not straight-forward where, for example, the access holders are not prepared to warrant the trade will not have an adverse effect on system capacity or where the new access holder's entry point is west of the former access holder's entry point. In this scenario, it may still be the case that the trade will not have an adverse effect on system capacity nor on the access rights of another access holder, however, an individual assessment will clearly be required.

### **Two week notice period**

At the public meeting on 18 January 2009, producers and other potential access holders queried whether a two week notice period for automatic trades where access holders have warranted that the trade will not have an adverse effect on coal chain capacity was required. Producers submitted that two weeks advance notice of a trade proposed in the HVAU is unnecessary and will discourage temporary trades.

While ARTC will rely on the warranty provided by the former and new access holders that the trade will not have an adverse impact on coal chain capacity, ARTC will still be required to assess whether the trade will have an impact on the access rights of other access holders. In practice, ARTC will be reliant on the HVCCC to determine whether a trade will impact on coal chain capacity and if so, the conversion, ie the extent to which the nominal path usages traded needs to be reduced to reflect the additional coal chain capacity consumption by the transferee. Until the HVCCC is established, trading processes determined, and the modelling process understood, ARTC is not able to commit contractually to a shorter period.

Nevertheless, ARTC appreciates the concerns expressed at the public meeting and recognises that it may be possible for a transfer to take place much more quickly. Accordingly, ARTC has expressly provided for the possibility of a reduction in notice periods in the AHA with a new clause 16.8 providing that: "ARTC will use reasonable endeavours to develop processes and mechanisms in conjunction with the HVCCC which will enable it to specify shorter notice periods for trading under clause 16.4." ARTC considers that it should be possible to develop further trading rules which can shorten the notice period with experience.

### **Deemed use of a traded path usage (temporary trades only)**

Path usages the subject of a temporary trade under clause 16.4 will be treated as if they had been used by the access holder who had traded the path usage (the former access holder). When the traded path usages are used, they will count towards the former access holder's monthly entitlement (monthly base path usage).

Where path usages the subject of a trade have been converted to a smaller or larger number of path usages to be used by the new access holder (for example, if the new access holder's mine is located further west than the former access holder's mine, then the path usages deemed to have been used by the former access holder will be amended as follows:

- where the path usages traded have been converted to a smaller number of path usages to be used by the new access holder, then the path usages deemed to have

been utilised by the former access holder will be increased by the number of path usages lost as a result of the trade;

- where the path usages traded have been converted to a larger number of path usages to be used by the new access holder, then the path usages deemed to have been utilised by the former access holder will be decreased by the number of path usages created as a result of the trade.

This is best demonstrated by way of an example:

Mine X trades 100 path usages to Mine Y. As Mine Y is located further from the Port of Newcastle than Mine X, the 100 path usages on Train Path 1 are converted to 80 path usages on Train Path 2. If Mine Y only uses 50 of the path usages traded on Train Path 2:

- Mine X will be deemed to use 70 path usages (that is, the 50 path usages used by Mine Y plus the 20 path usages lost as a result of the trade);
- Mine Y will not be deemed to use any path usages (traded path usages are deemed to have been used by the former access holder)

## **7.12 Capacity shortfall**

During the consultation process, HVRATF expressed the view that existing access rights should rank equally and new access rights should rank in order of execution of the Access Holder Agreements. This approach effectively provides existing users with a priority for the life of the mine - at the expense of new users of the Hunter Valley network. It also means that a new access holder executing an Access Holder Agreement after another new access holder will always have a lower priority to the other new access holder even though there may only be a short time between when the Access Holder Agreements were originally executed. Further, any shortfall in capacity would have the effect of removing all access from the newest mines.

ARTC understands the desire to ensure that compression of existing access holders does not occur as a result of new access holders being given rights to the Hunter Valley Network. However, ARTC considers that the protections built in to the HVAU, ensure that new access holders only obtain access if there is “real” spare capacity or additional capacity is brought on line. In ARTC’s view, once new capacity is built, all users should rank equally.

It was also suggested that there should be priority for coal hauls. ARTC considers that if an access holder has contractual rights to transport non-coal freight they should be entitled to exercise those rights.

Accordingly, ARTC has included capacity allocation mechanisms which it considers will treat access holders equitably.

### **Shortfall in existing capacity**

Where there is a shortfall in existing contracted capacity, for example due to a force majeure event, and the access rights are expected to be unavailable for a period of seven days or more, ARTC will allocate the access rights (path usages) available on an equitable prorate basis according to each access holder’s unconditional and unused capacity entitlements applying immediately before the shortfall. ARTC expects that any discontinuity between the

pro-rated track access rights and the port access rights could be addressed by the use of Monthly Tolerance or by the trading mechanism.

Where the access rights are expected to be unavailable for a period of less than seven days, ARTC will allocate the capacity at ARTC's discretion taking into account its contractual obligations and network efficiency.

In both scenarios, capacity will first be allocated to meet ARTC's statutory obligation to provide priority to passenger services and an access holder will not be entitled to any path usages if their access rights were still conditional on the occurrence of an event such as the building of new capacity or allocation at the Port of Newcastle.

### **Shortfall in creating additional capacity**

Where there is a delay in the creation of additional capacity such that some, but not all, of the additional capacity required to meet access holders' contracted requirements becomes available (for example, if one project out of a series of projects necessary to complete a tranche of additional capacity is not completed). ARTC will allocate the additional capacity which is available on equitable pro-rate basis between those access holders who have contracted for that additional capacity. There will be no impact on existing users.

## 8 OVERVIEW OF THE HVAU, INDICATIVE AHA AND OSA

In recognition of the unique circumstances of the Hunter Valley, ARTC has sought to incorporate developments and improvements on existing arrangements into the HVAU, as well as some new arrangements to improve the efficiency and appropriateness of commercial arrangements, operations and delivery of capacity.

The vast majority of the changes to the HVAU since the consultation draft made available in July 2008 have been to address issues and concerns raised by stakeholders during consultation. The HVAU the subject of this application represents a document that has been developed through a lengthy consultation process with industry stakeholders, rather than necessarily an initial ARTC position.

The table below sets out the provisions of the HVAU with what ARTC considers to be benefits and, where needed, explanatory notes.

**Table 5 - HVAU: Provision and explanation**

<b>HUNTER VALLEY ACCESS UNDERTAKING</b>	
<b>Provision</b>	<b>Explanatory Notes</b>
<b>Section 1 Preamble</b>	
<p>ARTC recognises:</p> <ul style="list-style-type: none"> <li>• The predominant use of the Hunter Valley network is for rail services to coal markets and that the operation and development of the network is primarily to improve the use and performance of rail services to the coal supply chain and to optimise coal export throughput.</li> <li>• The role of the HVCCC in planning the coal supply chain and ARTC's role as an active participant of the HVCCC.</li> <li>• Coal producers are seeking contractual alignment with the port, ARTC and above rail providers.</li> </ul> <p>The objective of the HVAU is to provide a framework to manage negotiations with applicants for access rights and to establish a workable, non-discriminatory and inclusive process for processing the applications.</p> <p>In achieving this, ARTC has aimed to reach an appropriate balance between the legitimate interests of the ARTC, the public and applicants for access rights.</p> <p>ARTC is proposing different contract structures for coal and non-coal access rights. In the case of coal access rights, ARTC will enter into an Access Holder Agreement with either a coal</p>	<p>ARTC has explicitly recognised that the primary purpose of the role of the Hunter Valley network is to serve the Hunter Valley coal supply chain and ARTC's role as a service provider forming part of a wider Hunter Valley coal supply chain.</p> <p>ARTC has recognised the role of the HVCCC and has committed to consult with the HVCCC on various matters including capacity analysis and investment planning.</p> <p>The contract structure is described in more detail in <b>section 7.7</b> above.</p> <p>ARTC is proposing to contract directly with coal producers as this will provide coal producers with the certainty of capacity they are seeking. Direct contracting with coal producers is also expected to support increased investment in the Hunter Valley network.</p> <p>While ARTC expects that non-coal access rights will typically be held by an operator, the HVAU allows for the possibility that an access holder may not be an accredited operator provided the access holder procures the services of an operator to operate the trains.</p> <p>The terms of an access agreement for non-coal access rights will contain the essential elements of an Access Agreement as set out in schedule 3 to the HVAU and will</p>

<b>HUNTER VALLEY ACCESS UNDERTAKING</b>	
<b>Provision</b>	<b>Explanatory Notes</b>
<p>producer or an operator providing for a right to train paths. A separate OSA will be required with an accredited operator for operational matters.</p> <p>For non-coal traffic, ARTC is proposing to enter into a single agreement covering a right to access the network and an entitlement to operate non-coal trains.</p>	<p>also be consistent with the Interstate Indicative Access Agreement (Track Access Agreement).</p>
<b>Section 2 Scope and administration</b>	
<p><b>Scope</b> (Section 2.1 and Schedule B)</p> <p>The HVAU covers the Hunter Valley network, as described in Schedule B and the benefit of associated facilities.</p> <p>The Hunter Valley network covers:</p> <ul style="list-style-type: none"> <li>• Newcastle Ports – Muswellbrook</li> <li>• Muswellbrook – Ulan</li> <li>• Muswellbrook - Gap</li> </ul>	<p>The scope of the coal network covered by the HVAU has been extended from that set out in the NSWRAU to include the track between the Dartbrook coal mine through to Werris Creek and Gap. This has been done to reflect the increasing utilisation of mines in the Gunnedah and Narrabri regions, and the planned investment in this part of the network. Explicit coverage provides greater certainty to ARTC and to the operations servicing these mines.</p> <p>ARTC has excluded the following sectors which form part of the network prescribed in the NSWRAU from the scope of the HVAU.</p> <p>450 Maitland – Telarah 451 Telarah – Martins Creek 456 Martins Creek – Dungog 457 Dungog – Craven 410 Woodville Jct – Islington Jct 411 Islington Jct – Waratah</p> <p>These parts of the network are all now covered by the 2008AU. While these parts of the network will continue to carry some coal, ARTC believes that the primary use of this track is for traffic other than coal such as interstate freight and passenger services. It is also expected that access revenue for these parts of the network would fall well short of full economic cost.</p> <p>Nevertheless, ARTC intends to negotiate a single access agreement with coal customers covering both networks where sought.</p> <p>ARTC has also included in the network covered by the HVAU, that part of the Newcastle mains incorporated in the Sandgate flyover. The inclusion however is only for the purposes of the pricing principles, where capital expenditure associated with the provision of the Sandgate flyover has previously been incorporated in the existing regulatory asset</p>

<b>HUNTER VALLEY ACCESS UNDERTAKING</b>	
<b>Provision</b>	<b>Explanatory Notes</b>
	base for the network covered by the HVAU.
<p><b>Term</b> (sections 2.2 and 2.3)</p> <p>ARTC is proposing a 10 year term with ARTC review after 5 years.</p>	<p>In proposing a 10 year term, ARTC is seeking to provide certainty for both the industry and ARTC going forward. However, ARTC recognises there is some uncertainty over industry structure, ownership, operation and commercial arrangements that is likely to continue for the short to medium term. In order to address these concerns, ARTC has:</p> <ul style="list-style-type: none"> <li>• proposed to undertake a review of the HVAU after 5 years, in consultation with the industry; and</li> <li>• provided for the possibility that ARTC may seek to vary the HVAU if it is no longer commercially viable to ARTC or it becomes inconsistent with the objectives.</li> </ul> <p>Any variations to the HVAU will require the consent of the ACCC.</p>
<p><b>Existing Agreements</b> (section 2.5)</p> <ul style="list-style-type: none"> <li>• Existing agreements and rights will be unaffected by the HVAU.</li> <li>• ARTC is offering to reserve for a period of 30 days, at no charge, existing train paths used for non-coal access rights and making them available to be used for substantially the same purpose and same end-market.</li> </ul>	<p>ARTC is proposing to reserve train paths currently used for non-coal access rights for a short period in order to provide those users of the Hunter Valley network with an opportunity to apply for access rights required to transport non coal freight. This will ensure a degree of certainty that they will be able continue to be able to use the network going forward in accordance with historical usage but future needs will be subject to there being available capacity or building additional capacity.</p>
<p><b>Administration</b> (section 2.7)</p> <p>Geographical, commercial, capacity, operational and regulatory information similar to that for the interstate network will be published on ARTC's website.</p>	<p>ARTC intends to publish a substantial amount of information on its website that is intended to assist applicants with their preparation of an application, as well as provide broader industry advice in relation to network capacity and performance.</p> <p>The HVAU also provides for further information to be made available by ARTC upon request from an applicant or potential applicant to assist it with negotiations.</p> <p>Together with information normally made public through ARTC's annual compliance arrangements, ARTC would</p>

<b>HUNTER VALLEY ACCESS UNDERTAKING</b>	
<b>Provision</b>	<b>Explanatory Notes</b>
	expect that the extent of information provided to be broadly similar to that provided for under the NSWRAU.
<b>Section 3 Negotiating for access and dispute resolution</b>	
<p><b>Overview</b></p> <p>The framework for an applicant to negotiate access to the network and dispute resolution arrangements are consistent with those that apply on the interstate network, including:</p> <ul style="list-style-type: none"> <li>• operators and producers (who can procure the services of an accredited operator) may negotiate for access;</li> <li>• prudential requirements;</li> <li>• timeframes;</li> <li>• confidentiality;</li> <li>• availability of an indicative agreement for indicative services; and</li> <li>• access to dispute resolution and ACCC arbitration.</li> </ul>	<p>ARTC has sought to incorporate provisions for access negotiation and dispute resolution that are consistent with those incorporated in the 2008AU. ARTC believes that a consistent process will make negotiations simpler and more efficient.</p> <p>The framework is more prescriptive than that in the NSWRAU. ARTC believes that this will improve certainty and reduce cost for both ARTC and the applicant.</p>
<p><b>Network Exit Capability</b> (sections 3.4 and 3.7)</p> <p>Before ARTC will commence preliminary discussions with an applicant seeking to transport coal, ARTC may require the applicant to provide evidence that they will have the ability to offload the anticipated coal from the network for the term of the agreement (“network exit capability”).</p> <p>Once the applicant is ready to submit a formal access application, the applicant will, as a general rule, be required to provide confirmation that it has the ability to offload the coal as part of that access application. However, ARTC may accept an access application which does not meet this requirement provided the applicant is able to establish that it is negotiating with the relevant port company to obtain sufficient capacity at the Port to offload the anticipated coal.</p>	<p>It is important that ARTC can require applicants to establish their capacity to offload coal at the Port of Newcastle or some other discharge point. This will ensure ARTC does not over contract coal chain capacity in the initial allocation stage and will assist in enabling alignment of coal chain capacity. This is discussed in more detail in <b>section 7.2</b> of the Explanatory Guide.</p> <p>However, ARTC recognises that at this preliminary stage of the process an applicant may not have a contract in place. Accordingly, ARTC has discretion whether or not to require this information.</p>
<p><b>Prudential requirements</b> (section 3.4(e))</p> <p>ARTC may also require an applicant (for coal or non-coal access rights) to demonstrate that it is able to meet the prudential requirements:</p>	<p>The prudential requirements reflect those contained in the 2008AU but with the additional requirement that the applicant has an acceptable credit rating or is willing to</p>



<b>HUNTER VALLEY ACCESS UNDERTAKING</b>	
<b>Provision</b>	<b>Explanatory Notes</b>
<ul style="list-style-type: none"> <li>• the applicant is solvent;</li> <li>• the applicant (or a related party) must not have been in default of any agreement with ARTC or with any other provider or rail infrastructure;</li> <li>• the applicant has an acceptable credit rating or will agree to provide credit support in the form of a security or parent guarantee before the access agreement becomes effective; and</li> <li>• the applicant must be able to demonstrate that it has a legal ownership structure with sufficient capital base and assets to meet the actual or potential liabilities under an access agreement.</li> </ul> <p>If an applicant considers that ARTC has unreasonably refused to commence or cease negotiations for these reasons, the applicant may refer the matter to arbitration in accordance with section 3.15.</p>	<p>provide credit support before the access agreement becomes effective.</p> <p>This was considered a necessary requirement given that ARTC will be making significant capital expenditure on the basis of the long term take or pay contracts and it is necessary to ensure that there is financial standing or some form of credit support to meet the commitments. In contrast, the interstate network does not require the same level of investment and the flagfall fees are a smaller proportion of the overall revenue.</p>
<p><b>Initial review: coal access rights</b> (section 3.6)</p> <p>The HVAU provides where an applicant for coal access rights requests an initial review of its requirements with all service providers, ARTC will participate in that review. The purpose of this review is to:</p> <ul style="list-style-type: none"> <li>• provide the applicant with sufficient information to the HVCCC to enable the HVCCC to determine the impact on coal chain capacity of the access rights sought; and</li> <li>• advise the applicant of the operating requirements needed to deliver the capacity sought and for the applicant to determine how many train paths it requires.</li> </ul>	<p>This additional step in the process is provided in order to assist applicants for coal access rights align their contracts across the coal supply chain.</p> <p>ARTC will work with the applicant and the HVCCC in determining the paths necessary for the applicant to obtain the coal throughput it requires and also to determine the impact on coal chain capacity of the train paths sought. This is discussed in detail in <b>section 7.2</b> of the Explanatory Guide.</p> <p>More detail on the steps ARTC is proposing to take to ensure contractual alignment is covered in <b>Attachment H</b>.</p>
<p><b>Negotiation process - timetable</b> (section 3.11 and 3.12)</p> <p>These provisions outline the timetable for the negotiation.</p>	<p>ARTC has sought longer maximum time frames for negotiation under the HVAU than under the 2008 AU. The longer timetables are sought mainly in relation to the negotiation of coal access rights in recognition of the additional complexities associated with coal chain arrangements and the involvement of other parties.</p> <p>The proposals retain flexibility to enable the negotiation of</p>

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	non coal access rights to be undertaken consistently across the Hunter Valley and the interstate networks. .
<p><b>Mutually exclusive access rights</b> (<i>section 3.13</i>)</p> <p>Where there is insufficient capacity on the network for ARTC to provide the access rights sought by two applicants, ARTC will allocate the access rights to that applicant who accepts an access agreement on terms most favourable to ARTC.</p> <p>This principle, however, is subject to the successful applicant being able to offload the coal to be transported under the access rights sought.</p>	<p>The allocation rule provided in section 3.13 of the HVAU reflects normal commercial principles. The requirement that an applicant establish its ability to offload the anticipated coal from the network aims to ensure ARTC contracts in line with Port contracts. See also the discussion in <b>section 7.3</b> and <b>Attachment H</b>.</p>
<p><b>Dispute resolution</b> (<i>section 3.15</i>)</p> <p>A three step dispute resolution process is proposed:</p> <ul style="list-style-type: none"> <li>• negotiation;</li> <li>• mediation;</li> <li>• arbitration (by the ACCC).</li> </ul>	<p>The dispute resolution process proposed in the HVAU reflects that contained in the 2008AU.</p>
<b>Section 4 Access pricing principles</b>	
<p><b>Floor and ceiling limits</b> (<i>section 4.2</i>)</p>	<p>ARTC has retained the broad characteristics of the revenue limit tests and annual compliance requirements that currently exist in the NSWRAU. ARTC understands that the industry supports existing arrangements in this regard. As ARTC has now developed reporting and financial modelling that underpins the current approach, retention of the existing approach should mitigate ARTC's costs of compliance to some extent, and any industry change during transition.</p> <p>It should be noted that where annual roll-forward of RAB and RAB Floor Limit reveals RAB to be in excess of RAB Floor Limit (unrecovered prior economic losses exist), then access revenue will not be constrained by the building blocks ceiling revenue limit as currently occurs.</p>
<p><b>Approach to regulatory asset valuation</b> (<i>section 4.3</i>)</p> <p>ARTC has proposed a loss capitalisation approach to its regulatory asset valuation. Key aspects are:</p> <ul style="list-style-type: none"> <li>• Capitalisation of economic losses into the regulatory asset base to enable long term economic cost recovery.</li> </ul>	<p>ARTC has provided a detailed rationale and description of the Loss Capitalisation Approach at <b>Attachment D</b></p> <p>Differential rates of return consistent with ARTC's WACC proposal in a separate document provided as part of the application, is provided at <b>Attachment F</b>.</p>

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<ul style="list-style-type: none"> <li>• Separate treatment of existing assets (as at commencement date) and new investments (commissioned during the Term) including differential rate of return and remaining mine life to recognise different characteristics of existing and new assets.</li> <li>• The starting regulatory asset base valuation for assets existing at commencement will match the valuation of those assets as determined under the NSWRAU.</li> <li>• The starting regulatory asset base valuation for assets existing at commencement but not valued under the NSWRAU will be based on DORC (Depreciated Optimised Replacement Costs).</li> <li>• The regulatory asset base will include capital expenditure endorsed as prudent.</li> </ul>	<p>The DORC value for the Segments between Dartbrook and Gap of \$139.3m (as at 01 July 2008) for the assets required to meet existing traffic levels has been determined for ACCC approval.</p> <p>Not revaluing existing assets will avoid any windfall gains or losses accruing to ARTC. This is consistent with the current regulatory view.</p> <p>ARTC is proposing to capitalise interest during construction into the regulatory asset base, based on the regulated rate of return.</p>
<p><b>Cost allocation</b> (<i>section 4.5</i>)</p> <p>ARTC is proposing a transparent methodology for cost allocation with cost separately identified and allocated on a segment, Hunter Valley corridor, and system wide basis.</p>	<p>ARTC has proposed to identify expenditure for inclusion in the determination of economic cost for a segment on three levels:</p> <ul style="list-style-type: none"> <li>• Where possible, ARTC will identify expenditure directly with a segment. This will mainly apply to maintenance expenditure where the location of a particular activity is known.</li> <li>• Expenditure which cannot be identified directly with a segment will be allocated to the Hunter Valley corridor (region). This would normally apply to such costs as maintenance supervision and management, corridor planning and management, provisioning centres, and some aspects of train control, coal chain coordination and support costs. Such expenditure will be allocated to Hunter Valley segments.</li> <li>• Expenditure that cannot be directly identified with other parts of the ARTC network, a segment or region level will be identified as system-wide. Such expenditure will be allocated to the Hunter Valley and other parts of the ARTC network as applicable, and then to the Hunter Valley segments.</li> <li>• ARTC is proposing to allocate expenditure associated with maintenance on a GTK basis, and expenditure not associated with maintenance on a train kilometre basis. This is consistent with current practice in the Hunter Valley and other jurisdictions including the 2008AU covered network, as well as being endorsed by the</li> </ul>

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	<p>NSW regulator.</p> <p>A diagrammatic representation of the proposed approach to cost allocation is provided at <b>Attachment E</b>.</p>
<p><b>Rates of return</b> (<i>section 4.7</i>)</p> <p>The HVAU provides for differentiation in the rate of return for existing assets and new investments</p> <p>The rate of return is to be reviewed after 5 years for approval by the ACCC.</p> <p>Annual revision of rate of return to reflect changes in market parameters being the risk free rate and the debt margin.</p>	<p>The different rates of return reflect different risks to ARTC in the commercial environment in respect of the assets.</p> <p>Differential rates of return, consistent with ARTC's WACC proposal provided to the ACCC separately as part of the application, is provided at <b>Attachment F</b>.</p> <p>The five year review of rate of return proposed is consistent with existing practice under the NSWRAU.</p> <p>It should be noted that proposing a new rate of return to the ACCC, if necessary, is not precluded under the review provisions of the HVAU.</p>
<p><b>Depreciation</b> (<i>section 4.6</i>)</p> <p>Depreciation based on remaining economic mine life with respect to mines that are relevant to the location and use of an investment.</p> <p>ARTC proposed to review mine life estimates after 5 years, for approval by the ACCC.</p>	<p>ARTC has set out an approach to estimating economic mine life and proposed estimates of separate average remaining mine life for each pricing zone depending on mines served by that pricing zone in a separate document provided to the ACCC as part of the application.</p> <p>The 5 year review is proposed in order to reflect changes in industry circumstances. This is consistent with existing practice under the NSWRAU.</p>
<p><b>Unders and Overs Accounts</b> (<i>section 4.8</i>)</p> <p>ARTC is proposing to maintain a separate unders and overs account for each customer with access rights to that part of the network which is constrained</p>	<p>ARTC will maintain an unders and overs account to reconcile the allocation of any unders and overs. ARTC has not proposed the use of a cusp to manage unders and overs accounts. As such ARTC would expect allocations to be determined on a simpler basis, in accordance with relevant revenue paid. Annual reconciliation would normally be made through bringing the account to zero, but an alternative means can be agreed, such as adjustments to future pricing. The latter approach will only be agreed by ARTC where the outcome results in equitable pricing for all customers with access rights to the constrained network. Different annual allocations may, if reconciled through future pricing, result in different future pricing, particularly where there is a number of customers with access rights to the constrained network and accordingly this is not ARTC's preferred approach.</p>

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	It should be noted that where annual roll-forward of RAB and RAB floor limit reveals RAB to be in excess of RAB floor limit (unrecovered prior economic losses exist), then access revenue will not be constrained by the building blocks ceiling revenue limit and a regulatory assessment of revenue against ceiling limit will not be required.
<p><b>ACCC Compliance Assessment</b> (section 4.9)</p> <p>ARTC is proposing to submit to the ACCC documentation necessary in order for the ACCC to carry out its annual review of ARTC's RAB, RAB floor limit and reconciliation of access revenue with the applicable ceiling limit.</p>	
<p><b>Structure of Charges</b> (sections 4.10 and 4.11)</p> <p>Access pricing for coal will be made up of a variable component (gross tonnes per kilometre) and a fixed take or pay component for the access rights.</p> <p>Charges for non-coal access rights will be made up of:</p> <ul style="list-style-type: none"> <li>• a variable component (a function of gross tonnes per kilometres);</li> <li>• a flagfall component specific to each train service type and Segment (\$/km); and</li> <li>• an excess network occupancy component which reflects excess time on the network (measured against a reasonable allowance).</li> </ul>	<p>The excess network occupancy component applicable to non-coal access rights reflects the charge incorporated in the 2008AU. The description and application of this charge can be found in the explanatory documents and submissions provided to the ACCC, as well as the ACCC's Decision on the 2008AU available on the ACCC's website. Pricing zone allowances reflecting reasonable requirements for operational activities will be provided early in the ACCC consultation process.</p> <p>ARTC is proposing to establish three pricing zones for the purpose of determining access charges as follows.</p> <ul style="list-style-type: none"> <li>• Pricing Zone 1: Newcastle Ports – Bengalla</li> <li>• Pricing Zone 2: Bengalla – Ulan</li> <li>• Pricing Zone 3: Muswellbrook – Gap.</li> </ul> <p>For coal, it is ARTC's intention to use these pricing zones to geographically differentiate access prices consistent with the relative volumes, costs and commercial characteristics existing for each pricing zone.</p> <p>ARTC will still, however differentiate on distance within a zone through the use of a gross tonnes per kilometre (<b>gtkm</b>) based charge.</p>
<p><b>Pricing Objectives</b> (clause 4.12)</p> <p>In determining charges ARTC will have regard to three separate cost elements:</p>	Detail of ARTC's pricing objectives is set out in <b>Attachment G</b> .

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<ul style="list-style-type: none"> <li>• a variable component of costs (VCC);</li> <li>• a fixed component of costs (FCC) being fixed operating costs and depreciation or and return on assets existing at the commencement date; and</li> <li>• a new capital component of costs (NCC) being depreciation of, and return on, assets commissioned during the term.</li> </ul> <p>ARTC will also have regard to the following objectives in determining charges:</p> <ul style="list-style-type: none"> <li>• recover all variable cost (VCC) in line with usage</li> <li>• maximise recovery of FCC and NCC possibly through take or pay charges; and</li> </ul> <p>where on the basis of take or pay, apply charges openly and equitably.</p>	
<p><b>Indicative Access Charges</b> (<i>section 4.13</i>)</p> <p>ARTC will determine annually the charges which are to apply to Indicative Services (<b>Indicative Access Charges</b>). The charges will be specific to each pricing zone crossed by the Indicative Service.</p> <p>The Indicative Service (coal only) will be based on prescribed characteristics determined in consultation with the HVCCC having regard to delivery of optimal coal chain capacity.</p> <p>More than one Indicative Service and Indicative Access Charge may exist in each pricing zone.</p>	<p>ARTC intends to work with the HVCCC to determine the assumptions underpinning the service characteristics that will deliver an optimum outcome for coal chain capacity. These characteristics will form the basis of the Indicative Services for the purpose of determining Indicative Access Charges.</p> <p>To recognise that different characteristics may be optimal on different parts of the network, given infrastructure constraints, a different Indicative Service may be specified for different pricing zones, and there may be more than one Indicative Service in each pricing zone.</p> <p>The Indicative Access Charges will be published as indicative prices on ARTC's website, each year when finalised.</p> <p>ARTC has also committed to publish all pricing on its website.</p> <p>Due to circumstances described in the table entry "Interim Indicative Access Charges" below, ARTC is not in a position to determine Indicative Access Charges to apply as at the commencement of the HVAU. Interim Indicative Charges will apply until ARTC is in a position to develop Indicative Charges in accordance with section 4.13 of the HVAU. ARTC will consult with industry and seek ACCC approval of the Indicative Access Charges at that time.</p>

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<p><b>Charge differentiation</b> (sections 4.14 and 4.15)</p> <p>Pricing for non-Indicative Services will be differentiated having regard to:</p> <ul style="list-style-type: none"> <li>• the Indicative Access Charges (for coal access rights)</li> <li>• the characteristics of the service intended to utilise the access rights;</li> <li>• the commercial impact on ARTC's business;</li> <li>• the logistical impacts on ARTC's business;</li> <li>• the capital contributions; and</li> <li>• the cost of any additional capacity.</li> </ul> <p>Subject to any obligations under legislated passenger priority rules, ARTC will not differentiate its charges according to the identity of the customer and whether or not the applicant is a government entity.</p> <p>Where the characteristics of the access rights sought are alike and the applicants operate in the same end market, ARTC will not differentiate in formulating its charges.</p> <p>Where an applicant disagrees with the charge for coal access rights notified by ARTC and the applicant raises a dispute in accordance with section 3.15 of the HVAU, that dispute will be stayed where ARTC receives dispute notices from access holders holding two thirds or more of contracted gtkm for Indicative Services in a pricing zone in accordance with section 4.17(c).</p>	<p>Pricing for coal services that do not operate with the characteristics of Indicative Services will be determined having regard to a range of factors. Important considerations will be the impact of the access rights sought on ARTC's cost, network capacity and coal chain capacity. Non indicative usage will often result in increased capacity consumption and an efficient charging regime needs to reflect this.</p> <p>Pricing for non-coal services are determined on a different basis to coal services where pricing will reflect the direct cost of providing the service and where the end user is able to pay, a contribution to fixed cost. Differentiation for non-coal access rights would be determined having regard to a range of factors. The focus of differentiation will generally revolve around the impact of a service or direct cost of service provision but ARTC may also have regard to other capacity and logistical impacts of various types of services.</p> <p>A charge for coal access rights other than Indicative Services will be linked to the Indicative Access Charges for Indicative Services. Accordingly if there are parallel disputes about Indicative Access Charges and charges for non-indicative coal access rights, it is appropriate to stay the dispute regarding non-indicative coal access rights until the dispute regarding Indicative Access Charges is resolved provided the two thirds rule is met (discussed below).</p>
<p><b>Interim Indicative Access Charges</b> (section 4.15)</p> <p>ARTC has proposed to develop Interim Indicative Access Charges (TOP and non TOP) in accordance with section 4.15 of the HVAU for ACCC approval for each pricing zone. These charges are to apply to those services with the characteristics which meet the interim indicative service assumptions ("<b>Interim Indicative Services</b>").</p> <p>The Interim Indicative Access Charges will be</p>	<p>Given the absence of institutional arrangements to manage and develop coal chain capacity, limited modelling tools and timing constraints, ARTC is unable to determine Indicative Access Services and Indicative Access Charges at this point which reflect optimal efficient use of the Hunter Valley network (in accordance with section 4.13).</p> <p>Accordingly, ARTC is proposing to put in place Interim Indicative Access Charges, for Interim Indicative Service assumptions until it is in a position to determine the</p>

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<p>updated annually until the end of the interim period.</p> <p>The interim period will end once ARTC is satisfied it is able to determine Indicative Services, Indicative Access Charges and the charges applicable to other services associated with coal access rights.</p>	<p>Indicative Access Charges.</p> <p>Once ARTC is in a position to determine the Indicative Access Charges and Indicative Services in accordance with 4.13 of the HVAU ARTC will submit the proposed charges and service assumptions to the ACCC. This will be done at least three months prior to the termination of the interim period.</p>
<p><b>Finalising Indicative Access Charges</b> (section 4.17)</p> <p>The Indicative Access Charges (and the Interim Access Charges) will be revised annually and will reflect forecast actual gross tonnes for coal trains for the following calendar year.</p> <p>ARTC will notify forecasts and Indicative Access Charges to those access holders holding coal access rights for Indicative Services at least 30 days before the charges are to take effect.</p> <p>When two-thirds or more of those access holders with coal access rights give ARTC a dispute notice within the requisite timeframe, then the dispute will be resolved by arbitration in accordance with section 3.15.</p> <p>If less than two-thirds of those access holders give ARTC a dispute notice within the required timeframe, then the Indicative Access Charges will be final and not subject to arbitration.</p>	<p>ARTC has proposed a “two-thirds” rule to determine when a dispute regarding indicative access charges should be the subject of arbitration under section 3.15(c).</p> <p>ARTC considers that this limitation is necessary to avoid delays and costs to industry arising from an individual dispute which will have implications for all ARTC customers with access rights for Indicative Services.</p>
<b>5 Capacity management</b>	
<p><b>Capacity analysis</b> (section 5.1)</p> <p>ARTC will undertake capacity analysis to determine whether there is sufficient capacity to meet the access rights sought by an applicant. ARTC will consult with the HVCCC and take into account HVCCC comments in relation to coal chain capacity as part of the capacity analysis undertaken.</p>	<p>The capacity analysis proposed is consistent with the approach in the 2008AU, but, for the purposes of allowing access holders to align their contracts for system requirements, and an assessment of the impact of the access rights sought on coal chain capacity, ARTC has committed to consult with the HVCCC.</p>
<p><b>Capacity reservation</b> (section 5.2)</p> <p>An applicant may reserve capacity for more than 6 months subject to there being sufficient</p>	<p>ARTC proposes to introduce capacity reservation as a tool to promote access and efficient utilisation of the network.</p>



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<p>available capacity and payment of a reservation fee.</p>	<p>To address potential opportunity cost (and to mitigate commercial disincentives to ARTC in allowing reservation of potentially scarce capacity on the Hunter Valley network) as well as the risk of hoarding, ARTC is proposing to apply a reservation fee which would have reflect the relevant opportunity cost. The reservation fee will be capped at 75% of the indicative access charges in that pricing zone.</p> <p>ARTC notes the ACCC's concerns with reservation fees in the 2008AU Draft Decision- that a fee may be imposed where there is little or no opportunity cost of reserving capacity. However, ARTC submits that, due to the capacity constraints on the Hunter Valley network, an opportunity cost is expected with any reservation. ARTC also submits that it is more likely a customer would seek to reserve or hoard capacity where the network is congested, where there is a risk that the capacity would not remain uncommitted, or where there was a significant competitive advantage in reserving such capacity.</p> <p>Further, the long term nature of the contractual commitments for coal on the Hunter Valley network mean that ARTC's will have little opportunity to use reserved capacity during a much shorter period of reservation.</p> <p>The explicit obligation on ARTC to have regard to the opportunity cost in determining a reservation fee, as well as the cap will prevent ARTC imposing a fee that was inappropriate or excessive.</p>
<p><b>Shortfall in capacity</b> (sections 5.3 and 5.4)</p> <p>ARTC has proposed principles for allocating capacity where there is:</p> <ul style="list-style-type: none"> <li>• a shortfall in existing capacity, for example, due to an event of force majeure or an "incident"; and</li> <li>• a shortfall in the creation of additional capacity.</li> </ul>	<p>This is covered in <b>section 7.12</b> of the Explanatory Guide.</p>
<p><b>Capacity resumption, relinquishment and transfer</b> (section 5.5)</p> <p>All access agreements covered by the HVAU will allow ARTC to reduce capacity for under-utilisation.</p> <p>Access rights may also be assigned or traded</p>	<p>Clause 11.4 of the AHA sets out the approach to be taken by ARTC in removing path usages for under utilisation.</p> <p>The trading mechanisms set out in clauses 16.3 - 16.5 of the AHA are covered in more detail in <b>section 7.11</b> of the</p>

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by an access holder in accordance with the provisions of the access agreement.	Explanatory Guide.
<b>6 Network connections and additions</b>	
<p><b>Network connections</b> (<i>section 6.1</i>)</p> <p>ARTC will consent to connections to the Hunter Valley network subject to certain technical requirements and provided there is no impact on network capacity or Coal Chain Capacity, and the applicant agrees to meet ARTC's costs.</p> <p>Before consenting to such a connection, ARTC will consult with the HVCCC and take into account the HVCCC's comments on the impact of the proposed connection to coal chain capacity.</p>	<p>This approach is consistent with the approach in the 2008AU, but for the purposes of allowing access holders to align their contracts for system requirements, includes an assessment of the impact of the access rights sought on coal chain capacity. ARTC has committed to consult with the HVCCC in this regard.</p>
<p><b>Additional capacity</b> (<i>sections 6.2 and 6.3</i>)</p> <p>ARTC envisages that additional capacity can be sought via three routes:</p> <ul style="list-style-type: none"> <li>• an applicant may request the construction of additional capacity;</li> <li>• the HVCCC may recommend an investment to provide additional capacity; or</li> <li>• ARTC may identify additional capacity to be constructed.</li> </ul> <p>Where an applicant seeks additional capacity, ARTC will consent to the provision of that additional capacity provided:</p> <ul style="list-style-type: none"> <li>• the additional capacity is commercially viable to ARTC;</li> <li>• the applicant agrees to meet the cost of the additional capacity (through capital contribution, access charges or another agreed way including take or pay); and</li> <li>• the additional capacity is technically and economically feasible, consistent with safe and reliable operation of the Hunter Valley network, will not impact on safety, will not reduce Hunter Valley network or coal chain capacity, meets ARTC's engineering and operational standards and will not compromise ARTC's legitimate business interests.</li> </ul>	<p>ARTC's approach to individual applications for additional capacity is consistent with the approach in the 2008AU, but with a commitment to consult with the HVCCC, and take into account the HVCCC's view on the impact on Coal Chain Capacity.</p> <p>Where ARTC considers that there is not sufficient available capacity to provide the access rights sought, ARTC will, if requested, provide the applicant with written reasons for its decision.</p> <p>ARTC has committed to work with the coal industry via the HVCCC in planning expansions to the network. This commitment is reflected in the consultation process provided in section 6.4 of the HVAU.</p> <p>Further discussion of "commercial viability" is provided in <b>section 7.5</b> of the Explanatory Guide.</p>

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<p>ARTC will consult with the HVCCC and take into account the HVCCC comments in determining whether the access rights will have an effect on coal chain capacity.</p> <p>Where the HVCCC recommends an investment to provide additional capacity, ARTC will consent to the provision of the additional capacity provided:</p> <ul style="list-style-type: none"> <li>• such provision is commercially viable to ARTC. Commercially viability would normally be based upon endorsement by the RCG and sufficient take or pay commitments to recover the NCC associated with the additional capacity; and</li> <li>• the additional capacity is technically and economically feasible, consistent with the safe and reliable operation of the Hunter Valley network, will not impact on safety, does not reduce Hunter Valley network capacity or coal chain capacity, meets ARTC's engineering and operational standards and will not compromise ARTC's legitimate business interests.</li> </ul>	
<p><b>Industry consultation</b> (<i>section 6.4</i>)</p> <p>In relation to all requests for additional capacity ARTC will undertake consultation with the RCG.</p> <p>Where the capacity is recommended by the HVCCC, ARTC will in addition carry out the step outline in section 6.4(c) of the HVAU - the development of the Hunter Valley corridor capacity strategy.</p> <p>The objectives of the consultation process in section 6.4 is to inform Hunter Valley coal chain participants of capacity requirements and strategies, provide a process for input and participation, and to provide a process for the endorsement of prudent capital expenditure.</p>	<p>ARTC is proposing to continue consulting on capacity planning and investment in the Hunter Valley network, at both a strategic and project level similar to the consultation which occurs currently. ARTC recognises that investment in the Hunter Valley network is paid for by users and that any investment in the network should be endorsed by those users.</p> <p>ARTC considers the most efficient means of obtaining certainty of recovery is to obtain industry endorsement that capital expenditure is:</p> <ul style="list-style-type: none"> <li>• consistent with overall coal chain planning</li> <li>• the most efficient means of delivery of capacity</li> <li>• prudent in scope and cost of delivery in the circumstances.</li> </ul> <p>ARTC considers that the most appropriate forum for consultation is the RCG. The make-up of the RCG, as well as the consultation process with the RCG that ARTC proposes to follow is set out in <b>section 7.5</b>.</p>
<b>7 NETWORK TRANSIT MANAGEMENT</b>	
( <i>section 7 and Schedule 3: Network Management Principles</i> )	The network management principles proposed are broadly

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<ul style="list-style-type: none"> <li>ARTC will undertake medium term capacity planning, will develop the master train plan and will provide it to the HVCCC.</li> <li>ARTC will undertake short term capacity planning, and will develop the daily train plan having regard to input by the HVCCC.</li> <li>ARTC will manage transit in accordance with the network management principles.</li> </ul>	<p>consistent with those incorporated in the 2008AU but recognise the specific requirements of coal trains.</p> <p>The proposed network management principles prescribe different objectives for coal trains and non-coal trains. The objective of a coal train is to arrive at the point of discharge in sequence in accordance with the Integrated Plan while the objective of a non-coal train is to arrive at its destination or exit the Hunter Valley network in accordance with its schedule.</p> <p>Where there is a conflict between two or more out-of-course coal trains, ARTC will manage the trains having regard to the primary objective of a coal train, being to arrive at a point of discharge in sequence and in accordance with the integrated train plan. Where necessary, ARTC will liaise with the HVCCC in order to determine an optimum recovery strategy to benefit the coal chain as a whole.</p>
<b>8 PERFORMANCE INDICATORS</b>	
<p>ARTC will develop performance indicators for the Hunter Valley network and publish these on its website. These will include performance indicators developed by ARTC customers and operators through the HVCCC.</p>	<p>ARTC is yet to develop and finalise system KPIs. These are to be developed as part of the process that industry is undertaking to develop long term access protocols and will be in alignment with the overall coal chain system performance indicators.</p> <p>The individual key performance indicators will flow on from the system key performance indicators and will be agreed by ARTC with an access holder in accordance with clause 3.12 of the Indicative Access Holder Agreement.</p>
<b>9 DEFINITIONS</b>	
<p>See discussions above for relevant terms</p>	
<b>SCHEDULE A - ESSENTIAL ELEMENTS OF THE ACCESS AGREEMENT</b>	
<p>ARTC has identified those elements which will need to be incorporated into:</p> <ul style="list-style-type: none"> <li>an agreement for coal access rights (an access holder agreement) including the endorsed operator sub-agreement; and</li> <li>an agreement for non-coal access rights (an access agreement).</li> </ul>	<p>The elements identified included those which must be uniform across all access holder to ensure the proposed mechanism works, for example the system wide monthly true up test and the trading provisions, as well as those provisions which ARTC considers are an essential component of an access agreement or an (endorsed) OSA.</p>
<b>SCHEDULE B - NETWORK</b>	
	<p>See discussion of section 2 of the HVAU above</p>
<b>SCHEDULE C - NETWORK MANAGEMENT PRINCIPLES</b>	
	<p>See discussion of section 7 of the HVAU above</p>
<b>SCHEDULE D - PERFORMANCE INDICATORS</b>	

<b>HUNTER VALLEY ACCESS UNDERTAKING</b>	
<b>Provision</b>	<b>Explanatory Notes</b>
	See discussion of section 8 of the HVAU above
<b>SCHEDULE E - SEGMENTS</b>	
	See discussion of section 4 of the HVAU above
<b>SCHEDULE F - PARENT GUARANTEE</b>	
	See discussion of section 3 of the HVAU above

**Table 6 - AHA: Provision and explanation**

<b>INDICATIVE ACCESS HOLDER AGREEMENT (“AHA”)</b>	
<b>Provision</b>	<b>Explanatory Notes</b>
<p><b>Recitals</b></p> <ul style="list-style-type: none"> <li>• ARTC agrees to grant the access holder rights to access the network for the purposes of transporting coal on the terms and conditions set out in the AHA.</li> <li>• The access holder may only access the network through a nominated operator.</li> <li>• Each nominated operator must have an unconditional OSA with ARTC which has been endorsed by the access holder. The endorsed OSAs are annexed to the AHA.</li> <li>• Each OSA governs the nominated operator’s use of the access holder’s access rights. ARTC will deal directly with the operators in relation to the day to day operations of the network.</li> <li>• The AHA and the OSA together comprise the basis on which ARTC grants the access holder access to the network and the use of those access rights by nominated operators.</li> </ul>	<p>The contract model allows coal producers to have the option of contracting directly with ARTC for access rights to the Hunter Valley network and appoint train operators to utilise those rights.</p> <p>The contract model is discussed in more detail in <b>sections 7.6 and 7.7</b> of the Explanatory Guide.</p>
<b>Clause 1 - Definitions and interpretation</b>	
<p><b>Train Path</b> means:</p> <ul style="list-style-type: none"> <li>• the entitlement of the access holder to use, through an operator, the Hunter Valley network from the port or discharge point to the load point and, from the load point to the port or discharge point as set out in a Train Path Schedule; and</li> <li>• all other ad hoc entitlements from load or discharge points but does not include ancillary services other than those on the journey from the discharge point to the load point and from the load point to the discharge point.</li> </ul> <p><b>Path Usage</b> means a right granted under the agreement to the access holder to utilise a train path through the operation of a Service by a nominated operator on the train path.</p> <p><b>Train Path Schedule</b> means a Schedule to the agreement that sets out the entitlement of the access holder to certain train paths which service a particular coal mine.</p>	<p>A train path is a route from a port or discharge point to a load point and back again. The train paths covered by the Access Holder Agreement will be identified in the train path schedule. This is discussed in more detail in <b>section 7.8</b> of the Explanatory Guide.</p> <p>A path usage is the access holder’s right to have a train service run on a specific train path in order to service a particular mine. The access holder may have a number of path usages on a specific train path. An outward journey from the port or a discharge point to the load point with a return inward journey from the load point to the port or discharge point will be considered a single path usage.</p> <p>The Train Path Schedule sets out the access holder’s right to certain train paths and the number of path usages from a particular coal mine. This allows different terms for different train paths (ie some mines may have a shorter mine life). This is addressed in more detail in <b>section 7.8</b> of the Explanatory Guide.</p>
<b>Clause 2 - Term</b>	
<p><b>Term</b> (<i>clause 2.1</i>)</p>	

<b>INDICATIVE ACCESS HOLDER AGREEMENT (“AHA”)</b>	
<b>Provision</b>	<b>Explanatory Notes</b>
<p>Subject to the fulfilment of the condition precedent, the agreement commences on the commencement date which is the date that the agreement is signed by both parties and continues until terminated under clause 12 or upon the cessation of all train paths.</p> <p><b>Condition precedent</b> (<i>clause 2.2</i>)</p> <ul style="list-style-type: none"> <li>The access holder must deliver a parent guarantee or security for an amount of at least three months TOP charges to ARTC if it has a credit rating below the acceptable credit rating.</li> <li>If the condition precedent is not satisfied within one month of the commencement date, ARTC may terminate the agreement.</li> </ul> <p><b>Termination on cessation of all Train Paths</b> (<i>clause 2.3 and 2.4</i>)</p> <p>Subject to the rights of a party to suspend the AHA according to clause 12.5, the AHA automatically terminates on expiry or termination of all Train Path Schedules.</p>	<p>The (indicative) AHA is drafted as an evergreen agreement and continues until terminated by the first to occur of:</p> <ul style="list-style-type: none"> <li>the cessation of all Train Path Schedules. The default initial term of a Train Path Schedule is 10 years during which the parties cannot terminate. After this initial period, the Schedule can be terminated by giving 5 years’ notice; and</li> <li>standard contractual termination events in accordance with clause 12 of the AHA.</li> </ul> <p>The initial term of 10 years is only a default position and the term for each Train Path Schedule is negotiable</p> <p><b>Section 7.8</b> of the Explanatory Guide contains further explanation.</p>
<b>Clause 3 - Access rights</b>	
<p>ARTC agrees to provide a base number of path usages for each train path per month plus additional path usages forming a monthly tolerance across all the train paths in a pricing zone.</p> <p>This commitment is subject to the access holder not exceeding its annual contracted path usages for the train path in the year and the use of monthly tolerance path usages is subject to a monthly tolerance cap in the pricing zone not being exceeded.</p>	<p>The nature of the access rights and the Operational Tolerance model conferred under clause 3 of the AHA is addressed in <b>section 7.6</b> of the Explanatory Guide.</p>
<b>Clause 4 - Operators</b>	
<p><b>Operators</b> (<i>clauses 4.1 to 4.4</i>)</p> <ul style="list-style-type: none"> <li>The access holder is only entitled to utilise a train path through an operator.</li> <li>The access holder has to nominate an accredited operator specified in the Train Path Schedule to use each train path.</li> </ul>	<p>Only accredited operators may run train services. The access holder may also be the operator as long as it complies with the terms of the agreement relating to operators.</p>
<p><b>Limited Agency</b> (<i>clause 4.6</i>)</p> <p>If the access holder is not also the operator for a path usage, the access holder appoints each nominated operator, as its agent for the</p>	<p>This ensures that ARTC deals with the operators rather than the access holders in relation to the daily operation of the</p>

<b>INDICATIVE ACCESS HOLDER AGREEMENT (“AHA”)</b>	
<b>Provision</b>	<b>Explanatory Notes</b>
<p>purposes of:</p> <ul style="list-style-type: none"> <li>• providing inputs and agreeing to the final daily train plan, the scheduling of trains or changes to that plan;</li> <li>• the use of a path usage including giving and receiving notices/instructions;</li> <li>• agreeing to temporary changes to train paths, path usages or the services in accordance with the OSA; and</li> <li>• the day to day operation of the Hunter Valley network including communications with the network control centre, providing train manifests to ARTC and informing ARTC of any changes to the services (including under OSA).</li> </ul> <p>The actual operation of services on any path usage remains the responsibility of the operator and, to avoid doubt, the access holder does not incur liability for incidents as a result of this clause.</p> <p>The access holder agrees that where an operator is acting as the access holder’s agent:</p> <ul style="list-style-type: none"> <li>• the access holder is bound by, and releases ARTC from any liability to the access holder relating to, the acts or omissions of the operator;</li> <li>• ARTC will deal directly with the operator and is under no obligation to provide notices or deal with the access holder; and</li> <li>• to indemnify ARTC from any claims made by the operator arising from the operator’s action or omissions as agent of the access holder, except to the extent such claims arise from ARTC’s negligence.</li> </ul> <p>The access holder is also deemed to agree to any changes to services, path usages or train paths arising as a result of the operator complying with its obligations under the OSA.</p>	<p>network and the access holder is bound by the actions of the operator in relation to the day to day operations of the Hunter Valley network and especially in relation to the scheduling of trains to utilise the access holder’s contracted access rights.</p> <p>In relation to liabilities that the operator may incur as a result of offering train services to the access holder, those remain the sole responsibility of the operator.</p> <p>Except to the extent that the claim arises from ARTC’s negligence, the access holder releases ARTC from all claims it may have against ARTC that may arise from the actions or omissions of the operator in its role as agent for the access holder.</p>
<b>Clause 5 - charges and payment</b>	
<p><b>Charges</b> (<i>clauses 5.1-5.3</i>)</p> <ul style="list-style-type: none"> <li>• At the beginning of every month, the access holder must pay TOP charges.</li> <li>• At the end of every month, the access holder must pay any non-TOP charges and ad hoc charges.</li> </ul>	<ul style="list-style-type: none"> <li>• The TOP charge is the primary way that ARTC will recover its fixed costs and capital expenditure, including the costs incurred for any expansions requested by the access holder. TOP charges are related to the expected monthly GTK and TOP price which will be set out separately in each Train Path Schedule.</li> </ul>



<b>INDICATIVE ACCESS HOLDER AGREEMENT (“AHA”)</b>	
<b>Provision</b>	<b>Explanatory Notes</b>
	<ul style="list-style-type: none"> <li>The non-TOP charges relate to the distance travelled for each train path and the actual gross tonnes of the trains on each path usage. The non-TOP charge primarily relates to the variable costs for ARTC to make each path usage available but may include some proportion of fixed costs.</li> <li>The ad hoc charges are charged for path usages or train paths provided by ARTC</li> <li>The calculation of charges is set out in schedule 3 of the AHA.</li> </ul>
<b>Calculation of TOP rebate</b> <i>(clause 5.4)</i>	The annual reconciliation to be carried out under clause 5.4 of the AHA is addressed in detail in <b>section 7.10</b> of the Explanatory Guide.
<b>Clause 6 - Capacity shortfall</b>	
<b>Shortfall in creation of existing and Additional Capacity</b> <i>(clauses 6.1 and 6.2)</i>	These provisions reflect section 6 of the HVAU and are covered in <b>section 7.12</b> of the Explanatory Guide.
<b>Clause 7 - Credit support</b>	
<b>Credit Support - Credit rating test</b> <i>(clause 7.1)</i> At any time from the commencement date, if the access holder does not have an acceptable credit rating then ARTC may request the access holder to provide credit support on seven days' notice.	If the access holder has a credit rating of below the long term credit rating of either BBB form Standard & Poors or Baa2 from Moody's than ARTC requires that the access holder provide credit support in the form of a security (in the amount of one month's TOP charges) or a parent guarantee (in the same form as provided in the HVAU). ARTC will return the credit support if the access holder's credit rating changes or upon termination of the agreement. The requirement to provide credit support is to give ARTC some certainty that the access holder has the financial capability to meet its obligations under the agreement.
<b>Security – payment default</b> <i>(clause 7.2)</i> If the access holder defaults in making a payment of monies under the agreement and has not remedied the default within seven days, then if ARTC does not already hold a security, ARTC may request the access holder to deliver to ARTC and keep current at all times during the term, security in the amount of one month's TOP charges.	Regardless of whether the access holder has an acceptable credit rating, if the access holder commits a financial default which is not remedied within seven days then ARTC may request that the access holder provide, and keep current at all times during the term of the agreement, a security in the amount of one month's TOP charges. This security can be applied by ARTC to satisfy any loss suffered by ARTC as a result of default by the access holder.
<b>Clause 8 - Control and management of access to the network</b>	
<ul style="list-style-type: none"> <li>ARTC has the control of the Hunter Valley network and manages access to the</li> </ul>	These provisions are the same as under the Interstate Indicative Access Agreement (Track Access Agreement).

<b>INDICATIVE ACCESS HOLDER AGREEMENT (“AHA”)</b>	
<b>Provision</b>	<b>Explanatory Notes</b>
<p>Hunter Valley network.</p> <ul style="list-style-type: none"> <li>• ARTC warrants that it is entitled to grant access to the Hunter Valley network.</li> <li>• ARTC agrees to the network access provider’s obligations and specific conduct in relation to the providing access.</li> </ul>	
<b>Clause 9 - Repairs and maintenance of the network</b>	
<p>ARTC agrees at all times during the term to maintain the network (but only in so far as the network is relevant to the access holder’s train paths) in a condition which is fit for use by an operator to provide services which meets the service assumptions.</p>	<p>This clause is the same as under the Interstate Indicative Access Agreement (Track Access Agreement) except the service assumptions for each service on a train path are specifically set out in each Train Path Schedule.</p>
<b>Clause 10 - Accreditation</b>	
<p>ARTC warrants that during the term it has and will maintain accreditation to the extent related to the Hunter Valley network and required by law. ARTC will notify the access holder if there is any material notice that affects its accreditation.</p>	<ul style="list-style-type: none"> <li>• ARTC’s obligations are the same as under the Interstate Indicative Access Agreement (Track Access Agreement) except there are no rights for the access holder to terminate the agreement if ARTC’s accreditation is suspended or cancelled. However, under clause 12.4 of the AHA, 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 for the period commencing from the date of suspension or cancellation of accreditation until ARTC’s accreditation is restored.</li> <li>• The operator’s obligation to have accreditation is provided under the OSA.</li> </ul>
<b>Clause 11 - Permanent variation of train paths</b>	
<p><b>Removal of Path Usage for Under-utilisation</b> (<i>clause 11.4</i>)</p> <p>If, at the end of a month it is found that the access holder has used less than 90% of the Monthly Base Path Usages for a train path in each of the previous three months then ARTC has the right to elect, to delete path usages from the relevant train path schedule provided ARTC has met the system wide monthly true-up test in the previous three months for the pricing zones spanned by that train path.</p> <p>ARTC may not delete more path usages than the difference between the Monthly Base Path Usages on that train path in the previous three months and the actual paths used by the access holder on that train path in the previous three months.</p>	<p>The removal of path usages for under-utilisation is intended to prevent hoarding and ensure the access holder’s contracted access rights is being used.</p> <p>This clause allows ARTC to ensure that the Hunter Valley network is being used efficiently and effectively to maximise coal throughput by reallocating any unused path usages to other access seekers.</p> <p>The access holder will not have to continue to pay TOP charges for path usages that have been deleted by ARTC.</p>

<b>INDICATIVE ACCESS HOLDER AGREEMENT (“AHA”)</b>	
<b>Provision</b>	<b>Explanatory Notes</b>
<p>If ARTC elects to delete any path usage, then the access holder’s obligations to pay the TOP charges from the date of deletion will be reduced to reflect the removal of the path usage.</p>	
<b>Clause 12 - Suspension and Termination</b>	
<p><b>ARTC’s termination rights</b>  ARTC may terminate a Train Path Schedule by giving the access holder no less than three months’ written notice if the mine to which the Train Path Schedule relates has permanently ceased operation</p> <p><b>Early termination and TOP charges</b>  <i>(clause 12.7)</i>  If ARTC terminates a Train Path Schedule or the AHA (other than under clause 2), the access holder pays ARTC an amount equal to the net present value of TOP charges applying as at the date of termination for each Train Path Schedule terminated which would have otherwise been payable:</p> <p>(i) over the remainder of the Initial Period (if any); plus</p> <p>(ii) the schedule notice period, with the discount rate to be used to be equal to the applicable rate of return approved by the ACCC under the HVAU at the time of termination.</p> <p>If, within 12 months of ARTC’s termination, ARTC enters into, or varies, an access holder agreement with another party (with a term of at least five years) for train paths which are the same as, or substantially similar to, one or more of the train paths, then ARTC may rebate an amount paid for early termination which ARTC reasonably considers to be the difference between the TOP charges it would have received from the access holder but for the early termination and the expected take or pay charges it receives under the new or varied agreement in relation to the train paths.</p>	<p>It is expected that in practice the access holder will terminate a Train Path Schedule in line with mine closures following the initial term. This provision is included as a back up to ensure no hoarding of train paths.</p> <p>If a Train Path Schedule is terminated for reasons other than the expiry of the term specified in that Schedule, then the access holder is liable to pay the net present value of the TOP charges that it otherwise would have had to pay to ARTC over the remainder of the term of that Schedule. The purpose of this clause is to give ARTC certainty of recovering the TOP charges, especially where ARTC is committing to expand the Hunter Valley network.</p> <p>Where ARTC sells the train paths (within 12 months of the termination), which were the subject of the cancelled Train Path Schedule, ARTC may rebate the difference between the TOP charges it may receive under the new agreement and the TOP charges it would have received if the Train Path Schedule was not terminated early.</p>
<b>Clause 13 - Indemnities and liability</b>	
<p><b>Mutual releases</b>  <i>(clause 13.1)</i>  Except for an entitlement to a rebate, the</p>	<p>ARTC now has a direct contract with the coal producers and</p>

<b>INDICATIVE ACCESS HOLDER AGREEMENT (“AHA”)</b>	
<b>Provision</b>	<b>Explanatory Notes</b>
<p>access holder releases ARTC from any claims under or in relation to the AHA.</p> <p>Similarly, ARTC releases the access holder from claims or liability relating to incidents.</p> <p><b>Mutual exclusion of Consequential Loss</b> (<i>clause 13.2</i>)</p> <p>Other than for indemnities given and liability for TOP, neither party will be liable to the other party for any consequential loss relating to the AHA however arising (including under the AHA, in tort including negligence, or for breach of any statutory duty).</p> <p><b>Mutual liability cap</b> (<i>clause 13.3</i>)</p> <p>Other than the liability to pay charges, a party’s maximum aggregate liability to the other party for all claims arising in or made during a financial year relating to the AHA however arising (including under the AHA, in tort (including negligence), or for breach of any statutory duty) is limited to the amount of the TOP charges payable for that financial year.</p>	<p>therefore has significant potential contractual liability for damage to goods arising from incidents and other losses which flow from incidents, delays or track unavailability.</p> <p>Therefore, the liability regime consists of the following:</p> <ul style="list-style-type: none"> <li>• ARTC’s liability to the access holder for failure to make path usages or train paths available is limited to TOP rebates and such failures do not constitute a default;</li> <li>• a number of full releases, including mutual release for incidents;</li> <li>• a mutual exclusion of liability for consequential loss; and</li> <li>• a mutual liability to the amount of the TOP charges payable for that financial year.</li> </ul> <p>The rationale for the liability allocation is discussed in more detail in <b>section 7.9</b> of the Explanatory Guide.</p>
<b>Clause 14 - Resolution of Disputes</b>	
<p><b>Procedure: joining with operator</b> (<i>clause 14.1</i>)</p> <p>If ARTC reasonably considers that a dispute also involves the operator, then where the dispute is a dispute raised under the AHA, ARTC and the access holder consent to, and will not in any way prevent, the operator from being joined to the dispute resolution procedure.</p> <p><b>Negotiation</b> (<i>clause 14.2</i>)</p> <p>If there is a dispute between the parties relating to or arising out of the AHA, then within seven days after the date of the dispute notice, senior representatives from each party will meet and use reasonable endeavours acting in good faith to resolve the dispute by joint discussions.</p> <p><b>Mediation</b> (<i>clause 14.3</i>)</p> <p>If the dispute is not resolved within 14 days after being referred to the chief executive officers under “negotiation” the dispute will be referred to formal mediation in New South</p>	<p>Due to the separation of the access rights from train operators and the establishment of the AHA as separate to the OSA, where there is a dispute that arises under either agreement and it involves both the access holder and the operator, then that dispute will be treated as a dispute under both agreements and will be run as a joint procedure.</p> <p>There are three tiers of dispute resolution mechanisms that may apply:</p> <ul style="list-style-type: none"> <li>• First, a dispute arising under or relating to the agreement the dispute will go to the senior representatives from each party for resolution.</li> <li>• Second, if the dispute is not resolved within 7 days of the dispute notice, then the dispute progresses to formal mediation. A party cannot commence legal proceedings regarding a dispute unless the first and second tiers have been complied with.</li> <li>• Third, certain disputes under the agreement are referred (directly or progressed) for resolution by expert determination.</li> </ul>

<b>INDICATIVE ACCESS HOLDER AGREEMENT (“AHA”)</b>	
<b>Provision</b>	<b>Explanatory Notes</b>
<p>Wales to be mediated by a single mediator appointed by agreement of the parties.</p> <p><b>Expert determination</b> (<i>clause 14.3</i>)</p> <p>If a dispute is referred under the AHA to proceed to expert determination, then the following provisions apply;</p> <ul style="list-style-type: none"> <li>• the parties may agree upon the appointment of an expert in relation to that dispute, failing such agreement within 10 business days of the dispute being referred to expert determination, such person as appointed by the President of IAMA will act as an expert in relation to the dispute (“Expert”);</li> <li>• the Expert may initiate such enquiries and investigations as it considers necessary or desirable and the parties must co-operate with the Expert;</li> <li>• unless the parties agree otherwise, the Expert must use reasonable endeavours to make its determination or finding in respect of the dispute within 30 business days of their appointment; and</li> <li>• any determination made by the Expert is binding on the parties (other than for manifest error).</li> </ul>	
<b>Clause 15 - Confidentiality</b>	
Standard confidentiality provisions.	
<b>Clause 16 - Assignment, trading and novation</b>	
<p><b>Permanent assignment and trades</b> (<i>clause 16.3</i>)</p> <p><b>Temporary trade of path usages</b> (<i>clause 16.4</i>)</p> <p><b>Treatment of traded path usages</b> (<i>clause 16.5</i>)</p>	The trading provisions are discussed in more detail in <b>section 7.11</b> of the Explanatory Guide above.
<b>Clause 17 - Force majeure</b>	
<p><b>Suspension of obligations</b></p> <p>The obligations of a party (other than an obligation to pay money, including a TOP charge) 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.</p>	The access holder is still liable to pay charges in an event of force majeure. This is because, by definition, force majeure is an event that occurs outside the control of the parties and ARTC still has receive the TOP charges in order to recover its capital expenditures or investment costs associated with Hunter Valley network expansions.

INDICATIVE ACCESS HOLDER AGREEMENT (“AHA”)	
Provision	Explanatory Notes
<b>Clause 18 - Governing law</b>	
<p><b>Law of the agreement</b> The law of this agreement is the law of New South Wales.</p> <p><b>Jurisdiction</b> The parties to this agreement agree that the Courts of New South Wales will have exclusive jurisdiction to hear and determine all disputes which may arise out of the AHA.</p>	The laws and courts of the State of New South Wales govern the AHA.
<b>Clause 19 - Change in law</b>	
<p><b>HVAU</b> (<i>clause 19.1</i>)</p> <ul style="list-style-type: none"> <li>To the extent the HVAU is replaced or varied during the term of the HVAU and the changes are inconsistent with changes negotiated and agreed by the parties, the parties must negotiate in good faith to modify the AHA to reflect the requirements of the new or varied access undertaking which are necessary or desirable for ARTC to safely and efficiently manage the Hunter Valley network and recover its costs while retaining, to the extent reasonably possible, the commercial and economic position of both parties arising from the previously agreed changes.</li> <li>Subject to the above, the parties agree that any changes to the (indicative) AHA included in an access undertaking approved by the ACCC will automatically be incorporated into the agreement.</li> </ul>	<p>If there are changes to the (indicative) AHA included in a new or varied access undertaking approved by the ACCC during the term of the AHA, then those changes will automatically be incorporated unless they are inconsistent with changes negotiated by parties. If that is the case, the parties agree to negotiate in good faith to modify the agreement to reflect the new access undertaking.</p> <p>As discussed in <b>section 7.8</b> of the Explanatory Guide, these protections are necessary because the (indicative) AHA is evergreen.</p>
<b>CLAUSE 20 - Notices</b>	
Standard notice provisions	Standard notice provisions.
<b>CLAUSE 21 - General</b>	
Standard provisions.	Standard provisions.
<b>SCHEDULE 1 - Hunter Valley network</b>	
Map of the Hunter Valley network.	Description of the Hunter Valley network.
<b>SCHEDULE 2 - System Monthly True-Up</b>	
	See <b>section 7.10</b> of the Explanatory Guide which describes in detail the system wide monthly true-up test.
<b>SCHEDULE 3 - Charges</b>	
See charges and payment under clause 5 above.	See charges and payment under clause 5 above.

INDICATIVE ACCESS HOLDER AGREEMENT (“AHA”)	
Provision	Explanatory Notes
<b>Train Path Schedule</b>	
See Train Path Schedule under clause 1 – Definitions and Interpretations above.	See Train Path Schedule under clause 1 – Definitions and Interpretations above.

<b>OPERATOR SUB-AGREEMENT</b>	
<b>Provision</b>	<b>Explanatory Note</b>
<b>Recitals</b>	
<ul style="list-style-type: none"> <li>• ARTC has agreed to grant the access holder access rights to the Hunter Valley network for the purpose of transporting coal on the terms and conditions set out in the AHA.</li> <li>• Pursuant to the AHA, the access holder has nominated the operator to provide services to it.</li> <li>• ARTC agrees to grant the operator rights to use and provide services to the access holder on the Hunter Valley network on the terms and conditions set out in the OSA and the AHA.</li> <li>• The operator will exercise its right to use and provide services on the Hunter Valley network in accordance with the OSA and the AHA.</li> <li>• The access holder has endorsed this OSA.</li> </ul>	See the AHA Explanatory Note for Recitals above.
<b>Clause 1 - Definitions and Interpretation</b>	
<p><b>Train Path</b> means:</p> <ul style="list-style-type: none"> <li>• the train paths defined in the AHA for which the access holder has nominated the operator where such nomination has been approved by ARTC; and</li> <li>• all other ad hoc entitlements related to the operation of services for the access holder (including train paths arising by reason of compliance with instructions) to access to the Hunter Valley network which are provided by ARTC to the operator (on behalf of the access holder) on the terms set out in this agreement and otherwise on such terms as ARTC may stipulate in accordance with this agreement or as otherwise agreed between the parties.</li> </ul> <p><b>Path Usage</b> means the right granted under the AHA to utilise a train path through the operation of a service by a nominated operator on the train path and for which the access holder has nominated the operator.</p>	<p>Access rights in terms of train paths and path usages are granted to the access holder. The OSA is the agreement under which the operator, nominated by the access holder, provides train services to the access holder in order to utilise those access rights.</p> <p>The operator has no access rights independent of the access holder.</p> <p>The definitions incorporate any train movements which are part of the outward journey to the mine and the return journey to the port (eg a diversion from the usual route for refuelling or as a result of instructions).</p> <p>Operators will still have train movements unrelated to a particular access holder – these will be dealt with under a separate ancillary services agreement with ARTC.</p>
<b>Clause 2 – Term</b>	
<p>The term of the OSA is 10 years (unless the linked AHA ends earlier).</p> <p>The OSA is conditional on the operator</p>	<p>The rationale for credit support is discussed in relation to clause 4 of the OSA below.</p>



<b>OPERATOR SUB-AGREEMENT</b>	
<b>Provision</b>	<b>Explanatory Note</b>
providing credit support if it is not of sufficient financial standing.	
<b>Clause 3 – Track utilisation rights</b>	
<p>These clauses provide for:</p> <ul style="list-style-type: none"> <li>the operator to be able to run services for the access holder using the access holder's access rights (subject to certain carve outs);</li> <li>limited agency as discussed in relation to the AHA above;</li> <li>the operator's co-operation in agreeing and monitoring KPIs.</li> </ul>	<p>As discussed above, the operator's right to use the Hunter Valley network is derivative (ie pursuant to the AHA. The OSA does not provide any independent right to run trains on the Hunter Valley network.</p> <p>A number of these clauses relating to non-exclusivity, passenger priority, early and later services, information warranties, manner of control of the network and light engine movements are consistent with the provisions in the Indicative Access Agreement attached to the 2008AU.</p>
<b>Clause 4 - Credit support</b>	
<ul style="list-style-type: none"> <li>If, at any time after the commencement date, the operator is unable to demonstrate to ARTC (on request) that it has a legal ownership structure with a sufficient capital base and assets of value to meet the actual or potential liabilities under this agreement, including timely payment of insurance premiums and deductibles under the required policies of insurance, then ARTC may request the operator to provide credit support (for an amount to be determined) on seven days' notice.</li> <li>The credit support will be held by ARTC as security for the performance of the obligations of the operator under this agreement and may be called upon by ARTC in any circumstances in which ARTC suffers any loss as a result of default by the operator under this agreement.</li> <li>If ARTC holds security, and it calls on the security, the operator is required to promptly provide a replacement security for the amount drawn or exercised by ARTC.</li> <li>The security will be returned upon termination of the agreement or if the operator satisfies ARTC that it has the legal ownership structure with a sufficient capital base and assets of value to meet the actual or potential liabilities under the OSA.</li> </ul>	<p>The purpose of this clause is to provide certainty to ARTC in instances where an operator effectively has no financial or capital backing (except for owning some rolling stock) that the operator can meet the obligations under the OSA.</p> <p>As the HVAU allows producers to directly hold access rights, it may be the case that new operators enter the market and that these new operators may not have the desired financial or capital backing.</p>
<b>Clause 5 - Control and Management of access to the Hunter Valley network</b>	
<p><b>Removal of Rolling Stock from Hunter Valley network</b></p> <ul style="list-style-type: none"> <li>If ARTC reasonably considers that a train operated by the operator is obstructing the Hunter Valley network, the operator will upon being notified of that obstruction</li> </ul>	<p>This clause provides that ARTC will inform an operator when its train is obstructing the Hunter Valley network and ask for the train to be removed. Where the operator does not remove or move the trains, ARTC will arrange for the removal.</p>

<b>OPERATOR SUB-AGREEMENT</b>	
<b>Provision</b>	<b>Explanatory Note</b>
<p>arrange for the train to be moved.</p> <ul style="list-style-type: none"> <li>• If the operator does not remove or move the train, the operator consents to ARTC arranging for the train to be removed from or moved to another part or parts of the Hunter Valley network.</li> <li>• Notwithstanding any other provision of the OSA, the operator will release and indemnify ARTC or its servant, agent, employee, contractor or volunteer for all and any injury, loss and damage arising from or related to the removal or movement arranged by ARTC, including without limitation where such injury, loss and damage is caused by the negligence of ARTC or its servant, agent, employee, contractor or volunteer.</li> </ul>	<p>As the obstruction was caused by the operator, any costs, liability, injury or loss (whether caused by ARTC's negligence or not) should be indemnified by the operator. This is consistent with the Indicative Access Agreement attached to the 2008AU.</p>
<b>Clauses 6 - 8 – Repairs and maintenance, Accreditation and Compliance</b>	
<p>These clauses provide for:</p> <ul style="list-style-type: none"> <li>• ARTC's obligation to repair and maintain the Hunter Valley network and to notify of operating restrictions where required due to the condition of the Hunter Valley network;</li> <li>• the need for each party to have accreditation under rail safety legislation; and</li> <li>• compliance by the operator with instructions and network control directions given by ARTC.</li> </ul>	<p>These clauses are consistent with the provisions in the Indicative Access Agreement attached to the 2008AU.</p>
<b>Clause 9 - Temporary variation or cancellation of train paths</b>	
<p><b>Examples of temporary variations of Train Paths by the giving of Instructions by ARTC</b> (<i>clause 9.1</i>)</p> <p>ARTC can temporarily vary the operator's right to utilise a train path or a path usage by giving instructions for the purposes of:</p> <ul style="list-style-type: none"> <li>• breach of the Safeworking Rules or safety standards;</li> <li>• material damage to the Hunter Valley network, ARTC's property or any associated facilities;</li> <li>• injury to any person or damage to any property;</li> <li>• delay to the progress of trains on the Hunter Valley network (but only insofar as any trains operated by a third party have priority over the operator's trains having regard to the Network Management</li> </ul>	<p>ARTC can temporarily vary the access holder's access rights by giving instructions to the operator. The operator must comply with the instructions. This is necessary in order for ARTC to safely and efficiently manage the network.</p>

<b>OPERATOR SUB-AGREEMENT</b>	
<b>Provision</b>	<b>Explanatory Note</b>
Principles); <ul style="list-style-type: none"> <li>• terrorism and security matters; and</li> <li>• preventing, or in response to, any actual or threatened breach by the operator of any of its material obligations under this agreement.</li> </ul>	
<b>Clauses 10 - 13 – Inspection and audit, Emergencies and Incidents, Safety Standards and Environmental requirements</b>	
These clauses provide for a number of issues dealing with safety.	These clauses are consistent with the provisions in the Indicative Access Agreement attached to the 2008AU.
<b>Clause 14 – Termination</b>	
This clause provides for: <ul style="list-style-type: none"> <li>• termination or suspension for breach which is not rectified following notices to rectify;</li> <li>• immediate termination or suspension in certain circumstances including insolvency;</li> <li>• termination or suspension if the operator loses its accreditation.</li> </ul>	These clauses are consistent with the provisions in the Indicative Access Agreement attached to the 2008AU except there are extra termination rights where another OSA is terminated.
<b>Clause 15 - Indemnities and liabilities</b>	
<b>Indemnity</b> <ul style="list-style-type: none"> <li>• If there is a breach of the agreement by a party which is the sole cause of an incident where the other party suffers loss or damage as a result, then the party in breach will:               <ul style="list-style-type: none"> <li>• be responsible for its own loss or damage arising from the incident; and</li> <li>• completely and effectually indemnify the other party in respect of loss or damage suffered by the other party as a result of the incident.</li> </ul> </li> <li>• If there is a breach of the agreement by a party contributing to an incident and the other party (who has not committed a breach) suffers loss or damage as a result, then the party in breach will:               <ul style="list-style-type: none"> <li>• be responsible for its own loss or damage arising from the incident;</li> <li>• indemnify the other party in respect of the loss or damage suffered by the other party as a result of the incident to the extent of its contribution;</li> <li>• the other party is to be responsible for its own loss or damage arising from the incident to the extent that the breach or breaches did not contribute to the incident.</li> </ul> </li> <li>• If there is a breach of the agreement by both parties which contributed to an incident then both ARTC and the operator</li> </ul>	Liability for incidents between the operator and the access holder which involve the day to day operation of the Hunter Valley network and the service, are dealt with under the OSA and not the AHA.  The purpose of clause 15 of the OSA is that the parties will deal with each other following an incident. The clause provides that where ARTC and/or the operator are in breach of the OSA, and any such breach is the cause or contributing factor to loss or damage to property of ARTC or to the operator then: <ul style="list-style-type: none"> <li>• any party in breach should bear responsibility for such loss or damage to the extent of such cause or contribution and completely and effectually indemnify the other party in respect of loss or damage suffered by the other party to the extent of that contribution and;</li> <li>• where the acts or omissions of a third party has caused or contributed to such loss or damage, neither ARTC or the operator will be responsible to the other for loss or damage to the other's property to the extent that the loss or damage is caused by or contributed to by the acts or omissions of that other party.</li> </ul>

**OPERATOR SUB-AGREEMENT**

Provision	Explanatory Note
<p>will:</p> <ul style="list-style-type: none"> <li>indemnify the other party in respect of the loss or damage suffered by the other party as a result of the incident to the extent of its contribution;</li> <li>be responsible for its own loss or damage arising from the incident to the extent that the loss or damage was not contributed to by the breach(s) of the other party.</li> </ul>	
<p><b>No Claim for Consequential Loss</b> There is no claim for consequential loss.</p> <p><b>Consequential Loss</b> includes:</p> <ul style="list-style-type: none"> <li>any liability which does not flow naturally from the relevant breach of this agreement, even if that liability may reasonably be supposed to have been in the contemplation of both parties as a probable result of the breach at the time they entered into this agreement;</li> <li>loss of profits, loss of business opportunity, loss of production, loss of revenue, loss of use, loss of contract, loss of goodwill, damage to goods being transported on the services, any port or shipping/demurrage costs or fees, damages or penalties payable under the access holder's customer contracts (whether direct or indirect); and</li> <li>any other economic, special or consequential liabilities,</li> </ul> <p>but does not include any third party liability.</p>	<p>Under the OSA, regardless of</p> <ul style="list-style-type: none"> <li>how an incident is caused;</li> <li>that ARTC and/or the operator is in breach of any duty of care or in breach of the OSA;</li> <li>any other rights or liabilities that ARTC and/or the operator may have under the OSA;</li> </ul> <p>ARTC and the operator will not make a claim against the other, and release the other from any claim, in respect of any consequential loss they suffer arising out of any incident.</p>
<p><b>Third party liabilities</b></p> <ul style="list-style-type: none"> <li>Where any third party seeks to recover a third party liability from ARTC or the operator, ARTC and the operator shall take the benefit of any statute or other law or contractual provision that limits, or may limit, the liability of ARTC or the operator to any proportion of loss and damage suffered.</li> <li>ARTC and the operator shall only be entitled to seek contribution from the other in respect of any third party liability on the basis of the negligence, or breach of statutory duty of the other party, but not because of any breach or alleged breach of OSA by the other party.</li> <li>ARTC and the operator release each other from all claims for contribution from the other in respect of any third party liability</li> </ul>	<p>If as a result of an incident, a third party suffers any personal injury, nervous shock, death, or property or economic loss or damage and that third party makes a claim against ARTC or the operator, then ARTC or the operator can only seek contribution by the other if the other party was negligent or was in breach of a statutory duty but not for mere breach of the agreement.</p>

<b>OPERATOR SUB-AGREEMENT</b>	
<b>Provision</b>	<b>Explanatory Note</b>
<p>except to the extent that such third party liability has been caused or contributed to by the negligence or breach of statutory duty of the other party to the OSA.</p> <p><b>Third party liability</b> means the liability of ARTC and/or the operator to any third party who suffers any personal injury, nervous shock, death, or property or economic loss or damage as a consequence of an incident.</p>	
<p><b>Prohibited Claim</b> Where, in any claim period, the total value of all prohibited claims exceeds \$250,000.00, no further claims arising from incidents that occur during that claim period will be prohibited claims.</p>	<p>Claims from incidents are capped at \$250,000 for every 12 month period (from the commencement date).</p>
<b>Clause 16 – Insurance</b>	
<p>ARTC and the operator must have minimum insurance covers.</p>	<p>These clauses are consistent with the provisions in the Indicative Access Agreement attached to the 2008AU.</p>
<b>Clause 17 Resolution of disputes</b>	
<p>See discussion of clause 14 of the AHA.</p>	
<b>Clauses 18 - 23 – Other clauses</b>	
<p>These are “boilerplate” clauses (other than for clause 22 – Change in Law which is discussed in relation to the AHA above).</p>	<p>These clauses are broadly consistent with the provisions in the Indicative Access Agreement attached to the 2008AU.</p>

**Hunter Valley Network Sectors  
(NSW Rail Access Undertaking)**

	Route KM
441 SANDY HOLLOW JCT TO ULAN COLLIERY JCT	103.42
418 CAMBERWELL JUNCTION TO GLENNIES CREEK	6.89
419 GLENNIES CREEK TO NEWDELL JUNCTION	8.59
448 MUSWELLBROOK TO BENGALLA	5.20
449 BENGALLA TO SANDY HOLLOW	37.98
460 TELERAH TO FARLEY	0.50
423 MUSWELLBROOK TO DARTBROOK JCT	7.53
422 DRAYTONS JCT TO MUSWELLBROOK	17.04
421 NEWDELL JCT TO DRAYTONS JCT	9.57
417 WHITTINGHAM TO CAMBERWELL JCT	12.66
428 BRANXTON TO WHITTINGHAM	18.57
416 FARLEY TO BRANXTON	21.59
415 MAITLAND TO FARLEY	1.29
510 THORNTON TO MAITLAND (VIA COAL)	10.40
509 SANDGATE TO THORNTON (VIA COAL)	12.33
504 HANBURY JCT TO SANDGATE (VIA COAL)	1.64
503 WARATAH TO HANBURY JCT (VIA COAL)	2.26
502 SCHOLEY ST JCT TO WARATAH (VIA COAL)	1.40
411 ISLINGTON JCT TO WARATAH	1.50
410 WOODVILLE JCT TO ISLINGTON JCT	0.87
497 BROADMEADOW TO WOODVILLE JCT	0.85
407 ADAMSTOWN TO BROADMEADOW (VIA MAIN)	1.60
490 SULPHIDE JCT TO ADAMSTOWN	8.05
406 COCKLE CREEK TO SULPHIDE JCT	3.15
405 NEWSTAN JCT TO COCKLE CREEK	7.18
500 ISLINGTON JCT TO SCHOLEY ST JCT	0.49
501 SCHOLEY ST JCT TO PORT WARATAH	4.94
506 KOORAGANG EAST JCT TO SANDGATE	0.87
505 HANBURY JCT TO KOORAGANG EAST JCT	1.11
507 KOORAGANG EAST JCT TO KOORAGANG ISLAND	9.20
532 WHITTINGHAM TO SAXONVALE JCT	7.97
534 SAXONVALE JCT TO MOUNT THORLEY	4.97
536 NEWDELL BRANCH	2.66
457 DUNGOG TO CRAVEN	46.54
456 MARTINS CREEK TO DUNGOG	26.70
451 TELERAH TO MARTINS CREEK	23.60
450 MAITLAND TO TELARAH	2.16

## Segments

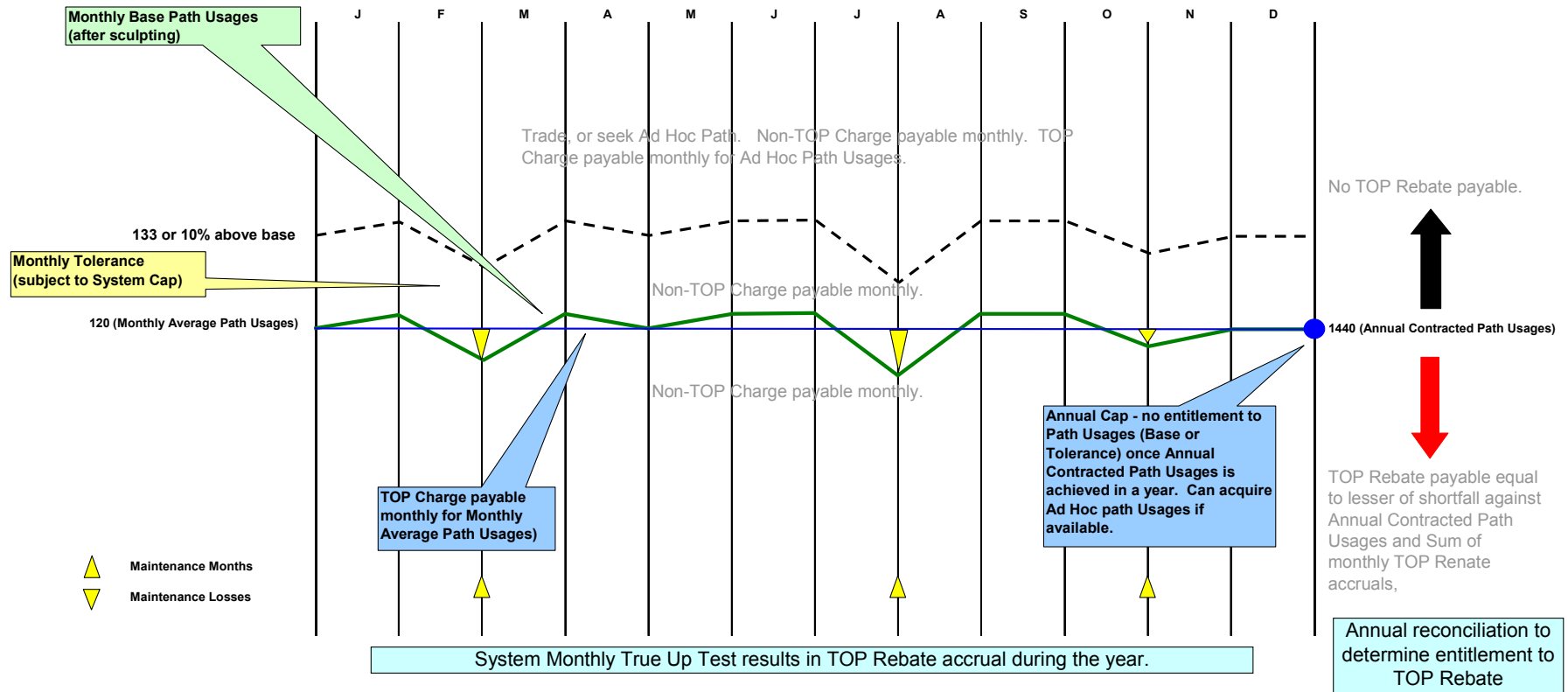
### Hunter Valley Access Undertaking

Pricing Zone	Segment	Description	Length
3	0401	Dartbrook - Werris Creek	114.3
3	0402	Werris Creek - Gap	5.2
1	0915	Islington Jct To Scholey St Jct	1.0
1	0916	Scholey St Jct To Port Waratah	3.5
1	0917	Scholey St Jct To Waratah (Via Coal)	1.4
1	919	Morandoo & Bullock Island	8.7
1	0925	Waratah To Hanbury Jct (Via Coal)	2.3
1	0926	Hanbury Jct To Sandgate (Via Coal)	1.8
1	0927	Hanbury Jct To Kooragang East Jct	1.1
1	0930	Kooragang East Jct To Kooragang Island	15.3
1	0931*	Kooragang East Jct To Sandgate	0.9
1	0936	Sandgate To Thornton (Via Coal)	12.4
1	0937	Thornton To Maitland (Via Coal)	10.6
1	0944	Telarah To Farley	0.4
1	0946	Maitland To Farley	1.4
1	0947	Farley To Branxton	21.6
1	0948	Branxton To Whittingham	18.5
1	0951	Whittingham To Saxonvale Jct	8.0
1	0952	Saxonvale Jct To Mount Thorley	1.5
1	0955	Whittingham To Camberwell Jct	12.5
1	0956	Camberwell Jct To Glennies Creek	6.8
1	0957	Glennies Creek To Newdell Jct	8.5
1	0958	Newdell Jct To Draytons Jct	9.6
1	0959	Newdell Branch	2.7
1	0961	Draytons Jct To Muswellbrook	17.0
3	0962	Muswellbrook To Dartbrook Jct	7.6
1	0970	Muswellbrook To Bengalla Jct	5.2
2	0971	Bengalla Jct To Anvill Hill	12.8
2	0972	Anvill Hill to Sandy Hollow Junction	25.2
2	0973	Sandy Hollow Jct To Wilpinjong	92.9
2	0974	Wilpinjong To Ulan Colliery Jct	10.3

\* Includes Sandgate Flyover (for the purposes of pricing principles only) which forms part of ARTC Sector 938 Sandgate – Maitland (via Main)

## COAL TRAIN PATH ACCESS RIGHTS & OBLIGATIONS

TRAIN PATH - MT. THORLEY TO KOORAGANG/PT. WARATAH - 10mTpa. HVCCC assessment indicates the Access Holder needs 1440 annual path usages





## Loss Capitalisation Approach to Economic Valuation

### Background

#### Expansion of the Hunter Valley coal network

Coal transported on the Hunter Valley network is sourced from a number of geographically dispersed mines and coal loaders.

The majority of coal shipments occur at the lower end of the Hunter Valley. However, it is anticipated that the growth in the network is likely to occur at the extremities of the current network. The forecast strong growth in the coal transport task over the next five years indicates an increasing proportion of coal being hauled from north of Dartbrook and east along the Ulan line. This trend is expected to continue in the period between 2010 and 2015.

This will have implications for traffic patterns on the network and for the location of future capital investment to expand network capacity. In particular, in terms of expansion plans, there is likely to be a stronger focus on single track sections of the network north of Antienne. Nevertheless, such investment is likely to yield capacity benefits to mines closer to the port, as well as mines further out.

#### Investment risk

Asset stranding risk occurs where an infrastructure service provider cannot fully recover the cost of providing the infrastructure having particular regard to the full capital cost of its sunken infrastructure.

Asset stranding risk is greater the longer the life of the asset. Long life assets are typically found on rail networks.

To meet increasing demand over the current regulatory period, ARTC has invested in additional network capacity outside the scope of the current regulated network but with a lack of binding contractual arrangements to underpin this capacity enhancement.

ARTC is currently most exposed to asset standing risk with respect to what is known as the 'unconstrained' part of the Hunter Valley network (where mines do not pay the full economic cost of rail service provision) and to expansions of the network outside of the relatively narrowly defined 'stand alone' network used in the NSWRAU.

Moreover, future capacity expansion will be necessary for new, or relatively new, mines on geographically distant parts of the Hunter Valley network which will entail significantly more

investment risk than capacity enhancement on the heavily used sections of the network closer to the port.

There are a number of options that ARTC could pursue to mitigate its asset stranding risk, especially in respect of new investment including:

- the use of a wider definition of the Hunter Valley network than is currently used under the NSWRAU;
- capitalisation of initial economic losses incurred on new infrastructure for later recovery through access charges; and
- adoption of accelerated depreciation in certain circumstances.

### **Capitalising economic losses for future recovery**

#### Asset base roll-forward to start of next regulatory period

ARTC is proposing to establish the opening regulated asset base (RAB) for the next regulatory period by rolling forward the value of the RAB determined for the existing regulatory period.

Initial RAB in relation to those Segments that have been ascribed a regulatory asset value in accordance with the NSWRAU in force at the time immediately preceding the Commencement Date will be set at the value of those Segments determined in accordance with the NSWRAU as at the Commencement Date.

This will involve taking the depreciated optimised replacement cost (DORC) asset value at the commencement of the existing regulatory period and rolling it forward each year to the commencement of the next regulatory period by adding in new capital expenditure for the defined regulated network and adjusting for inflation, actual depreciation and any asset disposals/transfers. This would then form the starting value for the next regulatory period.

As such, the potential for windfall gains that might arise from a revaluation are avoided. However, to the extent that the initial valuation of the regulated network undertaken by the NSW regulator in 1999 may have under or over-estimated the value of the regulated network, such under or over-estimate will be perpetuated with related efficiency consequences.

In relation to those covered assets that have not been ascribed a regulatory asset value in accordance with the NSWRAU in force at a time immediately preceding the Commencement Date, a separate DORC asset value (as at 1 July 2008) is proposed by ARTC, and is shown in the table below.

Segment	Proposed DORC Asset Valuation (as at 1 July 2008)
0401 – Dartbrook – Werris Creek	\$135.1m
0402 – Werris Creek - Gap	\$4.2m

Detailed documentation underpinning these valuations will be provided separately.

ARTC proposes to roll forward these 1 July 2008 valuations to the commencement date of the HVAU by the application of relevant CPI, capital expenditure and depreciation.

#### Asset base roll-forward during next regulatory period

Where an access provider is earning below economic returns on existing assets or initially on an investment in new capacity, ARTC considers that it should be able to offset this against any above-normal returns from the asset in question at a later period. Such an approach will facilitate use of the network as, where an expansion is occurring to service a new mine, setting higher prices initially for that expansion will tend to undermine the growth in volumes. This raises the riskiness of the investment, with the possibility that it would not be undertaken.

By reducing stranding risk and reducing the possibility that an investment is deferred, the mining industry will benefit from the higher tonnages railed. The additional tonnage also provides a wider community benefit through income generated from the higher tonnages. This higher income would not have been generated in the absence of the rail investment.

By allowing the infrastructure to recover the full economic cost of the investment in the long term (even though such recovery may not be possible in the early years of an investment), the likelihood of ensuring investment is undertaken ahead of demand is enhanced.

ARTC is proposing to adopt the 'loss capitalisation' approach in its Hunter Valley Access Undertaking (HVAU). Under this approach, ARTC would be able to 'capitalise' any economic losses incurred over time, provided its regulatory asset base (RAB) is above a specified lower limit, so it is able to earn a regulated return on these losses in the future.

Under this approach, if the access provider is earning insufficient revenue to cover operating expenditure and capital costs, the RAB will increase over time, reflecting the need to recover larger amounts of revenue in the future.

Where the access provider is consistently earning excess returns (and not investing at high levels), the RAB must eventually decline. The proposed approach includes a floor below which the RAB is not allowed to drop (ie. the 'RAB floor limit'). This RAB floor limit starts at a level at or near the Initial RAB and evolves over time, according to a conventional building block approach, such as annual roll-forward through the application of capital expenditure and adjustment for depreciation and inflation.

Worked examples of this approach are provided in the section below.

## Worked Examples

Conventional approach to defining a ceiling revenue limit

### 'Building Block Model'

The revenue limit is equal to the sum of the 'return on capital' (WACC times RAB) plus depreciation 'return of capital' (determined on some basis) plus operating expenditure\*. The Regulatory Asset Base ("RAB") is rolled forward as the sum of the previous RAB inflated, less depreciation plus net capital expenditure.

The proposed approach

### 'Loss Capitalisation Model'

The proposed approach seeks to allow an access provider a greater degree of flexibility than is normally possible under the building block approach. The access provider is allowed to 'capitalise' any economic losses incurred over time, provided its RAB is above a specified lower limit, so the access provider is allowed to earn a regulated return on these losses in the future.

RAB annual roll-forward

$$RAB_{t \text{ start}} = RAB_{t-1 \text{ end}} = (1 + WACC) * RAB_{t-1 \text{ start}} - \text{Out-turn Revenue}_{t-1} + \text{Out-turn Opex}_{t-1} + \text{Net Capex}_{t-1}$$

Under the proposed approach, if the access provider is earning insufficient revenue to cover operating expenditure and capital costs, the RAB will increase over time, reflecting the need to recover larger amounts of revenue in the future.

### 'The RAB Floor Limit'

If the access provider is consistently earning excess returns and is not investing at high levels, RAB must eventually decline. The proposed approach includes a floor below which the RAB is not allowed to drop – 'The RAB Floor Limit'

Once RAB drops to the RAB Floor Limit, the access provider is no longer free to choose access pricing. Instead, prices are regulated according to the conventional building block approach.

The RAB Floor Limit starts at a level at or near Initial RAB, and evolves over time, according to a conventional building block approach.

RAB Floor Limit annual roll-forward

$$\text{RAB Floor Limit}_{t \text{ start}} = \text{RAB Floor Limit}_{t-1 \text{ end}} = (1 + \text{CPI}_{t-1}) * \text{RAB Floor Limit}_{t-1 \text{ start}} + \text{Net Capex}_{t-1} - \text{Depreciation}_{t-1}$$

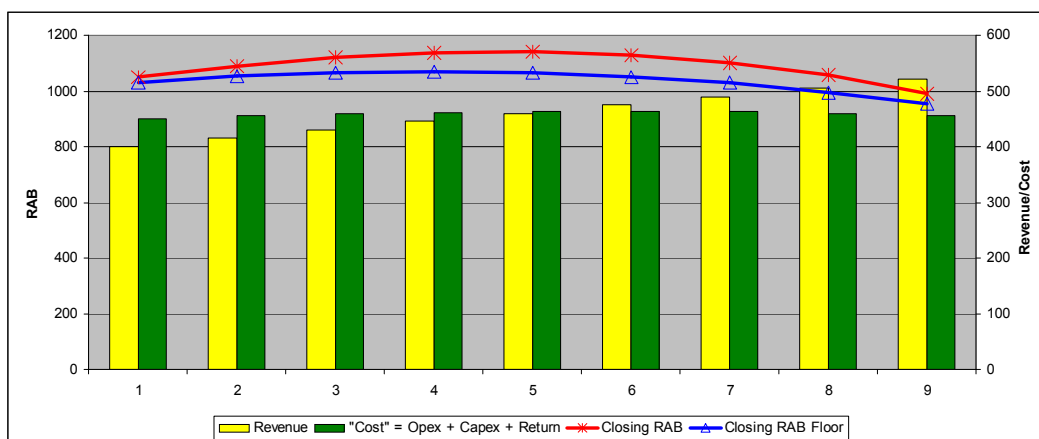
The Initial RAB is determined on a DORC basis.

### Examples

1. RAB does not reach RAB Floor Limit. Access provider is allowed to capitalise losses in the early years.

Opening RAB = Opening RAB Floor Limit = \$1000      Opex = \$200  
 Capex = \$150      WACC = 10%

Access pricing set to achieve revenue of \$400 increasing annually by \$15. Numbers are for illustrative purposes only.

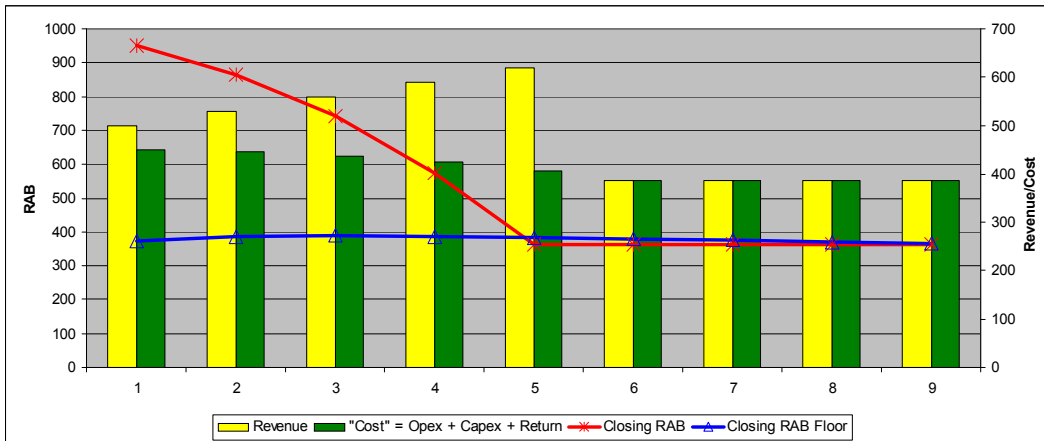


2. Revenue in excess of costs. RAB declines rapidly. When RAB reaches Floor Limit, access provider must revert to building block approach, substantially reducing revenue.

Opening RAB = \$1000, RAB Floor Limit is lower at say \$350 (reflecting earlier accumulated losses)

Opex = \$200      Capex = \$150      WACC = 10%

Access pricing set to achieve higher revenue of \$500 increasing annually by \$30. Numbers are for illustrative purposes only.



### ARTC's proposed application of the Revenue Limits

ARTC is proposing to treat assets existing as at the Commencement Date of the HVAU and assets commissioned during the Term of the HVAU on a different basis. Firstly the initial RAB for existing assets will be taken as the regulatory asset base as at the Commencement Date as determined under the process of economic regulation in place at that time, as described earlier. The initial RAB in relation to assets commissioned during the Term will clearly be zero.

To recognise the different risks faced through the operation of existing assets as opposed to new investments to facilitate capacity for mines in outer regions, ARTC is proposing to determine and capitalise economic losses to the existing and new assets separately and based on a different rate of return. There will be two separate RAB roll-forwards for existing and new assets determined for each Segment for each year of the Term based on:

- the relevant rate of return (WACC);
- relevant operating expenditure directly associated with that Segment or allocated to that Segment;
- capital expenditure for that Segment in determining the roll-forward of the RAB for new assets only.
- relevant access revenue derived for traffic on that Segment.

ARTC has proposed that Capital Expenditure endorsed by the HVCCC (or by expert determination as provided for in the HVAU), or as separately endorsed by the ACCC will be considered prudent for the purposes of RAB roll-forward.

Concurrently, ARTC will determine the RAB Floor Limit for each Segment (new and existing assets) for each year of the Term. The Initial RAB for each Segment will be set at DORC for that Segment as at the Commencement Date. The roll forward for each year will be based on the formula specified above, as well as:

- CPI;
- capital expenditure for that Segment; and,
- depreciation of assets on that Segment determined on a straight line basis and based on relevant economic mine life.

For the purposes of comparison with the RAB Floor Limit each year (which is determined for all assets), the separate RABs for existing and new assets will be combined.

Any applicable Ceiling Limit is adjusted (reduced) to the extent of return on assets paid for through capital contributions from Customers.

If it is able to, ARTC could derive revenue in excess of the conventional revenue ceiling limit during the Term. In any event, and for each year of the term, the revenue ARTC could derive from a Segment would be limited to its operating costs plus depreciation of, and return on, its assets and prior capitalised losses (RAB), and any losses not previously recovered.

In effect, for each Segment, the full recovery of prior losses acts as a trigger to the regulatory constraint of access revenue to the conventional revenue ceiling limit.

In terms of future recovery of shortfalls under the capitalisation approach, ARTC proposes that these be carried forward in the context of the existing combinatorial pricing approach.

#### Combinatorial pricing approach

Under the combinatorial pricing approach, prices are set within a floor (incremental cost) and ceiling (total economic cost) limit.

Costs for each route are allocated to the relevant route section. In broad terms, revenue is allocated to cover the costs attributable to particular route sections in an order of priority, as follows:

- incremental costs of all applicable route sections;
- up to the ceiling on all applicable branch or feeder (dedicated) route sections; and
- up to the ceiling on all applicable shared route sections.

This approach ensures that the costs of dedicated lines are recovered as a priority. Any additional revenue earned above incremental costs then goes to the feeder lines and then the main lines. The combinatorial pricing approach has two important benefits that ARTC considers are important in the context of the asset roll-forward capitalisation approach. First, it will avoid cross subsidisation between route sections. Second, recovery of capital costs on branch or feeder lines has higher priority than shared lines on the basis these are dedicated lines and, unless these costs are recovered, the lines may close (or not be built in the first place). Accordingly, this approach reduces

the risk of under-recovery of costs on dedicated lines, thereby facilitating investment in expanding the network in these areas.

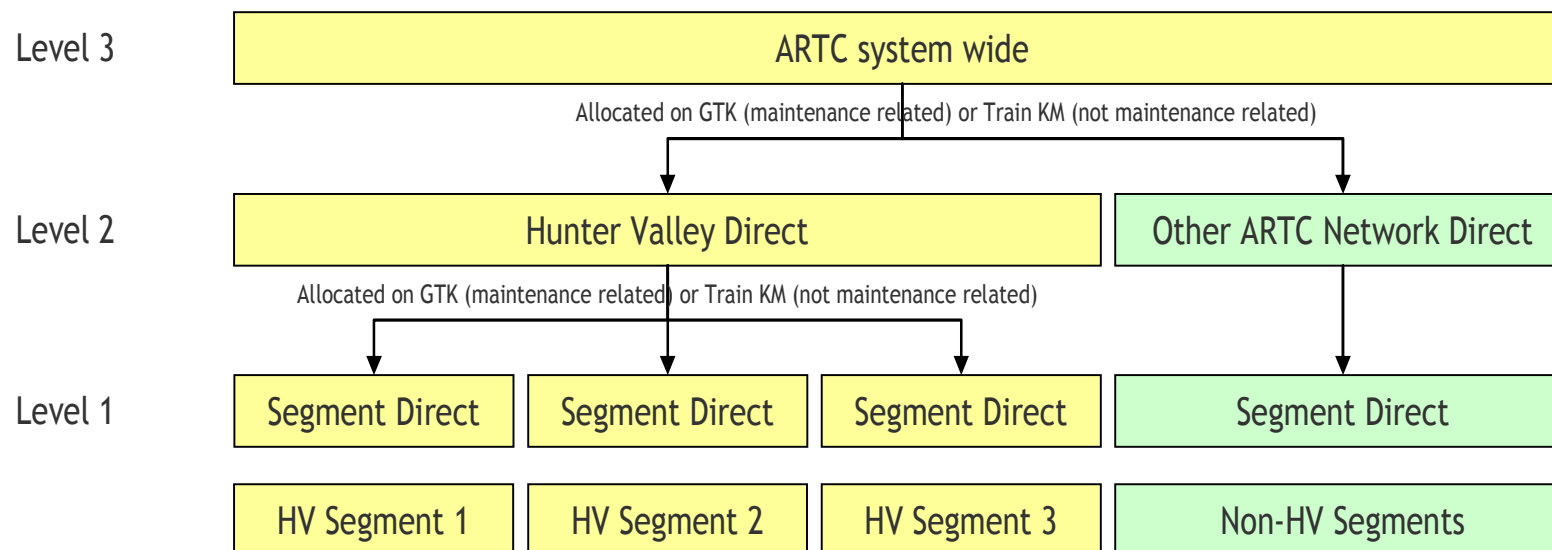
As a result of applying the combinatorial approach, capitalised shortfalls on relevant Segments would be recovered from users of those line segments and no other mines. This is essentially a cost allocation process and subsequent recovery of the allocated costs. ARTC recognises the sensitivities surrounding such a cost allocation process, in particular, the allocation of common costs.

Consequently, transparency of the cost allocation process to the regulator will be important to provide comfort to producers and operators that no cross-subsidisation is taking place.

Another key benefit of the capitalisation approach is that it seeks to provide greater flexibility to facilitate expansion of the network, particularly in the outer limits of the network where the investment is likely to be more risky due to uncertainty about future volumes. As such, it will result in a pattern of access charges over time that is consistent with utilisation of the asset.



## Cost allocation approach



Cost identified on three levels:

1. Identified directly with a segment (mainly maintenance, depreciation/return on directly identified RAB assets)
2. Identified directly with the HV network (train control, maintenance supervision, local management, HV logistics) then allocated to segment. Allocated on the basis of GTK (maintenance) or train kms (otherwise)
3. Not identified directly with the HV network or any other part ARTC network (system wide overheads eg corporate management/admin, system engineering support) then allocated to all parts of the ARTC network (including the HV network). HV network allocation then allocated to segment. Allocated on the basis of GTK (maintenance) or train kms (otherwise).

Where possible, costs will be identified directly with segments, parts of the business.

## Proposed Hunter Valley Rates of Return

### Executive Summary of a review of Weighted Average Cost of Capital undertaken by Synergies Economic Consulting (April 2009)

ARTC requested Synergies Economic Consulting (Synergies) to provide an opinion on the weighted average cost of capital (WACC) for the Hunter Valley coal network.

As part of its 2008-18 Hunter Valley Strategy, ARTC is expecting to spend nearly \$1.5 billion on infrastructure enhancements and upgrades to the network over the next five years, relative to an existing Regulated Asset Base of approximately \$640 million. Apart from the impact of the global financial crisis on conditions for capital raising, ARTC is expected to commit significant new capital for assets with very long useful lives (and no alternative use) in an extremely risky climate. The demand environment has changed very quickly from an unprecedented boom to one of considerable uncertainty as to the extent and duration of any slowdown in growth.

#### Parameter Estimates

The WACC has been estimated using a post-tax nominal framework (or 'vanilla' WACC), with the cost of equity determined in accordance with the domestic Capital Asset Pricing Model (CAPM), which remains the most commonly used asset pricing model despite a number of shortcomings.

It is also important to give due regard to the statistical imprecision of beta, and the asymmetric consequences of regulatory error. It is generally recognised that if prices are set too low, the resulting under-investment is worse from an economic and social perspective than if prices are set too high. This highlights the need to adopt a cautious approach in estimating beta, as well as other WACC parameters. In this context, this means erring on this side of setting WACC at the upper end of the range, rather than the lower.

One of the key drivers of WACC is systematic or non-diversifiable risk, which is reflected in the cost of equity calculation via the equity beta. In order to determine this for ARTC, Synergies undertook:

- a review of comparable companies from the coal and rail industries, as well as relevant regulatory decisions; and
- a first principles analysis, which concludes that a key source of ARTC's systematic risk is its high operating leverage.

Synergies have concluded that 0.5 and 0.6 is a reasonable range for ARTC's asset beta. The lower bound is consistent with the QCA's 2005 decision in relation to QR's central Queensland coal

network and the upper bound is based on other rail regulatory decisions, as well as beta estimates from listed coal and rail firms (the average of which is still well above this bound, reflecting that the risks faced by these firms are likely to be higher than ARTC's risk profile).

As noted above, ARTC is about to commit to an investment program that is significant relative to the size of its existing Regulated Asset Base. ARTC only has certainty in relation to the revenue it will earn for the duration of the regulatory period. Beyond this, it remains exposed to the risk of a reduction in demand. This risk is not compensated via the WACC (nor is it compensated elsewhere) given the CAPM assumes that returns are normally distributed, whereas stranding risk is asymmetric, notwithstanding that some of the drivers of asset stranding risk are systematic in nature.

Apart from the total size of the investment planned by ARTC, much of the demand for this additional capacity is being created as a result of new mines that are being developed some distance from the port. As is highlighted in the report, ARTC's systematic risk is underpinned by the risk profile of its customers. The systematic risk of coal mining companies is particularly high. This is driven by a number of factors, including the sensitivity of these companies' revenues to exchange rates given they influence the competitiveness of Australia's coal exports. Demand for ARTC's services will also be influenced by this, although ARTC's revenues are protected under the revenue cap, at least for the term of the regulatory period.

If these mines are considered in isolation (recognising that most of these mines are owned by companies that already have other developments in the region), the systematic risk of these particular mines is likely to be higher than the systematic risk of established mines that are located closer to the port. Apart from being relatively new developments, given the mines are located much further from the port, they are at a relative cost disadvantage compared to their competitors who are located closer to the port (given they face higher transport costs). As a consequence, these mines are likely to be more vulnerable to an adverse movement in exchange rates and could be the first to close if there was a significant downturn in demand.

ARTC's revenues are largely protected from systematic volume risk for the term of the regulatory period. If there was to be a significant change in demand during a regulatory period, it is still possible that the regulator would revisit prices. The new mines, having a higher cost structure than the established mines, would have a higher level of systematic risk (that is, they would be more affected by economic shocks than the established mines). The new expanded network servicing the new mines would therefore also have a higher level of systematic risk than the existing network. Closure of the new mines caused by adverse economic conditions would result in stranding risk being borne by ARTC. As noted above, the stranding risk is not compensated via the WACC.

The riskiness of the investment climate currently faced by ARTC has been highlighted with the recent global financial market downturn. There are now significant concerns regarding future world economic growth, including growth in China, which has been fuelling much of the current boom in

the demand for coal. This impact has already been seen in commodity prices and the implications for coal remain uncertain.

Even if the demand outlook remains positive, these events have highlighted the potential vulnerability of this outlook over the longer term. However, it is unlikely that this has moderated expectations on ARTC to undertake significant investments that will enhance the performance of the coal supply chain, which is in the public interest.

Synergies are of the view that it is reasonable to provide ARTC with at least some compensation for stranding risk. However, the key question is how this compensation can be appropriately determined and applied. There are three possible ways of doing this:

1. determining a methodology to value asymmetric risk, with a view to providing compensation via the cashflows, rather than the WACC;
2. applying a subjective adjustment to the beta (or the WACC); or
3. selecting the beta estimate from towards the upper bound of a reasonable range.

The first method is the preferred approach but unfortunately a robust methodology for valuing asymmetric risk is yet to be developed (and accepted by regulators). The second method is inconsistent with the CAPM, although it is probable that this is what a number of unregulated businesses do in practice.

This leaves the third option. While an imperfect solution, it ensures that sufficient incentive is provided to ARTC to invest, recognising that investment in essential infrastructure to support Australia's export capability is in the public interest. It should not result in over-compensation provided the beta is selected from within the bounds of a reasonable range.

Synergies note that the most recent determination by IPART regarding the rate of return to apply to the Hunter Valley network dealt with this issue by selecting a WACC from above the mid-point of the range:<sup>3</sup>

IPART proposes to take account of truncation by allowing an unders and overs account system and permitting a maximum rate of return above the mid-point determined by the CAPM framework.'

The environment facing ARTC's Hunter Valley coal business was quite different back in 2004, with the implications of the subsequent growth in the demand for coal yet to fully emerge. At the time, ARTC was not contemplating an investment program anywhere near the size of the expenditure it is looking to commit now.

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<sup>3</sup> Independent Pricing and Regulatory Tribunal of New South Wales (2004), Report on the Determination of Remaining Mine Life and Rate of Return from 1 July 2004, NSW Rail Access Undertaking, p.74.

The investment risk is a key issue facing ARTC's future capital program.

ARTC is not compensated for this risk (under the CAPM-determined WACC or otherwise). In the absence of any readily accepted method to value stranding risk we are of the view that providing some uplift to ARTC ensures that it has sufficient incentive to invest in this extremely risky investment climate. In addition to the approach taken by IPART in the 2004 decision, we note that an 'uplift' in WACC was provided to the Dalrymple Bay Coal Terminal by the Queensland Competition Authority in its 2005 decision, in recognition of the significant expansion it is undertaking in the same climate.

The ten-year Commonwealth Government bond yield is the most commonly used proxy for the risk-free rate given it is readily observable and reflects the long-term horizon that is assumed under the CAPM. However, following the global financial crisis, these yields are currently at historically low levels. This reflects the significant impact of 'non-risk' factors on the returns on sovereign government debt, which are largely driven by the 'flight to quality' that has been observed with the credit crisis and continued deterioration in the world economy. The premium that investors are willing to pay in such circumstances increases Commonwealth Government bond prices and compresses yields. While these non-risk factors have always influenced yields on Commonwealth Government bonds, this impact has increased considerably in recent times.

As a consequence, Commonwealth Government bond yields underestimate the required return on the risk-free asset under the CAPM, given the influence of non-risk factors that are not recognised as part of the CAPM framework. In our view, an adjustment for this compression in yields due to non-risk factors (which is often termed the 'convenience yield') should be made, at least for the duration of the global financial crisis (or, until the convenience yield reverts to its long-term average). While it has always been recognised that sovereign government bond yields are a less than perfect proxy for the risk-free rate (under the CAPM), these problems have been exacerbated in the current environment. As the 'convenience yield' has always been present to some extent, adjustment is only sought for the recent spike that has occurred in recognition of the abnormal market conditions resulting from the global financial crisis. This increase is estimated to be in the order of 60 basis points<sup>4</sup>, which is added to the current estimates of the risk-free rate.

In relation to the market risk premium, Synergies are of the view that there is no clear economic or empirical justification for a fall in the value of the market risk premium relative to historical values. Most long-term studies of historical returns produce estimates well in excess of 6% - most likely around 7% - which shows that the assumption that has been consistently adopted by regulators has been too low. Following the global financial crisis, expectations for the MRP suggest that it may be

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<sup>4</sup> Competition Economics Group (2008), Establishing a Proxy for the Risk-free Rate, A Report for the APIA, ENA and Grid Australia, September.

even higher, at least in the short to medium-term.<sup>5</sup> Synergies are therefore of the view that a range of between 6% and 7% remains appropriate.

Synergies also remain of the view that the value of gamma is zero, recognising that since the introduction of the 45-day rule, franking credits are now worthless to the marginal foreign investor. This is evident from recent reputable studies, as well as our own analysis which rejects the hypothesis that gamma has a value other than approximately zero (and also demonstrates that franking credits do not have a value, such as 0.5 or 1).

While franking credits may have had some value prior to this tax law change (which may be reflected in estimates from studies that have spanned this decision), this is no longer the case. The early regulatory decisions which adopted a value of 0.5 (which has since become precedent) were also made prior to the introduction of the 45-day rule. Synergies are of the view that there is sufficient evidence to now review the fundamental basis of this assumption.

Synergies are of the view that a capital structure range of between 50% and 55% is appropriate for ARTC. This conclusion was reached after reviewing other regulatory decisions, as well as capital structures maintained by firms in similar industries.

The recommended parameter estimates for the WACC for ARTC's Hunter Valley coal network are summarised in the following table:

Parameter	Lower bound	Upper bound
Risk-free rate <sup>a</sup>	4.95%	4.95%
Debt to total value	50%	55%
Equity to total value	50%	45%
Debt margin <sup>b</sup>	3.36%	3.36%
Debt raising costs	0.125%	0.125%
Market risk premium	6%	7%
Gamma	0	0
Tax rate	30%	30%
Asset beta	0.5	0.6
Debt beta	0	0
Equity beta <sup>c</sup>	0.99	1.32
Cost of equity	10.88%	14.16%
Cost of debt	8.44%	8.44%
Post-tax nominal WACC	9.66%	11.01%

<sup>a</sup> Based on a 20 day average for the period ending 31 March 2009, plus 60 basis points.

<sup>b</sup> Based on a 20 day average for 8 year BBB bonds plus the margin between an A-rated 8 and 10 year bond, for the period ending 31 March 2009. Before debt-raising costs.

<sup>c</sup> Based on the Monkhouse formula.

Synergies have also recommended that:

<sup>5</sup> B. Officer & S. Bishop (2009), Market Risk Premium: Further Comments, Prepared for Energy Networks Association, Australian Pipeline Industry Association and Grid Australia, January.

- an allowance for equity raising costs is included in the cashflows, based on an estimate of at least 5%. This is considered a lower bound as it only captures the direct costs of raising equity, not the indirect costs; and
- interest during construction is capitalised into the asset base during the construction period, based on the WACC.

### **ARTC proposal**

ARTC is proposing to apply a different rate of return to existing assets to that for new assets in order to recognise the different risk profile in relation to new assets.

ARTC acknowledges that this is a less than perfect solution to this issue given the key difference in risk between the existing and new assets is stranding risk (otherwise, the systematic risk is the same). However, the reality is that ARTC is not compensated for this risk (under the CAPM-determined WACC or otherwise). In the absence of any readily accepted method to value stranding risk ARTC is of the view that providing some uplift for new assets ensures that it has sufficient incentive to invest in this extremely risky investment climate. ARTC notes that an 'uplift' in WACC was provided to the Dalrymple Bay Coal Terminal by the Queensland Competition Authority in its 2005 decision, in recognition of the significant expansion it is undertaking in the same climate.

In formulating the separate rate of return in each case ARTC has had regard for:

- the Synergies assessment, particularly in regard to the assessment of components of the CAPM.
- the position taken, and arguments put forward, by the ACCC in relation to components of the CAPM in its Draft Decision with regard to the 2008AU.
- the position taken and arguments put forward, by IPART in its assessment of rate of return applicable to the Hunter Valley coal network assets in 2004.
- observed changes in estimates of certain CAPM parameters resulting from changes in markets and economic conditions since 2004.

### **Assets existing as at the Commencement Date**

In formulating rate of return for assets existing as at the Commencement Date, ARTC has adopted a range of feasible WACC advised by Synergies and has adopted a Rate of Return lying at the 60<sup>th</sup> percentile within that range. This is consistent with ARTC's proposal to the NSW regulator in its review of rate of return under the NSWRAU. In that proposal (applying to the Hunter Valley assets

as a whole) a rate of return set at the 70<sup>th</sup> percentile has been proposed (consistent with existing settings under the NSWRAU). ARTC expects that around one third of the Hunter Valley asset value will relate to existing assets with a lower degree of stranding compared to new assets. When combined with the percentile setting for new assets below, the overall asset setting would be consistent with the existing percentile setting under the NSWRAU.

### **Assets commissioned during the Term**

In formulating a rate of return for new assets commissioned during the Term, ARTC has adopted a range of feasible WACC advised by Synergies and has adopted a Rate of Return lying at the 75<sup>th</sup> percentile within that range. This is consistent with the ARTC's proposal to the NSW regulator in its review of rate of return under the NSWRAU. In that proposal (applying to the Hunter Valley assets as a whole) a rate of return set at the 70<sup>th</sup> percentile has been proposed (consistent with existing settings under the NSWRAU). ARTC expects that around two thirds of the Hunter Valley asset value will relate to new assets with a higher degree of stranding risk compared to existing assets. When combined with the percentile setting for existing assets above, the overall asset setting would be consistent with the existing percentile setting under the NSWRAU.

Inflation has been set at the underlying RBA target, as considered appropriate by the ACCC in its Decision on the 2008AU.

The table below shows parameters underpinning ARTC's proposed rate of return to apply to assets existing as at the Commencement Date and new assets commissioned during the Term.



ARTC PROPOSAL (HUNTER VALLEY ACCESS UNDERTAKING)		
	Synergies LOWER BOUND	Synergies UPPER BOUND
	May-08	May-08
Rf (nominal)	4.95%	4.95%
Debt	50%	55%
Equity	50%	45%
D/E	1.00	1.22
BBB bond rate (nominal)	8.31%	8.31%
Debt margin (nominal)	3.36%	3.36%
Debt raising costs	0.125%	0.125%
Cost of debt (Nominal)	8.44%	8.44%
MRP	0.060	0.070
Gamma	0.00	0.00
Inflation	2.50%	2.50%
Tax rate	30%	30%
Asset beta	0.50	0.60
Debt beta	0.00	0.00
Equity beta	0.99	1.32
ke	10.88%	14.16%
kd	8.44%	8.44%
<b>Vanilla WACC* Range</b>	<b>9.66%</b>	<b>11.01%</b>
<b>Pre-tax real** Range</b>	<b>9.26%</b>	<b>10.97%</b>
<b>Proposed Rate of Return applicable to assets commissioned during the Term</b>		<b>10.47%</b>
<b>Proposed Rate of Return applicable to assets existing as at the Commencement Date</b>		<b>10.67%</b>

\* A nominal post-tax framework is adopted by the ACCC

\*\* A real pre-tax framework has been adopted in the Hunter Valley historically and is proposed for determination of Full Economic Cost in annual ceiling test compliance.

ARTC has proposed a rate of return for assets existing as at the Commencement Date of 10.47% nominal post-tax. ARTC has proposed a rate of return for new investments commissioned during the Term of 10.67%. This is largely consistent with ARTC's existing proposal to the NSW regulator in relation to its rate of return review under the NSWRAU and will provide consistency in regulatory transition.

## COAL ACCESS PRICING OBJECTIVES

Cost Component	Pricing Objective	Applied to ....	Basis of recovery
<b>Variable component of cost (VCC)</b> Direct Cost associated with use of the network in the Pricing Zone	Full cost recovery	All Customers operating services in the Pricing Zone	Based on actual GTKs operated in the Pricing Zone.
<b>Fixed Cost Component (FCC)</b> <ul style="list-style-type: none"> <li>Fixed Operating Cost of the network in the Pricing Zone</li> <li>Capital Cost associated with assets existing as at the Commencement Date in the Pricing Zone</li> </ul>	Maximise cost recovery	A contribution will be sought from all Customers operating services in the Pricing Zone. Extent of recovery will generally have regard to cost impact and capacity to pay. Where the Pricing Zone is constrained full cost recovery would be achieved.	<b>Take or Pay component (coal Services only)</b> <ul style="list-style-type: none"> <li>Objective is provide certainty for ARTC to invest</li> <li>Will constitute some or all of FCC and NCC</li> <li>Will be applied openly (take or pay charges will be determined prior to each year and published)</li> <li>Will be applied equitably:               <ul style="list-style-type: none"> <li>based on forecast utilisation of new capacity</li> <li>applied irrespective of actual utilisation</li> <li>applied to all users of new capacity in a Pricing Zone</li> <li>will have regard to additional future use by all coal users of new capacity, where access revenue exceeds ceiling limit</li> <li>proportion of FCC recovered through Take or Pay will be applied consistently</li> </ul> </li> <li>may be charged on a periodic rather than actual usage basis</li> </ul> <b>Otherwise</b> <ul style="list-style-type: none"> <li>will be charged on a usage basis or as a flagfall component of charges (non-coal services)</li> </ul>
<b>New Capital Component (NCC)</b> <ul style="list-style-type: none"> <li>Capital Cost associated with new investments commissioned during the Term in the Pricing Zone</li> </ul>			

## Comparison of HVAU against CAG Guiding Principles

### 1. Summary

In developing the Hunter Valley Access Undertaking (**HVAU**), ARTC has participated in the Contractual Alignment Group (**CAG**) and assisted with developing the contractual alignment guiding principles in Schedule 5 of the Implementation Memorandum (**IM**) lodged with the ACCC by PWCS on 6 April 2009.

The HVAU is broadly consistent with these guiding principles (set out in full in italics in the boxes) as explained in the later sections below.

#### 1.1 Interaction of HVAU with the Implementation Memorandum

Given that ARTC has lodged the HVAU for approval with the ACCC, it believes there are benefits in the HVAU being taken into account in the ACCC's consideration of the IM, and in developing the documents to implement the IM.

##### *Terminal Access Protocols*

Schedule 3 of the Implementation Memorandum indicates that PWCS and NCIG should develop Terminal Access Protocols which will provide the agreed arrangements for access to the terminals (including the nomination and allocation procedures). The protocols will be incorporated into the relevant leases, Capacity Framework Agreement with the Newcastle Port Corporation and/or the long term ship or pay contracts.

ARTC believes that in developing these protocols the ports should have regard to the HVAU to ensure alignment to the maximum extent possible. In particular, it would be preferable if there was alignment and coordination in relation to:

- the role of the HVCCC - it appears that clause 11 of the IM envisages a similar role of the HVCCC as provided for in the HVAU;
- the granting of capacity, ie monthly allocations and tolerances and flexes;
- trading of port and track access rights;
- timing in relation to the negotiation of port and track access; and

##### *Coal Chain Access Protocols*

Schedule 3 of the IM indicates that PWCS and NCIG should enter into Coal Chain Access Protocols with producers to address contractual alignment between terminal, track access and above rail and must be consistent with the Schedule 5 guiding principles.

ARTC sees the main area of interaction between the service providers as follows:

- initial capacity review and allocation;
- planning and alignment of new capacity;
- operations;

- trading;
- minimising, and accountability for, interface losses.

ARTC believes that the first four points can be dealt with by having complementary access undertakings/protocols and through the HVCCC.

ARTC assumes that the proposed Coal Chain Access Protocols are intended to clarify the processes and terms of conditions of access, in much the same way as an undertaking. As such PWCS and NCIG have an opportunity to provide certainty to producers and for themselves, in committing to how interfaces with other parts of the coal chain will be managed. With common reference points and principles embedded in the protocols transparency in longer term cohesive chain management can be achieved.

## 2. Producers to contract for each supply chain element

### **Guiding Principle 1**

*The onus is on the Producer to secure commercial arrangements to transport coal from the mine to the ship. If the Producer has appropriate access contracts in place to transport its coal to the ship, then what other Producers do should not infringe on that Producer's right to have its contracted services delivered.*

The HVAU is consistent with this principle.

- The HVAU introduces new contractual arrangements by which producers have the option of contracting directly for track access from ARTC rather than through an operator as is currently the case.
- ARTC is contractually committed to provide access to each contracted access holder and therefore has both a legal obligation and commercial incentive to only sell on a firm basis what it is reasonably capable of delivering.
- The HVAU provides for the HVCCC to be involved in the initial assessment and advice to an applicant on the impact on coal chain capacity arising from the track access request. The HVAU envisages a process where the HVCCC system modelling provides producers with the assumptions for track, above rail and port on which to base their contracts and throughput. Subject to model limitations, if the producer and the service providers each comply with the assumptions relevant to them, then there should be no impact on other producers, and the throughput committed to be delivered. Any potential for non-performance (and the consequences thereof) should be addressed in the commercial contract.
- The track access provided is based on certain assumptions which impact on track capacity (such as axle load, train speed, train length, section run times etc). Producers whose operators run within these parameters will not impact on other access holders.
- The HVAU provides for the grant of access rights to be conditional upon the producer demonstrating that it has sufficient discharge capacity to utilise the access rights.

### 3. Contractible capacity to take into account System Assumptions

#### **Guiding Principle 2**

*The onus is on the Track and Terminal service providers to ensure that they calculate their individual contractible capacities taking into account agreed System Assumptions. The system assumptions should include realistic, eg interface losses between each element of the coal chain, agreed operating mode(s) of the system (recognising the different operating modes of PWCS and NCIG) and the associated flexibility requirements, live-run losses, agreed capacities of fixed infrastructure and rolling-stock specifications and operating parameters. While service providers may engage the yet to be established independent HVCCC and/or third parties to assist to determine these assumptions and capacities, the primary responsibility and accountability resides with each of the Track and Terminal service providers. The contractible capacity of each of the Track and Terminal service providers is defined as the Track/Terminal System Capacity and is derived as follows:*

*Terminal Unconstrained Capacity Adjusted for all System Assumptions = Terminal System Capacity (Mtpa)*

*Track Unconstrained Capacity Adjusted for all System Assumptions = Track System Capacity (Mtpa)*

*A requirement exists for Terminal capacity of PWCS and NCIG to be clearly established. A requirement exists for Track system Capacity of ARTC to be clearly established.*

This Guiding Principle raises three issues:

- ARTC is to take into account agreed System Assumptions in determining its capacity available for contracting.
- ARTC should be responsible for its assumptions but a body such as the HVCCC is necessary to manage the integrated system modelling.
- ARTC and the ports should not 'overcontract' anticipated system capacity.

#### **3.1 Issue 1 - Use of System Assumptions**

The HVAU assumes that the industry will continue to have a Coal Chain Master Plan developed by the HVCCC<sup>6</sup> which includes the System Assumptions (see definitions of Coal Chain Master Plan and Assumptions). ARTC will continue to participate in the process of developing the plan as it has done in the past.

ARTC will take into account the System Assumptions in determining Capacity available for contracting. System Assumptions are also taken into account in determining requirements for Additional Capacity. Further, ARTC will have regard to advice from the HVCCC on modelled Coal Chain Capacity impacts in determining Capacity and Available Capacity, and the process for obtaining access to ARTC's network explicitly recognises the HVCCC.

#### **Capacity and Available Capacity - key concepts in HVAU**

- The definition of Capacity in the HVAU takes into account forecast member' losses.

<sup>6</sup> In the event the HVCCC is not formed this function can be carried out by any entity provided the modelling is clear, transparent and published.

- Capacity, as defined in the HVAU is analogous to “Track System Capacity” measured in train paths as referred to above although not in Mtpa because that is a function of both track, rolling stock and loading. As ARTC does not control the rolling stock or loading, ARTC is unable to make a commitment in relation to tonnage throughput.
- Available Capacity is defined to be Capacity less Committed (ie contracted) Capacity. These concepts then apply throughout the HVAU in terms of granting access and Capacity management and planning.

### ***Obtaining access - Capacity analysis involving HVCCC***

*(See section 7.4 of the Explanatory Guide)*

- Section 3.6 of the HVAU requires ARTC to participate in an initial review of an Applicant’s Capacity requirements on the Applicant’s request. The purpose of this initial review is to assist the Applicant to provide sufficient information to the HVCCC to obtain advice from the HVCCC as to the impact on Coal Chain Capacity of the track access rights sought and to provide advice to the Applicant on the operating requirements to deliver the Capacity sought. The involvement of other relevant service providers is also contemplated in this process. The Initial Review is a discretionary step at this stage to enable an Applicant to make a formal application. Any HVCCC advice provided to the Applicant is able to be included in the application for track access rights.
- Once an application is received, ARTC must undertake a Capacity Analysis to identify if there is sufficient Available Capacity to meet the application (see ss 3.9 and 5.1 of the HVAU). ARTC will consult with the HVCCC as part of the Capacity Analysis. It is anticipated that a Capacity Analysis will generally have already been undertaken prior to the formal application as the voluntary process above will be more efficient.
- If ARTC disagrees with the advice of the HVCCC, ARTC may request the Applicant to seek a further review from the HVCCC. While obligated to take into account the HVCCC’s views, ARTC is not bound by them. On the Applicant’s request, ARTC must provide reasons why it does not consider there to be sufficient Available Capacity (ss 3.9(d) and (e) of the HVAU). An Applicant may access the dispute resolution rights.
- During consultation, it was queried why ARTC was only required to take into account and not be bound by the HVCCC’s advice. Ultimately, it must be ARTC’s judgment as to whether it believes there is sufficient Available Capacity to enable ARTC to fulfil its contractual commitments. This is subject to giving reasons for denying access and independent binding arbitration. As discussed below, ARTC has no incentive to oversell its Capacity or it could lead to unrecoverable take or pay rebates, which directly affects ARTC’s ‘bottom line’.

### **3.2 Issue 2 - Role of the HVCCC**

ARTC strongly believes that a body such as the HVCCC is required to manage the modelling of system capacity using the System Assumptions provided by the different service providers and agrees that each service provider must be responsible for delivery of its own System Assumptions.

- System capacity depends on the actual (rather than theoretical) capacity of each of the service providers plus the interface losses arising from interactions of the different parts of the supply chain.
- There needs to be an industry forum or mechanism by which system capacity is determined; it is not an individual exercise – ARTC strongly believes this should be the HVCCC which will inherit the expertise and modelling of the HVCCLT.
- No one party can take responsibility for the modelling of the Hunter Valley coal chain and Coal Chain Capacity as a whole but individual service providers should, as a *matter of contract*, be responsible for failing to meet their assumptions as should producers for their load points and the failures of their operators. Only such a process as this will accommodate whole of chain alignment of investment, contractual entitlement and obligations, and delivered capacity.

### 3.3 Issue 3 - Not overcontracting system capacity

ARTC agrees with the principle that system capacity should not be overcontracted but ultimately this must be achieved by parties being legally responsible under contract for delivery of contracted capacity (taking into account realistic system losses). There are two points. First, it is not possible to simply include a blanket requirement on ARTC in the HVAU as this is the 'output' not 'input' of combined system assumptions. Secondly, the HVAU and the AHA provide mechanisms which discourage ARTC from overcontracting capacity which cannot realistically be delivered.

#### ***System capacity is dynamic***

It is not possible to base the HVAU or the AHA on the concept of “system capacity” as modelled by the HVCCC.

- Given the complexities and number of variables in the supply chain, no model can perfectly predict system capacity; we can however achieve high levels of certainty and incorporate risk factor allowances.
- Further, system modelling will not be realistic unless based on operating experience.
- It is not practical to enter into long term take or pay contracts subject to some overriding contractual limit equal to system capacity as determined from time to time – this would simply lead to the compression seen at PWCS in the past. In the end, there must be contracts between individuals for firm capacity, binding commitments to the provision of this capacity, and defined mechanisms for making additional capacity available when required.
- The system modelling (incorporating System Assumptions) is a tool for ensuring system implications are considered when undertaking individual actions and accountability for those actions within the context of legal obligations and entitlements.

### ***Mechanisms to discourage ARTC from overcontracting system capacity***

The HVAU and AHA include a number of mechanisms to discourage ARTC from overcontracting system capacity. The HVAU is based on the fact that currently, track capacity generally exceeds port capacity but recognises this might change with the port expansions unless more track capacity is constructed.

- In circumstances where track capacity exceeds port capacity, Applicants must show that they have sufficient port capacity to meet their requested coal access rights (cl 3.4(d), 3.7(a)(ix) and 3.12(a)(vi)) and the Capacity Analysis undertaken in consultation with the HVCCC takes into account the impact on Coal Chain Capacity (ie inclusive of interface and other losses). This provides a strong framework to ensure ARTC will not oversell port capacity for the period that port capacity remains behind track capacity. ARTC's expectation is that the ports would introduce similar arrangements for new access applications should port capacity exceed track capacity.
- The HVAU is designed to ensure track capacity keeps up with port capacity through ARTC's Hunter Valley corridor capacity strategy which takes into account producer forecasts of demand, the Coal Chain Master Plan and the RCG process. The process is designed to ensure that parties contract for new capacity in advance to ensure alignment of track and port.
- If, despite this, track is equal to or less than port capacity, then ARTC must have regard to system capacity before contracting new track access as described above. In this case, ARTC has become the constraint and so must not oversell its network capacity in any case. Further the monthly system-wide true up test in the contracts provides an incentive to not "overcontract". Access holders will accrue rebates for take or payments where ARTC fails the system wide true up test and producers do not receive contracted capacity in the AHA. This is designed to discourage ARTC from overcontracting its realistic network capability. ARTC fails this test where the network capability made available (subject to specified availability exceptions which are outside ARTC's control) in a month is less than the sum of:
  - its contracted coal commitments;
  - its actual maintenance possessions;
  - actual system losses caused by ARTC;
  - forecast system losses caused by parties other than ARTC (if the actual losses are less than forecast, then the actual is used);
  - Capacity used by non-coal trains and by coal trains on an ad hoc basis.

This test ensures that ARTC has an incentive not to oversell its track capacity taking into account realistic track and system losses.

Access Rights dependent on the creation of Additional Capacity cannot be utilised by the Access Holder until the Capacity required to deliver those rights is commissioned. The delivery of this Capacity is transparent to the Access Holder. This protects existing entitlements from compression.



#### 4. Access to lesser of track and port

##### **Guiding Principle 3**

*Track and Terminal service providers will ensure that Access Rights to their respective infrastructure are not triggered in excess of the lesser of the Track and Terminal System Capacity (Producers with access contracts will also be able to opportunistically access ad-hoc capacity where available and on the basis that it does not infringe on the contracted access rights of other Producers). Producers will have a right to have the Track System Capacity and Terminal System Capacity audited against aggregate Access Rights.*

*Producer's Access Rights = Lesser of Producers Terminal System Capacity and Track System Capacity*

*The only reason that Terminal System Capacity and Track System Capacity may be different is when there is a misalignment in the timing of when Terminal and Track infrastructure is delivered compared to the System Assumptions.*

Obviously, the HVAU can only deal with track but does in effect provide for the lesser of rail and port concept in so far as track is concerned.

- As set out above, section 3.6 of the HVAU requires ARTC to participate in an initial review of an Applicant's Capacity requirements on the Applicant's request. The purpose of this review is, among other things to assist the Applicant to provide sufficient information to the HVCCC to enable the HVCCC to determine the impact of the access rights sought on Coal Chain Capacity. It is also contemplated that other service providers will participate in this review.
- As discussed above, the HVAU requires Applicants to show they have sufficient port capacity before they are entitled to track access. The starting point therefore is that contracted track access rights will not exceed port access rights (taking into account realistic system and interface losses).
- If an Access Holder loses its port capacity (eg contract termination or assignment) during the term of the AHA, then it risks having its track access removed from it under the "use it or lose it" provisions (cl 11.4 of the AHA).
- For new track Capacity contracted by an Access Holder, the AHA provides that the provision of such Capacity is conditional upon both the completion of the project and the Access Holder showing it has sufficient contracted port capacity (clause 5, Train Path Schedule of the AHA). Therefore, if the new port capacity comes on line before new track Capacity, the relevant access holder will have to wait for track completion, ie the rights of all access holders are not compressed. If new contracted track Capacity becomes available in advance of a port expansion, then ARTC can waive this right to have contracted port capacity so that it can receive take or pay payments but the Access Holder will not effectively be able to use it until the port expansion comes on line.

The AHA provides for the provision of ad hoc train paths as available.

The Guiding Principle provides for auditing of both track and port capacity against access rights. For track, ARTC believes this is provided for by the system wide true up test which

assesses on a monthly basis whether the network capability made available is sufficient to meet contracted commitments. ARTC will publish the results of each system-wide monthly true up.

## 5. Access to lesser of track and port

### **Guiding Principle 4**

*Producers can choose to hold non-aligned access contracts on track and terminal, however will only be able to access system capacity based on the lesser of their contracted Track System Capacity or Terminal System Capacity.*

While possible in theory, ARTC does not intend to contract track access rights unless the Applicant can show it has sufficient port capacity for that track access.

There is nothing stopping an Applicant contracting track Capacity which is less than its port capacity but it would be reliant on ad hoc paths being available to service that Additional Capacity. ARTC believes the AHA is designed to ensure that Applicants do not have an incentive to undercontract track access.

- Contracted track access would have priority over ad hoc requests.
- The use of ad hoc paths would still involve a contribution to new and fixed capital costs.
- The right to tolerance paths ends once the annual contracted path usages are used.

## 6. Operational responsibility

### **Guiding Principle 5**

*The responsibility of the Track and Terminal Service Providers to jointly operate in accordance with the System Assumptions is best achieved by planning and operating the system in a coordinated and co-operative manner. This is anticipated to be the primary role of the yet to be established independent HVCCC*

ARTC agrees this is the proper role of the HVCCC (or an equivalent body).

Co-ordinated planning of new track capacity is provided for in three main ways:

- ARTC will continue to assist with the development of the Coal Chain Master Plan.
- ARTC will develop an annual Hunter Valley corridor capacity strategy which must take into account the Coal Chain Master Plan (section 6.4(c)).
- There is a detailed planning and implementation process for new track capacity involving the RCG (which is intended to largely consist of HVCCC members) in section 6 of the HVAU as described elsewhere which is essentially a transparent consultative process between ARTC and the relevant producers.

In terms of operational responsibility, ARTC intends that the HVCCC will undertake daily coal train scheduling:

- ARTC will provide the Master Train Plan to the HVCCC which takes into account all contracted commitments to assist the HVCCC with daily planning of coal trains (section 7 of the HVAU);
- ARTC intends to provide the HVCCC with business rules in relation to this step to ensure that ARTC's contractual commitments are included in the planning process by the HVCCC;
- ARTC will then take the Master Train Plan and the HVCCC inputs to form the Daily Train Plan.

ARTC will also consult with the HVCCC in determining its annual maintenance assumptions prior to determining the months in which major Network outages are planned and the number of path usages lost as a result of the major Network outages (cl 3.2 of the AHA).

As set out above, section 3.6 of the HVAU contemplates that ARTC and other service providers will participate in an initial review with an Applicant which will, among other things, assist the Applicant provide sufficient information to the HVCCC to enable the HVCCC to determine the impact on Coal Chain Capacity of the track access rights sought.

For the avoidance of doubt, despite the role of the HVCCC, ARTC is still ultimately responsible and accountable for its contracted commitments.

No liability will accrue to the HVCCC and it is a matter for service providers through their representation on the Board of the HVCCC (or other means of governance such as the current Steering Committee to HVCCLT) that these obligations are being managed in accordance with contractual requirements.

## 7. Minimising excessive ship queues

### **Guiding Principle 6**

*Track and Terminal access contracts will provide for actual and forecast excessive ship queues to be addressed by ensuring:*

- 1 Contracted Access Rights to their respective elements do not exceed the lesser of the Track System Capacity or Terminal System Capacity.*
- 2 Those using any ad-hoc Access Rights do not contribute to the creation of an excessive ship queue or infringe on the contracted and aligned Access Rights of other Producers (in the event an adjustment to contracted access is required to reduce a vessel queue, Producers accessing capacity on an ad-hoc basis are the first to be constrained before any aligned access contracts are adjusted).*
- 3 Producers whose performance varies from their agreed System Assumptions which form the basis of their contracted Access Rights directly and individually incur the capacity increase or decrease as a result of their individual performance. Each Producer's performance may be monitored and determined by the HVCCC (subject to HVCCC being established and agreed rules being in place). The Producer's performance also includes the performance of that Producer's Above-Rail Haulage service provider with regard to the agreed System Assumptions.*
- 4 Track or Terminal service provider's performance which varies from the agreed System Assumptions distribute and isolate the resulting capacity increase or decrease to its customers. The Track and Terminal service providers' performance may be monitored and published by the envisaged HVCCC.*

Point 1 has been dealt with above.

Point 2 - Access Holders with contracted track access rights will have priority in the train planning process over ad hoc users. It is likely this will be included in the business rules given to the HVCCC. This is necessary to ensure ARTC meets its contracted commitments. Where ARTC fails the monthly system-wide true up test, an Access Holder who did not receive its monthly entitlement accrues a TOP rebate. This does not ensure that contracted access and aligned access rights will not be infringed, but reduces the risk, and provides for compensation where applicable, serving as a disincentive for ARTC to over commit. ARTC should not be prevented from selling Capacity on an ad hoc basis where it is, or becomes, available.

Point 3 - This occurs as a result of the interaction with the HVCCC and the Capacity Analysis undertaken before contracting for track access rights.

- The Applicant will provide the assumptions underlying its coal chain requirements (including load point, train characteristics and train path characteristics) to the HVCCC. Through this process, the Applicant will determine the capacities of rail, above rail and port to meet its throughput requirements.
- ARTC's contract to provide train paths will include the assumptions for the services (ie trains) which must be met to obtain the required throughput. These assumptions include axle loads, train lengths, train speeds and section run times (see clause 4,

Train Path Schedule).<sup>7</sup> ARTC must provide track which can accommodate services meeting these assumptions (clause 9.1, AHA). The intention is that a number of these elements will also be part of the agreed KPIs (see cl 3.12, AHA).

- ARTC expects that the relevant assumptions for above rail and port will be included in the access holder's respective contracts with operators and the ports. (See note 4, Train Path Schedule).
- Similarly, the Access Holder and its operators must comply with the services assumptions set out in the AHA. To the extent the operator does not (for example, shorter trains are used), there may be a reduction in throughput but this is a matter between the Access Holder and the operator under its rail haulage agreement. If the service exceeds the assumptions (for example, the load point or train runs slower than assumed so that cycle times increase and effectively consumes two path usages instead of one), then the Access Holder will use their contracted capacity quicker. ARTC is not required to provide the train paths as contracted where the producer or operator does not meet the service assumptions. The system-wide monthly true up test discourages ARTC from making non-compliant train paths available that will consume more Capacity than contracted train paths. If the Access Holder exceeds these assumptions consistently (and therefore possibly affects other users), then this would be a breach of the AHA with requirements for rectification and the potential for suspension or termination.
- As can be seen above, the Access Holder is responsible for its operators.

Point 4 - If ARTC does not meet its System Assumptions, this will be reflected in the provision of inadequate track capacity and captured in the system-wide true up test. This point may be seeking a broader true up of Coal Chain Capacity in total but ARTC cannot impose such a system on above rail or port. However, nothing in the HVAU prevents ARTC from participating in a broader reconciliation if one can be agreed through the HVCCC.

## 8. Queuing and priority

### ***Guiding Principle 7***

*New and expanding Producers (Access Seekers) will be provided for by each of the Track and Terminal service providers operating an orderly Access Queue and coordinating infrastructure and investment planning via a Coal Chain Master Planning function (envisaged to be performed by an independent HVCCC). Access seekers will obtain Access Rights to Track and Terminal capacity upon the delivery of the respective Track and/or Terminal System Capacity. The order within the Access Queue will be based primarily on the time of application but reviewed and modified as required so as to ensure that delivered mine export capacity can access available System Capacity ahead of mines that may be delayed or still under development.*

ARTC agrees with that the HVCCC should co-ordinate the planning function through the Coal Chain Master Plan and ARTC will continue to participate in that process. The HVAU provides for a high degree of co-ordination through the RCG process in section 6.

ARTC is of the view that a robust longer term planning and contractual framework such as contemplated in the HVAU will negate the need for queuing and hence it does not expressly

<sup>7</sup> Note that the assumed gross tonnes for each service included in the Train Path Schedule is for the purposes of pricing only

provide for a queuing mechanism as such, however it does achieve many of the same outcomes through other means:

- Section 3.13 deals with mutually exclusive access applications which provides that ARTC will generally determine priority based on a NPV test. Subject to the initial reservation for non-coal in section 2.5(b) and legislative requirements, this will generally favour coal over non-coal.
- As between coal, initial allocations will be done on the basis of port allocations. To the extent that Applicants have port contracts for port expansions and seek access to existing track Capacity which is in excess of that currently needed for existing port capacity, ARTC will decide applications on the basis of section 3.13.
- As discussed above, new track Capacity will be contracted on the basis that the Capacity is conditional upon both the completion of the project and the Access Holder showing it has sufficient contracted port capacity (clause 5, Train Path Schedule of the AHA). A misalignment of track and port expansions will not trigger compression of existing track access rights. A shortfall in the creation of Additional Capacity will be quarantined to those access holders which have entitlements to the Additional Capacity. Where there is a shortfall in the creation of port capacity, the “excess” track Capacity will not be capable of being used.
- The HVAU does not provide a mechanism for redistributing contracted capacity from a delayed mine to another which has completed in advance of it. However, the delayed mine has an incentive to trade to reduce its take or pay obligations and the failure of that mine to use its track entitlements should free up capacity for ad hoc usage.

## 9. Documents

The principles envisage the following documents.

*System Assumptions: A document containing the underlying agreed System Assumptions underpinning the determination of Track and Terminal System Capacity. This could become a schedule to all Access Contracts.*

ARTC agrees that each producer should as part of the process of determining its requirements with the HVCCC based on the system modelling have a single set of assumptions on which it bases its contracting of the individual components of the supply chain. ARTC believes that the assumptions relevant to each service provider should appear in its contracts. ARTC does not agree that all assumptions should appear in each contract as this is misleading - the service provider contract should only specify the assumptions for which the service provider can be held legally responsible.

ARTC is not in a position to guarantee all of the outputs of the system model, nor indeed is any other service provider,

*Hunter Valley Coal Chain Starting Point: A statement as to how the initial Access Rights will be granted under the first Track and Terminal access contracts.*

Subject to regulatory sign off, ARTC agrees. ARTC believes the HVAU deals with this by having initial allocations of Capacity based on port allocations.

*Access Protocols and Process: The process through which Access Seekers join the*

*Access Queue and the mechanism by which Track and Terminal Access is managed until an Access Seeker becomes an Access Holder.*

ARTC believes that the HVAU and AHA achieve this. As discussed, the ports should develop complementary mechanisms.

*Contract Performance Management: The process and mechanism by which system capacity is managed and performance and consumption of system capacity is reported and any adjustments to contracted Access Rights are made.*

In its case, ARTC believes that this provided for by the system-wide true up test and any relevant KPIs that may be developed as provided under the AHA.