



2013 Draft Access Undertaking

Volume 2: The 2013 Undertaking Proposal



Executive Summary

In preparing the 2013 Undertaking, Aurizon Network has sought to better promote the long-term competitiveness of the Queensland coal industry, ensure efficient and timely investment in the network and facilitate and strengthen its partnership with supply chain participants.

In doing so, Aurizon Network has retained the key elements of the 2010 Undertaking. It has therefore retained a negotiation framework that clearly spells out the steps in the negotiation process for access to both existing and expansion capacity. Additionally, the 2013 Undertaking continues to provide customers with a 'safety net' where negotiations are not successful, including standard agreements, reference tariffs and dispute resolution arrangements.

The 2013 Undertaking retains the key pricing principles from the 2010 Undertaking. It clearly spells out how they will be applied in the development of reference tariffs and the negotiation of access charges. The cap on Aurizon Network's revenue is retained.

The 2013 Undertaking contains a rigorous ringfencing regime for addressing concerns about vertical integration. Aurizon network accepts that ringfencing is a legitimate area of concern for stakeholders, and that it is an important component in ensuring that market participants operate on a 'level playing field'.

Noting the above, while recognising the importance of regulatory stability, Aurizon Network also considers it important to refine the existing regulatory framework in response to changes in the Queensland coal industry over the past decade, including the changed market environment and industry structure. There have also been significant changes in the financial market conditions applying to Aurizon Network, in both direct terms (i.e. its position as a major publicly listed company) and indirectly (i.e. through the impact of financial crisis on the ability to access funds from financial markets and the associated increased focus by shareholders and other financial market participants on ensuring sustainable returns on investment).

One of the most significant challenges facing Aurizon Network in preparing the 2013 Undertaking has been that the Central Queensland Coal Network (CQCN) is now capacity constrained. As a result, new requests for access will, now, nearly always require network expansions. Additionally, these network expansions will need to accommodate complex, multi-faceted projects which include multiple producers, operators, ports and funders (potentially including user-funders). A fundamentally new approach to expansions has therefore been required. The expansion process in the 2013 Undertaking therefore provides a flexible, responsive framework for negotiating network expansions.

In recognition of the increased complexity with the operation of the CQCN and the associated risk of coordination failures, Aurizon Network provides a renewed commitment under the 2013 Undertaking to actively participate in industry wide initiatives to improve supply chain performance. As part of this, Aurizon Network will publish a Network Development Plan which will take into account the entire supply chain in assessing options for the future expansion of the CQCN. This new Network Development Plan will address many of the deficiencies identified in the Coal Rail Infrastructure Master Plan (CRIMP) process in the 2010 Undertaking.

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Glossary

2010 Undertaking	Aurizon Network's current Access Undertaking, approved by the QCA on 1 October 2010, together with any subsequent changes approved by the QCA
2013 Undertaking	Aurizon Network's Draft Access Undertaking due to commence on 1 July 2013
ACCC	Australian Competition and Consumer Commission
AER	Australian Energy Regulator
AFoA	Alternate Form of Agreement, which collectively includes the two stapled agreements – the EUAA and the TOA
AFD	Access Facilitation Deed
AHAA	Access Holder Access Agreement
APCT	Abbot Point Coal Terminal
ARTC	Australian Rail Track Corporation
ASX	Australian Stock Exchange
Aurizon Group	The Group of Companies held by Aurizon Holdings Limited, which includes Aurizon Network Pty Ltd
Aurizon Holdings	Aurizon Holdings Limited
Aurizon Network	Aurizon Network Pty Ltd, the provider of access services in accordance with the 2010 Undertaking
BMA	BHP Billiton Mitsui Alliance
BREE	Bureau of Resource and Energy Economics
CAPM	Capital Asset Pricing Model
CCR	Committed Capacity Register
CNR	Capacity Notification Register
CPI	Consumer Price Index
CQCN	Central Queensland Coal Network
CQCR	Central Queensland Coal Region
CQNCM	Central Queensland Network Capacity Model
CRIMP	Coal Rail Infrastructure Master Plan
CTPP	Contested Train Path Principles
DAAU	Draft Amending Access Undertaking
DBCC	Dalrymple Bay Coal Chain

DBCT	Dalrymple Bay Coal Terminal
DIM	Draft Incentive Mechanism
DoO	Day of Operation
DORC	Depreciated Optimised Replacement Cost
DTP	Daily Train Plan
egtk	Electric gross tonne kilometres
Electric Traction DAAU	Electric Traction Draft Amending Access Undertaking, submitted by QR Network to the QCA in December 2011
EMP	Environmental Management Plan
EUAA	End User Access Agreement
GAPE	Goonyella to Abbot Point Expansion project
GCEE	Gladstone Coal Exporters Executive
GOC	Government Owned Corporation
gtk	Gross tonne kilometres
HPSTCT	Hay Point Services Coal Terminal
HVCCC	Hunter Valley Coal Chain Coordinator
IAP	Indicative access proposal
ILC	Integrated Logistics Company
IPO	Initial Public Offering
IRMP	Interface Risk Management Plan
ITP	Intermediate Train Plan
LTS	Long Term Solution
LTSIM	Long Term Solution Implementation Memorandum
MAR	Maximum Allowable Revenue
MCI	Maintenance Cost Index
mt	Million tonnes
MTP	Master Train Plan
mtpa	Million tonnes per annum
NDP	Network Development Plan
NMP	Network Management Plan

nt	Net tonnes
ntk	Net tonne kilometres
OAA	Operator Access Agreement
ORC	Optimised Replacement Cost
QCA	Queensland Competition Authority
QCA Act	Queensland Competition Authority Act (Qld) 1997
QMS	Queue Management System
QR	Queensland Rail Limited
QRC	Queensland Resources Council
QR Network	the subsidiary of QR which was established in 2008 to own and manage the Queensland rail network, now Aurizon Network
RAB	Regulatory Asset Base
RFP	Request For Proposals
rtp	Reference train path
SAA	Standard Access Agreement, which collectively encompasses the three different forms of standard access agreements – the AHAA, OAA and AFoA
SAC	Stand Alone Cost
SAR	System Allowable Revenue
SRCA	Standard Rail Connection Agreement
SSFA	Standard Studies Funding Agreement
STB	Surface Transportation Board
SUFA	Standard User Funding Agreement
SUFA DAAU	Standard User Funding Agreement Draft Amending Access Undertaking, submitted by Aurizon Network to the QCA in December 2012
TAR	Total Access Revenue
TFL	Transfer Facilities License
TMDMM	Traffic Management Decision Making Matrix
TNSP	Transmission Network Services Provider
TOA	Train Operations Agreement
TSE	Train Service Entitlement
UT1	the period from 2001 to 2006, being the term of QR's first access undertaking

UT2	the period from 2006 to 2010, being the term of QR's second access undertaking covering the CQCR
UT3	the period from 2010 to 2013, being the term of the 2010 Undertaking, being the third access undertaking covering the CQCR
UT4	the four year period commencing 1 July 2013, being the proposed term of the 2013 Undertaking, which will be the fourth access undertaking covering the CQCR
WACC	Weighted Average Cost of Capital
WICET	Wiggins Island Coal Export Terminal
WIRP	Wiggins Island Rail Project

Unless otherwise specified, all references to clauses and defined terms are per the 2013 Undertaking.

Introduction and Overview

In preparing the 2013 Undertaking, Aurizon Network has undertaken a review of the policies that need to be included in its access undertaking. In doing so, Aurizon Network has sought to promote the long-term competitiveness of the Queensland coal industry, ensure efficient and timely investment in the network, and facilitate and strengthen its partnership with supply chain participants.

While retaining the key elements of the 2010 Undertaking, Aurizon Network's regulatory proposal refines the existing framework in order to facilitate customer responsiveness and streamline commercial negotiations for access. The result is a regulatory proposal that meets the statutory criteria, protects the interests of Aurizon Network's customers, and encourages the continued, sustainable development of the Queensland resources sector.

Aurizon Network believes that it is important for the access undertaking to reflect and respond to changes in the Queensland coal industry. In this respect, the market environment and industry structure, and the resulting expectations of the regulatory framework, have changed over the course of the last decade. The nature of these changes supports the need for the continued refinement of the regulatory framework in UT4, while also reinforcing the view that the regulatory framework will continue to evolve in response to changing commercial expectations.

Overview of Volume 2

This volume presents the policy framework that forms the basis of Aurizon Network's 2013 Undertaking.

This submission is structured as follows:

- The market, institutional and regulatory context influencing Aurizon Network's approach to the 2013 Undertaking is discussed in **Part A**, and includes:
 - the current outlook for the export coal market;
 - the objectives and obligations arising from the regulatory environment; and
 - the evolution of the downstream haulage market since the access regime was originally developed, and the resulting changing priorities for the regulatory framework.
- Details of Aurizon Network's proposed regulatory policy framework for UT4 are set out in **Part B**;
- An overview of the changes to the standard agreements that continue to accompany the undertaking are set out in **Part C**;
- The **Appendices** include summary matrices showing the change from the 2010 Undertaking to the 2013 Undertaking, for both the undertaking itself and also the standard agreements.

The regulatory framework must respond to market changes

(a) The industry and market context for the Access Undertaking continue to change

Since Queensland Rail gave its first voluntary access undertaking in the late 1990s, the circumstances in which rail access services are provided to the CQCN have changed. The CQCN has been separated from the broader Queensland rail network and privatised, entry into haulage markets has occurred (including by coal producers themselves), Queensland coal production has doubled (and the network expanded to

accommodate it), and producers themselves are increasingly involved in the commercial negotiation of access rights and expansion projects.

More specifically:

- *Changes in the market cycle:* Where the second and third undertaking periods were characterised by relatively high commodity prices and strong demand growth, the fourth undertaking is being given in an environment of price moderation. While demand fundamentals remain strong, pressure on margins is driven by increasing costs, and the emergence of new competitors, particularly for thermal coal.
- *The predominance of private capital:* UT4 is the first undertaking where future investments in supply-chain infrastructure will be exclusively funded by the private sector. This is a substantial change from an environment where the infrastructure investment in the CQCN was made on behalf of State Government shareholders. As a consequence, the regulatory framework will move towards a model that allows funders to respond to the risks and returns of major network expansions, an outcome which is fully consistent with the QCA Act.
- *Changing competitive dynamics:* Over recent years, competition in the haulage market has become increasingly intense. The introduction of vigorous, actual competition (as opposed to the threat of competition), along with the increased recognition of the criticality of holding secure long term supply chain capacity entitlements, has resulted in a rapid evolution in the way that producers negotiate for rail haulage services, including their access requirements.
- *The need for world-class supply chain performance:* The first access undertaking was developed in an environment of depressed prices, excess capacity, and for application to four quite distinct coal systems. Since that time, all available capacity – as well as most low-cost options to expand capacity – have been exhausted. Moreover, the coal supply chain has become increasingly integrated, with many producers having multiple options for export port capacity from a single geographical origin. This increased complexity has a number of implications, including for planning, allocating and managing capacity as well as for pricing, but also reinforces the ongoing need for the industry to commercially resolve continuing concerns about efficient coordination.

Taken together, the impact of those developments has been that the level of regulatory prescription, complexity and control in the access undertaking no longer reflects the challenges of the Queensland coal industry. While Aurizon Network recognises in its 2013 Undertaking the importance of continued confidence in the stability of the regulatory arrangements, it also considers that the regulatory framework should respond to the changed commercial structure and priorities of the industry.

(b) The need for a renewed focus on commercial negotiation

The Queensland rail access regime, as with most Australian access regimes, is based on the premise that commercial negotiation should lead to a more optimal allocation of risk and income between parties than regulation. The intent is that regulatory intervention in the commercial relationship between access provider and seeker is a last resort, and then, only on such issues where agreement cannot be reached.

As noted by the QCA:

“Commercial negotiation is particularly important in the context of third-party access to rail infrastructure because of the varying nature of the service required by the access seeker.

Therefore a framework for commercial negotiation must be established that balances the legitimate business interests of QR and the interests of access seekers”.¹

An increased focus on negotiation, with recourse to a complete set of ‘safe-harbour’ standard agreements (including SUFA) is, in Aurizon Network’s view, the best way to ensure the long-term competitiveness of Queensland coal. As a result, the 2013 Undertaking is prescriptive to the extent necessary to ensure balanced commercial negotiations between Aurizon Network and access seekers.

Core elements of the 2010 Undertaking have been retained

The central role of Aurizon Network’s Access Undertaking is to facilitate commercial negotiations between Aurizon Network and its customers, consistent with the ‘negotiate-arbitrate’ model in the QCA Act. Where negotiations are unsuccessful, the access undertaking provides customers with a ‘safety net’, including standard agreements and dispute resolution.

While a number of elements of the 2013 Undertaking seek to more closely align with the ‘negotiate-arbitrate’ model, the key elements of the 2010 Undertaking have been retained in the 2013 Undertaking. These provide continuity and confidence in the regulatory framework, and include:

- a negotiation framework that sets out the steps in the negotiation process (which are largely unchanged from the 2010 Undertaking), including the type of information that must be provided by Aurizon Network and access seekers, and the timeframes that will apply;
- a clear process that can be used to resolve disputes in the negotiation or granting of access;
- an industry responsive contracting model for access agreements, whereby Aurizon Network will contract in a way that reflects customer preferences, whether this be through contracting directly with the operator or the end user, or alternately contracting with both parties through the alternate form of access agreement;
- Standard Access Agreements (SAA) continue to be appended to provide a ‘safe harbour’ for Aurizon Network’s customers;
- a workable and effective ringfencing regime that is consistent with Aurizon Network’s obligations under the legislation, and allows parties to negotiate with confidence;
- the legal support by the Aurizon Group for the ringfencing regime, which will continue to provide a voluntary deed of support to the regulator;
- retention of the key pricing principles, spelling out how they will be applied in the development of reference tariffs and the negotiation of access charges;
- retention of the obligations and processes in relation to the development and publication of Reference Tariffs and the operation of a cap on Aurizon Network’s revenue;
- clear and transparent principles for scheduling and managing network operations
- a framework to manage the safe operation of trains on Aurizon Network’s rail infrastructure by ensuring that all risks are assessed and appropriate mitigations adopted;

¹ Queensland Competition Authority (2000). Draft Decision re QR’s Draft Undertaking, Volume 1, p.5.

- obligations to facilitate the connection of private infrastructure to the CQCN;
- retention of Aurizon Network’s obligation to report financial and operational data publicly;
- obligations in relation to the reporting of breaches, complaints handling, and auditing of key Aurizon Network obligations;
- obligations in relation to planning and supply chain coordination; and
- a voluntary commitment to supply electricity to operators running electric trains.

Refinements to the regulatory framework have been proposed

Notwithstanding that the core of the 2010 Undertaking remains, Aurizon Network has drawn on its experience with the 2010 Undertaking to refine the framework to produce what it believes is an undertaking that is more workable, flexible, and responsive to customer needs. Further, it has sought where appropriate, to recalibrate the access undertaking to better align with the statutory criteria, and to balance the legitimate business interests of Aurizon Network and its customers.

(a) A commercial process for negotiating and managing access agreements

Aurizon Network considers that increased flexibility for the negotiation of access rights will generate the best opportunity for maximising efficiency. Resolving access issues through commercial negotiation rather than via a prescriptive set of processes should facilitate a timelier and more appropriately scoped response to access seeker preferences.

To support that, Aurizon Network has proposed in the 2013 Undertaking to remove a range of the duplicative and prescriptive processes governing access negotiations. Many such constraints reflect the historic practise of presuming that negotiations will fail (i.e. result in a dispute), that regulatory intervention will be sought by the parties, and that pre-emptive regulation is more efficient than dispute resolution. Over time, this assumption has created a complex, sometimes confusing process to be followed by access seekers and Aurizon Network.

Key Changes
<ul style="list-style-type: none"> ▪ The scope of services subject to the 2013 Undertaking is more clearly identified;
<ul style="list-style-type: none"> ▪ A balanced, flexible framework for negotiating access agreements is proposed: <ul style="list-style-type: none"> ○ the negotiation steps, and the timing and content of information exchange, have each been simplified; ○ Standard Access Agreements (SAA) continue to be appended in order to provide a ‘safe harbour’, and access to binding dispute resolution is maintained; ○ to avoid duplication and facilitate negotiation, ‘standard outcomes’ of access negotiations have been removed from the 2013 Undertaking, with the SAA the exclusive fallback; ○ to promote regulatory certainty for the UT4 period, all obligations for future development of the regulatory framework have been removed from the 2013 Undertaking; and ○ to encourage innovation and flexibility in the rail haulage market, the requirement that executed access agreements be published has been removed.
<ul style="list-style-type: none"> ▪ Reflecting the fact that all existing capacity is committed other than at the margins, the capacity queue has been replaced with capacity allocation criteria. It is noted that, a similar approach has been approved for inclusion in the ARTC’s Hunter Valley Access Undertaking,

Key Changes

and for Brookfield Rail in relation to its Train Path Principles.

- It is expected that the primary way in which capacity will be obtained in the future will be via users participating in expansion projects. A process for participating in an expansion has been included in a new Part 8 of the 2013 Undertaking.
- The voluntary commitment of Aurizon Network to supply electricity at cost is continued through UT4.

(b) A new framework for the negotiation of network expansions

The framework for developing and investing in future expansions was one of the most significant issues in UT3. It continues to be one of the most important policy issues for UT4.

To this end, Aurizon Network has been reviewing its framework for expansions in consultation with industry stakeholders, with most of the effort to date concentrated on the development and agreement of the Standard User Funding Agreement (SUFA). Since lodging SUFA with the QCA in December 2012, Aurizon Network has been actively working with producers to incorporate an expansion framework into the undertaking. The 2013 Undertaking reflects that process, with a version of Part 8 circulated to a representative producer group in March.

Future expansions of the network, given the exhaustion of most low-capital intensity options, are likely to be large, multi-user and coordinated with port expansions. Given the scale and complexity of such projects, many will likely share the same characteristics as greenfield investments, in the risks and costs associated with their development and construction. Aurizon Network considers that the optimum regulatory framework for the promotion of such investment is not driven by prescription, but by the commercial preferences of affected parties, and underwritten by genuine, commercial negotiation between infrastructure providers and the Queensland coal industry.

In this respect, the expansion process in the 2013 Undertaking, located in Part 8, is a flexible, responsive framework for negotiating network expansions. Aurizon Network is actively engaging with coal producers on this issue and expects the UT4 proposal to require ongoing refinement and development to reflect that process.

Overview of the Expansion Process

- Where there is sufficient demand for an expansion, Aurizon Network will undertake a pre-feasibility study. While it can be expected that Aurizon Network will fund most pre-feasibility studies itself, the undertaking provides an option for user funding of such studies, and includes a new Pre-feasibility Standard Studies Funding Agreement as a negotiating safe harbour for users;
- A feasibility study will be progressed where users are sufficiently confident in their demand for capacity as to be prepared to fund a feasibility study. The 2013 Undertaking provides:
 - a Feasibility Standard Studies Funding Agreement, and process to identify funding users; and
 - in recognition of the significant cost of a feasibility agreement, funding users will be granted a provisional capacity entitlement to the capacity that will be created from the project.
- The undertaking will support negotiation as the primary means upon which the terms and conditions of an expansion proceeding are agreed, including funding terms. In particular:
 - the SUFA, developed in close consultation with industry, is fully incorporated into

Overview of the Expansion Process

the 2013 Undertaking as the 'safe harbour' arrangement for funding expansions, where users are not prepared to accept the terms on which Aurizon Network will fund an expansion;

- as SUFA provides an alternative to obtaining Aurizon Network funding, the 2013 Undertaking removes most prescribed negotiating processes, 'standard outcomes' of negotiations, and ex-post QCA verification of outcomes as contained in the 2010 Undertaking; and
- Aurizon Network has withdrawn the voluntary commitment that was made by QR Network in 2010 to fund expansions up to \$300m. Consistent with its obligations to its shareholders and the demands of financial markets, Aurizon Network must allocate capital to the area of greatest return. The continued retention of mandatory funding is not only inconsistent with that principle, but also not sustainable. It is notable that Aurizon Network still intends to invest around \$2bn in the network over UT4.

- Where Aurizon Network elects to fund expansions through the regulatory framework, a user voting process has been adopted that provides for enhancements to the quality and specificity of the information that will be provided to voting users. This includes Aurizon Network providing information on the likely tariff implications of a capital project proceeding.

(c) Continuing Aurizon Network's commitment to supply chain coordination

Coal supply chains in the CQCR are now complex, with multiple participants, assets, and end customers.

The access undertaking can play an important, but limited, role in supporting cooperative and commercially led industry efforts to address coordination issues, recognising that it only governs one element of a complex and integrated supply chain. To do this, it needs to be flexible to accommodate and adapt to changes in supply chain coordination and planning that may develop over time. Further, it needs to ensure that the contractual and pricing framework in the undertaking incentivises behaviour that is consistent with the efficient operation of the supply chain.

Aurizon Network considers that the most effective vehicle for supply chain coordination will continue to be voluntary arrangements between industry participants, given the shared interest in maximising efficiency and promoting the lowest total cost of ownership for the entire supply chain.

Key Changes

- A renewed commitment to actively participate in industry wide initiatives to improve supply chain performance.
- The publication of a Network Development Plan, which will take into account the entire supply chain in assessing options for the future expansion of the network, addressing many of the deficiencies of the Coal Rail Infrastructure Master Plan (CRIMP) process in the 2010 Undertaking.
- A commitment for Aurizon Network to continue to base its assessments of capacity on overall system operating parameters, and a commitment to publish system operating parameters (and update when appropriate).
- The general incorporation of flexibility into the 2013 Undertaking to enable it to respond and implement specific coordination measures as agreed for a particular supply chain, e.g. increased flexibility in how a train service will be defined.

(d) Ensuring that tariff structures promote efficient use of and investment in the network

Aurizon Network's overarching objective for pricing in the 2013 Undertaking, consistent with the Objects Clause of the QCA Act, is to ensure that access prices provide appropriate signals for efficient network utilisation and investment decisions.

With the exception of the average cost regime for AT5, Aurizon Network believes that the current reference tariff structure reasonably supports this objective, as it creates a mechanism for access prices to adjust to reflect the different costs that each user imposes on the network. While alternate tariff structures could be used, addressing the unintended consequences of a change in tariff structure would create a degree of complexity that Aurizon Network does not believe is warranted at this time. Aurizon Network will therefore retain the form of the existing reference tariffs for UT4, with some modifications to address specific issues identified in UT3. Importantly, these proposals affect only how Aurizon Network recovers its approved revenue, rather than affecting the total amount of revenue that it is entitled to earn (which is discussed separately in Volume 3 of this submission).

The 2013 Undertaking includes some refinements to the pricing principles and to the reference tariff framework.

Key Changes
<ul style="list-style-type: none">There has been a material reduction in the AT5 rate in Blackwater to incorporate the principles in Aurizon Network's second DAAU on Electric Traction Pricing (lodged on 24 April 2013).
<ul style="list-style-type: none">A material increase in AT2 has been proposed, to align the price signal for incremental investment with current, much higher replacement costs of rail infrastructure in the CQCR.
<ul style="list-style-type: none">Where high cost expansions to the network occur, Aurizon Network is concerned that requiring expanding users to always bear the full incremental costs of the expansion creates a form of price differentiation (based on time of entry into the market) that could distort competition. Where this occurs, the 2013 Undertaking provides for reference tariffs to be determined on a case by case basis, and includes the ability to refer the issue to a user vote.
<ul style="list-style-type: none">Recognising the increased likelihood that mine specific spurs will be privately provided in UT4, the calculation of reference tariffs (including the minimum contribution to common cost) has been varied to remove reliance on assessing the specific costs of the spur, and now reflects a mainline tariff with a discount based on spur and mainline haul length. Further, to simplify pricing arrangements, Aurizon Network will replace rebates for contributed capital on single user spurs with a discount to the access charge.

(e) Managing Aurizon Network's revenue

Revenue management refers to the mechanisms in the access undertaking that deal with the overall revenue that Aurizon Network will earn. Under the 2013 Undertaking, Aurizon Network will maintain the revenue cap form of regulation, with some modifications to address issues that have been identified in UT3.

Key Changes
<ul style="list-style-type: none">The exclusion of AT1 revenue from the revenue cap exposes Aurizon Network to volume risk because a significant proportion of these maintenance costs are not sensitive to changes in volumes in the short run (i.e. fixed overhead). It is therefore proposed to bring the relevant proportion of these costs (75%) under the scope of the revenue cap.

Key Changes

- While Aurizon Network remains concerned about the accountability of individual users for capacity consumption via the system test on take or pay, it has not proposed any major changes for UT4, given the complexity that this would create with multiple 'generations' of take or pay. This issue will likely be revisited in future undertakings, when all UT1 access agreements have expired.
- A number of changes have been made to the circumstances in which the RAB value of assets can be changed:
 - limiting the circumstances under which the QCA can optimise the RAB to where Aurizon Network has provided false or misleading information;
 - removing the Condition Based Assessment obligation, which allowed the QCA to reduce the value of the RAB where infrastructure has deteriorated to an unreasonable extent. This arrangement creates excessive regulatory risk given the substantial interaction with other processes and obligations under the access undertaking and elsewhere, together with the practical difficulties in objectively assessing network condition. Moreover it is unnecessary, given Aurizon Network's obligations to maintain the network in accordance with access agreements and safety requirements.

(f) The ringfencing regime

Aurizon Network believes that ringfencing is a legitimate area of stakeholder and regulatory concern. It is an important component in ensuring that the playing field remains level, and that all market participants are able to reach commercial arrangements with confidence.

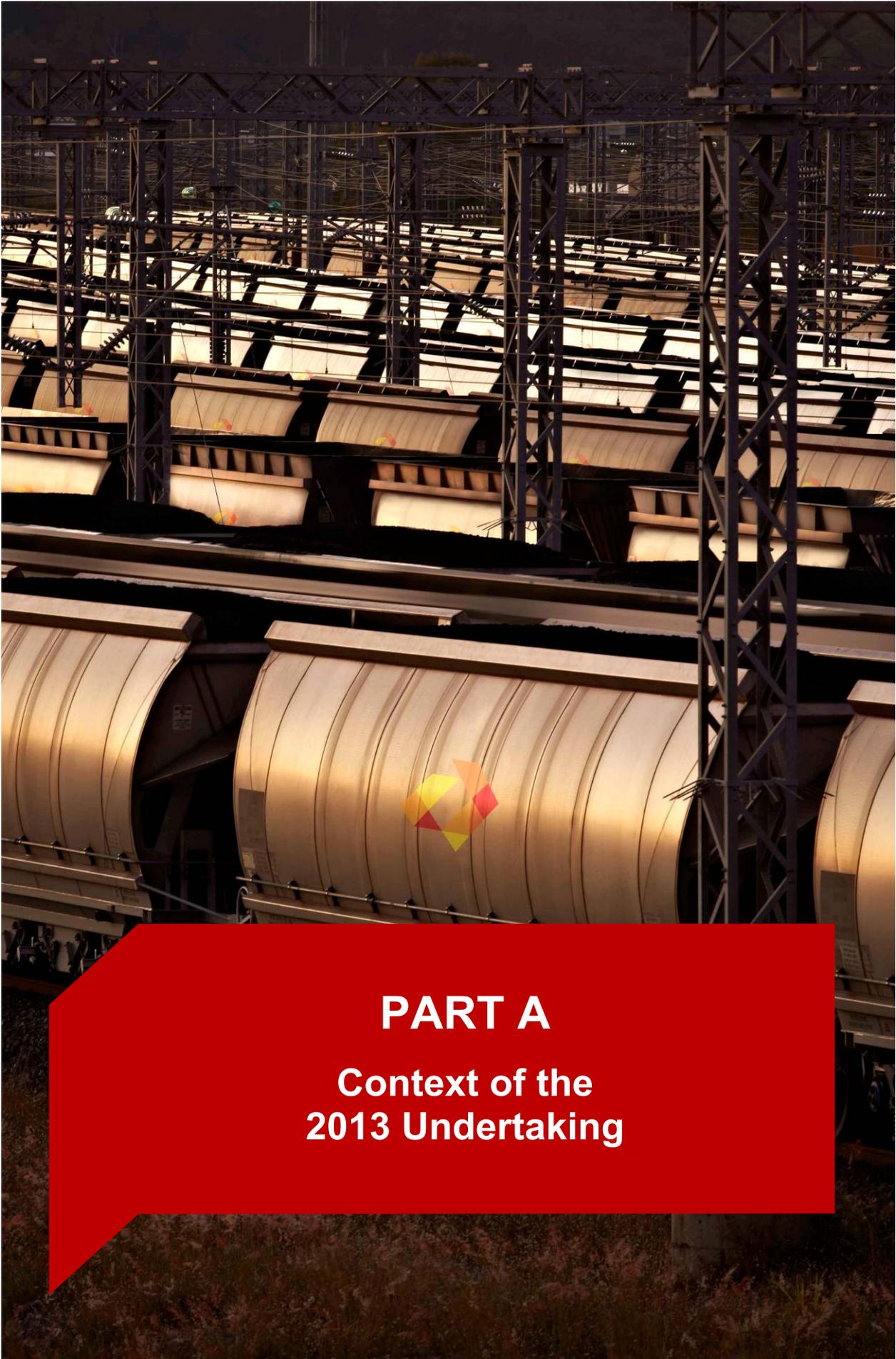
To this end, the 2013 Undertaking balances the protection of access seekers from vertical foreclosure (that is, the risk that Aurizon Network will deny them access in order to advantage Aurizon's above rail interests) with the corporate governance requirements and commercial interests of the Group. Further, the 2013 Undertaking draws from best practice in other regulated sectors, including the Australian Energy Regulator's *Ringfencing Guidelines*.

A key aim of the 2013 Undertaking has been to develop a rational and streamlined ringfencing framework, that is widely understood and contributes to a low-cost compliance culture, while still maintaining the effectiveness of prior undertakings. Since the first access undertaking in 2001, the basic design of the ringfencing provisions has been substantially unchanged. However, with each regulatory review, new provisions have been added (and none removed), often in response to concerns of a hypothetical nature, resulting in a regime that is complex and unwieldy. The intention of the 2013 Undertaking is to resolve this accumulated legacy of three undertakings, and thereby ensure that the obligations are clear, understandable and workable.

However, the 2013 Undertaking contains in substance the same principal controls as have existed in prior undertakings. In particular, commitments will continue to be made as to:

- functional separation of access-related functions from non access-related functions to avoid or minimise conflicts of interest;
- operational separation of above-rail train operations from below-rail train control;
- management separation, ensuring the independent management of Aurizon Network separate from the above-rail business;
- employee separation, encompassing controls on the separation of Aurizon Network employees from other Aurizon functions;

- information separation, encompassing processes governing the handling of access seeker confidential information;
- accounting separation, including preparation of separate financial statements for the regulated below rail network; and
- complaints handling and compliance mechanisms.



PART A

Context of the 2013 Undertaking

1 Overview of Aurizon Network's Business

1.1 Aurizon Holdings Limited

Aurizon is a top 50 ASX listed company offering rail and road-based freight transport and infrastructure solutions across Australia. Previously known as QR National², the Aurizon Group is Australia's largest rail freight operator, also providing a range of specialist services in rail design, engineering, construction, management and maintenance, and offering large-scale supply chain solutions to a diverse range of customers Australia wide.

Aurizon has played a critical role in the economic development and growth of the minerals-rich state of Queensland, providing the transport backbone for one of the world's largest coal supply chains. Through the Aurizon Group's three major product lines – Coal, Freight and Network - each day the Company moves on average more than 500,000 tonnes of coal, iron ore and other minerals, as well as agricultural and general freight, around the nation.

Figure 1 The Aurizon Group's National Operations



² On 8 December 2008 the Queensland Government announced its intention to offer for sale the commercial businesses of QR. As a result, the commercial components of Queensland Rail, including the coal, bulk and general freight haulage services, the Central Queensland Coal Region rail network and specialised track maintenance and workshop support functions, were transferred to QR National, the remainder of the businesses retained and subsequently rebadged as Queensland Rail. QR National was listed on the Australian Stock Exchange in November 2010.

In operating its portfolio of above and below rail and road transport assets, Aurizon's objective is to create sustainable value growth for its shareholders by:

- Raising the performance of Aurizon's operations to "best in class" levels;
- Maximising its share of the strong underlying growth within its core markets through innovative customer focused solutions; and
- Seeking out profitable new growth opportunities in existing and adjacent markets.

1.2 Aurizon Network

The network component of Aurizon's business is managed by a wholly owned subsidiary – Aurizon Network Pty Ltd, formerly QR Network Pty Ltd. Aurizon Network owns and operates the mainline rail network in the CQCR and is responsible for negotiating access with parties seeking to use this rail network. Aurizon Network, being a separate functional business unit within the Aurizon group structure as well as a separate legal entity, also provides services other than access, including rail design and engineering services, below rail maintenance and construction services³ and rail infrastructure management services.

The CQCR open access rail network is the largest coal rail network in Australia and one of the country's most complex rail freight networks, with more than 100 trains running on the 2,670 kilometres of heavy haul rail infrastructure every day. The CQCR is comprised of four major coal systems:

- Moura System – primarily services coal mines in the Moura region, together with the Callide Basin, with all coal being hauled to Gladstone, either for use at domestic industrial plants, Gladstone Power Station or for export via the Port of Gladstone. On construction of the Surat Basin Railway, the Moura System will support the export of coal from the Surat Basin.
- Blackwater System – primarily services coal mines in the central and southern Bowen Basin and carries the product through to Stanwell Power Station, Gladstone Power Station and the Port of Gladstone.
- Goonyella System – services coal mines in the central and northern Bowen Basin and carries product to the ports at Hay Point. The Goonyella System connects to the Blackwater System in the south and the Newlands system in the north.
- Newlands System – is located at the northern end of the Bowen Basin connecting to the port at Abbot Point. The system services mines located in the Newlands System, as well as an increasing number of mines located in the Goonyella System via the Goonyella to Abbot Point Expansion (GAPE) project.

³ Heavy plant and equipment is not owned by Aurizon Network Pty Ltd. The employees that operate that machinery are typically not employed by Aurizon Network Pty Ltd, but operationally are currently directed by Aurizon Network's management.

Network and operations

COAL NETWORK ASSETS SUMMARY 2011/2012

Track km's	2397km
Turnouts	1270
Route km's	1841 km
Overhead km's	1747 km
Level Crossings	766
Gross Tonnes	296 Mt
Mines	49
Ports	7
Regional Councils	12

LEGEND

- City/town
- Export terminal
- Rollingstock depot
- Train crew depot
- Aurizon above rail operations
- Existing rail
- Proposed rail
- Coal basin



2 Aurizon Network's access undertaking

2.1 The regulatory framework

The Central Queensland coal network (CQCN) has been declared under the *Queensland Competition Authority Act 1997* (QCA Act) for open third party access. Aurizon Network is consequently obliged to negotiate in good faith with entities seeking access to its rail network, and the QCA is empowered to regulate certain aspects of that negotiation.

The network was first declared by the Minister in 1998 through a regulation under the QCA Act, and, in response to a change in the declaration process in 2010, subsequently declared by legislation.⁴ The scope of the declaration was revised at the time of Aurizon's privatisation to ensure all critical rail infrastructure in Queensland, including the four CQCN systems, remained covered by the open access regime.⁵ To this end, the declaration was amended to specifically identify the rail network to be made available for access. Further, the declaration provide that augmentations, duplications, expansions and the replacement of this existing network infrastructure would also be automatically declared. However, extensions of the coal system connecting to new coal basins are not automatically covered.⁶

The QCA Act provides for the making of access undertakings by the owner or operator of a facility.⁷ Access undertakings may be either voluntarily submitted by the owner/operator of the facility, or alternatively the QCA may give the entity a notice requiring that an access undertaking be prepared. An access undertaking sets out in detail how an access provider will negotiate for access to the declared service and must be approved by the QCA following an assessment against the statutory criteria. An access undertaking is not intended to displace the 'negotiate/arbitrate' model in the QCA Act, but rather provide a more detailed framework for Aurizon Network and access seekers to reach commercial terms.

2.2 The 2013 Undertaking

Aurizon Network's 2010 Undertaking is due to expire on 30 June 2013. Consistent with its past practice of voluntarily submitting access undertakings, and in accordance with s136(1) of the QCA Act, Aurizon Network is submitting its 2013 Undertaking for the QCA's approval. A draft amending access undertaking will shortly be submitted to the QCA to extend the 2010 Undertaking and provide for transitional arrangements until approval of the 2013 Undertaking.

The QCA Act does not require that an undertaking be in force in relation to a declared service. However, the practise to date in relation to the declared service provided by Aurizon Network, is that an access undertaking is volunteered setting out the terms and conditions on which access will be made available. The 2013 Undertaking reflects a continuation of that practise. The submission of a voluntary access undertaking will provide continued certainty (for all parties) about the terms and conditions under which access will be made available to the below-rail infrastructure, and to provide guidance about the process of negotiating for access.

⁴ QCA Act, s 250.

⁵ The QR track network was first declared in 1998 and was based on ownership - the use of rail transport infrastructure for providing transportation by rail if the infrastructure is used for operating a railway for which Queensland Rail, or a successor, assign or subsidiary of Queensland Rail, is the railway manager. The revised declaration is an asset based declaration.

⁶ That is, extensions which directly connect these systems to a coal basin which was not directly connected on commencement of the declaration (i.e. July 2010).

⁷ QCA Act, s 136.

The circumstances in which access is provided to the CQC for UT4 have varied significantly since the commencement of open access. For example, the network has been sold into private ownership, entry into haulage markets has occurred, Queensland coal production has doubled (and the network expanded to accommodate it), and the commercial arrangements for producer interaction with the network have fundamentally altered.⁸ Further discussion on these environmental factors, and their implications for UT4, is set out in Chapter 3.

2.2.1 Aurizon Network's approach

Aurizon Network recognises in its 2013 Undertaking that the regulatory framework must be responsive to changing commercial priorities and preferences, while at the same time maintaining confidence in the stability of the regulatory arrangements. As required under the QCA Act, it must represent a balancing of the various, often competing, interests of stakeholders.

Many parts of the previous access undertakings have been progressively amended over the period since the commencement of the 2001 Undertaking, in response to specific concerns or conditions at the particular time, some of which are no longer relevant. This has resulted in the regulatory arrangements becoming complex, cumbersome and, in some cases, straying from the original intent of third party access regulation. In some respects, this has resulted in a number of inefficiencies and costs that could be minimised by clarifying, and in some cases simplifying, the access undertaking.

For the Aurizon Group, the change from privatisation has been profound. The Aurizon Group, and indirectly, Aurizon Network, is no longer subject to the mixed mandate of public ownership. Instead, Aurizon Network is now clearly required to act with the predominant and central objective of advancing the interests of its shareholders. This has implications for a regulatory framework that previously has all too readily assumed that the commercial interests of Aurizon Network could be subordinated to the larger purpose of promoting the development of Queensland coal mines. In this respect, the 2013 Undertaking presents an opportunity to develop a regulatory framework that balances the commercial interests of Aurizon Network with the interests and access seekers and the public interest.

Additionally, listing with the Australian Stock Exchange (ASX) has added a further layer of corporate governance requirements and has exposed Aurizon Holdings Limited to increased market scrutiny, disclosure requirements and sharper commercial imperatives. In particular, and in line with other publicly listed companies operating in the Queensland coal industry, commercial drivers require that it has the flexibility to manage its risks, to have control over its investment decisions and make long term decisions over its future direction in order to maximise shareholder value. Aurizon Network, as a wholly owned subsidiary, is clearly driven by the same imperatives.

It is also noted that despite the increased market discipline and accountability requirements, industry remains concerned over the incentives implied by vertical integration. Aurizon Network's strong commitment to ringfencing is continued in the 2013 Undertaking.

⁸ In 1999-2000, the network railed approximately 114 mtpa (See: QCA (1999). Draft Decision on QR's Draft Access Undertaking, Volume 2 – The Draft Undertaking, December, p. 37).

2.2.2 Priorities for the 2013 Undertaking

The implications of the evolving industry context for Aurizon Network's regulatory framework are discussed in more detail in Part B of this submission, which is structured to address the following key priorities:

- retain an effective and credible ringfencing regime;
- create an environment more conducive to commercial negotiation;
- ensure effective framework for planning, investing and allocating capacity;
- support effective, commercial commitment to supply chain coordination;
- promote the efficient pricing framework;
- maintain safe and efficient network operations; and
- ensure the accountability and compliance regime is robust.

These key priorities join to drive Aurizon Network's primary objectives of maintaining a highly reliable, world class rail network capable of fully and efficiently meeting its customers existing and future commitments.

3 The UT4 environment

The 2013 Undertaking has been proposed in a difficult cost environment for the coal industry, but also one characterised by substantial opportunities for future growth. As widely reported, cost pressures on Queensland producers, together with renewed competition from developing markets and the commercialisation of new energy sources, has moderated expectations relative to the environment in which UT3 was developed.⁹ At the same time, the medium-term outlook remains positive, with substantial growth projects still under development, including those in the Galilee and Surat Basins.

This chapter sets out the market context in which 2013 Undertaking has been developed, and the implications of that context on the design and structure of the regulatory proposal. In this respect, the 2013 Undertaking has necessarily been proposed taking into account the need for the regulatory framework to respond to commercial preferences. At the broadest level, Aurizon Network considers that the most appropriate regulatory response to changes in the market outlook is for the regulator to reaffirm that regulation should not unreasonably constrain any party (including Aurizon Network itself) from responding appropriately to changes in the commercial environment. To this end, and consistent with the principles of the National Competition Policy that underpin the QCA Act, the principal response of Aurizon Network is to reinforce the primacy of negotiation, confirming the ability of users and itself to agree appropriate commercial terms.

That noted, it is important to highlight that, irrespective of the market context, a regulatory proposal is by its nature a long-term document that does not invariably and without due consideration respond to short-term fluctuations in commodity cycles. Moreover, the policy framework itself must look to the longer-term outlook, and accommodate not just short-run cost preferences, but also those access seekers that are continuing to grow their businesses. The 2013 Undertaking balances those concerns.

3.1 The competitiveness of Queensland's export coal industry

3.1.1 Background

In UT3, the outlook for the coal industry was characterised by strong growth in demand and record high commodity prices. This continues to be reflected in investment activity. In the latest Queensland Government industry update (published in July 2012) there were three new mines under construction; 46 projects were in the 'advanced' stage¹⁰ and if progressed, will add up to 400 mtpa to Queensland's production.¹¹ Since 2004, exploration expenditure on brownfield developments has accounted for 62% of total mineral exploration expenditure in Australia.¹² This reflects the improved economics of a number of projects given the significant increase in the coal price.

Significant investment in coal supply chain infrastructure also continues. This is driven by a number of major terminal expansions that are at varying stages of investigation and development (for example, WICET, Dudgeon Point and T0, T2 and T3 at Abbot Point). In addition to necessary enhancements to existing rail network capacity to service these new terminals, there are a number of major new rail links,

⁹ Mining Australia, 2012, *Coal jobs pain continues for Queensland*, 21st November 2012, available at: www.miningaustralia.com.au/news/coal-jobs-pain-continues-for-queensland

Synergies Economic Consulting, 2012, *Impact of increasing Queensland coal royalty rate on the Queensland economy*, 9th August 2012, available at: www.synergies.com.au

¹⁰ This is where a mining lease has either been granted or is under application.

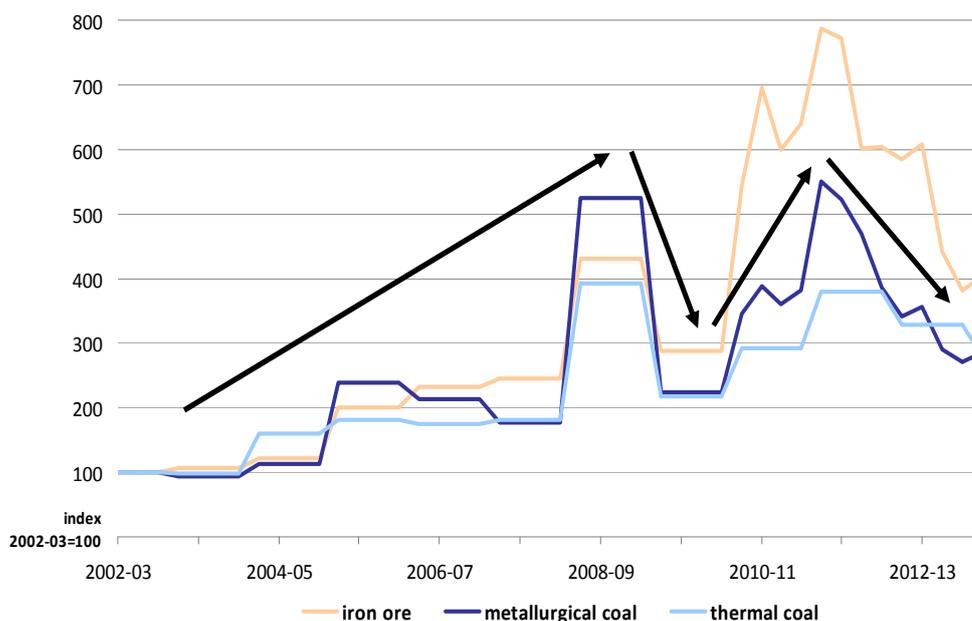
¹¹ Department of Natural Resources and Mines (2012). Queensland Coal Mines and Advanced Projects. http://mines.industry.qld.gov.au/assets/coal-pdf/new_coal_min_adv_proj.pdf

¹² Bureau of Resources and Energy Economics (2012). Mining Industry Major Projects, April.

including the recently completed Goonyella to Abbot Point Expansion, the Surat Basin Railway and the preferred solution/s to link the new Galilee Basin developments to export ports.

In the second half of 2012, a changing outlook for the industry began to emerge. The view summarised by the Bureau of Resource and Energy Economics (BREE) and others, is that commodity prices have now peaked and are expected to decline relative to levels seen in 2011.¹³ BREE expects substantial price reductions in the longer term based on large supply responses from Australia's competitors. Downward price pressures have also been exerted due to moderating economic growth in China and concerns over the fallout of the European crisis.¹⁴ Prices since the commencement of what it terms 'the Millennium Boom' (commencing in 2002-03) are shown in the figure below.

Figure 2 BREE: Real Commodity Prices 2002-03 to 2012-13



Source: Professor Quentin Grafton (2012). Australia and the Millennium Mining Boom, Presentation to the Australian National Conference on Resources and Energy, Bureau of Resource and Energy Economics, September, p.13.

For 2012-13, BREE expects:

- metallurgical coal production to increase by 12%, while the world price will fall by 28%;
- thermal coal production to increase by 14%, while the world price will fall by 11%.¹⁵

The BREE (Professor Quentin Grafton) describes the industry as being in the second and third phases of the Millennium Boom. While it considers that prices have peaked, the level of investment that has been stimulated by the significant increases in prices:¹⁶

... will likely result in a tripling of Australia's resource and energy exports, by volume, from the start of the Millennium Boom to the 2020s. These volume increases in resources and energy exports will be long lasting and will help sustain the benefits of the Millennium Boom well beyond the price peaks of 2011.

¹³ Professor Quentin Grafton (2012a). Economic Outlook for Australian Resources: Prices, Investment and Volumes. Presentation to AMEC, Bureau of Resource and Energy Economics, September.

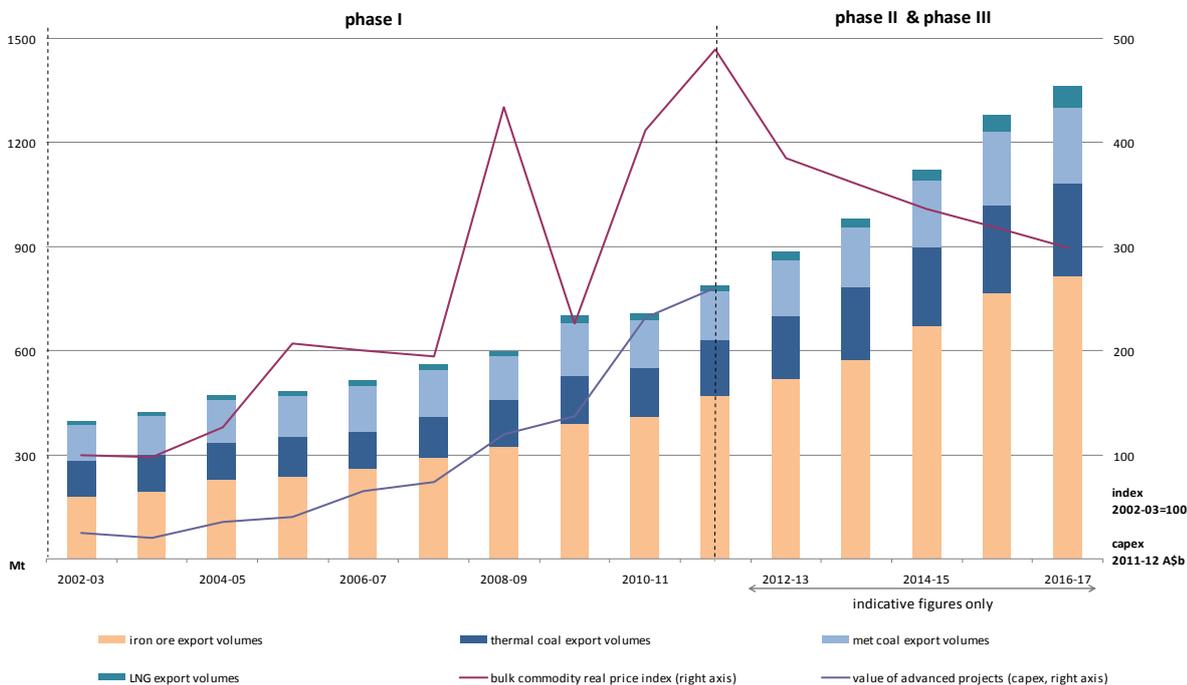
¹⁴ Professor Quentin Grafton (2012b). Australia and the Millennium Mining Boom, Presentation to the Australian National Conference on Resources and Energy, Bureau of Resource and Energy Economics, September.

¹⁵ Professor Quentin Grafton (2012b). p.6.

¹⁶ Professor Quentin Grafton (2012b), p. 16.

The BREE is not of the view that the investment phase has peaked but expects it will do so soon if prices continue to moderate.

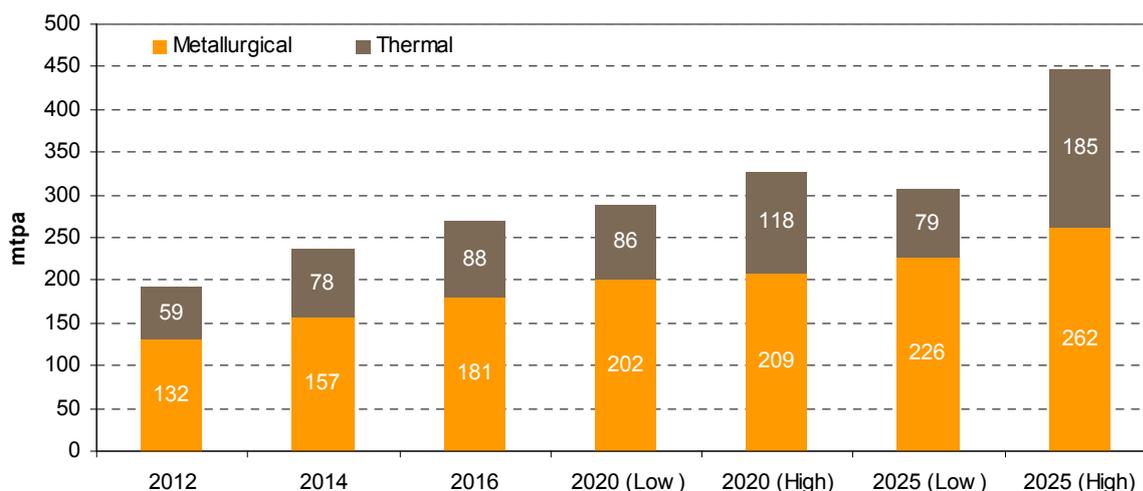
Figure 3 BREE: Phases of the Millennium Boom



Source: Professor Quentin Grafton (2012). Australia and the Millennium Mining Boom, Presentation to the Australian National Conference on Resources and Energy, Bureau of Resource and Energy Economics, September, p.17.

The third phase is not expected to result in a “peak and decline” of volumes but rather a levelling out. The following figure shows projected Queensland coal export growth from 2012, with low and high scenarios from 2020.

Figure 4 Projected Queensland coal exports



Source: Bureau of Resources and Industry Economics (2012). Australian Bulk Commodity Exports and Infrastructure – Outlook to 2025. July, Tables 6.1, 6.2.

The BREE considers that the “easy gains are over” and the key driver of any future gains will be productivity growth. Similar sentiments were made by the Chief Executive of the Australian Coal Association, Dr Nikki Williams, in an address to CEDA.¹⁷ Rather than signalling “the end of the boom”, she commented that the industry is more likely to be at “the end of price-led growth”. While demand fundamentals remain strong, the current challenge for industry is “vanishing margins” as the cost of mining coal has increased rapidly.

In September 2012 a report was published by Port Jackson Partners on the competitiveness of the Australian minerals sector.¹⁸ The report, commissioned by the Minerals Council of Australia, discussed a significant decline in the cost competitiveness of Australian producers.

It notes that capital costs are rising more rapidly compared to competitors, and that thermal coal projects are now 66% more expensive than the global average (being commensurate with the global average in 2006). As a consequence, for thermal coal “the majority of the project pipeline is at risk”, with new competitors emerging that are “strengthened by improved policy settings, new technologies and new sources of capital.”¹⁹ The situation for metallurgical coal producers is seen to be not as severe given the scarcity of these resources, however Australia is still losing market share to competitors.

Port Jackson Partners identify a need to shift the dialogue to the opportunities and benefits at risk, including “a more open discussion of the magnitude of the risks to the current investment pipeline.”²⁰ It advocates the need to address cost pressures on projects and operations by:

- mobilising available skilled labour to “stop labour cost super-inflation”;
- ensuring unfettered access to globally competitive suppliers; and
- increasing national savings to ease exchange rate pressures.²¹

3.1.2 Implications for UT4

Aurizon Network remains cautiously confident of the outlook for the export coal industry in UT4 and is committed to supporting the future growth and development of the CQCR.

However, the preceding discussion highlights the risk associated with Aurizon Network’s existing and future investments in long-term infrastructure. As noted above, the mining investment phase could be expected to peak soon, especially if prices continue to moderate. The outlook for investment is particularly uncertain beyond 2020, given the distinct possibility that prices will moderate. However, investment decisions have been made, and will continue to be made, to install supply chain infrastructure with economic lives which extend well into the future. Recent decisions taken by the mining industry have demonstrated that these companies are ready and willing to take quick and decisive actions on projects in response to the commodity price downturn. To the extent that Aurizon Network does not have the same flexibility, it needs to be able to take steps to effectively mitigate its risks and/or ensure that it is adequately compensated for the risks it is bearing. This is essential in order to preserve value to shareholders.

¹⁷ Dr. Nikki Williams (2012). The End of the Easy Ride, Address to the CEDA Resources Outlook: Sustaining Advantage, Brisbane, 30 October.

¹⁸ Port Jackson Partners (2012). Opportunity at Risk: Regaining our Competitive Edge in Minerals Resources, Report Commissioned by and prepared for the Minerals Council of Australia, September.

¹⁹ Port Jackson Partners (2012). p.10.

²⁰ Port Jackson Partners (2012). p.12.

²¹ Port Jackson Partners (2012). p.12.

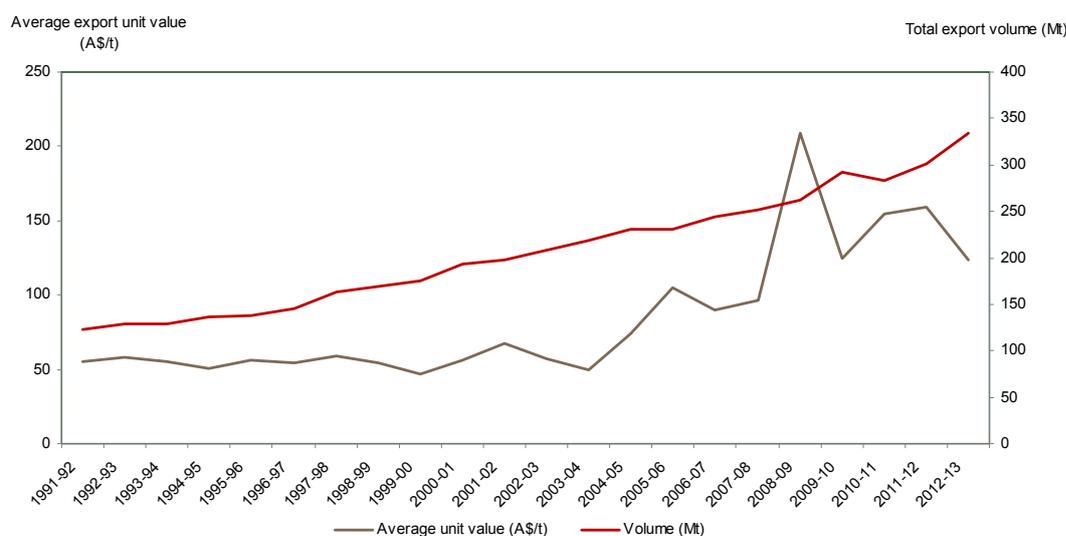
3.2 Availability of capacity

3.2.1 Background

A direct consequence of the 'Millennium Boom' is the emergence of major capacity constraints in the supply chain infrastructure required to support the coal industry.

At the commencement of QR's first access undertaking, there was significant surplus capacity in the rail systems (both above and below rail) with correspondingly high flexibility and reliability of throughput. Over the last decade, strong volume growth, as shown in the figure below, has absorbed both the pre-existing latent capacity as well as most opportunities for incremental capacity expansion.

Figure 5 Historical coal prices and actual volumes (thermal and metallurgical coal)



Source: http://www.bree.gov.au/documents/publications/res/Annual_RES_2012.pdf;
http://www.daff.gov.au/abares/publications_remote_content/publication_series/australian_energy_statistics;
http://adl.brs.gov.au/data/warehouse/pe_abarebrs99000464/PC11540.pdf

In recent years, expansion of the CQCR has been reliant on large expansions of both rail and port infrastructure, which in turn require coordinated investment decisions by multiple mining companies and multiple service providers. Examples have included the expansion of the Abbot Point Coal Terminal (APCT) and related Goonyella to Abbot Point Expansion (GAPE) rail project and the development of the Wiggins Island Coal Export Terminal (WICET) together with the Wiggins Island Rail Project (WIRP).

The capacity of the existing rail infrastructure in the CQCR is fully contracted, and requests for additional capacity will continue to be reliant on the development of large, multi-user integrated rail and port expansion projects.

3.2.2 Implications for UT4

While the framework for negotiating access remains a fundamental component of Aurizon Network's undertaking, it is necessary to recognise that the opportunities to negotiate access are limited in the absence of expansions to the network. The development of an expansions process that more effectively addresses the complexities around negotiating for the development of large scale, multi-user projects is therefore a key focus for UT4. A range of existing provisions in Aurizon Network's 2010 Undertaking, which were originally developed at the early stages of the 'Millennium Boom' to address incremental

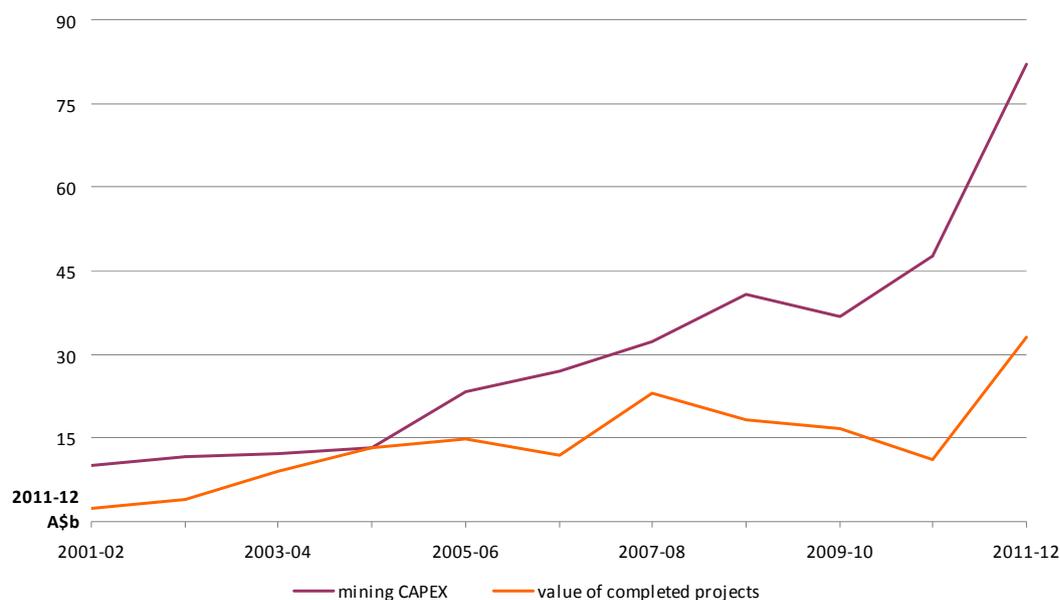
expansion and allocation of capacity, have progressively become less relevant given the nature of the expansion opportunities now available.

3.3 Cost environment

3.3.1 Background

The level of investment activity has seen significant cost pressures during UT3. New capital expenditure in the mining industry in Australia totalled \$49 billion in 2010-11. This was the highest on record in real terms and about three times annual average expenditure over the past 30 years.²² Mining capital expenditure in Australia since the beginning of the last decade is shown in the following figure.

Figure 6 Australian capital expenditure in mining and the value of completed projects



Source: Professor Quentin Grafton (2012). Australia and the Millennium Mining Boom, Presentation to the Australian National Conference on Resources and Energy, Bureau of Resource and Energy Economics, September, p.14.

This material spike in investment activity impacts project costs, including capital, labour and input costs. While much of the competition for resources has been within the mining industry it is also impacted by demands from other sectors. For example, reconstruction activity following the extreme weather events of 2011 added to the already significant infrastructure developments in the growing south-east Queensland region and this activity is expected to continue into UT4.

As outlined in Volume 4, there are also cost pressures that are not driven by demand growth. For example, a key safety issue that has material cost implications for UT4 is compliance with Queensland's rail safety fatigue requirements. This impacts productivity (with travel time included as part of the number of working hours in the day) and cost (for example, accommodation may be required close to the worksite to ensure workers are not travelling in a fatigued state).

3.3.2 Implications for UT4

The inherent tensions between maximising throughput in a capacity constrained environment and cost containment will continue to be an issue in UT4. While the former remains a priority, Aurizon Network continues to recognise the importance of ensuring that this is done in the most cost effective way.

²² Bureau of Industry and Energy Economics (2012). Mining Industry Major Projects, April.

This problem is compounded by the cost of new infrastructure developments, which affect all parts of the supply chain. As outlined in Aurizon Network's September 2012 submission on the Goonyella to Abbot Point Expansion,²³ one of Aurizon Network's main strategies has been to work with its customers to define key preferences and drivers of project development, which included minimising capital costs and developing a schedule that suited the cost objectives. Aurizon Network continues this collaborative approach with other new developments, including the Wiggins Island Rail Project (WIRP) Stage 1.

Information on Aurizon Network's cost forecasts for UT4 is provided in Volume 3.

3.4 Capital environment

3.4.1 Background

A fundamental change between the UT4 environment and previous access undertakings is the introduction of private capital into the investment environment. Previously, investments made by QR Network in the CQCR, and indeed by many of the port operators, were made by and on behalf of State Government shareholders. This necessarily meant that the commercial imperative of QR Network was lessened by both the public interest mandate of its owners, as well as the indirect financial interest of its owners in industry expansion (via increased royalties on coal production).

UT4 is the first undertaking where it is clear that all future investments in supply-chain infrastructure will be exclusively funded by the private sector. In this respect, the capital appetite of the CQCR extends beyond the rail infrastructure, to both mine and terminal infrastructure, all of which must (given disaggregated ownership) generate an economic return on capital on a standalone basis. Moreover, the scale of a number of these expansions means that the debt and equity raisings required for these projects will be large. It is therefore reasonable to expect that they will be subject to thorough due diligence by investors and financial market participants prior to construction, particularly given the size and complexity of the expansions and the long capital recovery periods (within the face of an uncertain long term demand environment).

3.4.2 Implications for UT4

As with other participants in the supply chain, Aurizon Network will be relying on private sector capital (ranging from households through to large institutional investors) to fund its investments through UT4. Whilst a government owned corporation, QR Network was obligated to ensure that it made prudent investment decisions and pursued value-creating opportunities for its shareholders, Aurizon Network is now, in addition, seeking to attract capital from investors that have a range of alternatives, domestically and globally. Undertaking investments that do not provide an appropriate return on capital will quickly lead to a reduction in Aurizon Holdings Limited's share price, eroding its ability to raise new capital. Like all other companies operating in the CQCR, Aurizon Network needs to ensure that it focuses on value-creating opportunities that do not expose its investors to unacceptable levels of risk, or that require them to bear risks for which they are not compensated.

²³ Aurizon Network (2012). Aurizon Network Access Undertaking (2010), Draft Amending Access Undertaking, Reference Tariff for the GAPE System, 5 September.

3.5 Changing competitive dynamics

3.5.1 Background

Over the course of UT3, competition in the haulage market has become increasingly intense. In 2009 Pacific National entered the CQCR above rail market, with a commitment to 10 consists²⁴ in the Goonyella system. Since that time, it has pursued increases in its market share, and now services between 15%-20% of the CQCR haulage market.²⁵ In conjunction with this, a number of miners have established, or are in the process of establishing, in-house haulage capacity. Most notably, BMA will shortly begin operating a narrow gauge electric fleet in Goonyella.²⁶ Further, Xstrata has established its own haulage entity in the Hunter Valley (X-rail) and is actively considering extending its own haulage operations into the CQCR.²⁷

The introduction of vigorous, actual competition (as opposed to the threat of competition), along with the increased recognition of the criticality of holding secure long term supply chain capacity entitlements, has resulted in rapid evolution in the way that producers negotiate for rail haulage services, including their access requirements. In order to enhance their ability to take advantage of this vigorous above rail competition, producers are increasingly wishing to control their own capacity entitlements. This means they are more likely to be negotiating the terms and conditions for access, and there is a growing demand for alternate contracting frameworks in which the end user directly contracts for long term capacity entitlements with Aurizon Network, compared to the approach taken historically where below rail access was negotiated with the above rail provider.

Further, in an environment where capacity is fully committed, significant investment in the network is necessary to provide additional capacity. As the parties who, in practice, primarily underwrite the expansion of the rail network through take-or-pay and underlying off-take agreements, producers are heavily involved in negotiating the terms under which these expansions occur.

As a result, the focus of Aurizon Network's commercial negotiations and relationships has moved from rail operators to producers. Contractual negotiations are increasingly held with producers, particularly in relation to key commercial terms, and negotiations with operators are typically more focussed on operational matters.

The increasing direct involvement of producers in the negotiation of access has significantly impacted the extent of countervailing market power that exists in these negotiations. Also contributing to this is the increased expertise and assistance provided by above rail operators to their customers as part of their services, the availability of additional port capacity and the increased utilisation of alternative routes to port (through the use of cross system movements). These Tier 1 mining businesses are well resourced and equipped to negotiate effectively with Aurizon Network, as demonstrated by their comparative revenues.

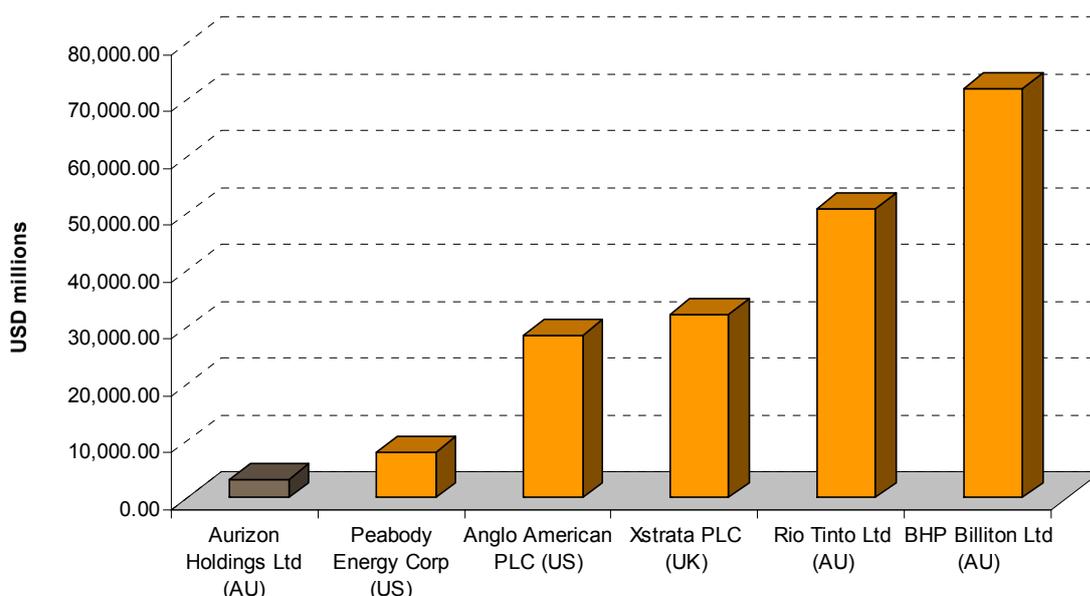
²⁴ Perry, J. (2009). *PN commences QLD coal haulage operations*, May 20. Available at: <http://www.railexpress.com.au/archive/2009/may-20-09/other-top-stories/pn-commences-qld-coal-haulage-operations>. [Accessed 27 March 2013]

²⁵ See, for example (1) Pacific National website, downloaded on 14 March 2013 <http://www.asciano.com.au/pacific-national-coal/>: "In FY12 Pacific National Coal had approximately 65 per cent share of the coal hauled in New South Wales and 16 per cent of the coal haulage market in Queensland"; (2) PN Coal opens Nebo, Queensland maintenance facility by Rail Express — last modified Sep 05, 2012 11:29 AM <http://www.railexpress.com.au/archive/2012/september/september-5th-2012/top-stories/pn-coal-opens-nebo-queensland-maintenance-facility>: "PN Coal's haulage in Queensland grew by 28% during the 2011/12 financial year and it currently has around a 17% share of the Queensland market, but expects this to rise to 20% by mid-2014. "

²⁶ BMA has awarded Siemens a contract to supply 13 narrow gauge electric locomotives to transport coal to the HPSCT. [see: <http://www.miningaustralia.com.au/news/siemens-to-supply-bma-with-locomotives>]

²⁷ See for example, Xstrata, *Hitting Our Stride: Xstrata Investor Seminar – Part 2*, 6 December 2011, slide 141

Figure 7 Revenues – Tier 1 Mines compared to Aurizon (2012 financial year, USD millions)



Source: Bloomberg

Greater involvement of producers in the haulage market and the market for rail access has led to an environment where Aurizon Network’s market conduct is effectively monitored by some of the Australia’s largest and most well resourced companies, a number of which themselves operate large, integrated rail systems. The Queensland coal industry is well resourced to deal with issues to effectively mitigate the exercise of market power by Aurizon Network, such as being able to consider and propose alternative regulatory approaches, resolve and negotiate contractual terms on equal footing, and/or explore multiple ways to bypass any capacity constraints, such as investing directly in rail assets. Similarly, through the entry of firms specialising in operational and procurement services, smaller producers are also able to negotiate with below and above rail operators more effectively.

3.5.2 Implications for UT4

For UT4, whilst issues of market power and vertical integration remain of fundamental importance to the regulatory framework, the potential impacts on competition have been significantly mitigated by increased levels of countervailing power exercised by producers and increased competition in the above rail market.

Further, while it remains critical to include in UT4 provisions that constrain Aurizon Network from misusing market power, it is important that the negotiation framework, for both access and expansions, also recognise the extent of countervailing market power that the mining companies hold. For large, multi-user network expansions, mining companies typically negotiate collectively in order to maximise the effectiveness of their negotiations,²⁸ hence further consolidating the countervailing market power that they can exert in these negotiations.

²⁸ Miners collectively bargained in negotiations for GAPE and WIRP, and the ACCC has authorised mining companies to collectively bargain in negotiations for rail network expansions required for proposed Dudgeon Point port terminal developments and Surat Basin Rail.

3.6 Supply chain performance

3.6.1 Background

Over the last decade, the number of service providers operating in the CQCR supply chains has significantly increased. Competition has been introduced in the rail haulage market, with Pacific National now providing 15%-20% of haulage services in the CQCR and BMA readying itself to commence its own haulage operations in the Goonyella system, and the number and size of export port terminals has increased.

Beyond this, the integration of the CQCR supply chains has been increased, with some producers now having more than one option for export port capacity from a single geographical origin. Historically, most mines railed to a single port destination based on the shortest haul route. This model no longer applies with the availability of alternative routes to port (e.g. the connection of the Goonyella and Newlands systems allow Goonyella mines to export via APCT, and some mines now operate rail services to three different port precincts). This increasing complexity is demonstrated in Figure 8 below.

Whilst integration provides producers with increased flexibility for the transportation task, it increases the complexity of the supply chains and the interdependencies between supply chain participants. This increased complexity has a number of implications, including for planning, allocating and managing capacity, and pricing.

In light of this, the need for effective coordination has intensified. Given that the CQCR is continuing to expand, one of the most important aspects of supply chain coordination is in the planning of and investment in new capacity. This is necessary to ensure that appropriate investment occurs in each element of the supply chain in order to most efficiently realise the required increase in capacity. This is of particular importance where supply chains are highly complex and control over the separate elements is fragmented, as is the case in the CQCR. Any misalignment in capacity expansions under these conditions will result in a mismatch between rail and port capacity and ultimately the inefficient utilisation of supply chain infrastructure.

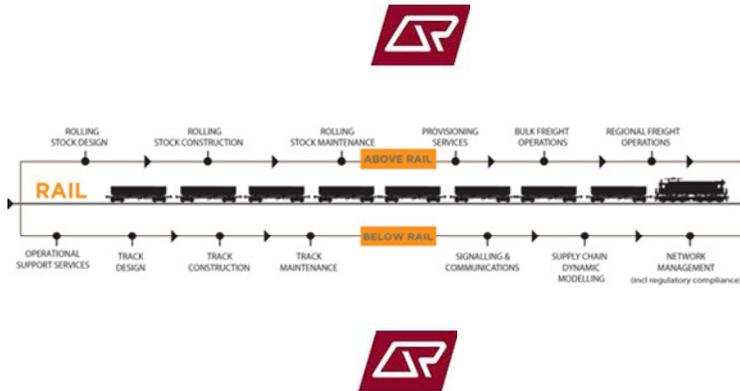
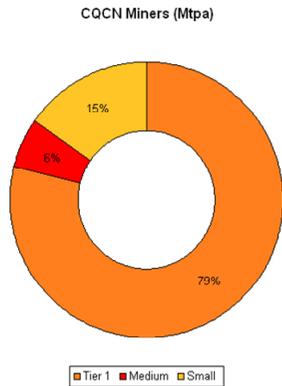
Infrastructure investments will need to take into account various factors as the producer (who may be proposing to develop a specific deposit or multiple deposits in different locations) will have options over the port precinct (and terminal) to which it rails. Its preferred option will be based on a range of factors including the cost, availability and timing of that capacity. The different transport options have materially different impacts on the infrastructure requirements. For example, a mine in the central Goonyella region has transport options to port precincts at Abbot Point, Hay Point and Gladstone; each of which have completely different implications for rail system expansions. The supply chain participants impacted by these various scenarios will therefore differ.

MINING

TRANSPORT

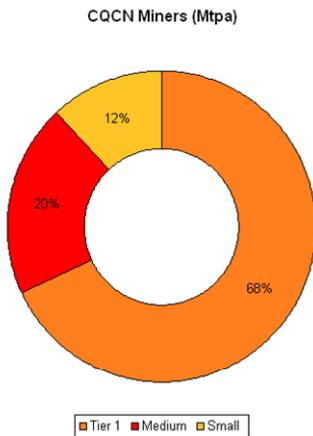
PORT

2001 - UT 1



	ABBOT POINT COAL TERMINAL Ports Corporation of Queensland 16Mtpa
	DALRYMPLE BAY COAL TERMINAL Ports Corporation of Queensland 46.6 Mtpa
	HAY POINT SERVICE 3 COAL TERMINAL BHP Billiton Mitsubishi Alliance 34 Mtpa
	R O TANNA COAL TERMINAL Ports Corporation of Queensland 30 Mtpa
	BARNEY POINT COAL TERMINAL Ports Corporation of Queensland 6 Mtpa
	FISHERMAN ISLANDS COAL TERMINAL Port of Brisbane 3 Mtpa

2013 - UT 4



	ABBOT POINT COAL TERMINAL Ports Corporation of Queensland 60Mtpa
	DALRYMPLE BAY COAL TERMINAL Ports Corporation of Queensland 56 Mtpa
	HAY POINT SERVICE 3 COAL TERMINAL BHP Billiton Mitsubishi Alliance 44 Mtpa
	R O TANNA COAL TERMINAL Ports Corporation of Queensland 70 Mtpa
	BARNEY POINT COAL TERMINAL Ports Corporation of Queensland 8 Mtpa
	FISHERMAN ISLANDS COAL TERMINAL Port of Brisbane 8.8 Mtpa
	WIGGINS ISLAND COAL EXPORT TERMINAL Industry owned 27 Mtpa

This degree of optionality is unique to the CQCR and is quite different to other coal supply chains in Australia. The Hunter Valley coal supply chain is often raised as a comparator to the CQCR and, whilst it too is a large coal supply chain, there is far less optionality in this system: all three coal terminals are in the same port precinct (Newcastle) and the vast majority of coal is transported within a single rail system. This allows a level of commonality in the rail system solutions required for capacity expansions, notwithstanding that there may be options being considered both in relation to the mining deposit being developed, and the export coal terminal to be used. This allows for more predictability in the likely expansion path for the supply chain and creates a common set of stakeholders who will be impacted by the proposed expansions.

3.6.2 Implications for UT4

Given its complexity, it is not possible to develop a single expansion path for the CQCR as part of the UT4 process. Rather what is necessary is a framework that provides sufficient information at a relatively high level for stakeholders to identify their transport options and possible implications. It is necessary for the planning framework to provide for further detail on the expansion plans to be developed in a flexible manner that does not sacrifice timeliness, responding to the demands of producers, as the ultimate beneficiaries of any capacity created. This means that the planning framework should provide for the progressive development of expansion plans, as confidence in the expansion requirements increases.

4 Overview of the Statutory Framework

Aurizon Network's 2013 Undertaking is required to promote the legislative requirements set out in Part 5 of the QCA Act, in particular, those in s138(2). This chapter sets out the statutory and policy context in which that assessment is made by the QCA. Later chapters of this submission provide a more detailed exposition of how particular policy proposals meet, and indeed promote, the statutory objective.

Aurizon Network has not sought to change the fundamental elements of the 2010 Undertaking. Despite this however, it is of primary importance to consider the UT4 proposal within the context of the relevant legislation. In this respect, this chapter explores the key policy objectives of competition policy, particularly the introduction of third party access and the implications of 'declaration' to Aurizon Network.

One of the most important implications of this discussion for Aurizon Network's 2013 Undertaking is that the third party access model is premised upon the understanding that commercial negotiation can typically be assumed to lead to a more optimal allocation of risk and income between parties than regulatory intervention. Inherent in the statutory model is that regulatory intervention is a last resort, and then, only on such issues as the access seeker and access provider have been unable to agree. As a result, the 2013 Undertaking proposal is designed around the level of prescription that is required to ensure that the outcomes of negotiations between Aurizon Network and an access seeker will be reasonable.

4.1 The objectives of competition policy

4.1.1 Competition policy and regulation

Competition policy is based on the premise that competitive markets will generally result in better consumer and community outcomes than those with prevailing market failure. Competition policy aims to encourage competition, not for its own sake, but because competition is recognised as a means of enhancing community welfare by promoting more efficient use of resources, in turn resulting in greater returns to producers and higher real wages.²⁹ The role of the regulator is to establish an environment which promotes a material increase in competition in dependent markets, while at the same time protecting the legitimate commercial interests of the provider of the service. The intent is to regulate insofar as necessary to enable competition, but not further; the task of the regulator is to enable a process (namely, competition), but not to mandate an outcome that should properly be determined by a well-functioning market (like a market share target, or an 'optimum' number of access seekers).

In drawing a line between the two, it is important to re-emphasise that the primary reason for regulating monopoly infrastructure services is to prevent the use of market power in ways damaging to efficient outcomes (in particular, in ways that could adversely impact competition in the dependent markets). The aim is to minimise the negative impacts associated with inefficiently allocated resources and to maximise the contribution of infrastructure services to national income and living standards.³⁰ While such an objective is rightly broad, there is a real practical difficulty in identifying the extent to which outcomes have occurred as a result of misuse of market power (e.g. earning monopoly rents) – which should rightly be targeted by a regulator - as compared to the outcomes that would occur in a normal, workably competitive market.

²⁹ Australian Competition and Consumer Commission (2004). The role of competition policy in structural adjustment An overview of recent Australian structural reforms Speech by Joe Dimasi Executive General Manager – Regulatory Affairs Division to APEC High Level Conference on Structural Reform, September, p. 1.

³⁰ Banks, G. (2012). Competition Policy's regulatory innovations: quo vadis?, 12 July, p.11.

4.1.2 Centrality of commercial negotiation to access regulation

The QCA Act, as is the case with Australian access regimes generally,³¹ provides that once a service is declared, the service provider and access seeker can negotiate terms and conditions of access to the service and, failing agreement, can call on the economic regulator to arbitrate.³² In this respect, third party access effectively provides a safety net to access seekers, while also protecting the owner's rights, including enabling it to charge prices that recover at least its efficient costs (including an appropriate return on investment).³³

The structure of the QCA Act reflects a public policy consensus that commercial negotiation is the preferred means to determine the price and other terms and conditions of access to services provided by infrastructure or other facilities.³⁴ To achieve this, regulatory settings should be limited to preventing the misuse of monopoly market power by providing access seekers with a framework that facilitates the negotiations of reasonable terms (but does not mandate terms). The regulatory settings should allow adequate flexibility for the parties to negotiate agreed terms and conditions, subject to the access seeker facing no less ability to bargain than if it were negotiating with a service provider in a competitive market. In other words, the regulatory framework should support *balanced* commercial negotiations. Balanced commercial negotiations are more likely to achieve outcomes that:

- are targeted towards the specific needs of individual users and operators, hence facilitating innovation in the haulage market;
- efficiently allocate risks between the parties, as the parties will directly trade off risks and rewards through the negotiation process in such a way that risks are allocated to the party who is best able to manage the risk, and the negotiated price will reflect a shared view of the value of that risk;
- incentivise investment in the network; and
- minimise the risk of regulatory error.

The importance of commercial negotiation was recognised and re-emphasised by COAG in the 2006 *Competition and Infrastructure Reform Agreement (CIRA)*:

“...in the first instance, terms and conditions for third party access to services provided by means of significant infrastructure facilities should be on the basis of terms and conditions commercially agreed between the access seeker and the operator of the infrastructure”.³⁵

The QCA also acknowledged this in UT1:

“Commercial negotiation is particularly important in the context of third-party access to rail infrastructure because of the varying nature of the service required by the access seeker. Therefore a framework for commercial negotiation must be established that balances the legitimate business interests of QR and the interests of access seekers”.³⁶

³¹ All state-based access regimes (including that contained in Part 5 of the QCA Act) and the National Access Regime (Part IIIA of the Competition and Consumer Act 2010) are based on the same underlying principles set out in the Competition Principles Agreement.

³² National Competition Council (2011). Access to Monopoly Infrastructure in Australia, October p.4.

³³ National Competition Council (2011), p.2.

³⁴ National Competition Council (2011), p.2.

³⁵ Council of Australian Governments (2006). Competition and Infrastructure Reform Agreement, clause 2.2. [Available at: http://archive.coag.gov.au/coag_meeting_outcomes/2006-02-10/docs/attachment_b_ncp_review.pdf]. Accessed: 4 April 2013.

³⁶ Queensland Competition Authority (2000). Draft Decision re QR's Draft Undertaking, Volume 1, p.5.

4.1.3 Costs and benefits of regulation

Where a regulator does need to intervene, e.g. where (as in Aurizon Network's case) a regulated business has volunteered a level of prescription, regulators practice caution and restraint to ensure the benefits of regulation outweigh the costs. This recognises that poorly conceived or executed regulation can be as, or more, costly than the market failure it was intended to remedy.

As recently noted by the QCA:³⁷

“Excessive or poorly designed regulation can reduce the ability of the private sector to perform optimally and adapt to change. Consequently, regulatory reform has the potential to generate large economic and social benefits. ... [Some] regulatory schemes may not be properly designed to achieve regulatory objectives in the most efficient manner or may have been put into place even though the costs of a properly designed and implemented scheme would exceed the benefits”.

In the case of access regulation, regulators have a particularly difficult task of juggling multiple and sometimes conflicting objectives,³⁸ and regulatory error with its attendant costs, is inevitable. As the Hilmer report recognised:³⁹

“Regulated solutions can never be as dynamic as market competition, and poorly designed or overly intrusive approaches can reduce incentives for investment and efforts to improve productivity”.

Of particular concern is the frequently recognised potential for excessive or poorly designed access regulation to undermine community welfare by reducing the incentive of the access provider to offer the service. Professor Allan Fels has recently emphasised, in this respect, the “the long-term insidious effect of regulatory error on investment incentives”.⁴⁰ This echoes the Productivity Commission's frequently repeated concern that “... access regulation - and the accompanying pricing approaches or rules - are likely to alter the incentives to invest in essential infrastructure”.⁴¹ The Productivity Commission has also noted that the “... regulation of access prices and conditions ... will almost always have some adverse impacts on pricing and operating efficiency”.⁴² It is the task of the regulator to balance the costs and benefits associated with regulation.

In order to minimise the scope, and therefore the costs, of regulatory error, the starting point for third party access regulation should be commercial negotiation of the terms and conditions of access, with regulation and arbitration reserved as a last resort.⁴³ The alternate approach of introducing more precision and prescription into the regulatory process in an attempt to make markets more 'efficient', increases the likelihood of regulatory error, with its attendant costs. Notwithstanding this, regulatory prescription in the application of third party access has progressively increased over the last decade. In making observations on the price regulation of monopoly infrastructure providers, the former Chairman of the Productivity Commission, Mr Gary Banks, noted in 2012 that:⁴⁴

³⁷ Queensland Competition Authority (2012). Interim Report: Measuring and Reducing the Burden of Regulation, p.2

³⁸ Banks, G. (2012). p.14

³⁹ Hilmer, Professor F. (1993). National Competition Policy, Commonwealth of Australia, p. 271.

⁴⁰ Fels, A. 2012, The Merits Review Provisions in the Australian Energy Laws, Submission to the Review of the Limited Merits Review Regime, March

⁴¹ Productivity Commission (2001). Review of the National Access Regime, September, p. 66.

⁴² Productivity Commission (2001) p. 64.

⁴³ Banks, G. (2012). p.16.

⁴⁴ Banks, G. (2012). p.1.

“...some of the regulatory regimes that have emerged have proven to be complex and costly. And the clarity of focus of the regulatory endeavor has seemingly diminished.”

Mr Banks also noted a shift in the economic landscapes in which economic regulation operates, from public to private provision of infrastructure services and a shift in the policy priority from a need to achieve efficient use of existing assets to the need for efficient investment in new infrastructure.⁴⁵ For example, in its 2008 submission to Infrastructure Australia’s National Infrastructure Audit, the Productivity Commission recommended “investment friendly” price and other regulation of privately provided infrastructure to encourage new investment.⁴⁶

Noting the potential costs that can be created through regulation, Aurizon Network believes that, as the QCA considers the proposals contained in the 2013 Undertaking, it should seek to ensure that the benefits of regulatory intervention outweigh the costs. In this respect, Aurizon Network notes that cost-benefit analysis has been recognised by the Australian Competition Tribunal as constituting an essential element of the ‘public interest’ (and thereby requires consideration by the QCA pursuant to s 138(2)(d)).⁴⁷ Regulatory intervention that imposed more costs than benefits would be unlikely to promote efficiency in any sense of the word, and thus would contravene s 69E.

4.2 Overview of Aurizon Network’s third party access regime

4.2.1 Declaration of services

Declaration of the service provided by Aurizon Network covers the use of a coal system for providing transportation by rail and is defined in s 250 of the QCA Act in terms of its function, geography and the identity of the controlling entity, which is Aurizon Network or a related body corporate.

The functional element is based on the definition of ‘rail transport infrastructure’ in the *Transport Infrastructure Act 1994*.⁴⁸ Rail transport infrastructure refers to facilities necessary for operating a railway, including railway track and works built for the railway (cuttings, drainage, excavations etc) and things associated with the railway’s operation (bridges, marshalling yards, signalling etc) and specifically includes overhead electric power supply systems and over-track structures.⁴⁹

The geographical scope of declaration is defined in terms of the rail corridors in the CQCR namely, part of any of:

- The Blackwater system, being the railway connecting Gregory, Rolleston and Minerva to Gladstone, including the part of the North Coast Line between Parana and Rocklands;
- The Goonyella system, being the railway connecting Gregory, North Goonyella and Blair Athol mine to the Port of Hay Point;
- The Moura system, being the railway connecting the Moura mine to Gladstone; and
- The Newlands system, being the railway connecting Newlands to the Port of Abbott Point, including part of the North Coast Line between Durroburra and Kaili.⁵⁰

⁴⁵ Banks, G. (2012). p.1.

⁴⁶ Productivity Commission (2008). Submission to Infrastructure Australia’s National Infrastructure Audit, p.11

⁴⁷ In the BHP case – [2011]FCAFC58 - [1161]

⁴⁸ QCA Act s. 250 (1)

⁴⁹ Transport Infrastructure Act 1994, Schedule 6 definition of “rail transport infrastructure”

⁵⁰ QCA Act s. 250 (3)(a)

The aspect of declaration related to the identity of the controlling entity is defined as the rail transport infrastructure that is directly or indirectly connected to a system and which is owned or leased by the owner or lessee, or a related body corporate of the owner or lessee of the system.⁵¹ In addition, extensions to the systems above (apart from greenfields connections to new coal basins) which are built on or after 30 July 2010 and are owned or leased by Aurizon Network or a related body corporate are included in the declared service.

4.2.2 Aurizon Network's obligation to negotiate for access

One of the most important implications of declaration is an obligation on the access provider to negotiate with an access seeker who wants to secure access to the network. As the access provider of a declared service, Aurizon Network is bound by the QCA Act to negotiate in good faith with access seekers, and to not hinder their access once obtained.⁵² As part of this negotiate/arbitrate model, Aurizon Network is obliged to make all reasonable efforts to satisfy the reasonable requirements of an access seeker, including the provision of information about a range of matters set out in s 101 of the QCA Act. This includes information on things like the price and costs of the service, the value of relevant assets used in providing the service, information on spare capacity and a map of the facility, operational and safety information and, if relevant and subject to confidentiality conditions, information about any determination made in an arbitration.⁵³

Unlike businesses operating in a competitive market, Aurizon Network may be required to allow connection to, or to expand or extend, its below-rail facility, although is not required to fund the extension, nor can the ownership of its assets be changed.⁵⁴ Aurizon Network has, after several years of consultation and development, recently proposed a user funding arrangement (discussed in Chapter 7) that will allow the network to expand within these constraints.

As a vertically integrated access provider, Aurizon Network is also subject to obligations that restrict its dealings with related parties competing with third party access seekers or holders.⁵⁵ In addition, relevant costs must be allocated to the regulated business, not only to ensure efficient and cost reflective prices, but also to prevent costs that are not directly attributable to the provision of the declared service from being shifted to the regulated business.

4.2.3 The access undertaking

4.2.3.1 Rationale for an access undertaking

An access undertaking is a set of approved obligations guiding the negotiation of access to the declared service. It provides access seekers with transparency about the negotiation process, including the information that will be provided by Aurizon Network to facilitate negotiation. An access undertaking may also provide for safety nets in the event successful negotiation is not forthcoming, such as standard agreements for access and dispute resolution mechanisms.

The QCA has previously described the role of the access undertaking as follows:⁵⁶

⁵¹ QCA Act s. 250 (3)(b)

⁵² QCA Act s. 100

⁵³ QCA Act s.101

⁵⁴ QCA Act s.118 and s.119

⁵⁵ Transport Infrastructure Act 1994, section 438H

⁵⁶ Queensland Competition Authority (2001). Final Decision re QR's Draft Undertaking, p.39.

“The rationale for having an approved undertaking is that it provides the baseline for the provision of access, however, the parties are ultimately free to negotiate access on any terms they may require. The provisions in an undertaking will therefore only apply to the extent that the parties are unable to agree.”

As noted by the QCA, successful negotiation (whether a standard contract is used or otherwise) will result in a contractual agreement between the access provider and access seeker outlining the terms and conditions of access, at which point the statute provides that the contract will prevail over the access undertaking to the extent of an inconsistency.⁵⁷

Once an undertaking is accepted, it can be enforced by the Supreme Court of Queensland and may only be varied or withdrawn (in most circumstances) by agreement between the access provider and the QCA.

4.2.3.2 Requirements of an access undertaking

An access undertaking establishes the process the access provider will follow during an access negotiation, as well as the access seeker’s responsibilities during this process. The matters in the access undertaking relate to the transactions between an access seeker and the access provider prior to the execution of an agreement. It provides sufficient information and guidance about the process to ensure that negotiations are progressed in a timely manner, which includes binding timeframes. A list of matters that may be included in an access undertaking is set out in s 137; while broad, the list is not limitless.

In this respect, an access undertaking *must* state the expiry date, providing certainty around the period for which access will be available under the approved terms and conditions. In addition, for a service that is owned and operated by a vertically integrated access provider, such as Aurizon Network, an access undertaking *must* include provisions that effectively separate its regulated business from its non-regulated businesses. That is, the access undertaking *must* include provisions for identifying, preventing and remedying behaviour that unfairly differentiates between access seekers or between users of the services and it *must* include provisions preventing Aurizon Network from recovering costs that are not attributable to the provision of the declared service in access charges.⁵⁸ The 2013 Undertaking contains such provisions in Part 3.

An access undertaking *may* include a range of other matters which are set out in s 137(2) of the QCA Act, including how access charges will be calculated, information to be given to access seekers, how spare capacity will be determined and terms around extensions to the facility among others.

4.3 Statutory criteria for the approval of the 2013 Undertaking

The QCA must consider a draft access undertaking given to it and must either approve or refuse to approve it, in which case the QCA must give a written notice stating the reasons for the refusal and the way in which it considers the draft access undertaking should be amended.⁵⁹ The factors affecting this approval are considered below.

The QCA may approve a draft access undertaking only if it considers it appropriate to do so after considering the factors set out in s 138 of the QCA Act. These factors define the parameters for consideration by the QCA in assessing whether or not to approve a draft access undertaking which, while leaving a degree of discretion in their interpretation, are informed and circumscribed by the policy intent of the regulation and regulatory precedent. These provisions are paralleled in other regulatory regimes,

⁵⁷ Queensland Competition Authority (2001) Final Decision re QR’s Draft Undertaking, p 27.

⁵⁸ QCA Act s 137 (1A)

⁵⁹ QCA Act 136(5)

including the National Access Regime, meaning that case law and practice that has developed in other jurisdictions is directly relevant to a Queensland regulatory process.

The following sections address the factors affecting approval of a draft access undertaking and set out Aurizon Network's interpretation of these matters.

4.3.1 Objects Clause

The fundamental principle underpinning the QCA's assessment of a draft access undertaking is the objective of Part 5 of the QCA Act (the Objects Clause) which is:⁶⁰

“...to promote the economically efficient operation of, use of and investment in, significant infrastructure by which services are provided, with the effect of promoting effective competition in upstream and downstream markets”.

While efficiency is not explained, it is generally viewed as a multi-faceted concept, which can be described in the following terms:⁶¹

- *Productive efficiency*: achieved by maximising output for given set of inputs, and will be promoted where, for example, access prices allow for more efficient sources of supply to replace less efficient sources. This is particularly relevant in relation to maximising utilisation of Aurizon Network's infrastructure and consequently reducing or deferring the need for additional network investment.
- *Allocative efficiency*: achieved where resources are allocated to their highest value to provide maximum benefit to society. In the case of the coal network, this includes maximising the economic value of the State's mineral resources, as well as the value generated by all supply chain participants (infrastructure owners, operators and users).
- *Dynamic efficiency*: provides incentives to invest in future innovation to improve efficiency, both in relation to the upstream and downstream markets as well as within Aurizon Network. Incentives hinge on being able to gain or retain value from innovation, which by definition deals with unknown future activities. This highlights the need for flexible and responsive regulation.
- *Transactional efficiency*: minimises transaction costs, including costs of providing information, and reduces exposure to opportunistic behaviour and hold-ups.

These concepts of efficiency incorporate an internal tension between static and dynamic efficiency, where the incentive for innovation and investment depend, to some extent, on less than perfect productive and allocative efficiency. For example, regulated price levels and structures must encourage efficient use and delivery of monopoly services, while also encouraging efficiency in the nature and timing of investments – not only for the monopoly service itself, but in related markets.⁶²

The tension between setting efficient prices, where no economic profit is made, and providing incentives for investment, which depend on an economic return, suggests perfect regulatory settings can never be fully realised. As advocated by the Exports and Infrastructure Taskforce:⁶³

⁶⁰ QCA Act s. 69E

⁶¹ QR National (2012). Submission on QR Networks Electric Traction Draft Amending Access Undertaking, September, p. 33. Citing Re Fortescue Metals Group ([2010] ACompT 2 at [798]-[803].

⁶² Banks, G . (2012)., p.11.

⁶³ Exports and Infrastructure Taskforce (2005). Australia's Export Infrastructure, Report to the Prime Minister by the Exports and Infrastructure Taskforce, p.4.

“The relevant test applied by regulators should be simplified and based on whether what has been proposed by the infrastructure owner is reasonable in the commercial circumstances and in the light of the statutory objectives. This test — under which a regulator could not reject a proposed access arrangement that fell within a reasonable range, merely because it preferred another point in that range — should be applied universally and uniformly, as envisaged under the national competition policy reforms. Simplifying the regulatory test to one that merely considers whether the infrastructure provider’s proposal is reasonable in the commercial circumstances and falls within a reasonable range should reduce the complexity of the regulator’s task and result in a more timely process”.

While the same tension exists in most competitive markets, competition drives a natural evolution towards efficiency. Regulation, as a less dynamic process, must nonetheless seek settings which promote efficiency and the assessment of efficiency must necessarily take into account the differing impacts of transactional, productive, dynamic and allocative efficiencies both for the declared service and in related markets.

4.3.1.1 Effective competition in dependent markets

The ultimate aim of declaration and third party access is to promote effective competition in one or more dependent markets, with the access undertaking providing critical support in ensuring that this is achieved. Specifically, the access criterion at clause 76(2)(a) of the QCA Act requires that in declaring a service, ‘*access (or increased access) to the service would promote a material increase in competition in at least one market (whether or not in Australia), other than the market for the service*’. Access to the service must improve opportunities and the environment for competition in such a ‘dependent’ market and promote materially more competitive outcomes.⁶⁴

Identifying the dependent markets and defining effective competition are therefore important considerations in the drafting of an access undertaking, which must target the relevant dependent markets and must support conditions where ‘effective’ competition exists or is possible, while also protecting the legitimate business interests of the access provider.

Dependent markets

The concept of a market is well-understood in competition and regulatory practice. As defined by the Tribunal in QCMA.⁶⁵

“A market is the area of close competition between firms or, putting it a little differently, the field of rivalry between them (if there is no close competition there is of course a monopolistic market). Within the bounds of a market there is substitution - substitution between one product and another, and between one source of supply and another, in response to changing prices. So a market is the field of actual and potential transactions between buyers and sellers amongst whom there can be strong substitution, at least in the long run, if given a sufficient price incentive.”

That is, markets include products (goods or services) offered by suppliers and their substitutes which are in competition. Separate markets exist where products are not able to be substituted, either demand-side (consumers can substitute the product) or supply-side (suppliers can switch to producing the substitute).⁶⁶

⁶⁴ National Competition Council (2013) s 3.5, p. 26 [note this is Declaration of Services, A guide to declaration under Part IIIA of the CCA 2010 (Cth)]

⁶⁵ Re Queensland Co-Op Milling Association Limited and Defiance Holdings Limited (QCMA) (1976) 8 ALR 481; at [518]; See also: Maureen Brunt, ‘Market Definition Issues in Australian and New Zealand Trade Practices Litigation’ (1990) 18 Australian Business Law Review 86-128:

⁶⁶ National Competition Council, (2009). Declaration of Services: A guide to declaration under Part IIIA of the Trade Practices Act 1994, p.27.

In the case of Aurizon Network, the declared service is one of multiple functional elements of the coal supply chain, each of which could be described as dependent on network access to some degree. The most relevant dependent markets for access to below-rail heavy haul services can be inferred from those identified in the analogous context of iron ore in the Full Federal Court Decision on the matter of Fortescue Metals Group Limited as being the global thermal and coking coal export market, the coal tenements market and the rail haulage market.⁶⁷ Other related markets include the port terminal coal handling services and the upstream locomotive supply market identified by the QCA in its July 2012 Draft Decision on the Electric Traction DAAU.

Effective competition

The relevant issue with respect to the dependent markets is whether or not they are already effectively competitive. In defining effective competition, the Tribunal accepted that “effectively competitive” means a market where no firm (or group of firms) is exercising significant market power and where the price is not above the competitive price.”⁶⁸

Effective competition is also ‘workable competition’. It has never been considered necessary to create ‘perfect competition’ which the NCC has pointed out is considered theoretical, while:⁶⁹

“...effective competition refers to the degree of competition required for prices to be driven towards economic costs and for resources to be allocated efficiently at least in the long term”.

In terms of achieving the object of Part 5, having identified that the relevant dependent markets are the global thermal and coking coal export market, the coal tenements market, the rail haulage market and, potentially, also the port terminal coal handling services and the upstream locomotive supply market, it remains to consider which dependent markets are ‘effectively competitive’ and which should be the target of the access undertaking in further supporting conditions for effective competition.

While the markets in the Fortescue Metals Group Limited matter discussed above relate to iron ore, specifically the global iron ore market, the iron ore tenements market, and the rail haulage market, Aurizon Network considers the iron ore and coal markets are sufficiently similar that the analysis applied by the Tribunal stands as well for both sets of markets, where:⁷⁰

“The Tribunal held that the global iron ore and the iron ore tenements market were already effectively competitive and that criterion (a) had no application in markets that are already effectively competitive.”

In support of the similarities between the global iron ore and the global coal markets, specifically in relation to whether or not effective competition exists, Aurizon Network notes that there are over 50 operating coal mines in Queensland, which produced almost 180 million tonnes in the 2010/11 financial year, of which over 160 million tonnes was exported.⁷¹ The large number of coal producers and the global nature of the coal market, in which coal producers are effectively price takers, unable to exert market power over the prices for coal, suggest that the coal production and export markets, like those for iron ore, are likely to be effectively competitive. Similarly the CQCR coal tenement market can be considered effectively competitive showing high levels of activity reflecting the global market for coal with three new

⁶⁷ Pilbara Infrastructure Pty Ltd v Australian Competition Tribunal [2011] FCAFC 58, note: 119

⁶⁸ [2010] ACompT 2, Note 818

⁶⁹ National Competition Council, (2009), p.35.

⁷⁰ [2011] FCAFC 58, note 119 citing [2010] ACompT 2

⁷¹ Queensland Department of Natural Resources and Mines Geological Survey of Queensland, July 2012

coal mines in development, almost a dozen expanding coal mines and a range of others in the advanced project stages according to a State Government report from July 2012.⁷²

In assessing whether or not the port terminal coal handling services market is effectively competitive, it is worth noting that proposed developments in the Galilee Basin have highlighted that various options exist for access to port terminals with additional capacity being developed at APCT, further terminal developments at Abbot Point proposed, proposed new terminal developments at Dudgeon Point, WICET currently in development and an expansion at BMA's HPSCT progressing.

The locomotive supply market was discussed in Aurizon Network's response to the QCA's Draft Decision on the Electric Traction DAAU, in particular noting that both electric and diesel locomotive supply markets are intensely and globally competitive with up to ten international suppliers of electric locomotives and five international suppliers of diesel locomotives.⁷³

The remaining dependent market and the one most relevant in terms of Aurizon Network's access undertaking is the above rail haulage market. Without access to the below rail service, there would be no competition in the above rail haulage market. Aurizon Network submits that, in the context of s 138, the *only* relevant dependent market for the purposes of promoting competition is the above rail haulage market. By promoting the process of competition in the haulage market, this in turn can increase economic welfare through, for example, creating conditions that are more conducive to further development of the coal industry.

4.3.2 Legitimate business interests of the owner or operator of the service

In balancing the competing interests of the access provider, access seekers and public benefit, the QCA is required to specifically consider the legitimate business interests of the owner or operator of the service. Although the assets are leased, Aurizon Network is both the owner and operator of the declared service and bears all the economic benefits and liabilities associated with ownership.

'Legitimate business interests' refers to the:

“...commercial considerations of the service provider, such as the provider's obligations to shareholders and other stakeholders, including the need to earn normal commercial returns on the facility”.⁷⁴

As highlighted by the ACCC, this does not preclude an access provider from earning higher than normal commercial returns provided the returns are not generated from the exercise of market power, but rather demonstrate innovative investment, process reform or some other original form of cost cutting measures.⁷⁵

Aurizon Network's status as a subsidiary of Aurizon Holdings Limited potentially adds complexity to the assessment of its legitimate business interests, particularly as the commercial interests of Aurizon Network's shareholders are those of the broader group. However, as the access undertaking applies only to the declared service, the legitimate business interests of Aurizon Network as a stand alone access provider are the relevant consideration, including its legitimate business interests in an appropriate balance of risk and reward, minimising costs and maintaining control over its business decisions.

⁷² Queensland Department of Natural Resources and Mines (2012). p.4

⁷³ QR National Network Submission to QCA: Electric Access Draft Amending Undertaking section 3.1.2.4

⁷⁴ Australian Competition and Consumer Commission (2007). Final Determination Statement of reasons: Access dispute between Services Sydney Pty Ltd and Sydney Water Corporation, June, p. 20.

⁷⁵ Australian Competition and Consumer Commission (2007). p. 20

For example, Aurizon Network has a legitimate business interest in protecting itself from being required to negotiate with insolvent access seekers, having an ability to resume unutilised or underutilised capacity, protecting itself from the impacts of unsafe or environmentally damaging practices by access seekers and ensuring that access arrangements are offered in a way that does not disadvantage its related above rail operator in competing with third party operators.⁷⁶

4.3.3 Pricing principles

Another important aspect of access regulation which the QCA is required to consider in assessing an access undertaking is the price at which access is offered. Prices influence behaviour of market participants and, therefore, potentially play a central role to the way in which access seekers and Aurizon Network interact. Section 168A of the QCA Act requires that prices should:

- generate expected revenue for the service that is *at least* enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved [italics added];
- allow for multi-part pricing and price discrimination when it aids efficiency;
- not allow a related access provider to set terms and conditions that discriminate in favour of the downstream operations of the access provider or a related body corporate of the access provider, except to the extent the cost of providing access to other operators is higher; and
- provide incentives to reduce costs or otherwise improve productivity.⁷⁷

Market participants respond to both the level and structure of prices suggesting that prices must balance a range of interests. That is, on the one hand they have a role in promoting competition in dependent markets through efficiency in the provision of access to the declared service, while on the other they provide an incentive for investment and innovation by the access provider.

Market conditions and the extent to which below rail capacity is fully utilised will influence the optimal balance for prices. Where capacity is scarce, pricing should provide incentives for investment in new supply, while in circumstances where a large amount of spare capacity is available, prices should provide incentives for users to increase utilisation. Prices must therefore promote both efficient utilisation and provide incentives for efficient expansion of the rail infrastructure. Pricing is discussed in more detail in Chapter 9, whereas capital returns and the regulated WACC are addressed in Volume 3.

4.3.4 Interests of access seekers

In assessing a draft access undertaking the QCA must also consider the interest of access seekers, including whether adequate provision has been made for compensation if the rights of users of the service are adversely affected.⁷⁸ Access seekers include above rail operators and coal producers, both of which may contract with Aurizon Network for access to the below rail service.

The interests of access seekers include being able to obtain access to the below rail capacity and the associated service on fair and reasonable terms and at reasonable prices. This requires that access seekers have sufficient information about available capacity, the standard of service and the costs of providing that service to make an informed decision about whether this is the case. Access seekers also

⁷⁶ Queensland Competition Authority (2000). Draft Decision on QR's Draft Undertaking, Volume 2, December, p. 43.

⁷⁷ QCA Act s. 168

⁷⁸ QCA Act s. 138 (e)

have an interest in being protected from anti-competitive or discriminatory behaviour or from the misuse of monopoly power, usually provided through a robust and transparent dispute resolution process. In addition, access seekers have an interest in the safe, reliable and efficient operation of the network and as a group have an interest in maximising system throughput, and in minimising the scope for the activities of one access seeker to impact adversely on another.

4.3.4.1 Promoting competition, not competitors

The interests of access seekers must be considered in the context of the object of Part 5 of the QCA Act, in that the aim of an access undertaking is to establish an environment similar to that which the access seeker would face in a competitive market for the service. That is, the access seeker would have an ability to negotiate, but not an assurance that their exact commercial preferences would be accommodated by a service provider.

Underlying this is that the purpose of regulation is to protect competition, not competitors. That is, a policy measure should have an appreciable positive impact on competition rather than merely assisting a market participant. To the extent that competition can only be promoted with negative impacts on an existing user, the QCA Act provides for this to be compensated (rather than that an action not be taken).⁷⁹

4.3.4.2 The nature of access seekers

In this context, it is relevant to consider the nature of Aurizon Network's access seekers. Access seekers are, predominantly, either above-rail haulage operators seeking to hold access on behalf of coal producers, or coal producers seeking to contract directly with Aurizon Network for access. Where the access seeker is a coal producer rather than an above rail haulage operator, access to the below rail service still provides support for competition in the above rail haulage market in that, in order to use the access rights, a coal producer must become, or engage, an accredited above rail operator.

Access seekers are mostly large corporate bodies, relatively few in number, which are well resourced to develop and propose alternative regulatory approaches, resolve and negotiate contractual terms, and/or explore multiple ways to bypass any capacity constraints, such as investing directly in rail assets. In contrast to the users of other regulated services, such as energy, which includes households and small businesses, the sophistication of Aurizon Network's access seekers enhances the scope for effective commercial negotiation and permits significantly less prescriptive regulation.

4.3.5 The public interest

The QCA Act requires the QCA to consider an access undertaking having regard to the public interest, including the public interest in having competition in markets (whether or not in Australia). The public interest is not defined but intuitively suggests consideration of the interests beyond those of the access provider, access seeker and the industry participants, to other parties and the broader community. In the matter of Fortescue Metals Group Limited the Tribunal noted that what must be considered in terms of the public interest "is the welfare, particularly the economic welfare, of the ...community as a whole"⁸⁰ not with the view of achieving perfection, but at least a better outcome.

In particular, the Tribunal referred to the arguments by Professor Fels⁸¹ describing the public interest in terms of whether the benefits of regulation outweigh the costs. The relevant costs considered by the

⁷⁹ QCA Act, s 138(e)

⁸⁰ [\[2010\] ACompT 2, citation 1161](#)

⁸¹ [\[2010\] ACompT 2, citation 1161](#)

Tribunal included those imposed by access regulation itself, such as those regulatory costs summarised by the Productivity Commission as being:

- compliance and administrative costs;
- constraints on efficient pricing and service delivery;
- disincentives for investment;
- incentives for strategic behaviour; and
- regulatory failure.⁸²

The QCA has previously identified a number of particular public interest considerations in relation to a draft access undertaking including:⁸³

- the efficient allocation of resources;
- promoting competition within a fair and equitable regulatory framework;
- ensuring rail safety;
- promoting the competitiveness of Australian business;
- the interests of consumers or any class of consumers;
- industrial harmony;
- promoting regional economic development and opportunities for employment generation;
- legislation and government policies relating to occupational health and safety and industrial relations;
- legislation and government policies relating to ecologically sustainable development; and
- social welfare and equity considerations.

Other considerations include the public interest in having efficient supply chains which support the competitiveness of the Queensland coal export market.

4.3.6 The effect of excluding assets for pricing purposes

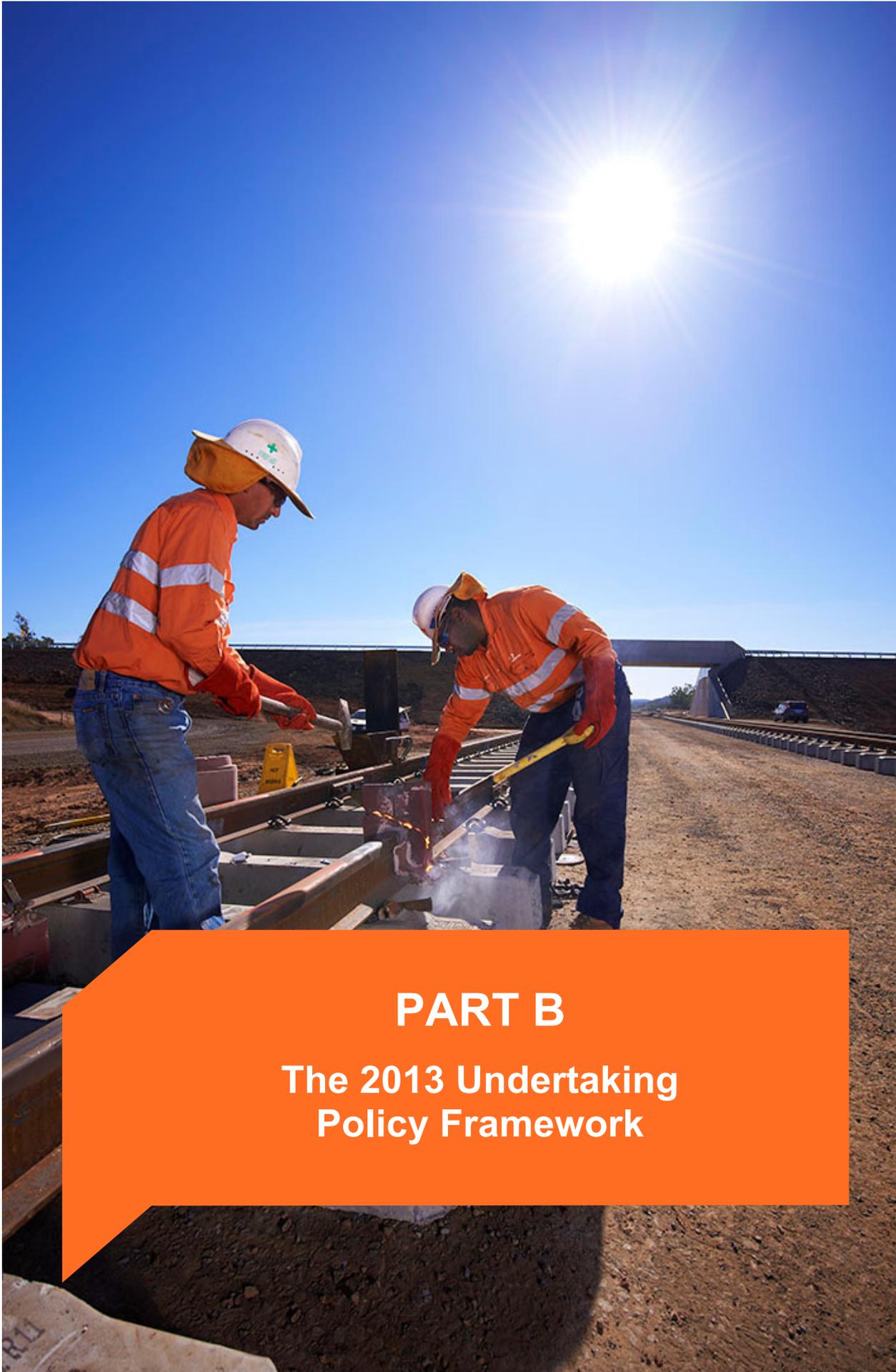
The QCA Act specifically requires that the QCA consider the effect of excluding assets for pricing purpose. Notably, if this were to occur in a regulatory determination, this would reduce access charges, but would also mean that Aurizon Holdings Limited's shareholders would not receive a return on investment made in the regulated assets. The effect of this will be to discourage future investment in the declared service, which is currently protected to some extent by the 'regulatory compact' - an expectation that where Aurizon Network meets the regulatory requirements it will recover its capital together with a reasonable commercial return.

Additionally, the precedent effect of such a decision could also flow through to other areas here infrastructure is regulated, with consequential negative implications for future investment in those areas.

⁸² Productivity Commission, Review of the National Access Regime, report No. 17 (28 September 2001), „Access Review, Chapter 4

⁸³ Queensland Competition Authority (2000). p. 45.

The resultant negative impact on community welfare through lower investment in new infrastructure could therefore prove substantial.



PART B

The 2013 Undertaking Policy Framework

5 Ringfencing Framework

Summary:

The ringfencing regime established in the access undertaking is designed to address Aurizon Network's legislative obligations to not discriminate or engage in anti-competitive conduct. Importantly, the ringfencing regime seeks to allay the competition concerns that arise due to Aurizon's vertical integration while preserving the efficiency benefits that flow from this.

After 12 years of operation, and with the benefit of cross-industry experience, Aurizon Network has taken the opportunity to review the ringfencing regime from first principles, to create a rational, streamlined and workable framework that effectively addresses the key risks to competition resulting from vertical integration. The 2013 Undertaking contains in substance the same principal controls as have existed in prior undertakings, with the obligations clarified and, in cases, strengthened to ensure their continued effectiveness.

The 2013 Undertaking includes the following key elements in Part 3:

- continuation of Aurizon Network's upfront commitment to the general principles of non-discrimination;
- maintenance of the voluntary commitment from Aurizon Holdings Ltd that it will ensure that all Aurizon Group companies will assist in ensuring Aurizon Network's compliance with the ringfencing framework;
- a strengthened commitment to the ongoing functional separation of Aurizon Network from the above rail businesses of the Aurizon Group;
- an enhanced framework supporting the independence of Aurizon Network's management and its 'arms length' relationship with its related operator;
- a new, comprehensive framework for handling protected information, based on these principles:
 - information handling framework must be clear, logical and, above all, workable, given the large number of employees who must comply;
 - the disclosure framework is based on a 'need to know' basis, with disclosure only allowed where the recipient must have access to the information for legitimate business purposes, such as to progress and access application or for governance requirements;
 - the disclosure of protected information to Aurizon's Marketing Division is prohibited;
 - accountability measures are required to ensure security of protected information and compliance; and
- a single complaints handling framework now covers the entirety of Aurizon Network's ringfencing obligations, expanding the scope of the multiple mechanisms from the 2010 Undertaking.

The combined effect of these provisions is a clearer and more concise ringfencing framework designed to strengthen confidence in the Aurizon Network's commitment to non-discrimination.

5.1 Introduction

Part 3 of the 2013 Undertaking specifies the ringfencing arrangements that Aurizon Network proposes to implement this regulatory period. The purpose of these arrangements is to provide certainty to access seekers and access holders, as well as the QCA, that Aurizon Network is satisfying its obligations under both the QCA Act and the *Transport Infrastructure Act 1994* in relation to the supply of access to Aurizon Group businesses, and, more generally, to address any competition concerns which arise as a result of the vertical integration of the Aurizon Group.

Aurizon Network has proposed an effective and robust ringfencing regime. The ringfencing arrangements are a central part of the regulatory arrangements in that they underscore the integrity of the negotiation process envisaged by the QCA Act and by other parts of the 2013 Undertaking. It is accepted by Aurizon Network that, for the regime to facilitate commercial flexibility, it is necessary for controls to be in place to ensure that the playing field remains level, and that all market participants are able to reach commercial agreements with confidence. For that reason, Aurizon Network has developed its ringfencing proposal as a balanced response to a recognised issue.

It is in the interests of all stakeholders for the ringfencing obligations to be clear, understandable and workable. Of all components of the 2013 Undertaking, it is Part 3 that most needs to be readily understandable by the large number of employees, contractors and other Aurizon parties who are required to comply with it. Moreover, Part 3 is important to the way in which the Aurizon Group is structured, how it operates, and how it creates value for its shareholders and its customers. A clear, workable and stable approach to this issue is of considerable importance to the effective management of the Group companies, and to the outlook of the Aurizon business. This is equally important to access seekers and holders, as well as the QCA, in providing them with confidence that the ringfencing arrangements effectively address the legitimate concerns that arise from the Aurizon Group's vertical integration.

In this respect, Aurizon Network believes that there is substantial scope to improve the ringfencing provisions of the 2010 Undertaking to achieve these objectives. In particular, the 2013 Undertaking provides a timely opportunity to review the ringfencing regime from first principles, given the benefits of over a decade of experience in the operation of ringfencing regimes – both Aurizon Network's and those which apply to other vertically integrated companies. Since the 2001 Undertaking, the core ringfencing obligations have been substantially unchanged. However, with each regulatory review, new provisions have been added, often in response to concerns of a hypothetical nature, resulting in a regime that is unnecessarily complex and unwieldy. A key aim of the 2013 Undertaking is therefore to develop a more streamlined ringfencing framework that is widely understood and contributes to a low-cost compliance culture, while still ensuring its effectiveness.

While the proposed Part 3 in the 2013 Undertaking is clearly quite different in structure from that in the 2010 Undertaking, Aurizon Network believes that it still contains the same essential components as prior undertakings. Indeed, as explained below, many of the controls have actually been clarified and strengthened in a way that is beneficial to the Aurizon Group and stakeholders, both of whom have an interest in having a clear, concise ringfencing regime. Indeed, in many respects, the 2013 Undertaking contains in substance the same principal controls as have existed in prior undertakings. In particular, commitments have been made as to:

- functional separation of access-related functions from non access-related functions to avoid or minimise conflicts of interest;

- arrangements for the separate, independent management of Aurizon Network;
- controls on the separation of Aurizon Network employees from other Aurizon functions;
- processes governing the handling of access seeker confidential information;
- preparation and audit of separate financial statements for the regulated below rail network; and
- complaints handling and compliance mechanisms.

The 2013 Undertaking's approach to these issues is explained in greater detail below.

5.2 Aurizon Network's approach

5.2.1 The need for a ringfencing regime

The CQCN is owned and operated by Aurizon Network, a wholly owned group company of the Aurizon Group. The Aurizon Group is vertically integrated, in that it both supplies access to rail infrastructure (through Aurizon Network) and utilises that rail infrastructure to supply train services in competition with other rail operators.

The merits of vertical integration in heavy-haul railways have been the subject of lengthy debate in economic literature.⁸⁴ In the specific context of Queensland's rail infrastructure, the merits of vertical integration were canvassed in the context of the listing of QR National on the ASX in 2010.

As part of this review, QR Limited commissioned a report by Professor Allan Fels AO, former Chairman of the Australian Competition and Consumer Commission, on competition issues arising out of the vertical integration of QR Limited.⁸⁵ Professor Fels' report argued at the time that the vertical integration of a rail operator is not inherently contrary to the public interest. Indeed, the vertical integration of a rail operator produces tangible benefits in terms of economic efficiency and, as a consequence, lower costs to users.

Professor Fels discussed at length the costs that arise out of the separation of above and below rail operations. In particular, Professor Fels found that the vertical integration of rail produced benefits:

- in relation to the timing and coordination of traffic, with resulting benefits to throughput and safety, and reduced transaction costs; and
- by facilitating timely and efficient investment decisions, especially in the context of an industry where there is such a high ratio of fixed network costs to delivered service costs.

Similar findings have been made over the years by the Productivity Commission,⁸⁶ the Bureau of Transport and Regional Economics⁸⁷ and the Australian Competition Tribunal.⁸⁸

⁸⁴ For example, 1) Drew, J. and Nash, C.A. (2011). Vertical separation of railway infrastructure - does it always make sense? Institute for Transport Studies, University of Leeds, Working Paper 594, provides a list of examples in the form of a Literature Review, p 3; 2) In the matter of Fortescue Metals Group Limited [2010] ACompT 2 (30 June 2010) section 8.2 note 514:

"Moreover, economies of organisation may arise because transaction costs for organising supply within an industry are minimised with a single supplier. Such economies are part of what can be called "economies of joint production", of which scope economies are a component. There are many examples of the development of an overall system which requires planning and coordination between industry segments. If there are difficulties and costs associated with establishing effective commercial contracts between diffuse firms, the industry may be better organised as a single vertically integrated firm."

⁸⁵ Fels A (2012). *Regulatory and Competition Policy Context for Rail Privatisation in Queensland*, October.

⁸⁶ Productivity Commission (2006). *Road and Rail Freight Infrastructure Pricing*, Report No 41, December, at 346.

⁸⁷ Bureau of Transport and Research Economics (2003). *Rail Infrastructure Pricing: Principles and Practice*, Report 109, July at 14-15.

⁸⁸ *In the matter of Fortescue Metals Group Limited* [2010] ACompT 2 paras 1238 to 1243

It is clear that the vertical integration of Aurizon produces benefits in terms of efficiency, which flow on to promote the interests of the access provider, access seekers and users as well as the public interest generally. As noted in its proposed Draft Incentive Mechanism,⁸⁹ the financial interest of the Aurizon Group in multiple elements of the supply-chain substantially strengthens the incentive of Aurizon Network to act in the interests of Queensland coal producers. While, as currently structured, the regulatory regime provides only a weak financial incentive for a stand-alone Network business to contribute to throughput maximisation, Aurizon Network and its management have a powerful incentive through vertical integration to contribute to the performance of the supply-chain to ensure that opportunities are created for other Aurizon business interests (as for other supply-chain participants). This is amply demonstrated, for example, by the continued willingness of Aurizon Network to explore low-capital intensity technological or operational solutions to capacity constraints, despite a relatively weak financial incentive for it to do so.

However, the vertical integration of Aurizon, while not contrary to the public interest, does raise well recognised risks in an environment where third party rail operators require access to Aurizon Network's rail infrastructure in order to supply train services in competition with its related operator. These risks relate chiefly to the potential incentives for Aurizon Network to discriminate in favour of the related party user, as well as the opportunities for cross subsidy and the misuse of confidential information. The purpose of ringfencing is to guard against these risks to ensure that it does not undermine competition, while preserving the efficiency benefits that flow from vertical integration.

In effect, vertical integration itself is not the problem that ringfencing is designed to remedy. Rather, it seeks to address the risks around *vertical foreclosure* - that is the possibility that the access provider will not provide access to competitors on reasonable terms - through the regulation of an access provider's conduct.

It is also important to recognise that the nature of Aurizon Network's ringfencing requirements is changing as the focus of access negotiations shifts. That is, access negotiations are increasingly centred on producers rather than operators. This reflects a desire by producers to have greater control over their access rights and is evidenced by the development of alternative forms of standard access agreements. The ringfencing issues in relation to negotiation of long term capacity entitlements with producers are often quite different, as Aurizon is not competing in the same market as the access seeker in this case (as occurs when the access negotiation is with a train operator), and so concerns about scope for anti-competitive conduct and impacts on competition in related markets are not prominent.

Against this background, Aurizon Network believes there are two critical principles that must underpin the ringfencing arrangements that will apply under the access undertaking:

- ringfencing arrangements must identify and address the risks to competition arising out of the potential for discrimination in favour of a related operator, noting that these risks to competition essentially arise in the rail haulage market rather than in the export coal market; and
- ringfencing arrangements must do no more than is necessary to address these risks, if they are not to undermine the genuine efficiency gains that can result from vertical integration and/or impose unwarranted compliance costs on Aurizon Network, which will ultimately be passed through to users through higher access charges.

⁸⁹ QR Network (2012). *QR Network's 2010 Access Undertaking, Draft Amending Access Undertaking, Draft Incentive Mechanism*, 30 April

In this regard, Aurizon Network notes the Australian Energy Regulator's view that ringfencing arrangements should promote efficient pricing of regulated services, promote competition in contestable markets and be flexible enough to accommodate changes in the market.⁹⁰

Part 3 of the 2013 Undertaking is therefore aimed at the essential risks to competition that arise out of the vertical integration of Aurizon. These are:

- the need to make decisions in a way that does not discriminate or unfairly differentiate between related and unrelated access seekers and users;
- the need to protect confidential information; and
- the need to ensure transparent accounting and financial reporting.

Aurizon Network acknowledges that the ringfencing measures in the 2010 Undertaking essentially sought to address these issues. However, Aurizon Network believes those measures were, in a number of places, ambiguous, duplicative and unnecessarily burdensome. They have also been added to through each successive access undertaking review, with the result that by the 2010 Undertaking, the ringfencing arrangements had become complex and lacking in clarity. Indeed, even provisions that Aurizon Network recognises as being an essential component of a ringfencing regime, are difficult to understand and, hence, to comply with and ultimately to enforce. This is unhelpful for all stakeholders, including Aurizon Network. A genuine attempt has therefore been made in the 2013 Undertaking to simplify and streamline the ringfencing arrangements, while maintaining their effectiveness.

Moreover, the 2013 Undertaking seeks to provide a *proportional* response to the problem. While Aurizon Network recognises the importance of a robust ringfencing regime as part of its access undertaking, it is important to emphasise that its market conduct (unlike the case with any other Australian, vertically integrated regulated business) is effectively 'policed' by some of the largest corporations in both Australian and international terms.

Ringfencing is a concept that primarily developed to address perceived vertical foreclosure issues in consumer industries, such as telecommunications, where the end user is not in a position to determine whether the merits of particular service offerings reflect anticompetitive elements due to informational asymmetry. The situation in the CQCR is plainly not analogous; end users in the CQCR are not uninformed consumers, but 20 major coal mining corporations, with access to significant legal and information resources. A number of these companies themselves run substantial integrated rail systems for the transport of bulk mining products. They also have significant visibility over all elements of the CQCR supply chain – indeed, some have control over day-of-operations train scheduling and management and are even preparing to run their own rollingstock.

As already highlighted, end users are increasingly directly involved in the negotiation for access - even where this is not the case and access negotiations occur between Aurizon Network and a rail operator, the end users are intimately aware of how these negotiations are progressing. They are alive to the risk of Aurizon Network discriminating against a third party operator, and carefully scrutinise arrangements to ensure that this does not occur.

As a result, the level of regulatory intervention to protect such interests by way of ringfencing controls can be substantially less than is the case in a consumer industry.

⁹⁰ Australian Energy Regulator (2012). Position Paper, Electricity Distribution Ring-fencing Guidelines, September, p. 4

5.2.2 The legal framework for assessing Aurizon Network's ringfencing regime

Section 137 of the QCA Act specifies the matters that may be contained in an access undertaking. In the context of ringfencing, the most critical provision is s 137(1A), which provides (emphasis added) that:

'An access undertaking for a service owned or operated by a related access provider must include provisions for —

(a) identifying, preventing and remedying conduct of the related access provider that unfairly differentiates in a material way between —

(i) in negotiating access agreements, or amendments to access agreements, relating to the service — access seekers; or

(ii) in providing access to the service — users; and

(b) preventing the related access provider recovering, through the price of access to the service, costs that are not reasonably attributable to the provision of the service.'

Aurizon Network is a 'related access provider' of Aurizon.

Each of the proposed ringfencing measures proposed in Part 3 are measures which can be included in an access undertaking in accordance with s 137 of the QCA Act.

In previous access undertakings, s 137(2)(ea) has also been central to the QCA's assessment. This provision states that the access undertaking may include details of:

“arrangements to be made by the owner or operator to separate the owner's, or operator's, operations concerning the service from other operations of the owner or operator concerning another commercial activity”.

The relevance of this sub-section has eased since the legal separation of Aurizon Network from its parent company in 2008.

The criteria that govern the QCA's consideration of the ringfencing arrangements are to be found, primarily, in s 138(2) of the QCA Act. Chief among these are:

- the legitimate business interests of the owner or operator of the service (s 138(2)(b));
- the interests of persons who may seek access to the service (s 138(2)(e)); and
- the interests of access holders and end users (which are relevant under s 138(2)(d) and/or (h)).

The interests of access seekers, access holders and users are plainly served by ringfencing measures which guard against the potential for anti-competitive discrimination, unfair differentiation and cross subsidy that could potentially result from the incentive for Aurizon Network to favour its related operator. However, such measures will often come at a cost, in terms of the loss of the efficiency gains from vertical integration and compliance costs. These costs are contrary to the interests of Aurizon Network as well as access seekers, access holders and end users, who will ultimately bear these costs through higher access charges and reduced operating efficiency.

In short, as discussed in Chapter 4, there is a need to balance the costs and benefits of ringfencing measures to be imposed under the access undertaking. Aurizon Network believes that its proposed ringfencing arrangements strike this balance in a way which effectively guards against the risks arising out of vertical integration while preserving, to the extent possible, the benefits of vertical integration.

It should also be recognised that, concurrent with privatisation, the Queensland Government strengthened the ringfencing obligations on Aurizon through general legislation - particularly, the obligations in the *Transport Infrastructure Act 1994* for an independent Board and for arms-length dealing between Aurizon Network and related operators. The effect of these additional measures should be fully recognised in the assessment of what the access undertaking needs to address.

Furthermore, it is also noted that the central ringfencing obligation that applies to Aurizon Network is contained in the QCA Act. The purpose of Part 3 of the access undertaking is to supplement the enforcement of the statute, not to supplant it. Given this, Aurizon Network considers that the QCA should not, and indeed cannot, seek to make the statute stricter than the legislature intended through imposing additional requirements in the access undertaking.

5.2.3 Approach to ringfencing in the 2013 Undertaking

For the reasons outlined in section 5.1, Aurizon Network considers that the 2013 Undertaking provides a timely opportunity to review its ringfencing arrangements.

Aurizon Network recognises that there are legitimate issues in regulating aspects of the conduct of a vertically integrated access provider which the access undertaking must address. Aurizon Network's approach in developing the 2013 Undertaking ringfencing framework is therefore to provide a reasonable, workable and clear framework that balances the effective and efficient management of a group of companies with the economic problem that regulation is seeking to address. To this end, Aurizon Network has sought to ensure that the access undertaking effectively manages the risks around incentives for discriminatory conduct in the most straightforward and cost effective way. It is intended to enable both Aurizon Network and access holders to receive the benefits that flow from vertical integration in terms of efficiency gains, while at the same time appropriately managing the associated risks. Aurizon Network believes that there is substantial value for all stakeholders to be gained from reviewing the ringfencing arrangements to develop a clearer, simpler and more workable framework which is better understood by all parties.

Consistent with this approach, the ringfencing provisions in the 2013 Undertaking have not been undermined or weakened. Rather they have been redrafted on a 'first principles' basis, with the aim of achieving a clear, simple and more workable framework. Indeed, Aurizon Network has continued to make voluntary commitments through the Group Deed (refer section 5.3) and has included some new constraints that were not previously in the access undertaking.

Improved workability is an important objective for Part 3 obligations because, of all elements of the access undertaking, the ringfencing arrangements are one component where it is vital that the obligations are clear and not duplicative, given that they need to be understood and applied by a large number of Aurizon employees and contractors. Aurizon Network has therefore consciously removed duplicative, unclear or unauditable obligations from the access undertaking to ensure that the ringfencing arrangements are clear and to assist in promoting a genuine compliance culture.

As part of this approach, Aurizon Network considers that it is not workable to seek to anticipate every circumstance that might arise and provide a remedy, even before an actual problem emerges. Efforts to do this in previous access undertakings have contributed to an overly complicated ringfencing regime which is not readily understood. As noted above, it is not Aurizon Network's intention to undermine the objective of the regime, but rather to improve clarity and, as a result, better achieve the objectives of the regime. The ability for stakeholders to have concerns about compliance investigated and to apply to the

QCA for an audit to be conducted of the matter of concern, allows Aurizon Network and the QCA to address any specific problems that may arise.

5.2.4 Implementing this approach in UT4

Aurizon Network’s approach in terms of the key elements of the ringfencing framework in the 2013 Undertaking is elaborated below. The table below provides a summary of the key elements of the framework, including an overview of changes from UT3.

Table 1 Summary of key changes in ringfencing framework

Ringfencing element	UT3 approach	UT4 approach
Separate legal entities	Aurizon Network Pty Ltd is an ultimate subsidiary company of Aurizon Holdings Ltd. ⁹¹	No change proposed.
Functional separation	Separation is achieved by a specific clause containing a requirement for prior approval by QCA for any proposal for a related operator “to become responsible for matters integral to the provision of below rail services”. This is combined with a list of examples of the “responsibilities” of Aurizon Network.	Adopt a clear statement of core access-related functions performed by Aurizon Network (adapted from UT3), combined with an obligation that those functions will not be undertaken by, or contracted out to, a related operator, <i>but that</i> nothing prevents Aurizon Network undertaking a non-core function or requires it to undertake a non-core function.
Management separation	There is a general obligation for Aurizon Network to be managed independently from related operators, and for related operators not to participate in the supervision or appointment of the executive management of Aurizon Network.	Replace the general obligation of independent management with a formalisation of the current, independent management structure of Aurizon Network. Provide for the creation and maintenance of an independent network executive management team that: <ul style="list-style-type: none"> (a) does not manage a related operator; (b) has independent management reporting and supervision lines that do not include any person with direct management responsibility for a related operator; (c) has an executive manager of equivalent or greater seniority to the executive manager of a related operator.
Employee separation	Commitment in the 2010 Undertaking is to avoid conflicts of interest for Aurizon Network employees by preventing their participation in “working groups” that may affect access. This approach creates substantial uncertainty in practice.	Replace the “working group” clause with a clear commitment that access-related Aurizon Network employees work principally for Aurizon Network and not work at the direction of a related operator, unless transferred or seconded (subject to requirements for handling protected information).
Information separation	Regime set up very broadly, to be a framework for all confidential information, rather than limiting coverage to what information that could be used anti-competitively by an above rail business group. Disclosure framework is to allow full disclosure of confidential information within Aurizon Network and limited disclosure elsewhere in business. This approach was workable for the “Network Access Unit”, but is not consistent with a large stand-alone network business.	Introduce concept of “protected information”, to distinguish regulated restrictions on information flow from those entered into voluntarily by Aurizon Network. Propose to change disclosure framework to a ‘need to know’ basis, with cascading system of disclosures across various categories of recipients (both in and outside Aurizon Network) that require access to the information. Appropriate controls are retained.

⁹¹ Aurizon Network Pty Ltd is a subsidiary of Aurizon Operations Pty Ltd, which is in turn a subsidiary of Aurizon Holdings Ltd. Aurizon Operations Pty Ltd is not equivalent to the “Operations” function within the organisation structure. Rather, Aurizon Operations Pty Ltd (formerly QR Ltd) is the intervening holding company between Aurizon Holdings Pty Ltd and Aurizon Network Pty Ltd.

Ringfencing element	UT3 approach	UT4 approach
Transparency and reporting	Provides mechanism for complaint investigation, reporting to QCA and annual audit of compliance with obligations. Disclosures of confidential information recorded in ringfencing register.	Retention of complaint, reporting and audit mechanism. A single broad mechanism is included that encompasses all Part 3 obligations, including prohibition on unfair differentiation between access seekers.

The drafting of Part 3 also seeks to recognise the option of the Alternate Form of Standard Access Agreement (AFoA) contracting structure, with consequential drafting references to this structure throughout Part 3 as required to ensure the appropriate application of the protected information framework under this contracting structure. For example, train operators are given specific protection in Part 3.

5.3 Purpose and general principles of non-discrimination

Following the general discussion above, the specific elements of the proposed ringfencing framework are discussed, following the structure adopted in the 2013 Undertaking.

5.3.1 Purpose of the ringfencing framework

The 2013 Undertaking contains a preamble upfront as to the general and legislative context for the ringfencing framework. Consistent with the discussion above, this is an important starting point for the 2013 Undertaking. It provides a point of reference for provisions to ensure that they align with the central purpose of the ringfencing framework. Fundamentally, this purpose links directly to the legislative framework in the QCA Act, which:

- requires Aurizon Network to negotiate in good faith with access seekers to reach an access agreement;
- obliges Aurizon Network to not unfairly differentiate between access seekers in access negotiations in a way that materially adversely affects the ability of one or more access seekers to compete with other access seekers;
- prohibits Aurizon Network from engaging in conduct for the purpose of preventing or hindering access; and
- deems certain types of specified conduct where Aurizon Network provides access to itself or a related operator to constitute conduct that prevents or hinders a user's access.

In recognition of this, the overall purpose of Part 3 is to aid Aurizon Network's compliance with the statutory obligations referred to in this section, recognising that the undertaking can neither add to nor subtract from obligations with a statutory basis.

5.3.2 General principles of non-discrimination

Part 3 also includes an upfront statement of the general principles of non-discrimination, consistent with the 2010 Undertaking. As described above, the QCA Act imposes clear legislative obligations on Aurizon Network to not engage in conduct for the purpose of preventing or hindering access. The 2013 Undertaking supplements this legislative obligation by elaborating on what this practically entails. The overall obligation from the Act is duplicated, in effect, to mean that a breach can be enforced under the access undertaking rather than under the Act.

There are in fact two interrelated issues being addressed here:

- a general obligation to not unfairly differentiate between access seekers; and
- a more specific obligation to not unfairly advantage a related operator.

The general non-discrimination obligation was previously located in Part 2 of the undertaking, reflecting that it was not a ringfencing specific issue. However, this resulted in duplication and lack of clarity. Therefore, the 2013 Undertaking has included all of the non-discrimination obligations in a single section of the undertaking, with a single complaints handling mechanism to deal with any concerns. This reflects a clearer and more streamlined approach.

Also, in the 2013 Undertaking, the drafting of the general non-discrimination obligation has been aligned with the QCA Act obligation in order to provide a more accurate reflection of this obligation.

Aurizon Network has not retained the specific decision making principles incorporated in clause 3.5 of the 2010 Undertaking. Aurizon Network agrees that it must have a sound and non-discriminatory basis for making decisions in order to ensure that it is complying with its overarching commitments for non-discriminatory treatment. However, the inclusion of these decision making principles as a prescriptive obligation under the access undertaking, and the accompanying requirement that Aurizon Network's compliance with them be audited on an annual basis, has proven to be simply unworkable.

Aurizon Network's rail network constitutes a major business managing Australia's largest export coal rail network of 2,670 kilometre track and other assets totalling \$4.4 billion. Given this size and scale of operation, decisions covering a broad scope of activities that may potentially affect an access seeker or access holder are made on a daily basis by a wide range of employees. Over a year, a very significant number of decisions fall within these decision making principles. There is no means of comprehensively auditing whether or not all of such decisions are in fact made consistent with the decision making principles. This fact has been highlighted in each of Aurizon Network's ringfencing audits, with the QCA notified of such. Notwithstanding this practical concern, on a simple cost-benefit basis, it is difficult to see whether strict compliance with this provision would be in any way proportional to the competition risks of many of the decisions that the clause currently captures.

Having said this however, for those major decisions that do need to be subject to scrutiny, there is already an existing, onerous, statutory obligation that takes the place of the decision-making principles in the 2010 Undertaking. Under the *Transport Infrastructure Act 1994*, the Aurizon Network Board is specifically required to confirm that any access agreement entered into with a related operator reflects arms' length arrangements. These decisions, consistent with the *Corporations Act*, are made with due care and skill, as well as recorded, and are thus essentially fulfilling the same function as the decision-making principles, but on a scale that is capable of being meaningfully complied with.

Further, the extension of Aurizon Network's complaints handling mechanism to complaints about Aurizon Network's compliance with the whole of Part 3 provides a mechanism for individual concerns about discriminatory conduct to be investigated and, if necessary, referred to the QCA for audit. As such, this provides for close investigation of the basis for Aurizon Network's actions and decisions on a targeted basis, rendering the need for broad decision-making principles redundant.

5.3.3 Support by Aurizon Holdings Ltd

In recognition of the fact that ringfencing obligations affect not just Aurizon Network but other Aurizon parties, the 2013 Undertaking includes a voluntary commitment by Aurizon Network to request that its

Ultimate Holding Company provides a support deed, in the form set out in Schedule D. The purpose of the support deed is to ensure that all Aurizon parties undertake such actions as necessary to enable Aurizon Network to comply with its ringfencing obligations in the access undertaking.

This commitment supplements the legislative obligation around independence of Aurizon Network under the *Transport Infrastructure Act 1994*. Aurizon Network would particularly highlight that this is a voluntary commitment that the Aurizon Group is prepared to make. The QCA Act only applies to the owner or operator of the declared service, in this case, Aurizon Network Pty Ltd, with there being no obligation on other entities in the Aurizon Group to comply with it. Nevertheless, Aurizon recognises that for the QCA and other stakeholders to be comfortable with the inevitable and necessary involvement of Aurizon Network in corporate activities, services and governance, some level of group wide commitment is desirable. To that end, the support deed has been offered to provide an assurance that the regime is balanced and reasonable.

5.3.4 UT4 Proposal

Section A of Part 3 establishes the general provisions relating to ringfencing. It includes a new introduction section which sets out the purpose of the ringfencing arrangements (clause 3.1). This is largely explanatory of Aurizon Network's position within the Aurizon Group, its obligations under the *Transport Infrastructure Act 1994* and the access obligations which apply under the QCA Act. These key access obligations are included as they provide the overarching legislative framework within which the access undertaking, including the ringfencing arrangements, apply. The overall purpose of Part 3 is to aid Aurizon Network's compliance with the statutory obligations referred to in this section.

Clause 3.2 of Part 3 establishes the general principles of non-discrimination. These are similar in content to the 2010 Undertaking, but they have been moved upfront to highlight the overarching nature of these commitments. While the QCA Act creates the key obligations in this regard, they are also included in the access undertaking to provide additional clarity around what this statutory obligation means in practice and what are some of the limits which define non-discriminatory conduct. It is also recognised that the QCA, or other interested parties, may perceive it important to treat breaches as being of an access undertaking rather than of the statute, given differences in enforcement. To that end, the 2013 Undertaking includes the following commitments, namely that Aurizon Network commits that it will not:

- engage in conduct for the purpose of preventing or hindering access;
- unfairly differentiates between access seekers in a way that has a material adverse effect on the ability of one or more of the access seekers to compete with other access seekers; and
- provide access to a related operator on more favourable terms than those on which Aurizon Network provides access to competitors of the related operator.

Aurizon Network also commits to ensure that:

- all transactions between Aurizon Network and related operators in relation to access are conducted on an arms-length basis; and
- all access seekers and train operators, irrespective of whether they are a related operator or not, are provided with a consistent level of service with respect to access and
 - in respect of train operators, are given an equal opportunity to operate train services in accordance with corresponding access rights; and

- in respect of access seekers, are given an equal opportunity to obtain access rights.

As can be seen from the above, the drafting of these provisions seeks to address the option of an AFoA contracting structure.

Further, Aurizon Network will ensure that, subject to the provisions of the QCA Act and the 2013 Undertaking, all decisions made under this access undertaking are consistent between all access seekers and/or access holders in the same circumstances.

As under the 2010 Undertaking, Aurizon Network will not engage in:

- anti-competitive cost-shifting;
- anti-competitive cross-subsidies; or
- anti-competitive price or margin squeezing.

These commitments in relation to non-discriminatory access provide an important protection for access seekers/holders and set a high level of accountability for Aurizon Network in demonstrating it has complied with the statutory obligations not to discriminate in providing access.

Clause 3.3 of the 2013 Undertaking includes a commitment by Aurizon Network to request that its Ultimate Holding Company provides a support deed, in a form specified in Schedule D.⁹² This is in recognition that, in order to comply with certain obligations imposed on Aurizon Network in the access undertaking, Aurizon Network will require the cooperation of members of the broader Aurizon Group. A change from the 2010 Undertaking is that the support deed now applies only to Aurizon Network's obligations under Part 3, namely ringfencing obligations. Aurizon Network considers that this is more appropriate as it is targeted at conduct where risks of vertical foreclosure are greatest, namely, in the handling of confidential information, the separation of functions, the need for management and employees to minimise conflicts of interest, and the risk of discriminatory conduct.

These commitments are central to preventing vertical foreclosure and are therefore considered to be the proper focus of the support deed. As the support deed is an entirely voluntary commitment by Aurizon Group and is beyond the QCA's power to require under the QCA Act, Aurizon Network considers that limiting the support deed to obligations under Part 3 is therefore a reasonable and appropriate approach, as it meets the objective of securing the Aurizon Group's cooperation to achieve compliance in the central areas of conduct that raise competition concerns.

5.4 Functional responsibility

5.4.1 Background

Functional separation of the provision of access from activities in dependent markets is a key element of a ringfencing regime. This model of functional/operational separation remains unchanged from the 2010 Undertaking.

However, during the term of the 2010 Undertaking, Aurizon's organisational structure has undergone major change. Whereas when the 2010 Undertaking was reviewed, QR National was structured into business units (i.e. coal, freight, network), Aurizon is now structured along functional lines where each

⁹² It is considered appropriate that stakeholders view the form of the support deed, which was not the case under the 2010 Undertaking. This is a further commitment of Aurizon Network to transparency and integrity in its dealings with producers and operators.

business division is responsible for a particular function. In this respect, there are currently eight functions that comprise the Aurizon business: Commercial and Marketing, Operations, Network, Strategy, Business Development, Business Sustainability, Finance, Human Resources and Enterprise Services. The functional model is intended to improve customer focus and to more closely align operational focus and improved company performance.⁹³

Despite this change, this organisational structure continues to facilitate the separation of the management and operation of declared below rail infrastructure from the operation of train services.

As was recognised in the 2010 Undertaking,⁹⁴ there remain divisions within the Aurizon Group that provide support activities for both Aurizon Network and related operators, as well as core corporate functions. The 2013 Undertaking reflects this functional organisational structure and continues to maintain an appropriate separation of access and non access-related functions.

5.4.2 Separation of access and non access-related functions

5.4.2.1 Issue

The primary aim of functional separation in ringfencing arrangements for vertically integrated access providers is to ensure that there is no conflict of interest on sensitive access related issues. In practice, this means implementing separation of access from non access related functions within the business organisational structure.

The approach in the 2013 Undertaking in regard to functional separation is to provide a clear statement of the core access related functions that must be performed by the Network business, combined with an express commitment that these functions cannot be transferred, delegated or contracted out to, or otherwise undertaken, by a related operator. This is a new obligation which is intended to provide a clear statement of Aurizon Network's intentions in this regard. It provides much greater assurance than the current obligation, which simply prevents the ambiguously described "matters integral to the provision of Below Rail Services" from becoming the "responsibility" of a related operator.

Further, it is a simpler and more robust approach than the current drafting which contemplates functional changes, but with a requirement for submission of a draft amending access undertaking to the QCA for prior approval. Instead, the 2013 Undertaking provides all parties with greater certainty by providing an upfront commitment to functional separation. Unlike the approach in the 2010 Undertaking, the list of core access-related functions is not contemplative of change – rather, it ensures certainty throughout UT4 as to the role of Aurizon Network in the functional structure.

5.4.2.2 UT4 proposal

The 2013 Undertaking includes a clear statement of Aurizon Network's obligation to perform core access-related functions (clause 3.4). In particular, it states that the primary function of Aurizon Network is to provide and manage the rail infrastructure and to provide and manage access to the rail infrastructure. While there have been some minor modifications to the description of the functions listed as core access-related functions, they are substantially the same as those in the 2010 Undertaking, with retention of these key functions:

⁹³ QR National, ASX Announcement – QR National New Leadership Appointments, 24 November 2011. Available from: <http://www.asx.com.au/asxpdf/20111124/pdf/422shgwr4k1mq4.pdf>

⁹⁴ 2010 Undertaking, clause 3.4.2(b)

- negotiating and managing access agreements and train operations agreements, for the rail infrastructure with access seekers, access holders and train operators, as applicable;
- procuring maintenance and renewal of the rail infrastructure, consistent with Aurizon Network's role as Rail Infrastructure Manager under the *Transport (Rail Safety) Act 2010*, to ensure that it is maintained to the required standard to meet obligations to access holders/train operators (as applicable), DTMR and to its infrastructure lessors;
- assessing, allocating and managing capacity; and
- providing scheduling and train control services for the rail infrastructure in accordance with the Network Management Principles.

Of note, the language of UT3 in the previous clause 3.1(b)(iii) has been amended to make it clearer that it is Aurizon Network's function to procure maintenance services, recognising that Aurizon Network does not maintain in-house all resources required to perform all maintenance tasks. Consistent with the *Rail Safety Act*, while the execution of the maintenance task might be performed by Aurizon Network, third parties or other entities within the Aurizon Group, Aurizon Network must retain effective management and control of the rail infrastructure.

Further modifications have been limited to redundant or duplicative provisions:

- the deletion of the previous clause 3.1(b)(ii) - this clause refers to Aurizon Network developing and managing agreements with Queensland Transport regarding the provision of rail infrastructure supported by Transport Service Payments. As there are no longer any such payments to Aurizon Network, the provision no longer applies; and
- the deletion of the previous clause 3.1(b)(vi) – this clause specifically identified obligations for Aurizon Network in relation to the provision of electric infrastructure. As electric infrastructure is encompassed within the concept of access and is within scope of the declared service,⁹⁵ this provision was duplicative.

Aurizon Network's obligations in regard to the sale of electricity is addressed in clause 2.4 of the 2013 Undertaking and in Chapter 6 of this submission.

As discussed above, clause 3.5 of the 2013 Undertaking states that core access-related functions performed by Aurizon Network and specified above will not be transferred, delegated, contracted to or otherwise undertaken by, a related operator.

Consistent with the 2010 Undertaking, the exception to this is that Aurizon Network may contract with related operators for the provision of certain components of the train control service which would otherwise constitute core access related functions, being field incident management and yard control services at yards other than major yards (clause 3.5(d)). The purpose of this clause is to address minor yards that are rail operator controlled, such as the Gladstone Yard, Auckland Point Yard and Barney Point Yard, and also to address sidings and other minor yards that may be related operator controlled in future.

A new obligation in the 2013 Undertaking is a commitment by Aurizon Network not to undertake the operation or marketing of train services, unless for the purpose of performing access-related functions or

⁹⁵ As noted in Chapter 4 (section 4.3.1) of this submission, third party access applies to the 'declared service' as defined in s 250 of the QCA, Act. The declared service includes electric overhead infrastructure as part of the below-rail service.

the provision of services in respect of private infrastructure (clause 3.5(b)). The 2010 Undertaking provided only asymmetric coverage, in that while it prevented Aurizon Network from favouring a related operator, it did not prevent Aurizon Network from becoming a train operator itself. That has now been remedied in an effort to provide a more balanced approach to ringfencing than was the case previously.

Further clarification of the limits of functional separation, which are consistent with the legislative framework and the scope of regulation, are included in clause 3.5(c), namely that nothing in the undertaking:

- requires Aurizon Network to perform a function that is not a core access-related function; or
- prevents Aurizon Network from undertaking any function which is not a core access-related function, apart from commercial above-rail services.

5.4.3 Employee separation

5.4.3.1 Issue

The 2013 Undertaking also includes commitments by Aurizon Network in relation to staff functions. The purpose of this is to minimise scope for conflicts of interest in the performance of access-related functions by providing for the separation of Aurizon Network employees from those employed by other Aurizon Group companies. In particular, Aurizon Network will commit that employees whose duties are primarily the performance of core access-related function will work primarily for Aurizon Network and not undertake any work at the direction of a related operator.

Aurizon Network believes that this commitment is a substantial improvement on the 2010 Undertaking, which contained no practicable controls for employee separation. The relevant provisions in the 2010 Undertaking attempted to prohibit the involvement of Aurizon Network employees in vaguely described “working groups”. This provision was neither clear nor consistent with the reality of Aurizon Network employees having to participate in the activities of the Aurizon Group consistent with good corporate governance practices. The replacement is carefully calibrated to be both clear, enforceable and targeted at the core competition issue, and thus strengthening the ringfencing arrangements under the 2013 Undertaking.

While Aurizon Network remains committed to implementing effective employee separation, it is also necessary that this include some flexibility, both to avoid placing unacceptable limitations on the prospects for Aurizon Network’s employee career advancement within the Group, and also to ensure that the provisions do not limit the Aurizon Group’s ability to efficiently deploy its staff where this does not cause a risk to the ringfencing framework. As such, consistent with the 2010 Undertaking, some limitations to the commitment to employee separation apply, reflecting Aurizon Network’s functional organisation structure, while also ensuring appropriate functional separation of access and non access related activities. This approach ensures that conflicts of interests are minimised and protected information remains secure.

5.4.3.2 UT4 proposal

Clause 3.6 specifies Aurizon Network’s commitment to employee separation. Specifically, it provides that Aurizon Network will ensure than an employee primarily involved in the performance of core access-related functions will work primarily for Aurizon Network and will not undertake any work at the direction of a related operator (clause 3.6(a)). For clarification, clause 3.6(b) states that nothing in this provision restricts or prevents:

- an employee engaged to work for Aurizon Network from performing functions that are required to negotiate for, or provide access to, a related operator in accordance with the terms of the undertaking;
- secondments of employees, subject to the requirements in this undertaking on the handling of protected information;
- an employee ceasing to work for Aurizon Network and commencing to work for a related operator, subject to the requirements of the undertaking on the handling of protected information;
- an employee undertaking any function or activity as required by law, under a court order or a notice by any Authority, as required for conduct of legal proceedings, dispute resolution or audit or in the course of responding to an emergency or natural disaster;
- an employee undertaking work providing services that do not relate to the provision of below rail services; or
- an employee engaged in asset construction, maintenance, renewal or repair or support services and/or corporate functions;

from undertaking work for any Aurizon Group business unit or corporate functional area, subject to requirements of the 2013 Undertaking on the handling of protected information.

5.4.4 Accounting separation

5.4.4.1 Issue

The 2013 Undertaking retains the intent of the 2010 accounting separation provisions. These include a commitment to provide, on an annual basis, separate financial accounts for Aurizon Network.

5.4.4.2 UT4 proposal

Clause 3.7 sets out obligations in regard to accounting separation. This cross-refers to Part 10, as the 2013 Undertaking has been restructured to place all reporting and audit obligations in a single section. The drafting has been amended to remove references to 'general purpose' statements as, in practice, Aurizon Network has prepared statements for the specific purpose of demonstrating compliance with the Costing Manual rather than for a general purpose. For clarity, the financial statements will not include information relating to any other non-regulated business conducted by Aurizon Network as this is not necessary under Aurizon Network's structure.

5.5 Management of Aurizon Network

5.5.1 Background

The independence of the upstream business from downstream interests in dependent markets is another important element of effective functional separation. In the 2010 Undertaking, this issue was addressed by a high level commitment to the independence of senior management of the network business. Ensuring independent management of Aurizon Network continues to be a feature of the 2013 Undertaking framework, with modifications aimed at increasing clarity.

5.5.2 Issues

As noted above, the issue of independent management is specifically addressed in the 2010 Undertaking. However, these provisions lack clarity. As a result, Aurizon Network has developed a new set of provisions regarding independence of management, which creates a simple and clear framework by defining the key elements of independence.

The intention of these provisions is to ensure effective management separation between the network business and that of related operators, while at the same time improving clarity about what the nature of the regulatory commitment for independent management actually involves. These new provisions reflect a stronger commitment to independent management of the network business and the management separation of Aurizon Network from the related operator than is contained in the 2010 Undertaking.

5.5.3 UT4 proposal

Section C of Part 3 addresses the independent management of Aurizon Network.

Clause 3.8 of the 2013 Undertaking specifies that Aurizon Network will be managed by a team comprising Aurizon Network's Executive Officer and his/her direct reports and any other person nominated by Aurizon Network's Executive Officer (the Network Executive Team). To help ensure independence of Aurizon Network management from the related operator, this clause also requires that related operators do not participate in the process for the appointment of Aurizon Network's Executive Officer or other member of the Network Executive Team.

A new provision has also been included in the access undertaking which clarifies what 'management separation' means in practice, thus strengthening these provisions in the 2013 Undertaking. Specifically, clause 3.9 states that the Executive Officer or any other person appointed to the Network Executive Team:

- must not have direct management responsibility for a related operator;
- may have direct management responsibility for an Aurizon Group business unit that is not a related operator; and
- must have an independent management reporting line that does not include any person with direct management responsibility for a related operator.

Further, clause 3.9 includes new provisions which ensure equivalence between Aurizon Network's Executive Officer and the executive manager with direct responsibility for a related operator. This is to ensure that the Aurizon Network Executive Officer has an equivalent position and, therefore, comparable influence and decision-making ability within the broader Aurizon organisation as does the equivalent related operator executive. This provision draws from ring-fencing restrictions in the telecommunications industry,⁹⁶ and provides both flexibility in the structure of an executive leadership team, yet certainty that the management of the upstream business will not be indirectly subordinated to that of the downstream business. This further upholds and clarifies the extent of management separation between the regulated and contestable arms of Aurizon. As this is a matter that applies to parts of the business outside of Aurizon Network, to guarantee compliance, the 2013 Undertaking provides that the Ultimate Holding Company Support Deed require that this equivalence obligation is implemented.

⁹⁶ Telstra's Structural Separation Undertaking, 23 February 2012

The independence of Aurizon Network's management from that of the related operator is further underpinned by an express commitment that Aurizon Network will not act on directions from a related operator in respect of the granting or exercise of access rights to or by:

- a related operator; or
- a third party access seeker, access holder or train operator, otherwise than with the consent of the third party,

other than as legitimately allowed for the exercise of the related operator access rights in accordance with its access agreement with Aurizon Network (clause 3.10).

This additional obligation provides significantly greater accountability for Aurizon Network in terms of ensuring the granting and exercise of access rights is conducted on an 'arms length' basis between Aurizon Network and its related operator. This provides access seekers and holders with greater certainty and comfort around the risk of Aurizon Network engaging in anti-competitive conduct, and goes well beyond the vague commitment to 'independence' that was contained in the 2010 Undertaking.

5.6 Protected Information

5.6.1 Background

The terminology in the 2013 Undertaking has altered to refer to 'protected information' rather than 'confidential information'. The explanation for this new approach is set out below.

In making an access application and during the course of access negotiations, an access seeker will need to disclose confidential information to Aurizon Network about its proposed operations. To ensure that this confidential information does not flow to the parts of Aurizon's business which compete in the same market as the third party access seeker, the 2013 Undertaking incorporates a framework which controls 'protected information' flows within the Aurizon organisation. This framework defines the circumstances in which Aurizon Network may disclose protected information and when not. It also establishes a range of accountability measures and processes governing the handling of protected information to minimise the risk of breaches occurring, thereby promoting accountability and compliance.

5.6.2 Application of information controls

The protected information control framework in the 2013 Undertaking reflects a more targeted approach than the 2010 Undertaking. Specifically, the 2010 Undertaking was a broad bilateral confidentiality arrangement which covered information disclosure by both parties (access seeker and access provider). Instead, the 2013 Undertaking only applies to protected information disclosed by the access seeker and includes specific commitments regarding the handling of protected information. This framework is therefore more targeted, applying only to disclosures by third party access seekers that, if made available to Aurizon Network's related operator, would provide it with a competitive advantage that it would not otherwise have.

The standard confidentiality deed from the 2010 Undertaking has been removed on the basis that it has proven unnecessary. There has been very low demand from access seekers to use it, with only one instance to date. Further, the deed was unnecessarily broad, covering confidentiality restrictions generally – which themselves are readily negotiable – rather than focusing on the specific area of regulatory concern, which is the disclosure of information to the contestable parts of the Aurizon business. Further, in the event that there is demand for a confidentiality deed due to specific concerns, then they are fairly

standard legal documents that are readily able to be developed to meet the required circumstances. As a result, it is considered that including a standard, QCA approved agreement in the access undertaking is unnecessary.

In addition, the 2013 Undertaking has removed the specific provisions regarding controls on external flows of protected information as these are now governed under the general obligations regarding controlling protected information. This change is another example where the revised drafting reflects a more streamlined approach, without lessening the protections for information security as compared to the 2010 Undertaking.

5.6.3 Controlling protected information

As discussed above, the provisions regarding the handling of protected information in the access undertaking have been substantially redrafted to adopt a more streamlined but logical approach, while maintaining the effectiveness of the arrangements in terms of safeguarding an access seeker's and an access holder's protected information.

The underlying approach in this part of the 2013 Undertaking is for information disclosures to occur on a 'need to know' basis – that is, disclosure is allowed only in the circumstances where the recipient must have access to that information for a legitimate business purpose. In most cases, this will be for the purpose of progressing or responding to an access application or administering an access agreement. The framework will also capture disclosure as required for the performance of certain corporate functions (e.g. management reporting). Where disclosure does occur for a legitimate business purpose, there are a range of accountability measures to safeguard the information. Disclosure is prohibited to the Aurizon above-rail marketing function altogether.

Aurizon Network believes that this framework provides a more targeted basis for disclosure and one which imposes tighter control on information flows. The relevant provisions of the 2010 Undertaking (and previous undertakings) were structured such that disclosure of access seeker protected information is unrestricted within the network business, but is tightly restricted beyond that (with certain limited exceptions). This disclosure regime, based on the identity of the recipient rather than whether disclosure is required for a legitimate business purpose, has resulted in a situation where recipients within Aurizon Network with no need to access information are able to do so, but those in other functional areas within the Aurizon Group (particularly, those in corporate support and compliance roles) are unable to do so at all. One consequence of this situation has been that Aurizon Network has been unduly constrained in its legitimate use of shared corporate services in many instances, even where no competition concerns are raised by the disclosure. Another has been the location of services divisions within Aurizon Network (such as engineering and design services), in part due to the comparative administrative ease of such a structure.

The approach in the 2013 Undertaking is to use the stricter 'need to know' principle to provide a more rigorous basis on which to define permitted disclosures and one which is more closely targeted at addressing competition concerns. Protected information will be subject to a strict accountability regime, with disclosure only permitted where necessary to perform the access-related function (or other legitimate purpose; for example, as part of normal governance reporting or in response to an incident on the network). In most cases where disclosures occur, a set of accountability measures will apply; for example, clear identification of protected information and informing the recipient of the need to protect confidentiality of the information. The extent of controls that are applied are stricter where there are potential competition risks arising from the disclosure. Additional commitments regarding the physical separation of access from non access-related functions have also been included in the 2013 Undertaking.

Aurizon Network considers that this framework will provide a more robust and accountable disclosure regime.

Aurizon Network believes that this simplified drafting approach does not reduce the effectiveness of the arrangements in achieving the statutory objective. Aurizon Network also believes this will assist all stakeholders to have a better understanding of the requirements, thereby promoting compliance, and will ensure that information handling procedures are as practical and effective as possible. Aurizon Network believes that these changes, although involving what on the face of it could be considered a substantial redrafting of Part 3, in fact deliver a more effective and workable regime.

5.6.4 UT4 proposal

Section D of Part 3 addresses obligations in relation to protected information, with the provisions explained below.

5.6.4.1 General provisions

Section D1 of Part 3 of the 2013 Undertaking sets out general provisions regarding:

- the definition of protected information and examples;
- exclusion of the access undertaking by voluntary agreement; and
- an overarching commitment to information security.

As noted above, the 2013 Undertaking now refers to 'protected information' rather than 'confidential information'. This change is intended to provide greater clarity about what information is covered by the access undertaking. The use of the previous term 'confidential information' has generated confusion with other confidential information that is not actually covered under ringfencing obligations (such as commercial-in-confidence information or information relating to Aurizon Network's business interests in unregulated activities). As discussed above, Aurizon Network considers that it is unnecessary for the access undertaking to provide a comprehensive framework for managing confidential information generally (including non access-related confidential information), as this is beyond the scope of the ringfencing issue that this provision is designed to address. Aurizon Network considers that the term 'protected information' provides a more precise description of the class of information that is intended to be captured by the ringfencing provisions of the access undertaking.

The definition of protected information is therefore appropriately modified compared to the definition of confidential information that applied in the 2010 Undertaking. However the intent remains unchanged. Drafting has also been simplified by consolidating the definition into one clause (clause 3.11). The key differences from the 2010 definition of confidential information are that:

- to be protected information, other than by nomination by the access seeker, information must be reasonably expected to adversely affect the commercial interests of the discloser if disclosed by Aurizon Network without consent;
- it adds certain exceptions to the definition of protected information:
 - information developed by Aurizon Network other than in the course of providing access to the discloser and which Aurizon Network can prove was in its possession at the time of disclosure or which was otherwise known to it other than through any breach of confidence;

- information that is aggregated with other information in a way that de-identifies the information and where disclosure of that aggregated information occurs in the ordinary course of business or in compliance with any legal, listing rule or business reporting requirement; and
- information that is disclosed by Aurizon Network to:
 - an end user regarding the performance or terms of a train operator's train operations agreement relevant to that end user; or
 - a train operator in relation to a relevant end user access agreement to the extent that such a disclosure is: (i) reasonably necessary for negotiation of the relevant end user access agreement or train operations agreement; (ii) reasonably necessary for the performance of obligations or exercise of rights under either the end user access agreement or the train operations agreement; or (iii) in connection with the safe operation of the rail infrastructure.

Aurizon Network believes that these modifications are minor in nature and provide greater clarity in the definition of protected information. As can be seen from the above, the drafting of this provision also seeks to address the option of an AFoA contracting structure.

Indicative examples of protected information are included to assist in understanding of the type of information that is likely to be covered (clause 3.12). These include, amongst other things, access applications and preliminary information, forecasts of future user requirements, correspondence relating to access negotiation and information relating to rollingstock research and development (R&D).

The 2013 Undertaking also includes a new provision which allows for the access undertaking provisions relating to protected information to not apply where Aurizon Network and the relevant third party access seeker or access holder voluntarily enter into a binding agreement which expressly excludes the operation of those obligations (clause 3.13). This clause means that the information handling provisions of Part 3 will automatically apply, unless the parties agree otherwise. This provision gives the parties flexibility to adopt an alternative approach on this matter where mutually agreed. This is consistent with the operation of s 168 of the QCA Act, which would allow an access seeker and Aurizon Network to achieve this result in an access agreement regardless.

Section D1 also includes an overarching commitment to information security by Aurizon Network. Clause 3.14 commits that Aurizon Network will:

- keep confidential and not disclose protected information, unless in accordance with the access undertaking;
- use protected information only for the purpose for which it is disclosed to Aurizon Network and only to the extent necessary for that purpose; and
- not use or disclose protected information for the purpose of a related operator obtaining an unfair commercial advantage.

This provision has been included to reinforce Aurizon Network's overarching commitment to keep protected information secure by clearly stating this upfront. It sets clear boundaries around the legitimate use of protected information, providing enhanced accountability for Aurizon Network and greater protection for access seekers and holders that protected information will not be used inappropriately, including for the purpose of benefiting related operators.

5.6.4.2 Control framework for Protected Information

The control framework for protected information - which describes when disclosure is allowable and the limits on disclosure - is set out in Section D2 of Part 3. As discussed above, under this framework, disclosure of protected information, both internally and externally, will occur on a 'need to know' basis. The aim of this is to more tightly control disclosures, in particular, to limit disclosure to circumstances where it is strictly necessary for a legitimate business purpose. This is intended to give a more effective basis for the disclosure framework and to improve clarity of obligations. Accountability measures around disclosure are greatest where competition concerns potentially arise. The key provisions in the control framework are elaborated below.

5.6.4.3 Prohibition on disclosure to marketing function

The 2013 Undertaking includes an overarching prohibition on Aurizon Network disclosing protected information to the 'marketing division' (clause 3.15). The marketing division is defined as those persons within the Aurizon Group (other than those persons in positions described in clause 3.9(c)(i) to (iv)) with responsibility for:

- the marketing of train services in competition with other above rail train service providers in the coal systems;
- the negotiation of contracts for the provision of above rail train services in competition with other above rail train service providers in the coal systems;
- the development of above rail service plans in response to a competitive tender process relating to the provision of above rail services in the coal systems where
 - the relevant persons are exercising their responsibility for the purpose of determining Aurizon Group's tender response; and
 - if the tender is successful, those persons will also be involved in the day-to-day delivery of the applicable above rail train services; and
- the commercial decision to enter into a contract for the provision of above rail services in the coal systems.

These are the activities where there is most sensitivity around protected information and where the risk and consequences of anti-competitive conduct are greatest. The term Marketing Division has been adopted in the 2013 Undertaking provisions relating to the handling of protected information rather than 'related operator' in order to better manage this risk in a way aligned with the functional model of the Aurizon Group

As has been the case historically, Aurizon Network may be required to obtain advice and services from such functional areas in the management of the network. For example, Aurizon Network must obtain advice on rollingstock and rollingstock interface issues, construction, design and procurement, safety and incident response from staff with the relevant expertise who are located outside of Aurizon Network. Aurizon Network considers that the ability to draw on such expertise within the broader business is a legitimate synergy for a vertically integrated rail business. Duplication of such functions within the network business would be both impractical and costly. This issue of disclosure to staff performing shared services and the protections around such disclosures is discussed further below.

Nevertheless, the key area of sensitivity and potential concern in terms of scope for conflicts of interest and anti-competitive conduct relates to the marketing team whose role is to undertake commercial negotiations with producers for the above rail business. This clearly represents a potential conflict of interest with Aurizon Network's role as an access provider to third party access seekers. For this reason, the 2013 Undertaking includes an explicit obligation that Aurizon Network must not disclose protected information (without the consent of the relevant access seeker or holder) to the marketing division (clause 3.15). To further reinforce information security, clause 3.15 states that Aurizon Network acknowledges and agrees that nothing in clause 3.16 (which defines circumstances where disclosure is allowed, as discussed below) operates to permit a disclosure of protected information to the marketing division.

5.6.4.4 Disclosure of protected information

Clause 3.16 sets out the persons or business units with access to protected information and the control measures that apply. This is consistent with the overall approach to information disclosure whereby disclosure only occurs on a 'need to know' basis. Allowable disclosures within this framework can be considered in three broad categories.

- disclosure required for the performance of access-related functions within Aurizon Network and for management reporting and normal corporate governance (clause 3.16(a));
- disclosure required to allow people to perform their roles (access related or otherwise), but where there are no or minimal competition concerns (clause 3.16(b)); and
- disclosure required to allow people to perform their roles (access related or otherwise), but where potential competition concerns do exist, and thus greater protection is necessary (clause 3.16(c)).

The first of these categories is set out in clause 3.16(a), which includes the individuals or business units that must necessarily have access to protected information in the course of performing their duties. These include:

- Board members – Aurizon Holdings Ltd Board, Aurizon Operations Ltd Board⁹⁷ and Aurizon Network Pty Ltd Board;
- Senior managers:
 - for Aurizon Group – the Chief Executive Officer; Chief Financial Officer, Company Secretary or any assistant Company Secretary, General Counsel, Chief Internal Auditor and Chief Information Officer;
 - for Aurizon Network – the Network Executive Team;
- division/s within Aurizon Network responsible for responding to access applications and negotiating and administering access agreements, undertaking capacity analysis, and planning the development of the network, who by definition deal almost exclusively in protected information;
- the division/s within Aurizon Network responsible for administering Aurizon Network's financial affairs, who necessarily are responsible for administering the financial side of access, including billing, take or pay calculations, and pricing; and

⁹⁷ Aurizon Operations Pty Ltd is not equivalent to the "Operations" function within the organisation structure. Rather, Aurizon Operations Pty Ltd (formerly QR Ltd) is the intervening holding company between Aurizon Holdings Pty Ltd and Aurizon Network Pty Ltd.

- any person providing executive support or clerical or administrative assistance to the above individuals or business units.

The above list is intended to capture the group of people who must have unrestricted access to protected information for the performance of their duties in providing core access-related functions, or in providing senior governance of the Aurizon Group companies. This reflects a more tightly controlled flow of information than was the case under the 2010 Undertaking as, even within Aurizon Network, protected information may only be disclosed to those staff who must have access for the performance of their duties. This means that within Aurizon Network, disclosure is limited to those who must have access to protected information for the purpose of negotiating access and administering access agreements, as well as their senior managers and support staff.

Disclosure of protected information to certain senior managers in the broader Aurizon Group is also required to allow them to perform their roles. This reflects the fact that convergence is inevitable at some level in a vertically integrated business, and so certain senior managers and also Board members must have access to protected information to perform their duties. These individuals have obligations under both the *Corporations Act* and other laws for the management of the Aurizon Group, and therefore must have visibility over all Group company activities. The individuals so identified are senior executives of an ASX50 company and can reasonably be anticipated to have an acute awareness of their legal obligations under the regulatory regime. Senior management of the related operator is not on this 'allowable disclosure' list of positions, and management independence and separation between the related operator and Aurizon Network is guaranteed under the management separation provisions in the 2013 Undertaking (Section C).

The second category of disclosures are those that are required to allow people to perform their roles, whether access related or not, but where the disclosure does not raise any significant competition concerns (clause 3.16(b)). It is broadly equivalent to a similar list that appears in the 2010 Undertaking. Exposure to protected information in these cases may be incidental or may be required to allow these recipients to perform their normal duties. For example, disclosure may be required to perform a compliance function (such as being required by law, under stock exchange listing or to the safety regulator); to clear an incident on the network; or to manage interfaces with other railway networks or supply chain infrastructure. This provision also covers disclosure to external advisers to Aurizon Network, where such advisers are under a duty of confidentiality to Aurizon Network. Disclosure to the marketing division is precluded altogether.

For disclosures under this clause 3.16(b), there are little or no competition concerns that arise as the recipients and circumstances of disclosure specified do not involve a conflict of interest for Aurizon Network as an access provider. In other words, the protected information that is disclosed under this category does not go to any business area that is adjacent to, or part of, Aurizon Network's related operator and so it is not a situation where disclosure is likely to result in a competitive advantage. Under these circumstances, it is reasonable that disclosure is not subject to additional controls. It should be again noted that the circumstances of disclosure outlined in this provision and the extent of controls that apply are similar to those in the 2010 Undertaking.

The third category is similar to above in that disclosure is required to allow the specified recipients/areas to perform their duties (which may be related to access or for some other legitimate business purpose), but where the disclosure gives rise to potential competition concerns (clause 3.16(c)). This may reflect the fact that the specified recipients are in the operational function of the Aurizon Group. By their very nature, certain services are provided across Aurizon's business (across functions, including Network and

operations, and also in some cases nationally). These specified functions typically have responsibility to the whole of the Aurizon Group, and not just to Aurizon Network. As such, it would be operationally inefficient to try to duplicate these roles. Aurizon Network, as a vertically integrated access provider, should appropriately be able to obtain these shared services. This is a legitimate benefit of vertical integration, provided that protected information remains secure, and was accepted in previous undertakings. Examples of disclosures under this category include disclosures for the purpose of:

- safeworking procedures;
- safety standards;
- incident investigations;
- project delivery, engineering or rail construction services in relation to rail infrastructure;
- rail infrastructure maintenance services, including asset maintenance planning; or
- advice on rollingstock and rollingstock interface issues;

Other disclosures include the real estate division in relation to property issues, for the purpose of normal corporate governance or to Aurizon Group employees/contractors engaged in internal audit, IT and safety, environment and insurance related services, to the extent necessary to allow relevant staff to perform their duties.

In recognition of the greater potential for conflicts of interests and competition concerns in these circumstances, clause 3.16(d) of the 2013 Undertaking include certain additional control measures for disclosures under this category, namely that:

- disclosure to the marketing division is prohibited altogether;
- disclosure is only allowed when the recipient has a legitimate business purpose for requiring access to the information, with disclosure limited to extent necessary for that purpose;
- protected information must be clearly identified as such; and
- disclosure is subject to the recipient being informed by Aurizon Network of the need to keep the information confidential and, in particular, of the prohibition on disclosure of it to the marketing division.

Clause 3.17 sets out the circumstances in which the executive officer or the compliance officer of Aurizon Network may authorise persons, functional service areas or external advisors in addition to those in the broad categories described above to have access to protected information. This provision is essentially designed to cover the situation of an organisational restructure, or other significant but unanticipated circumstance in which the list of disclosures need to be expanded. In effect, it is a substitute for the provision in the 2010 Undertaking requiring prior approval by the QCA for certain restructures. In the 2010 Undertaking, the confidentiality regime operated as an indirect constraint on Network's organisational structure because some functions, albeit not integral to below-rail services and thus not under the exclusive control of Network, require protected information access to perform their duties. It was therefore necessary for such functions to be retained by Network, even where this was not the intent of the functional separation regime.

Given potential concerns with this mechanism, robust control measures are warranted for disclosures under these circumstances to ensure the security of protected information. In addition to the measures

outlined above for disclosures under clause 3.16(c), additional control measures that apply include a signed declaration of awareness by the recipient, recording of the disclosure in the protected information register and, in some circumstances (i.e. if the recipient is not within Aurizon Network or within an Aurizon Group company bound by the support deed), entering into a legally enforceable agreement with the recipient. These are quite onerous restrictions and, critically, entirely transparent; for the mechanism to be available to the executive officer, it must be recorded in a register that is freely available to the QCA.

Aurizon Network considers that this approach is more reasonable than requiring prior approval or having no flexibility at all. One of the key features of access undertakings is that they are meant to provide certainty to all parties by having the regulator approve the access undertaking for a specified term, with reviews at the end of that period. Reviews of key issues within the regulatory period undermine this principle. Further, as use of this mechanism (particularly in the context of a restructure) has potential market and workforce implications, a QCA approval process is likely to promote uncertainty in these circumstances. As such, Aurizon Network believes that the best way to address this scenario is for the 2013 Undertaking to include a provision which contemplates such a change, but which has very strict disclosure control measures apply. It should also be noted that the provisions in Section B which define Aurizon Network's functional responsibilities continue to apply, as does the commitment in Part 1 that Aurizon Network is responsible for providing, monitoring and managing the rail infrastructure and for providing and managing access to it.

Clause 3.18 seeks to address a situation of a conflict of interest where Aurizon Network and the related operator share advisors in relation to the same matter. In this case, Aurizon Network must obtain the consent of the discloser of the protected information.

5.6.5 Compliance monitoring and safeguards

The 2013 Undertaking includes a range of compliance monitoring measures and safeguards that are designed to ensure security of protected information (Section D3).

A protected information register will be established and will be the responsibility of the compliance officer (clause 3.19). This provision represents an extension of obligations in the 2010 Undertaking regarding the establishment of a ringfencing register. The protected information register will contain:

- the identity of recipients who have been approved under clause 3.17 to have access to protected information, and the defined category of information to which they have access;
- a record of recipients that have signed a declaration signifying their awareness and understanding of Aurizon Network's obligations regarding protected information (see clause 3.20, below); and
- a record of the signing of an exit certificate by employees working within Aurizon Network that have transferred to work for another business unit within the Aurizon Group (clause 3.20).

Similar to the 2010 Undertaking, access seekers and holders may request to view information in the protected information register regarding their own protected information that they have disclosed to Aurizon Network. The QCA may also view the protected information register on request.

To ensure staff awareness of obligations and to promote compliance, Part 3 also requires that all Aurizon Network and Aurizon Group employees that have access to protected information in the course of performing their duties are aware of the Aurizon Group's obligations and have completed training (clause 3.20). Where Aurizon Network employees that have had access to protected information leave Aurizon

Network to work for another Aurizon Group business, including for a temporary secondment, they will undergo a debriefing as part of an exit process to remind them of Aurizon Network's obligations relating to protected information, and will be asked to sign an exit certificate (to be recorded in the protected information register).

To enhance the robustness of functional separation arrangements and also the integrity of information controls, a new commitment has been included in the 2013 Undertaking requiring that Aurizon Network's major office premises have in place adequate security measures to ensure that employees working for a related operator are unable to access the Aurizon Network offices, unless such access is authorised and the employee is accompanied by an Aurizon Network employee, to the extent reasonably practicable, while in the Aurizon Network office. For clarity, this provision does not require that Aurizon Network be located in a different building to the related operator.

5.7 Complaints handling

5.7.1 Background

A complaints handling mechanism for concerns about Aurizon Network's compliance with its ringfencing obligations forms an important element of the access undertaking's accountability and compliance framework. This topic is addressed in detail in Chapter 12. The complaints handling provision in clause 3.22 of the 2013 Undertaking is very similar to that in the 2010 Undertaking, except that a single broad mechanism now applies to all ringfencing obligations in the access undertaking.

5.7.2 Complaints handling

5.7.2.1 Issue

The 2010 Undertaking includes a number of complaints handling mechanisms. Clause 2.2 established a framework for handling complaints in relation to Aurizon Network's non-discriminatory treatment obligations and clause 3.6 provided a complaints handling process applicable to Aurizon Network's the management of confidential information and decision making. The complaints handling mechanism in the 2013 Undertaking provides a single complaints handling process in relation to alleged breaches of all Aurizon Network's obligations under Part 3. This includes, in addition to obligations relating to the management of protected information and non-discrimination, Aurizon Network's commitments regarding functional responsibility and management separation. The consolidation and broadening of this provision provides access seekers and holders with an enhanced ability to seek an investigation by Aurizon Network of matters of concern.

A key theme of Aurizon Network's approach to accountability and compliance is for issues of concern to be addressed through the appropriate mechanism. In this context, the complaints handling mechanism for concerns raised about ringfencing compliance is an example of an accountability mechanism used to address issues specific to a particular access seeker or holder. As discussed in Chapter 13, Aurizon Network considers that it is appropriate for it to seek to investigate and resolve the issue internally prior to escalation to the QCA. Experience shows that the vast majority of issues can be resolved in this way.

5.7.2.2 UT4 proposal

Consistent with the approach outlined above, clause 3.22 of the 2013 Undertaking sets out a process by which an access seeker or holder can notify Aurizon Network of a complaint regarding a possible breach of one or more of its obligations under Part 3. Aurizon Network commits to investigate the complaints received. Under this provision, the QCA will maintain visibility of any complaints through the obligation on

Aurizon Network to advise the QCA as soon as practicable of any complaints received. It must also advise the complainant and the QCA in writing of the outcome of that investigation and Aurizon Network's proposed response. Where the complainant is not satisfied with the outcome of Aurizon Network's investigation, it can apply to the QCA seeking an audit of the complaint, which the QCA must consider in accordance with the audit provisions in clause 10 of the access undertaking.

5.7.3 Waiver of obligations

A new provision has also been included in the 2013 Undertaking (clause 3.23), which provides that Aurizon Network may apply in writing to the QCA for a waiver of some or all of its obligations under this Part on either a temporary or permanent basis. The purpose of including this new provision is to replace numerous instances in the 2010 Undertaking which contemplated QCA approval of a deviation. Instead, this draft provides this power in a single location, and across all matters contemplated by Part 3. In this regard, we note that the Australian Energy Regulator (AER) considers that the inclusion of sufficient flexibility to take into account particular or changing circumstances (for example, through provision for waivers or variations) is an underlying principle of an effective ringfencing framework.⁹⁸

The fact that QCA approval is required gives protections to access seekers and holders. The inclusion of a waiver provision is a standard feature of many ringfencing regimes, and Aurizon Network believes it is an appropriate addition to its Access Undertaking, consistent with regulatory best practice.

5.8 Responsibility for rail infrastructure

5.8.1 Background

QR Network's access undertakings have typically provided a specific regulatory process relating to the management of infrastructure. The purpose of this was to provide confidence that QR Network would be responsible for the infrastructure used for the declared service, particularly in the context of the prior declaration of the network being written in a way that left uncertainty around what infrastructure was required for the declared service (and what was not) and, further, that the legal owner of all assets was QR, with assignment of assets to a particular part of the business purely being a management decision.

As a result the 2010 Undertaking included a range of provisions regarding the management of rail infrastructure, essentially addressing:

- an obligation to publish and update line diagrams, which indicate the coverage of the access undertaking - the purpose of this obligation was to provide greater clarity for all parties about what assets were subject to the access undertaking, and what were not;
- an obligation that Aurizon Network will manage infrastructure required to provide the declared service and, hence, that access to all of this rail infrastructure would be governed by the access undertaking - this implemented via a specific obligation to not assign or transfer ownership of rail infrastructure outside Aurizon Network, together with an obligation for Aurizon Network to obtain ownership (from elsewhere within the Aurizon Group) of infrastructure required to provide the declared service;
- preventing removal of "Rail Infrastructure" except in certain circumstances; and

⁹⁸ Australian Energy Regulator (2012). Position Paper, Electricity Distribution Ring-fencing Guidelines, September, p. 4

- a process for handling disagreements or disputes about whether Aurizon Network does manage all infrastructure required to provide the declared service.

In effect, the obligations of clause 3.8 of the 2010 Undertaking fell into two categories:

- to provide clarity about the extent of rail infrastructure that was available for access under the terms of the access undertaking; and
- to ensure that all infrastructure required to provide the declared service would be managed by Aurizon Network.

5.8.2 Clarity on coverage of access undertaking

Based on the original declaration of QR's rail access services, there was significant uncertainty about what infrastructure was required to provide this declared service, particularly in the area of shared above and below rail yards.

The service declaration under s 250 of the QCA Act is now much clearer about what infrastructure is required to provide the declared service, with the declaration indicating on individual system maps what infrastructure (as at 1 July 2010) is required for the declared service and what is not. While there is not the same level of clarity within the declaration itself with respect to infrastructure constructed after 1 July 2010, this does not in practice create concern, as the areas of uncertainty (primarily yards) are constructed only irregularly, and expectations of ownership and access will necessarily be clarified for these yards at the time of their construction. This means that there is far less risk for contention around this issue than was the case historically.

As a result, there is no longer a need for the access undertaking to include a process to resolve what infrastructure is required to provide the declared service – this issue now becomes simply one of providing transparency about the scope and layout of the CQCN.

The 2013 Undertaking provides that Aurizon Network will maintain the obligation to publish line diagrams indicating the infrastructure managed by Aurizon Network and which is covered by the undertaking – this will be in the preliminary information that Aurizon Network commits to publish on its website. The undertaking maintains an obligation to keep this information up to date (Part 4).

5.8.3 Accountability for management of rail infrastructure

Clause 3.8.1(c)(ii) of the 2010 Undertaking prevented Aurizon Network from removing existing rail infrastructure, except in nominated circumstances. This obligation is a legacy of the past, primarily driven by QCA concerns about Queensland Rail closing poorly utilised rail infrastructure in regional areas where there was a potential future use. This issue is no longer relevant in the context of Aurizon Network's activities following the IPO in 2010. Rail infrastructure in CQCR is provided on a purely commercial basis, under access agreements. These access agreements specify Aurizon Network's obligations for providing and maintaining the rail infrastructure. As a result, clause 3.8.1(c)(ii) is redundant as there is no basis for obliging Aurizon Network to maintain rail infrastructure in the CQCR that is not required for the purpose of providing contracted access rights.

The limitation on Aurizon Network assigning or transferring ownership of rail infrastructure to another Aurizon party, as per clause 3.8.1(c)(i), sought to ensure that Aurizon would not attempt to deter an access seeker from accessing the rail network by transferring the infrastructure outside of Aurizon Network and hence removing it from the scope of the undertaking. Since the incorporation of Aurizon

Network Pty Ltd as a separate legal entity, together with the issue of the underlying infrastructure and land leases at the time of QR National's IPO, Aurizon Network Pty Ltd is (and will remain) the lessee of the rail infrastructure necessary to provide the declared service under the relevant Crown leases for the CQCN. The complex Government approval requirements and prohibitive transaction cost associated with transferring these assets and leases outside of Aurizon Network mean that concerns about the transfer of rail infrastructure - either existing rail infrastructure or expansions and additions to the rail network which are constructed on existing leases - to a related operator are simply unfounded.

Aurizon Network acknowledges that these constraints are significantly reduced where new rail infrastructure is developed using a new corridor lease. This may occur where a new mine specific spur is developed. As discussed in Chapters 6 and 7, the development, ownership and management of mine specific spurs is, and should remain, a contestable service. In the event that an Aurizon Group company agrees to develop a new mine specific spur, the parties should be free to negotiate and agree the terms under which that spur is developed, including whether it is managed by Aurizon Network and subject to Aurizon Network's access undertaking. Hence, for the 2013 Undertaking, the Aurizon Group has removed its voluntary commitment to assign to Aurizon Network all new infrastructure required to provide the declared service.

6 Negotiating and managing access rights

Summary:

Aurizon Network considers that increased flexibility for the negotiation of access rights will generate the best opportunity for maximising efficiency. Consistent with the National Competition Policy principles that underpin the QCA Act, Aurizon Network believes that resolving access through commercial negotiation, rather than via a prescriptive set of processes, will facilitate a more timely and appropriately scoped response to access seeker preferences.

However, Aurizon Network acknowledges that there is an important role for the regulatory framework in ensuring that negotiations are balanced, and that Aurizon Network cannot exercise market power. In particular, 'safe harbour' arrangements – in the form of standard agreements - will continue to apply, and access to binding dispute resolution will be maintained.

The negotiation framework sets out the fundamental steps of the negotiation process, which remain largely unchanged since the 2010 Undertaking. Modifications to the previous approach have been designed to simplify and clarify the steps to negotiation, and to enhance the opportunity to resolve issues through commercial negotiation. The key elements in the 2013 Undertaking are:

- The scope of services subject to the 2013 Undertaking remains unchanged;
- Aurizon Network continues to provide an industry responsive contracting model for access agreements, whereby it will contract in a way that reflects customer preferences, whether this be through contracting directly with the operator or the end user, or alternately contracting with both parties through the alternate form of agreement;
- A balanced, flexible framework for negotiating access agreements is proposed:
 - the negotiation steps, and the timing and content of information exchange, have each been simplified, but remain fundamentally consistent with the 2010 Undertaking;
 - standard agreements - standard access agreements and the standard rail connection agreement - continue to be appended in order to provide a 'safe harbour' for negotiations, and access to binding dispute resolution is maintained;
 - to avoid duplication and facilitate negotiation, 'standard outcomes' of access negotiations have been removed from the 2013 Undertaking, with the SAA now the exclusive fallback;
 - to encourage innovation and flexibility in the rail haulage market, the requirement that agreed access agreements be published has been removed.
- Guidance is given on how capacity will be allocated to access seekers, and how they can then manage these access rights. In particular, reflecting the fact that all existing capacity is committed other than at the margins, the detailed capacity queuing procedures have been replaced with capacity allocation criteria. The primary way in which capacity will be obtained in the future will be via expansions; and

- The voluntary commitment of Aurizon Network to supply electricity is made more explicit.

The arrangements for expanding the capacity of the rail infrastructure where it is insufficient to meet the requests for access rights is addressed in Chapter 7.

Importantly, Aurizon Network has excluded from the 2013 Undertaking any processes for continued development of the regulatory framework over the course of UT4. Providing for additional matters to be developed and subsequently included in the access undertaking is undesirable, as it undermines stability in the regulatory framework and promotes the use of regulation, rather than negotiation, as the means to address issues that arise.

This framework for negotiating and managing access rights is established in Parts 2 (Intent and Scope), 4 (Negotiation Framework), 5 (Access Agreements), 7 (Capacity Management) and 9 (Connecting Infrastructure) of the 2013 Undertaking.

6.1 Introduction

Since the 2001 Undertaking, the access undertaking has been incrementally adjusted to address new commercial challenges for the CQCR, such as the unanticipated growth in global demand for export coal and the network becoming increasingly capacity constrained. However, this has often occurred with little consideration as to whether the issue in question might be better addressed through commercial resolution rather than prescriptive regulation. This approach reflected an historic practice of replacing negotiation with regulation, with all contentious issues addressed and resolved through an upfront regulatory determination and the implementation of regulatory endorsed ‘standards’. The comprehensiveness of this approach can be seen in the fact that, in the twelve years since QR’s first access undertaking commenced, not a single issue has been referred to dispute resolution under an access undertaking.⁹⁹

Over time, this approach has resulted in the access undertaking containing a detailed, prescriptive and somewhat duplicative set of arrangements aimed at addressing all manner of possible issues – including those that have never actually arisen. In effect, the regulatory framework has typically presumed that negotiations will fail (i.e. result in a dispute), that regulatory intervention will be sought by the parties, and that pre-emptive regulation is more efficient than dispute resolution. This approach is, in Aurizon Network’s view, inconsistent with the *Competition Principles Agreement* (1995), the *Competition and Infrastructure Reform Agreement (CIRA)* (2006), the QCA Act, and best Australian regulatory practice.¹⁰⁰

Aurizon Network considers that this historic practise, rather than achieving the intended end result of rapid and uncontentious allocation of access rights, has instead resulted in an overly complex and bureaucratic process, with parties to a negotiation focusing on what the regulation will require or allow them to do rather than seeking the most efficient solution to a problem. Moreover, it has facilitated a

⁹⁹ There was a dispute between QR and Pacific National in 2004, however this was a dispute under the QCA Act in relation to whether or not a requested service formed part of the declared service, and did not constitute a negotiation dispute under the access undertaking.

¹⁰⁰ For example, the South Australian Ports Access Regime which focuses on “(p)roviding regulatory support to commercial negotiations between service providers and users. ... it does not seek to impose regulator determined outcomes across the board. Rather, regulatory intervention (arbitration) occurs only where parties cannot agree on the outcome.” Source: ESCOSA (2003). Ports Access Review – Discussion Paper. December. p 13.

culture where contentious issues are resolved through a regulatory – rather than a commercial – process, with regulatory actions becoming the first port of call rather than a last resort as originally envisaged by Hilmer and the National Competition Principles Agreement.

The consequence of regulatory creep is that Aurizon Network and users alike are constrained from adopting commercially negotiated resolutions to issues. This is particularly so in relation to the ability of users to respond to market signals in a timely way and invest in expanding the capacity of the supply chain. As demonstrated by the Exports and Infrastructure Taskforce in 2005 in relation to emerging bottlenecks, this is contrary to the efficient management of the supply chain. The Taskforce particularly noted that:

“In our view, there should be a presumption that issues associated with export oriented infrastructure will be resolved by commercial negotiation between the infrastructure provider and users. We accept that this will often be imperfect, but it is still likely to be preferable to intrusive regulation.”¹⁰¹

Aurizon Network therefore believes that the 2013 Undertaking should be appropriately recalibrated so that it is only prescriptive to the extent necessary to ensure balanced commercial negotiations between Aurizon Network and access seekers, many of whom are large, well-resourced international mining companies. Extending the regulatory framework beyond this point results in distortions to commercial decision making and inefficiency.

6.2 Aurizon Network’s approach to the negotiation framework

Against this background, Aurizon Network has reviewed the provisions in the 2010 Undertaking that relate to negotiations for access (now in Parts 2, 4, 5 and 7 of the 2013 Undertaking) and for capacity expansions and private infrastructure (now in Parts 8 and 9 respectively of the 2013 Undertaking). That review has resulted in what is considered to be significant simplification as compared to the arrangements in the 2010 Undertaking, including the introduction of a new framework for the negotiation of capacity expansions, the removal of the detailed queuing process, and greater scope for flexible negotiation.

Table 2 Overview of UT4 Submission on Negotiation

	UT4 Part	Discussed at:
Negotiation of Access		
Intent and Scope	Part 2	Chapter 6
Negotiation Framework	Part 4	
Access Agreements	Part 5	
Capacity Allocation and Management	Part 7	
Private Infrastructure	Part 9	
Negotiation of Expansions		
Expansions and Supply Chain Coordination	Part 8	Chapter 7

¹⁰¹ Exports and Infrastructure Taskforce (2005), Australia’s Export Infrastructure, Report to the Prime Minister, Canberra, May, p.45.

6.2.1 Negotiations for access to the network

This chapter addresses the framework for the negotiation of capacity, assuming that capacity is available, or has been committed to become available.

A robust framework for negotiating access is a cornerstone of the access undertaking. The core elements of the negotiation framework have been maintained since QR's initial access undertaking in 2001. However, as with many other aspects of the access undertaking, over time, additional detail and processes have progressively been added to address a variety of issues, some of which have reduced in relevance following significant changes in market conditions.

In order to achieve a regulatory framework that supports balanced but robust commercial negotiations for access, the 2013 Undertaking provides a clear framework within which these negotiations will be conducted, including what will happen if negotiations fail. The 2013 Undertaking provides:

- clarity around the process and associated timelines;
- information requirements (timeliness and quality obligations) for both the access provider and the access seeker;¹⁰²
- measures to ensure non-discriminatory treatment of access seekers; and
- clear and accessible fallback positions to address the risk that negotiations fail (e.g. standard terms, dispute resolution).

For the 2013 Undertaking, Aurizon Network has retained the general structure and intent of the access negotiation framework contained in Parts 4 and 5 of the 2010 Undertaking. The majority of the amendments made are aimed at simplifying the processes underlying the negotiation framework so that it is clearly understood by all parties, while at the same time providing flexibility and incentives for parties to reach commercially negotiated solutions. Sections 6.3 to 6.6 highlight how the 2013 Undertaking's access negotiation framework addresses the key elements necessary for effective negotiations, as described above, whilst also noting how this framework has evolved since the 2010 Undertaking.

The long term allocation of access rights is the most important outcome of the access negotiation, and as such, the criteria governing capacity allocations are a critical element of the negotiation framework. While capacity expansions clearly create the most significant concerns about how capacity will be allocated, the approach to capacity allocation is also an issue in relation to negotiations for access to existing capacity. In this context, it remains important that the existing rail network capacity is allocated in a way that promotes the overarching objective of the access regime, namely the efficient use of, and investment in, the rail infrastructure. This issue is discussed in sections 6.8 and 6.9.

6.2.2 Negotiations for expansion of the network

In QR's early access undertakings, expansion of the rail network could be achieved on an incremental basis. However, it is now the case that major integrated supply chain expansions are required to meet increases in demand. Negotiating multi-user, coordinated expansions on such a scale inevitably raises a different set of issues than is the case for negotiations regarding access agreements where capacity is available (or the commitment has been made to create the necessary capacity). As a result, the way in

¹⁰² This acts to mitigate the potential effects of asymmetric information provision in commercial negotiations.

which the 2013 Undertaking supports negotiations relating to expansions is addressed in a separate part of the Undertaking (Part 8) and discussed in Chapter 7 of this submission.

6.3 Scope of services subject to negotiation under the undertaking

6.3.1 Access to the declared service

Consistent with previous access undertakings, the 2013 Undertaking will apply to negotiations for access to Aurizon Network's rail infrastructure for the purpose of operating train services, as declared by s 250(1)(a) of the QCA Act. The definition of "access", and hence the services that access seekers can expect to use, remain unchanged from previous access undertakings.

6.3.2 Mine specific infrastructure

The development, ownership and management of mine specific rail spurs is, and should remain, a competitive service. The 2010 Undertaking reflected this, by specifying arrangements for the connection of private infrastructure to Aurizon Network's railway, and also by establishing how the reference tariff arrangements will work where train services use both Aurizon Network and private rail infrastructure.

The 2013 Undertaking continues to recognise that mine specific rail infrastructure is a competitive service. However, recognising the likelihood of mine specific infrastructure being developed by producers, the 2013 Undertaking includes amendments to the reference tariff arrangements to simplify the pricing arrangements that apply. This is discussed further in Chapter 9.

That noted, Aurizon Network acknowledges that, to the extent that it does develop and manage mine specific rail spurs, access to this infrastructure will be covered by declaration under the QCA Act and, where agreed between Aurizon Network and the user, may be incorporated into the scope of the access undertaking. In this event, access to this rail infrastructure (once constructed) will continue to be governed by the terms of the 2013 Undertaking, and negotiations will proceed in accordance with the processes therein.

6.3.3 Sale of electricity

6.3.3.1 Background

The sale of electricity is not within the scope of the declared service. However, historically, Aurizon Network has been the sole party purchasing electric energy for the operation of electric trains in the CQCR, which it has then onsold to operators. It is acknowledged that there are a number of practical and technical issues that would need to be resolved prior to another provider directly selling electric energy to a rail operator, and as a result Aurizon Network is prepared to continue a voluntary commitment to sell electric energy to access holders for the purpose of operating electric trains.

This commitment is subject only to:

- Aurizon Network being legally permitted to do so; and
- the terms upon which it sell this electric energy being reasonable.

Importantly, for coal carrying services, the terms upon which Aurizon Network will sell electric energy are set out in the SAA and the reference tariff provisions. Aurizon Network has retained the EC component in the reference tariff framework because to do otherwise for the term of the 2013 Undertaking might give rise to contractual uncertainty for access holders. Therefore, whilst the QCA has no role in setting prices

for unregulated services, Aurizon Network will include the charge for electric energy in a separate component of the reference tariff, which will continue to be established on a cost pass through basis and published annually (refer Chapter 10).

Further, as was discussed at length through the assessment process for the Electric Traction Services DAAU, Aurizon Network has a strong incentive to ensure that electric energy costs for all operators are minimised, as excessive electric energy charges will undermine the overall competitiveness of Aurizon Network's electric infrastructure. In recognition of these factors, it is not considered necessary for negotiations on the terms of sale of electric energy to be referable to dispute resolution under the access undertaking.

6.3.3.2 UT4 Proposal

Although the sale of electricity is outside the scope of the declared service, Aurizon Network is willing to continue to procure and onsell electricity to all access seekers, provided it is lawfully entitled to do so under the relevant Queensland or Commonwealth law (particularly, where consistent with the National Electricity Rules). Clause 2.4 of the 2013 Undertaking therefore redrafts the 2010 Undertaking provisions to unambiguously reflect that this is a voluntary commitment. By making this commitment to sell electricity to all access seekers, it is unnecessary to state that Aurizon Network will sell electricity to third parties if it does so for a related party.

Clause 2.4(b)(ii) clarifies that an access holder, or a train operator where a TOA applies, may acquire electricity for its train services from a third party, subject to compliance with Aurizon Network's safety and technical requirements for the connection of that energy and with Aurizon Network's consent.

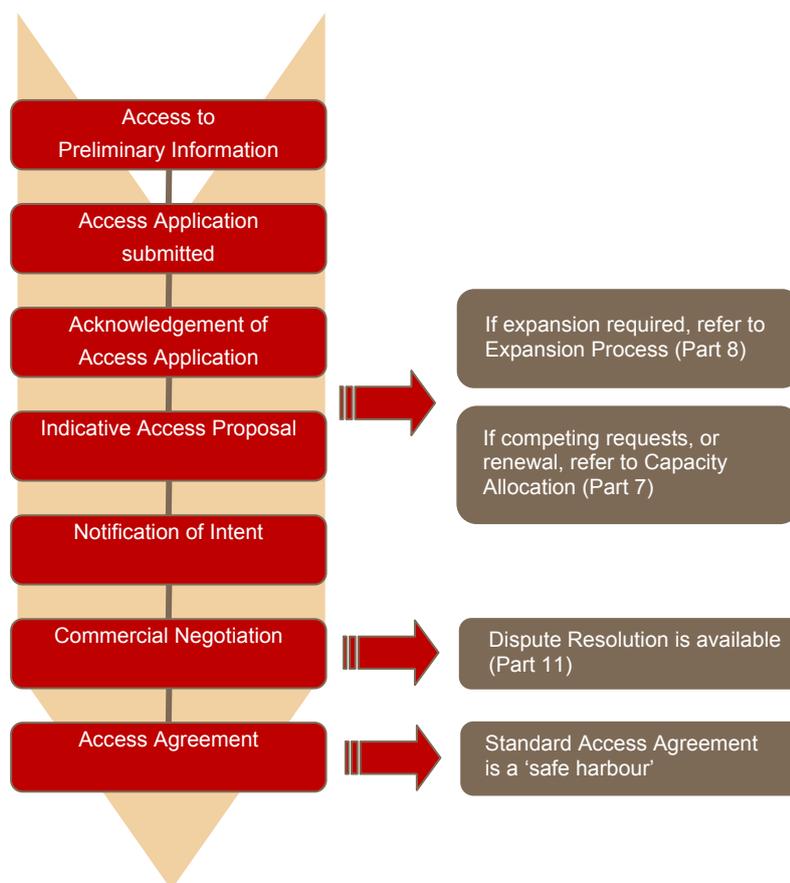
Reflecting that the supply of electric energy is not part of the declared service, and that Aurizon Network has made a commitment through the reference tariff framework to charge for electricity on a cost pass through basis only, the ability to refer the reasonableness of Aurizon Network's terms of sale to dispute resolution has been removed.

6.4 The negotiation framework in the 2013 Undertaking

6.4.1 Overview

The following figure provides an overview of the key steps to the negotiation framework, which reflect the major milestones in relation to the exchange of information between Aurizon Network and the access seeker. Significant differences in the framework in which these negotiations occur, as compared to the 2010 Undertaking, are explained below, while changes aimed at streamlining the steps to the negotiation framework are discussed in section 6.5.

Figure 8 Stylised overview of the negotiation process



6.4.2 Access Seekers

6.4.2.1 Definition of Access Seeker

Issue

The negotiation framework imposes obligations on Aurizon Network in its dealings with “access seekers”. Compliance with these obligations has been complicated by the very broad definition of an access seeker in the 2010 Undertaking, which provides that an access seeker is a person “seeking new or additional access rights”. A broad reading of that provision could give rise to any party having a discussion with Aurizon Network about access, gaining the legal status of an access seeker.

Furthermore, once a party is identified as a genuine access seeker, various asymmetric obligations are placed on Aurizon Network, as the 2010 Undertaking does not in fact bind access seekers, despite numerous provisions appearing to create obligations for an access seeker. Currently, Aurizon Network’s main recourse in the event that an access seeker materially fails to comply with the relevant provisions of the access undertaking, is an ability to cease negotiations with that access seeker. Otherwise, obligations on access seekers that are important to the efficiency and effectiveness of the negotiation framework, including the three stage dispute resolution process in Part 11, cannot be readily enforced. This situation is not considered to represent an appropriate balancing of responsibilities and obligations within the context of commercial negotiations.

UT4 Proposal

Aurizon Network has therefore adjusted the definition of access seeker to clarify that a party is not an access seeker for the purpose of the access undertaking until Aurizon Network has received a properly

completed access application from that party. This change allows Aurizon Network to have preliminary commercial discussions with producers and operators without triggering a formal negotiation process under the access undertaking.

An additional clause has also been included to clarify that by lodging an access application as required by the access undertaking, the access seeker agrees to be bound by those provisions of the access undertaking that apply to access seekers. If an access seeker subsequently materially fails to comply with an obligation in the access undertaking that applies to it, Aurizon Network can, without prejudice to any other remedies it may have, cease negotiations.¹⁰³

6.4.2.2 Application to negotiations for Alternate Form Standard Access Agreement

Issue

As is discussed in more detail in Chapter 12, Aurizon Network has agreed to provide users with the option to contract access under an alternate form standard access agreement, being a standard End User Access Agreement (EUAA), which is accompanied by a standard Train Operations Agreement (TOA). These agreements allow an end user to contract for long term access rights while its selected operator contracts directly with Aurizon Network regarding the operational requirements for running train services using those access rights.

In April 2011, Aurizon Network submitted its proposed alternate form standard access agreement to the QCA for approval along with proposed consequential amendments to the 2010 Undertaking necessary to give effect to the new agreement model. On 27 July 2012, the QCA issued its draft decision proposing not to approve Aurizon Network's proposed alternative form of access and published its final decision on the matter on 24 April 2013.

One of the issues of concern for the QCA is the identity of the 'access seeker' for the purposes of the access undertaking. In general terms, Aurizon Network considers that the access seeker is the party who will eventually contract for the access rights – that is, the end user. The QCA has concerns that this does not adequately deal with a number of issues, most importantly:

- the rights for a TOA operator to participate in disputes;
- the timeframe which Aurizon Network must comply with in the negotiation of a TOA; and
- obligations to a TOA operator in relation to ringfencing and non-discrimination.

Aurizon Network has sought to implement a similar model to that developed by the Australian Rail Track Corporation (ARTC) and approved by the ACCC, whereby the TOA is a proforma agreement, developed in association with the relevant EUAA, and which is then executed by the end user's selected rail operator. In this respect, any variation to the TOA could have implications for the related EUAA, and therefore should be negotiated by the end user as part of the EUAA itself. In particular, if the selected rail operator wishes to make any change to the train operating plan, this will need to be reflected in the EUAA. Hence, the rail operator will need to work with the end user to make the necessary amendments to the EUAA.

The timeframes and processes for the development of interface risk management arrangements and other operational aspects of the service will occur under the terms and procedures embodied in the TOA. To the extent that an end user wishes to nominate a new rail operator, then that end user will need to

¹⁰³ Clause 4.3(b) of the 2013 Undertaking

ensure that it has allowed a sufficient period of time between the nomination of that rail operator and the proposed commencement date for those railings, in order to allow these operational aspects to be finalised.

UT4 Proposal

The 2013 Undertaking clarifies that, where the alternate form of access is used, the end user will be treated as the access seeker for the purpose of conducting the access negotiation process.

Under the 2013 Undertaking, the standard TOA itself establishes the framework for how the operational arrangements for the service will be developed and any disputes resolved.

However, in order to address the QCA's concerns about the status of the TOA operator (defined under the 2013 Undertaking as a Train Operator) under this framework, Aurizon Network has explicitly identified, throughout the 2013 Undertaking, how provisions of the 2013 Undertaking will apply to a Train Operator. For example, specific provisions have been developed to identify how a Train Operator will participate in the access negotiation process. Provisions have also been included in the 2013 Undertaking to ensure that Aurizon Network's obligations around ringfencing, protected information and non discriminatory treatment, as well as dispute resolution are also applicable to a Train Operator.

While Aurizon Network intends that these provisions will address the concerns that the QCA has had with regard to the proposed alternate form of access agreement submitted under the 2010 Undertaking, given the limited time between the publication of the QCA's final decision on 24 April 2013 and the lodgement of the 2013 Undertaking, the treatment of this issue in the 2013 Undertaking, as well as the detailed provision of the standard form EUAA and TOA, may require further refinement by Aurizon Network to address issues identified in that decision (where appropriate), and to ensure obligations are split appropriately between the end user and train operator.

6.4.3 Negotiations where capacity is not available

6.4.3.1 Background

Where Aurizon Network receives an access application that it clearly cannot fulfil without an expansion of the network, the application is only progressed following a decision to expand the network – that is, the parties must first negotiate the scope and terms upon which the capacity will be created, before they can negotiate the terms of the access agreement in relation to that capacity.

However, where there is available capacity, Aurizon Network will commence negotiations. In such circumstances, negotiations may commence for multiple applications that would – if all successful - use the same capacity. A consequence of this is that negotiations between Aurizon Network and an access seeker may terminate where, either due to the execution of another access agreement or for other reasons, a change in the availability of capacity means that Aurizon Network can no longer offer capacity on the terms outlined in the indicative access proposal (IAP).

The 2010 Undertaking (clause 4.5.1(e)(v)) states that, in this circumstance, the negotiation will cease. The 2010 Undertaking sets out a detailed process to be followed addressing what alternate access proposals may be made and timeframes for their progression. While the intention of the detailed process (clause 4.5.1(f)) was to provide clarity around how negotiations would proceed in this instance, it has actually proved to frustrate negotiations and limit the scope of alternative scenarios that could be considered. As a result, Aurizon Network believes that this situation can be improved, with consequential benefits for relevant stakeholders.

6.4.3.2 UT4 Proposal

Where Aurizon Network receives an access application which requires an expansion of the network, including a customer specific branch line, clause 4.4(c) provides for the negotiation process under Part 4 to be suspended pending agreement on how the expansion will be funded. Negotiations regarding how the network will be expanded are governed under the new Part 8 of the 2013 Undertaking and are discussed in Chapter 7 of this submission.

Where Aurizon Network has commenced access negotiations on the basis that it had available capacity, but can no longer provide access as expected due to a reduction in available capacity, it will of course then be necessary for the parties to reconsider the scope of the negotiation. The implications of this to an access seeker, and its available options, will differ in every case. As a result, Aurizon Network believes these situations are best resolved through commercial discussions with the access seeker rather than via a structured process detailed in the access undertaking. Aurizon Network has therefore replaced clause 4.5.1(e)(v) of the 2010 Undertaking with an obligation, under such circumstance, to have further discussions with the access seeker, with a view to identifying if there is a reasonable alternative means of granting the requested access rights (clause 4.9.1(d)). If agreement cannot be reached within 20 business days (or some alternative period as agreed between the access seeker and Aurizon Network) the negotiation period will then cease, on the basis that there is no longer any available capacity.

6.4.4 Applications from multiple access seekers for the same access

6.4.4.1 Background

With more end users seeking greater control over the management of their access rights, the possibility of more than one application for the same access rights being submitted has increased. For example, Aurizon Network might obtain an application by both an end user and an operator. Applications may also be sought from more than one operator where the end user is yet to determine who will be granted haulage rights. In such circumstances, Aurizon Network believes that the choice of who will hold the access rights is properly one for the end user. Consistent with its commitment for non-discriminatory access in Part 3 of the 2013 Undertaking, Aurizon Network is not able to influence this decision by the way in which it negotiates under the access undertaking.

This issue was addressed in clause 7.3.2 of the 2010 Undertaking, which set out a range of provisions for dealing with what was termed “competing applications”. These provisions anticipated rail operators seeking access proposals from Aurizon Network as an input into a competitive rail haulage tender process and, as such, required Aurizon Network to negotiate with all access seekers, subject to the ability to prioritise an end user’s own access application over a rail operator’s application. However, given evolution in the rail haulage market, it has become apparent that these provisions do not provide sufficient clarity on how Aurizon Network is to act in the event of receiving multiple applications for the same access rights. Aurizon Network recognises that its processes should not unreasonably interfere with an end user’s decision making process for choosing a rail operator. However, it also wants to avoid being committed to engage in multiple negotiations for the same set of access rights, which is costly and time consuming for Aurizon Network.

6.4.4.2 UT4 Proposal

A new clause has been included in Part 4 of the 2013 Undertaking to address situations where Aurizon Network receives more than one application for the same access rights (clause 4.7). The principles contained in clause 4.7 are that if more than one party is seeking access for the same access rights:

- if one of those parties is the end user, that party will be treated as the access seeker; or
- if the parties are all operators, the operator nominated in writing by the end user to Aurizon Network will be treated as the access seeker.

In the event that Aurizon Network receives applications from multiple operators, Aurizon Network will provide an IAP, which will set out the indicative arrangements in accordance with which Aurizon Network can provide access, in response to all access applications. An access seeker which intends to progress its application on the basis set out in the IAP must notify Aurizon Network of its intention in writing prior to the expiry of the IAP. However, clause 4.7(b) provides that beyond this, if the end user fails to nominate which operator should be treated as the access seeker, Aurizon Network may suspend the negotiation process with *all* operators until such time that the end user provides such notification. This provides for an unambiguous right for the access rights to be negotiated with the party determined by the relevant end user, and avoids the potentially wasteful time and cost involved in progressing multiple negotiations for the same access rights.

Where the end user is seeking access rights which will be utilised by more than one operator:

- if it intends to contract using an operator access agreement, it will need to notify the proportion of the access rights it intends to allocate to each operator; or
- if it intends to contract using an EUAA, it will need to ensure it adequately consults with those operators to ensure that the EUAA reflects any specific requirements of those operators.

6.4.5 Information to be provided by Aurizon Network

6.4.5.1 Background

Prior to a potential access seeker preparing an access application, they must be able to access information about the physical network, and the arrangements under which access may be granted, in order that they can properly identify their requirements. In recognition of this, Aurizon Network commits to making preliminary information available to potential access seekers, either on its website or upon request. Aurizon Network also commits to making further nominated information available to access seekers as required throughout the negotiation process.

6.4.5.2 UT4 Proposal

In the 2013 Undertaking, Aurizon Network is maintaining its commitment to provide preliminary information. The only change to the information provided at this stage of the process is the exclusion of the working plan and section diagrams (included at Schedule D of the 2010 Undertaking), as experience has shown that potential access seekers' requirements are adequately addressed by the other available information.

Further, Aurizon Network is expanding the breadth of the preliminary information directly available on its website. In particular, potential access seekers will now be able to access rollingstock interface standards directly from the website at no cost (previously a \$1,000 charge applied).

The only preliminary information that is not available on Aurizon Network's website is the master train plan (MTP), which needs to be assembled in relation to a potential access seeker's specific area of interest. The MTP is now part of what is termed "Capacity Information", which will be provided to potential access seekers as they reasonably require, including prior to them making an access application.

As with the 2010 Undertaking, additional information will be provided as required throughout the negotiation process. Other than as noted above, the content of the preliminary and additional information remains consistent with the 2010 Undertaking and is set out in Schedule A of the 2013 Undertaking.

6.4.6 Lodgement of access application

6.4.6.1 Background

An access application needs to provide sufficient information about the planned train service for Aurizon Network to assess the capacity required and other implications of that request. The information required to describe a planned train service is well established and is summarised in Schedule C of the 2010 Undertaking.

Where Aurizon Network receives an access application that does not provide all of this information, or where further information or clarification is reasonably required in order to prepare an IAP, the 2010 Undertaking requires Aurizon Network to advise the Access Seeker of this within ten business days. Unfortunately however, the lodgement of incomplete access applications is not uncommon. This can be attributed, in part, to the incentives created by the queuing framework, the removal of which will go some way to remedying this problem.

While Aurizon Network is permitted to reject the application if the information is not provided, Aurizon Network has on occasion found itself in a 'perpetual loop' where an incomplete application is lodged and the response to requests for additional information are only partial, leading to further requests for additional information. This is an inefficient and wasteful process.

The problem this poses is compounded because the 2010 Undertaking goes on to require that Aurizon Network's obligations to provide an IAP and enter the formal negotiation process will trigger where the information that is provided (even if incomplete) gives 'a reasonable description of the proposed Train Service'. In effect, this means that Aurizon Network must prepare an IAP, at its cost, based on assumptions made by Aurizon Network relating to the information not provided by the Access Seeker.

There is little balance in these obligations, where Aurizon Network is required to develop an IAP and commence negotiations based on what could be very preliminary information from an access seeker. There is considerable time, effort and cost for Aurizon Network in developing an IAP and negotiating access arrangements, and the value of this is substantially diminished if the initial information provided by the access seeker is preliminary, incomplete or incorrect. In contrast to the 2001 Undertaking (when these provisions were originally developed) where there was a genuine concern about the prospect of an access seeker being able to provide all of the required information, the processes around gaining rail access in Australia have matured, and a potential access seeker should either possess, or be reasonably able to procure the necessary information or expertise to prepare, a complete access application. The requirement that the access seeker has available to it sufficient information to complete the access application is quite reasonable, given the materiality of the value of the access rights being sought.

In this respect, in order to incentivise the lodgement of complete access applications, Aurizon Network's obligation to provide an IAP should only be triggered where an access seeker has developed its request to the point that it can properly complete an access application. This will then create a stronger and more workable basis for commencing formal negotiations.

6.4.6.2 UT4 Proposal

As with the 2010 Undertaking, Schedule B includes a summary of the information requirements for an access application. These information requirements are unchanged from the 2010 Undertaking, except for the inclusion of a requirement to provide initial advice on whether the access seeker, or its customer will be able to use the requested capacity. (This includes whether it has, or will, secure access to a port, a rail haulage contract, use of private infrastructure or whether the output of any associated mine output is commensurate with the capacity sought). Although this has always been part of Aurizon Network's consideration in assessing an access application, inclusion of this information in the information requirements for an application enhances transparency. The actual format of the required access application will be as published on Aurizon Network's website.

Where an access application is not properly completed, or additional information is reasonably required by Aurizon Network to prepare an IAP, clause 4.3(c) of the 2013 Undertaking continues to require that Aurizon Network will advise the access seeker of this within ten business days. However, a new clause 4.3(d) has been included in the 2013 Undertaking to allow Aurizon Network to cease negotiations with that access seeker if this required information has not been provided within 20 business days of the request.

Aurizon Network has amended the acknowledgement of access applications provision now in clause 4.4(a) to provide that acknowledgement will only occur upon receipt of all necessary information from an access seeker; that is, a properly completed access application, together with any other information requested under clause 4.3(c). This will improve the quality of information upon which an IAP is developed, as well as remove ambiguity about when the obligation to provide an IAP triggers.

Further, Aurizon Network proposes in clause 4.4(b) that the recorded date for the access application be the date of the acknowledgement notice, as this is the date where Aurizon Network has confirmed that it has received all information necessary for the preparation of an IAP. Aurizon Network acknowledges that the 2010 Undertaking approach of recording the date of application as the date the initial application is submitted (whether or not complete) was driven by the requirements of the queuing framework. Aurizon Network's alternate proposal for dealing with this issue is discussed in section 6.7.4.

6.4.7 Subsequent amendments to an access application

6.4.7.1 Background

Clause 4.2(g) of the 2010 Undertaking provides that if Aurizon Network has issued an acknowledgement notice but is yet to issue an IAP, the access seeker may review and revise the information in its access application,¹⁰⁴ provided this does not substantially alter the nature of the access rights sought.

Notwithstanding that clause 4.2(h) allows for an extension to the timeframe for providing the IAP, Aurizon Network considers it important to ensure that access seekers are clearly incentivised to lodge a complete application based on the best information available at the time. As discussed above, ensuring that access seekers lodge complete access applications will improve the quality of the information that Aurizon Network can provide in the IAP and will have flow on improvements to the timeliness of negotiations.

¹⁰⁴ The information requested by Aurizon Network, for the purposes of access application, is high level in nature and only reflects the information necessary to compile the response. Therefore it is reasonable to assume that any changes to this information will be material to Aurizon Networks assessment.

As a result, if the access seeker wants to revise any information in the application, it should be required to lodge a new application. This approach will not compromise the access seeker's ability to negotiate and secure access in a timely manner as Aurizon Network remains bound by the negotiation process and associated timeframes. It will no longer have any implications for an access seeker's place in the queue, as the queue has been removed entirely. The date of an access seeker's application will only be used to determine the allocation of capacity in the unlikely event that Aurizon Network cannot differentiate between two applications in accordance with its capacity allocation criteria.

6.4.7.2 UT4 Proposal

The ability for an access seeker to submit revisions to the information contained in the access application, regardless of its materiality (clauses 4.2(g) or (h) of the 2010 Undertaking) has not been included in the 2013 Undertaking. The exclusion of this provision incentivises an access seeker to make a fully documented application, which will ensure Aurizon Network has a clear understanding of the services an access seeker requires, and whether investment in the CQCR will be required to provide access. Aurizon Network acknowledges that the 2010 Undertaking was in part applied in order to avoid subsequent amendments to an access application impacting the recorded date of the application for the purposes of the capacity queue. As noted above, Aurizon Network's alternate proposal for dealing with this issue is discussed in section 6.7.4.

6.4.8 Notification of Intent

6.4.8.1 Background

The notification of intent is where an access seeker advises Aurizon Network that it wishes to proceed with the access negotiation, based on the arrangements set out in the IAP, and triggers additional obligations relating to the negotiation process.

Clause 4.4(b) of the 2010 Undertaking provided that, where an access seeker gives Aurizon Network notification of its intention to progress its access application *after* the expiry date of an IAP (but not less than six months after that date), Aurizon Network would review the IAP and if considered necessary, prepare a revised IAP.

While many of the relaxations in the 2010 Undertaking were included in order to maintain the access seekers date of application for the queuing framework, this provision was not one of them. If the notification of intent was provided after the expiry date of the IAP, the notification date was deemed to be the new date of access application. As a result, this provision simply acts as an alternate process to submitting a new access application with little impact on the timeframes for negotiating access.

6.4.8.2 UT4 Proposal

Aurizon Network considers that notification of an intent to progress an access application should, in all cases, be provided prior to the expiry date of the IAP. Allowing for such notice to be given after the IAP dilutes the incentive to adhere to the timeframes for the negotiation process. It also increases the likelihood that the IAP no longer reflects the service that Aurizon Network is able to deliver, given the intervening passage of time. Aurizon Network has therefore not included this provision in the 2013 Undertaking. If, following expiry of the IAP, an access seeker wishes to proceed with negotiations, it will need to lodge a new access application.

6.4.9 Minor changes to negotiation framework

In addition to the amendments to the 2010 Undertaking negotiation framework discussed above, Aurizon Network has made a number of minor drafting changes. These changes are not intended to alter the rights and obligations of the parties, but rather to simplify the document. This covers matters such as:

- removal of individual provisions identifying that disputes can be raised in relation to specific provisions, in favour of a broad provision (contained in Part 11 of the 2013 Undertaking) that any matter relating to negotiations for access under the 2013 Undertaking can be disputed; and
- using business days as the measure of time in all instances.

In addition, changes elsewhere in the 2013 Undertaking, most notably in methodology for allocating capacity, have allowed further simplification of the negotiation framework provisions established in Part 4. Discussion of this change can be found in section 6.8.

6.5 Standard agreements for access negotiations

6.5.1 Standard Access Agreements

6.5.1.1 Background

While it is open for parties to negotiate the terms and conditions for access in whatever form they wish, Aurizon Network considers that it is appropriate to maintain in the 2013 Undertaking a set of 'safe harbour' arrangements that reflect reasonable terms and conditions for the provision of access. In this respect, a long standing feature of Aurizon Network's access undertaking is the establishment of 'safe harbour' arrangements for coal services through a combination of reference tariffs, which establish a benchmark tariff for the specified reference train service, and SAAs, which set out standard commercial terms and conditions upon which Aurizon Network will agree to provide access.

The existence of the SAAs should not constrain Aurizon Network and an access seeker from negotiating different arrangements that better suit their specific circumstances. In this regard, it is important that the access undertaking reinforce the ability for the parties to negotiate and agree terms other than the SAA terms, if they choose, reflecting the primacy of commercially negotiated terms over undertaking provisions in s168 of the QCA Act.

However, the SAAs provide an effective baseline set of arrangements that ensure that Aurizon Network offers access on reasonable terms. The standard agreements can be used if:

- one or both of the parties does not want to negotiate terms other than the standard terms; or
- parties cannot reach agreement to non-standard terms.

Any agreement to non-standard terms may also have pricing implications to the extent that they result in cost or risk differences (which could be higher or lower). This is addressed in Chapter 9.

6.5.1.2 UT4 Proposal

Clause 5.1(c) of the 2013 Undertaking provides that the terms of an access agreement will be as agreed between the parties, but obliges Aurizon Network to offer to provide access to an access seeker on the basis of the SAAs (as included in Volume 3 of the 2013 Undertaking), thereby providing a clear fallback position in the event that negotiations on non-standard terms fail.

Consistent with the 2010 Undertaking, the 2013 Undertaking incorporates three different forms of SAA for coal services:

- the Standard Access Agreement (Operator) for use where the rail operator contracts with Aurizon Network for access rights and offers an integrated rail haulage service (bundling above and below rail elements of the service);
- the Standard Access Holder Access Agreement (Access Holder), for use where the end user of the service contracts directly with Aurizon Network for access rights, and then either operates train services itself or subcontracts the operation of train services using those access rights to a rail operator; and
- the Standard Access Agreement (Alternate Form) being a standard EUAA, which is stapled with a standard TOA. These agreements allow an end user (as access seeker) to contract for long term access rights while its selected operator contracts directly with Aurizon Network regarding the operational requirements for running train services using those access rights.

For non-coal carrying services, clause 5.1(c)(iii) requires that Aurizon Network offer an access agreement consistent with the standard access agreement, subject to changes necessary to reflect the different nature of the services. This approach has been adopted in lieu of the 2010 Undertaking approach of including a set of access agreement principles as a schedule to the access undertaking, as it is more informative for both Aurizon Network and access seekers to use the comprehensive standard arrangements as a baseline for non-coal services. As a result, Schedule E of the 2010 Undertaking has been deleted.

Part C discusses the specific provisions contained in these SAAs and any changes from the 2010 Undertaking.

6.5.2 No additional requirement to specify ‘standard outcomes’ of negotiations

6.5.2.1 Background

An issue related to the SAAs is that, in a number of areas, the access undertaking prescribes the ‘standard outcomes’ of negotiations within the access undertaking itself. Examples of these include the circumstances in which Aurizon Network can resume capacity and the circumstances in which it can inspect and audit compliance with interface standards.

The inclusion of these provisions reflects the historical development of the access undertaking itself and there is no contemporary reason for the continuation. QR’s first access undertaking was finalised in the absence of SAAs, which were then developed through a separate process during the UT1 period. The ‘standard outcomes’ were intended to bridge the gap between the finalisation of UT1 and the development of standard access agreements. In subsequent regulatory periods (UT2 and UT3) the standard access agreements that were developed through the UT1 period were included as part of the access undertaking. However, none of these ‘standard outcomes’ were removed.

The primary role of the access undertaking is to facilitate negotiations with access seekers. Once an access agreement has been negotiated, the agreement should govern the relationship between Aurizon Network and an access holder. It should therefore be unnecessary to retain provisions in the access undertaking that are also addressed in the SAA (unless it relates to matters that could impact an access holder that is not a party to the access agreement).

The duplication of matters in both the access undertaking and the access agreements has given rise to significant uncertainty, with access holders arguing that the provisions of the access undertaking should prevail over an access agreement. As an example, notwithstanding the qualification in clause 7.3.6(a) of the 2010 Undertaking that, unless otherwise specified in an access holder's agreement, an access holder may relinquish or transfer access rights in accordance with clause 7.3.6, stakeholders presume that transfer or relinquishment fees will be calculated in accordance with the access undertaking.

Thus, it is now clearly appropriate to remove these 'standard outcomes' of negotiation from the main body of the access undertaking. This does not reflect a hesitancy to make these commitments by Aurizon Network – as they remain part of the SAAs.

6.5.2.2 UT4 Proposal

The 2013 Undertaking has been simplified to remove provisions specifying 'standard outcomes' of negotiations between Aurizon Network and an access seeker that are addressed in the SAA. In recognition of their inclusion in the SAA, the key provisions that have not been retained in the 2013 Undertaking include:

- the requirement that train services be operated by an accredited operator (2010 Undertaking Clause 5.1(c));
- rate review provisions (2010 Undertaking Clause 6.1.2(d));
- capacity management arrangements which have been excluded from Part 7 of the 2013 Undertaking, including service specification and train scheduling, capacity resumptions, capacity relinquishments and those parts of capacity transfer that are reflected in the SAAs; and
- the interface and environment management processes which have been excluded from Part 8 of the 2013 Undertaking.

All of the provisions of Part 8 of the 2010 Undertaking relating to the conduct of the safety interface risk management process and the environment interface risk management process are now contained in the SAA. These provisions are necessarily included in the access agreements, to reflect that, in many cases, part or all of the interface risk management processes occur once the access agreement is signed, and during the life of the access agreement may need to be 'reused' if aspects of the operation are varied.

However, Aurizon Network acknowledges that there may be instances where part or all of these processes may be required to be conducted during the negotiation of the access agreement. As such, Aurizon Network has included a new Clause 4.9.2(b)-(c) that provides that, to the extent required prior to agreement being reached, these processes will be conducted in accordance with the provisions set out in the SAA. This issue is further discussed in Chapter 11.

6.5.3 Development of new standard access agreements

6.5.3.1 Background

As described above, the comprehensive suite of SAAs that is now incorporated into the 2013 Undertaking provides a 'safe harbour' set of terms and conditions for the vast majority of access negotiations conducted by Aurizon Network. These SAAs address coal carrying services in the CQCR, which represent the vast majority of services that operate on Aurizon Network's rail infrastructure.¹⁰⁵ The three

¹⁰⁵ For example, during the UT3 period the average train kilometres for non-coal traffic represents nine percent of total average train kilometres.

different forms of SAA now included in the 2013 Undertaking also reflect all of the negotiating structures for the acquisition and management of access rights that stakeholders have identified that they may wish to use.

6.5.3.2 Issue

Previous access undertakings have included a process for the development of new SAAs. Again, this reflects history, with the operator and access holder forms of the SAA developed during the UT1 term, and the alternate form of access agreement developed during the UT3 term in response to user demand. While the intention to develop these specific forms of access agreements was anticipated at the beginning of UT1 and UT3 respectively, the 2010 Undertaking also provided for other standard agreements to be developed during the regulatory period if a need is identified. This requirement was in response to the broad scope of access previously provided under QR Network's access undertaking, which covered a complex range of traffics and networks across the entirety of Queensland.

However, in the context of the 2013 Undertaking, the suite of three forms of SAA provides a relevant and appropriate fallback for the vast majority of Aurizon Network's access negotiations (which are overwhelmingly for coal traffic). In this respect, it must be emphasised that the purpose of standard agreements is to determine a 'safe harbour', but not to cater for all conceivable commercial preferences which are readily able to be negotiated. For all coal traffics, all reasonably anticipated preferences (certainly to the point necessary to remedy ascertainable market power) have already been dealt with, rendering any further obligation to develop standard agreements unnecessary.

For the remaining traffics, these are varied in nature. While the SAA for coal services will provide guidance regarding the terms and conditions for non-coal services, it is appropriate that the tailoring of these terms and conditions to address the requirements of those specific types of traffics is most effectively left to individual negotiations.

6.5.3.3 UT4 proposal

As the suite of SAAs that is now incorporated into Volumes 2 and 3 of the 2013 Undertaking directly address the vast majority of access negotiations conducted by Aurizon Network, it is considered that there is no further requirement for the access undertaking to provide a process for the development of new SAAs. Therefore, this process (as set out in Clause 5.2 of the 2010 Undertaking) has not been retained in the 2013 Undertaking.

6.5.4 Private infrastructure connections

6.5.4.1 Background

The development of mine specific infrastructure is a competitive service. The development, construction and management of spur lines will not necessarily be done by Aurizon Network through the UT4 period. Further, rail operators make their own arrangements for provisioning, maintenance and storage of their rollingstock, all of which require separate facilities adjoining Aurizon Network's rail infrastructure. For these reasons, the ability to negotiate the connection of private infrastructure to Aurizon Network's rail infrastructure is an important component of the regulatory framework.

6.5.4.2 Issue

A standard rail connection agreement was approved by the QCA on 24 April 2013 providing a 'safe harbour' for negotiations regarding connections to the rail network, similar to the other SAAs. The

continued inclusion of a standard rail connection agreement in the 2013 Undertaking permits the simplification of the provisions relating to private infrastructure connections.

6.5.4.3 UT4 proposal

The connection of private infrastructure to the CQCN is now addressed in Part 9 of the 2013 Undertaking. The drafting represents a material simplification of the 2010 Undertaking and focuses specifically on access seekers who will construct and own private infrastructure that will connect to the CQCN. Aurizon Network will consent to such a connection when, unless otherwise agreed, Aurizon Network designs, constructs, project manages and commissions the connecting infrastructure. It will also be necessary for the connecting party to ensure that minimum technical and safety standards are satisfied, as well as that the connecting infrastructure will not reduce capacity. It will be necessary for the parties (Aurizon Network and the access seeker) to have entered into a Rail Connection Agreement (RCA).

Further information on the standard RCA can be found in Part C.

Clause 8.4 in the 2010 Undertaking relates to the obligation to the development of the standard RCA. As this has been completed, the clause is no longer required.

6.5.5 Access to dispute resolution

While the existence of the standard agreements provides a 'safe harbour' for negotiations by establishing a reasonable benchmark set of terms and conditions, there still may be areas where Aurizon Network and an access seeker cannot reach a negotiated agreement. In these instances, it remains important for the access undertaking to include a readily accessible dispute resolution framework. Chapter 12 of this submission discusses the dispute resolution arrangements that are set out in Part 11 of the 2013 Undertaking.

6.6 Publication of access agreements

6.6.1 Background

An unusual feature of Aurizon Network's access undertaking is the requirement that all coal access agreements negotiated in accordance with the access undertaking be published (excluding nominated confidential information). The genesis for this provision was the development of the 2001 Undertaking, where stakeholders were very uncertain about how the market for rail haulage services would evolve. At the time it was anticipated that rail operators would typically negotiate rail access agreements with QR, and on the basis of these access arrangements, would offer integrated haulage services to producers. Under this assumed competitive model, the terms upon which QR offered access to competing operators could have significant implications for the producers' choice of preferred operator. In this context, there was substantial concern about QR providing access on a non-discriminatory basis to different operators. The requirement to publish the resulting access agreements was in response to this concern, in order to give stakeholders confidence that QR would offer equivalent terms to competing operators.

It was acknowledged at the time that publication of access agreements was a very blunt instrument for providing confidence about non-discriminatory treatment. It was recognised that there would be negative consequences resulting from publication of agreements, most particularly that this requirement would discourage differentiation between access agreements.¹⁰⁶ The requirement to publish access agreements would mean that operators would be less likely to innovate, as the arrangements that they had negotiated

¹⁰⁶ QCA Draft Decision on QR's Draft Access Undertaking, December 1999, Volume 2, pp 134-135

would be published upon execution of the agreements, leaving little opportunity for this innovation to create a lasting competitive advantage.¹⁰⁷ Further, the requirement to publish all access agreements would discourage Aurizon Network from varying from its standard terms and conditions in a negotiation, due to concerns about operators “cherry picking” their preferred provisions in future negotiations without recognition of the tradeoffs that were made between the parties to the initial negotiation.

Notwithstanding these recognised concerns, the requirement to publish access agreements was incorporated into the 2001 Undertaking, as stakeholders – both potential rail operators and producers – considered the benefits of transparency would outweigh these costs, given the infancy of the haulage market. The costs and benefits of this obligation have not been explicitly considered in subsequent access undertakings.

While Aurizon Network acknowledges the importance of providing confidence to stakeholders that it will not unfairly discriminate between access seekers, the nature of access negotiations has changed since UT1 and the rail haulage market has matured substantially. Producers are much more involved in the negotiation of access agreements, and in many cases will themselves be the access holder (either under the access holder or alternate form of access agreement). In many cases, access arrangements are substantially negotiated before an operator is selected. In these circumstances, there is less opportunity than originally envisaged for Aurizon Network to potentially manipulate outcomes in the haulage market through the provisions of its access agreements. However, the stifling effect on innovation remains real.

In this context, Aurizon Network believes that alternate mechanisms for ensuring that it does not unfairly discriminate between access seekers can provide the requisite confidence in non-discriminatory treatment, while avoiding the drag on efficiency gains through the continued disincentives for parties to innovate in access arrangements.

In particular, the ringfencing framework in Part 3 of the 2013 Undertaking establishes a number of obligations on Aurizon Network to ensure that it does not unfairly differentiate between access seekers, including:

- the inclusion of an overarching obligation to not unfairly discriminate between access seekers;
- a requirement for negotiations with a related operator to be on an arms’ length basis, with the *Transport Infrastructure Act 1994* requiring this to be confirmed for every access agreement by Aurizon Network’s board of directors; and
- a complaints handling process that can be used in the event that a stakeholder thinks that these obligations have been breached, together with an ability for this to be escalated to the QCA if the complaint is not satisfactorily addressed by Aurizon Network.

Beyond this, s103 of the QCA Act allows for access agreements to be provided to the QCA. This clearly provides an opportunity for the QCA to review access agreements to identify if there is any discriminatory treatment in breach of Aurizon Network’s obligations. Aurizon Network has reinforced this role in the 2013 Undertaking, to provide procedural certainty as regards to the provision of agreements to the regulator.

¹⁰⁷ While the QCA sought to minimise the drag on innovation by excluding ‘above rail’ elements of the agreements from publication, in practice this has been limited to a small number of matters, and does not cover all parts of the access agreements that may be impacted through the introduction of innovations in the above rail market.

6.6.2 UT4 proposal

Clause 10.3.1 of the 2013 Undertaking provides for Aurizon Network to provide to the QCA the below rail aspects of signed access agreements, in order to allow the QCA to satisfy itself that the access agreement does not offend the non-discrimination provisions of either the access undertaking or the QCA Act. Against this background, and in order to better facilitate innovation and negotiated outcomes, the 2013 Undertaking does not retain the requirement for Aurizon Network to publish the below rail elements of signed access agreements, nor does it permit the QCA to publish these access agreements in the absence of consent by Aurizon Network and the access holder.

6.7 Allocating capacity in access agreements

6.7.1 Background

While capacity expansions clearly create the most significant concerns about how capacity will be allocated, the approach to capacity allocation is also a significant issue in relation to negotiations for access to existing capacity, both in relation to renewals of access agreements and negotiations for access where available capacity exists (albeit that there is only limited available capacity on the network). The allocation of capacity created through expansions of the rail network is discussed in Chapter 7.

In this context, it remains important that the existing rail network capacity is allocated in a way that promotes the overarching objective of the access regime, namely the efficient use of, and investment in, the rail infrastructure. Fundamentally, this is achieved where capacity is allocated to its highest value use.

While this objective is clear from the QCA Act, there are challenges in implementing a capacity allocation framework which achieves this objective. Aurizon Network acknowledges that it does not readily have all of the information necessary to judge what the highest value use of capacity is, as the value of the capacity will depend on circumstances particular to the user. For this reason, there has been a tendency for the regulatory framework to adopt prescriptive, procedural based approaches to capacity allocation. However, a procedural approach by its nature gives little consideration to the value of use and, in many cases, these prescriptive approaches cannot keep up with the dynamic environment in the CQCR.

Aurizon Network has reviewed in detail its approach to allocating existing capacity in light of how best to meet the overall objective of efficient use of, and investment in, infrastructure. Aurizon Network considers that the most important issue emerging from this review is to ensure that existing capacity is allocated to users who are able and likely to use that capacity. There is substantial opportunity to improve the clarity and effectiveness of the access undertaking in this area. In doing so, the key issues are:

- the minimum requirements for gaining capacity entitlements;
- rights for renewal of existing access agreements; and
- allocating available capacity amongst competing access seekers.

6.7.2 Minimum requirements for gaining capacity entitlements

6.7.2.1 Background

As highlighted above, Aurizon Network considers that the most important issue emerging from the objective of allocating capacity to its highest value use is to ensure that existing capacity is allocated to users who are able and likely to use that capacity. As such, Aurizon Network's current and previous

access undertakings specifically provide that Aurizon Network may cease negotiations or elect not to enter an access agreement if it becomes apparent that an access seeker is unlikely to use the capacity.

While this principle is clearly established in the 2010 Undertaking, Aurizon Network believes that it would be useful to provide greater clarity around the factors it can consider in assessing whether an access seeker is reasonably likely to use access at the level sought.

6.7.2.2 UT4 Proposal

Clause 4.6(a)(iii) of the 2010 Undertaking allows Aurizon Network to cease negotiations if it is of the reasonable opinion that the access seeker has no genuine intention of obtaining access rights or has no reasonable likelihood of utilising access at the level sought. Clause 4.6(c) goes on to identify, without limitation, factors that Aurizon Network can consider in forming this opinion, including:

- whether they have (or are likely to have) rights to exit the network or unload at their destination;
- if the access seeker is an end user, whether they have (or are likely to have) an agreement with a rail operator to use the access rights; and
- the speed and timeliness of their conduct of the negotiations.

In the course of recent negotiations, there are a number of other factors that have been identified that will have a major bearing on the access seekers' ability to use the requested access rights. Although the factors listed in the access undertaking are not intended to be limiting, Aurizon Network considers that it is appropriate, on the grounds of efficiency, to identify in the 2013 Undertaking what these other critical factors are, being:

- whether they have secured (or are reasonably likely to secure) rights to other elements of the supply chain, including use of adjacent rail infrastructure as well as the right to unload at their destination – these are now included as a defined term being Supply Chain Rights;
- whether the access seeker or its rail operator has sufficient facilities (including rollingstock, provisioning facilities and storage facilities) to enable it to run train services to fully utilise the access rights sought; and
- whether the anticipated output of the source mine is sufficient to support full utilisation of the access rights sought (i.e. whether the duration of the mine will be commensurate with the economic life of the rail infrastructure).

Aurizon Network has deleted the speed and timeliness of the conduct of negotiations as a critical factor, as this is not considered to be a reliable indicator of the likelihood of an access seeker using the requested access rights. Clause 4.11(c) of the 2013 Undertaking reflects these changes. These factors are also included in Clause 7.2 of the 2013 Undertaking as general requirements that must be met for access rights to be allocated to an access seeker.

6.7.3 Renewal of existing access agreements

The position that, upon the expiry of an existing access agreements, the expiring user should have a first option to negotiate for the capacity that has been previously committed to their agreement, has been a longstanding tenet of Aurizon Network's access undertaking. While this does not provide a guaranteed ability for users to renew their access agreements under any circumstances, it does ensure that they have the right to be the first party to negotiate for access to that capacity. Provided that the relevant user

continues to meet the requirements of the access undertaking, including that it is reasonably likely to use the capacity, an end user will be able to renew its capacity entitlement (including on the terms in the SAA). Aurizon Network will maintain this position in the 2013 Undertaking as set out in clause 7.3.

6.7.4 Allocation of available capacity between competing access seekers

6.7.4.1 Queuing framework

To the extent that there is capacity available on the network, and there is competing demand for that capacity, the 2010 Undertaking provides for this capacity to be allocated on a 'first come first served' queuing policy, with Aurizon Network provided with some flexibility with regard to the re-ordering of applications in the queue in order to allow it to prioritise higher value uses of capacity. In order to implement this queuing policy, the 2010 Undertaking includes a range of provisions aimed at precisely identifying how the queue will be created and maintained. Aurizon Network considers that this prescriptive queuing framework, the details of which are set out in clause 7.3 of the 2010 Undertaking, has served its purpose and, in the current environment, is simply unnecessary given that the network is capacity constrained, and will continue to be so for the foreseeable future.

Similarly, a 'first come first served' below rail access queue represents an unreliable basis for capacity allocation where the ability to utilise those access rights is also dependent on the allocation decisions for other elements of the supply chain. The practical effect of the queue was to potentially preclude negotiation with the party most likely to utilise access rights due to a perceived priority for earlier access applications. As the queuing arrangements include provision for reordering the queue to accommodate these circumstances, the reliability of the 'first come first served' approach as a basis for allocating capacity is substantially diminished.

As the network is currently fully contracted, access applications for new capacity will typically require expansions, the allocation of capacity for which is now dealt with in accordance with the expansion provisions of the 2013 Undertaking (Clauses 8.2-8.7). The existence of a 'first come first served' queue mechanism serves no purpose in an expansion as capacity essentially must be allocated to the parties who are able to use the capacity and are ready and willing to commit to the project at the required date, given the major investment that their commitment must be able to support.

The situation of constrained existing capacity is not expected to change in the foreseeable future. In fact, it will only change if existing access holders relinquish access rights, presumably in response to a substantial deterioration in coal market circumstances. In the event that market demand declines to the point where access holders opt to relinquish access rights (noting that the access holder would have the ability and the incentive to transfer those rights to another user in the first instance), it is unlikely that a queuing mechanism would be required to allocate capacity between competing users. To date, there has never been a relinquishment of coal access rights on the CQCN (except for the purpose of facilitating a transfer of access rights, either to permit the operation of a different train service or to another operator).

Therefore, given that the circumstances that might trigger this allocation mechanism (i.e. competing access applications for existing available capacity) are highly unlikely to arise during the term of the 2013 Undertaking, or indeed in any foreseeable timeframe, the inclusion of this queuing mechanism in the access undertaking is considered unnecessary.

More importantly, experience has demonstrated that the inclusion of the queue mechanism is not benign as it creates perverse incentives which promote strategic behaviour by access seekers and adds

unnecessary complexity and uncertainty to the capacity planning process. Under the current ‘first come first served’ queuing framework, access seekers have an incentive to lodge an access application as soon as possible just to ensure a place in the queue and an option of obtaining capacity if it arises. All access seekers face this incentive, with the inevitable result that the queue is ‘stacked’ with applications, often not fully formed, with a very limited likelihood of resulting in access. This creates unnecessary costs and complexity in terms of managing the process. In effect, the ‘first come first served’ queuing mechanism promotes gaming by access seekers by creating incentives for strategic behaviour.

Moreover, while it is common to refer to ‘the queue’, the reality is that separate queues need to be maintained, not only for each system, but for different segment bottlenecks in each system. The maintenance of multiple queues for common assets means that – even were the queue able to be practically applied – it is by no means straightforward to determine with certainty which access seeker is entitled to available capacity.

The queuing approach that applies for the allocation of capacity under the 2010 Undertaking also fails to ensure that capacity is allocated in a way which maximises the efficient utilisation of the rail network. For example, the requirement under the queuing framework that Aurizon Network give priority on a ‘first come first served’ basis prevents it from allocating train paths to participants in the queue in such a manner that would maximise the utilisation of the network.¹⁰⁸ Additionally, as a procedural framework, the queuing framework has little regard to the value of use. While the provisions for re-ordering the queue are aimed at allowing some prioritisation of higher value uses, in effect these provisions primarily effect allocations between coal and non-coal traffics, and fall far short of addressing all issues that impact on the value of use, particularly between different coal services.

The ‘first come first served’ approach essentially provides a fairly simple administrative mechanism to achieve the objective of non discriminatory access. However, Aurizon Network believes it promotes outcomes that are contrary to the objects clause as it fails in any way to take adequate account of efficiency considerations, namely the allocation of capacity to its highest value use and the efficient operation and use of rail infrastructure and overall supply chain efficiency. Moreover, as noted above, it also incentivises gaming behaviour by encouraging ‘queue sitting’ by access seekers. As there are no costs associated with joining a capacity queue, access seekers associated with speculative mine developments have an incentive to lodge a request for capacity and attempt to prolong negotiations.

6.7.4.2 Alternate approach

The 2013 Undertaking addresses these negative outcomes by presenting a new approach. Recognising the low likelihood of the queuing framework actually being used as a basis for allocating capacity (and that it could actually result in outcomes that undermine the overarching efficiency objective), Aurizon Network plans to substantially simplify the 2013 Undertaking by removing this process. In the unlikely event that capacity is available to allocate to access seekers in the absence of major investment, Aurizon Network will allocate this according to capacity allocation criteria, which have been developed to more effectively target the allocation of capacity towards high value uses. In the event that Aurizon Network is not able to distinguish between access applications using this criteria, priority will continue to be awarded to the access seeker that first submitted their access application.

¹⁰⁸ For example, if Aurizon Network received three applications for a train path that is able to accommodate 20 train movements, it may be required to accept the first and second applications, regardless of whether accepting the second and third applications would result in the greater utilisation of the network (e.g. first application was for 10 train movements, the second application was for 5 movements and the third application was for 15 movements).

Importantly, the replacement of the queuing framework with these capacity allocation criteria still provides access seekers with a clear framework that must be followed in the allocation of existing capacity, while also allowing Aurizon Network to allocate capacity in accordance with its legitimate commercial interests, and consistent with the objectives of the access regime.

The use of capacity allocation criteria (rather than a procedural queuing approach) is consistent with the capacity allocation approach used by other major rail network providers, such as ARTC in the Hunter Valley and Brookfield Rail in WA.¹⁰⁹

6.7.4.3 Capacity allocation criteria

A key consideration into the future will be retaining the competitiveness of the Queensland coal industry as extracting from existing resources, and the development of new resources, becomes more marginal. The common risk to both industry and Aurizon Network is the asset stranding risk if the rail network is expanded and capacity allocated in a way which foregoes improvement in network density and the capital efficiency of the existing investment, or alternatively a marginal project displaces a more efficient project.

Therefore, in considering how to target capacity to higher value uses, the key factors that Aurizon Network will consider include:

- likelihood of use – the ability of the access seeker to use the capacity is a foundation requirement for the allocation of capacity;
- the value of use – this should at least reflect the full cost of providing the capacity, including a return on and return of capital over the life of the asset.

Aurizon Network has applied these factors to develop a set of capacity allocation criteria that it will follow in allocating any available capacity. Clause 7.5.2 provides that Aurizon Network will have regard to certain factors in determining capacity allocation between mutually exclusive access applications, such as whether the access seeker will be able to use the access rights sought, whether they can be provided without adversely affecting existing access holders, whether the proposed term is at least 10 years and whether the access seeker will be able to use the access rights on date they become available. If, after applying these factors, there are remaining mutually exclusive access applications or none of them satisfy these criteria, then Aurizon Network will enter into negotiations with those access seekers whose access rights would best meet Aurizon Network's legitimate business interests. In determining this, Aurizon Network will consider the following factors:

- ensuring Aurizon Network's revenue adequacy, namely the requirement for access charges to recover a return of and a return on capital;
- allocating capacity to its highest value use;
- promoting efficient investment in and use of the rail infrastructure, having regard to matters such as:

¹⁰⁹ For example, 1) Clauses 3.13 (e),(f) and (g) of the Hunter Valley Access Undertaking (HVAU) provide for the Australian Rail Track Corporation (ARTC) to allocate mutually exclusive access applications to the access applicant which represents the highest present value of future returns, after risks are considered. Where two or more applications are of equal present value, ARTC will allocate on a pro-rata basis; 2) The Brookfield Rail Train Path Policy approved by the Economic Regulation Authority (ERA) in February 2013 provides at section 2.2.3 that Brookfield Rail will compare the relative compliance of the access applicants with the requirements of the Railways (Access) Code 2000 and will allocate based on four general criteria. Otherwise, the allocation is based on first come, first served basis.

- the expected duration of mine life,
- the quality and saleability of the coal,
- the capital efficiency of rail infrastructure;
- the density of network utilisation,
- the contribution of the access rights sought to the long term demand for the rail infrastructure; and
- the current and future competitiveness of the relevant supply chain (particularly, having regard to the competitiveness of Queensland coal against that exported from other jurisdictions).

Coal services are specifically recognised as more favourable to Aurizon Network’s legitimate business interests than are non-coal services, except to extent that giving priority to a coal service would breach Aurizon Network’s legal obligations, such as the preserved train path obligations.¹¹⁰ Aurizon Network will specifically be prevented in clause 7.5.2(e) from prioritising capacity allocations to preference a related operator.

These general allocation criteria reflect the overall objectives of the access framework. Specifically, the objective of achieving revenue adequacy directly reflects the pricing principles in section 168(A) of the QCA Act, providing for sufficient revenue to be earned for Aurizon Network to recover at least the efficient costs of providing access, including a return commensurate with the commercial and regulatory risks involved. This is clearly central to Aurizon Network’s legitimate business interests.

The second objective, which targets allocating capacity to its highest value use, will serve to prioritise the allocation of capacity to those users who value it most. This is both consistent with Aurizon Network’s legitimate interests in contracting with access seekers who have the strongest ongoing demand for the service, and also promotes the objective of efficient use of and investment in rail infrastructure.

The final objective identifies efficient investment in and use of the rail infrastructure as a relevant factor in assessing Aurizon Network’s legitimate business interests. This in turn must have regard to factors which seek to minimise asset stranding risk (mine life, quality and saleability of coal and the contribution of the access rights sought to the long term demand for rail infrastructure) and to promote the efficient use of rail infrastructure and the competitiveness of the supply chain (capital efficiency of rail infrastructure, density of network utilisation and the current and future competitiveness of the relevant supply chain).

Aurizon Network considers that the above factors to be taken into account in allocating priority are reasonable in terms of achieving a balance in the interests of the parties and are also consistent with the legislative framework. It should be recognised that the 2010 Undertaking accepted the principle that prioritising an access application which contributed more to Aurizon Network’s commercial performance (in terms of achieving a higher net present value of returns on a risk adjusted basis) was a legitimate objective for Aurizon Network in allocating capacity. The 2013 Undertaking approach is consistent with this principle, but has modified the drafting by setting out a range of factors (listed above) that may be taken into account.

¹¹⁰ These are the obligations of a Railway Manager under section 266A of the Transport Infrastructure Act 1994.

6.7.4.4 UT4 Proposal

Renewals

The 2010 Undertaking provided priority for existing access holders to renew their access agreements by placing them at the head of the capacity queue. The removal of the procedural queuing framework has necessitated an amendment to how this principle is incorporated into the 2013 Undertaking.

Clause 7.3 has therefore been developed for the 2013 Undertaking to provide an existing access holder with a 'first option' to negotiate the renewal of its access rights, provided that:

- it does not attempt to do this earlier than three years prior to their expiry;
- an access agreement is successfully executed at least 12 months prior to expiry; and
- the term of the agreement is for a minimum of 10 years or the remaining mine life, whichever is shorter.

These provisos are generally consistent with the terms upon which Aurizon Network was prepared to renew an access agreement under the 2010 Undertaking.

Under the 2013 Undertaking, Aurizon Network will no longer be obliged to notify access holders that their rights are expiring, unless such an obligation is stipulated in the access agreement. Aurizon Network considers that access holders should bear responsibility for managing their own supply chain access rights. There is no information asymmetry which would justify Aurizon Network having such an obligation, as access holders will be fully informed of the expiry date of their own access rights and should reasonably be expected to be able to time the re-negotiation of an agreement to suit their commercial objectives.

Replacement of queuing framework with the capacity allocation criteria

Clauses 7.3.2 to 7.3.4 of the 2010 Undertaking deal with the procedures that are to be followed where access seekers lodge requests for mutually exclusive access rights, through the application of a capacity queue. For the 2013 Undertaking, these provisions have been replaced with a new framework established in Clause 7.5. As discussed above, the key provisions under this clause include:

- Aurizon Network will enter into negotiations for those access applications that meet the following criteria (clause 7.5.2(b)):
 - the access application is for coal carrying train services;
 - the grant of access rights is not subject to any expansion, customer specific branch line or other works or expenditure by Aurizon Network;
 - the access rights could be used without adversely affecting the ability of existing access holders to use their access rights;
 - the access agreement proposed is for a term of at least 10 years; and
 - where the grant of access rights requires existing capacity that will become available capacity, Aurizon Network is reasonably satisfied that the access seeker will be able to use that existing capacity on the date when it becomes available.

- Clause 7.5.2(c) provides that, where the application of the above factors do not determine priority, Aurizon Network will enter into negotiations with access seekers whose application for access rights best meets its legitimate business interests, with Clause 7.5.2(d) establishing the matters that Aurizon Network will consider in making such a decision (outlined above);
- confirming that, in making a decision regarding priority in access negotiations, Aurizon Network must have no regard to whether an access seeker is a related operator (Clause 7.5.2(e)); and
- in the unlikely event that Aurizon Network is unable to differentiate between access applications after applying the above factors, clause 7.5(f) provides that it may prioritise between the applications based on date order, where the date is that on which the acknowledgement notice for the access application was issued, or (if the access rights sought commence more than three years after that date) the date that is three years prior to the date the access rights are planned to commence.

Consequential amendments

The requirement to maintain a queue resulted in a range of matters being incorporated into the steps to negotiation (established in Part 4 of the 2010 Undertaking), to clarify how the capacity allocation queue would be established, and how it would be used in negotiations for capacity. The removal of the capacity queuing provisions creates an opportunity for simplification of the negotiation framework, as these provisions are either irrelevant or no longer have any material impact on how negotiations will proceed.

The queuing framework provided for capacity to be allocated based on a 'first come first served' approach (subject to certain queue reallocation provisions), therefore creating an intense focus on the earliest possible recording of the date of an access application. The removal of the procedural queuing framework means that the 'date of application' is unlikely to be a critical factor in allocating capacity – it is only considered in the unlikely event that Aurizon Network cannot distinguish between two access applications based on the factors in clause 7.5.2(b) and (c). As discussed in section 6.5, the negotiation process has now been simplified and streamlined, and as part of this, the provisions addressing these previous concerns have been removed.

The removal of the provisions relating to the queuing framework will also mean that there is no reasonable requirement for Aurizon Network to maintain either a capacity notification register (CNR) or a committed capacity register (CCR). Both of these registers were created to directly support the procedural requirements of the queuing framework. The provisions relating to these requirements have therefore been removed from the 2013 Undertaking.

Clause 4.1(g) of the 2010 Undertaking obliges Aurizon Network to provide access seekers with information in relation to their place in the queue. Clause 4.1(f) provides an obligation on Aurizon Network to, where an access application identifies a customer for the service, give notices about the progress of the access application to the customer as well as the access seeker – the most important of these notices related to changes in their place in the queue. Both of these clauses are therefore now superfluous and have been removed from the 2013 Undertaking.

6.8 Managing capacity in access agreements

6.8.1 Ongoing requirement for ability to utilise access rights

6.8.1.1 Background

The importance of ensuring an alignment in capacity entitlements across all elements of the supply chain in terms of the efficient utilisation of rail and port infrastructure has been previously discussed. Despite this, the 2010 Undertaking does not include an ongoing requirement for access holders to continue to demonstrate their ability to utilise their access rights (i.e. that they have complementary supply chain capacity). This means that in the event that an access holder loses its port terminal capacity entitlements, the rail network will become underutilised. While this underutilisation of access rights may eventually be captured through the capacity resumption provisions that already apply in access agreements, this mechanism operates with a substantial lag, so that there will be a period of inefficient network utilisation.

6.8.1.2 UT4 proposal

The standard access agreements under the 2013 Undertaking include new provisions relating to the need for customers to demonstrate they have sufficient capacity at an unloading point as a condition precedent to obtaining access rights and to operate its train services. Provisions have also been included which impose an ongoing requirement on access holders to demonstrate that they possess the rights to unload that will enable them to continue to have the ability to fully utilise their contracted capacity rights. Failure of the access seeker to satisfy this requirement could trigger a capacity resumption review.

The inclusion of the above provisions is consistent with the increased focus being placed on the need for users to demonstrate that they possess access to complementary supply chain capacity in all areas of the 2013 Undertaking. The proposed provisions will ensure that users are accountable for their capacity rights, in addition to ensuring alignment in capacity entitlements across the supply chain. This will prevent access holders from engaging in capacity hoarding, which is not only inefficient in terms of the use of existing capacity but can also result in Aurizon Network having to expand the network unnecessarily. It will also help ensure that existing capacity is used as efficiently as possible, which is particularly important in an environment where the network is capacity constrained. To this end, a general requirement for an access seeker to demonstrate the ability to utilise the requested access rights on a sustainable basis has been included at clause 7.2 of the 2013 Undertaking that deals with capacity management to further support the objective of maximising capacity utilisation.

6.8.2 Capacity transfers

6.8.2.1 Background

The 2010 Undertaking sets out how capacity entitlements may be transferred from one access holder to another. This is necessarily effected through an amendment to each access holder's access agreement. Based on feedback received by users, Aurizon Network has identified that there are opportunities to simplify this process.

6.8.2.2 Facilitating short term capacity transfers

Aurizon Network is aware that there is a desire by users for a more readily accessible short term capacity transfer process that would enable them to easily transfer rail capacity between themselves to match variability in planned usage. Creating this capability would require a new transfer mechanism to be developed - one that does not require amendment to each access holder's agreement, but rather

provides a right of short term assignment, akin to the 'third party shipment' provisions in the DBCT standard user agreement.

Aurizon Network considers that this issue is linked to the extent to which take or pay makes individual users accountable for utilisation of their capacity entitlements. Under the 2010 Undertaking, this accountability is diluted via the application of the system test. Under the system test, if an individual user under-rails in a year relative to contract, it will not be required to pay take or pay if the total system gross gtk exceeds the system forecast for that year. In effect, other users that are railing to (or above) contract are cross-subsidising that user.

As will be outlined in section 10.5.2, Aurizon Network has considered the implications of removing the system test on take or pay in order to ensure that individual users are made fully accountable in the event that they under-rail over the course of a year. Given the legacy issues associated with access agreements created based on different risk profiles prevailing under previous access undertakings, no change has been proposed for UT4. Aurizon Network intends to give further consideration to this issue over the course of UT4 and may seek to implement it at a later date (for example, in UT5). This will also provide existing users with an opportunity to review their contracted positions against expected actual demand.

In the event that users are fully accountable for their use of their capacity, Aurizon Network agrees that it would be necessary for this to be accompanied by a simplified short term capacity transfer mechanism that allows them to defray this liability in the event that their usage requirements change.

However, until such time, Aurizon Network considers that short term variations in capacity usage are best accommodated in the scheduling environment.

6.8.2.3 Simplification of arrangements

Notwithstanding the discussion above, Aurizon Network has sought to streamline the provisions associated with amending access agreements to transfer capacity and has moved much of the detail of these provisions to the standard access agreement. This reflects that a transfer of access rights relates more to an access holder and Aurizon Network (and will therefore be governed by the access agreement) than to the negotiation of access. The broad principles governing transfers remain as established in the 2010 Undertaking, in particular that:

- an access holder may transfer its interest in an access agreement to a third party in accordance with the provisions of that agreement;
- if an access agreement permits relinquishment of access rights and nomination by the access holder of an access seeker to use those rights, Aurizon Network will negotiate exclusively with that access seeker, subject to certain conditions relating to those rights using the capacity made available by the transfer;
- this exclusivity of negotiation does not apply to any additional access rights sought by access seeker (for example, access rights that require an expansion or customer specific branch line or additional train paths that do not use transferred access rights). This exclusivity also does not affect Aurizon Network's negotiations with another access seeker where Aurizon Network and that other access seeker are already in the process of negotiating an access agreement and that other access seeker has demonstrated that it is reasonably likely to use the access rights and, in particular, that it holds Supply Chain Rights in respect of its requested access rights; and

- Aurizon Network is not obliged to enter into an access agreement with the nominated access seeker if they do not comply with the obligations of the 2013 Undertaking.

This approach provides the nominated transferee with priority in negotiating access for the transferred rights, which are then negotiated in accordance with the access undertaking provisions. The access undertaking also clarifies the existing practice that transferring access seekers do not in effect 'jump the queue' in terms of ancillary access rights.

6.8.2.4 UT4 proposal

Clause 7.4 of the 2013 Undertaking establishes the broad principles governing capacity transfers, as outlined above. The detailed arrangements addressing how capacity transfers will be made have been moved to the SAAs.

The SAA also includes a reduction in the timeframe for a short term capacity transfer from two years (i.e. zero relinquishment fee payable for capacity transfers less than two years) to 12 months. This is considered to be a more appropriate timeframe for a short term transfer.

6.9 Promoting regulatory certainty and negotiation

As discussed previously, balanced commercial negotiation will typically provide the most efficient allocation of risk and income between an access provider and an access seeker. While the access undertaking has always clearly stated that the terms of access will be negotiated and agreed between the parties, in practice the provisions of the access undertaking have not encouraged such negotiation. As such, parties have generally adopted the standard terms of access without significant negotiation. Further, the way in which the access undertaking has developed and been administered has encouraged parties to seek regulatory, rather than commercial, solutions to matters as they arise.

Of particular note, has been the practise of 'leaving open' issues for resolution during each regulatory period, thereby promoting continual litigation of regulatory issues throughout the regulatory period. For example, in the 2001 Undertaking, there was a requirement for SAAs to be developed during the term of the UT1. The 2005 Undertaking included a requirement for a review of the form of regulation during its term, which culminated in the change from a hybrid price cap to a revenue cap.

While it would normally be considered that the requirement for such regulatory development would reduce as the regime matures, during UT3, the range of matters specifically required to be developed over the course of the access undertaking expanded dramatically, and included:

- a standard user funding agreement (SUFA);
- the incorporation of the Schedule J expansion framework into the access undertaking;
- an alternate form standard access agreement;
- a standard rail connection agreement;
- an incentive framework; and
- system rules for the CQCR rail systems.

Aurizon Network believes that the continued approach of specifying matters for further development and subsequent inclusion in the access undertaking is undesirable, both because it prevents the settling of a stable regulatory regime for the duration of the regulatory period, and also because it promotes the idea

that the best way of addressing issues that arise during the term of the access undertaking is through further development of the regulatory framework, rather than through negotiation.

Aurizon Network's philosophy for the 2013 Undertaking is that, upon endorsement of the 2013 Undertaking, it will create a stable regulatory framework for the *entire* UT4 term. Issues that are raised during the term of the access undertaking will be addressed through commercial negotiation, with referral to dispute resolution if required. Experience of this negotiation framework will then provide a guide to the regulatory arrangements that will be put in place for UT5.

7 Negotiating expansions of the network

Summary:

The framework for developing and investing in future expansions is one of the most significant issues in UT4 for all stakeholders and for the overall Queensland economy. As a result, Aurizon Network has comprehensively reviewed its processes for planning and developing capacity expansions, as well as for negotiating the terms upon which expansions will be funded, with the aim of promoting a sustainable investment environment that will deliver a network capable of efficiently meeting customer requirements into the future.

There have been major changes to the environment within which the 2013 Undertaking will operate compared to previous undertakings. The CQCR is now capacity constrained, meaning that new requests for access will nearly always require network expansions. Further, these expansions will be complex, multi-faceted projects which include multiple producers, operators, ports and funders (including user funders). A fundamentally new approach to negotiating expansions is therefore required.

The key elements of the 2013 Undertaking expansion framework have been developed against this background and are:

- Where there is sufficient interest in an expansion, Aurizon Network will commence a pre-feasibility study – while Aurizon Network will typically fund a pre-feasibility study itself, the undertaking provides an option for it to be funded by users, with pre-feasibility costs reimbursed once the project moves to feasibility stage;
- A feasibility study will be progressed where users will be sufficiently confident in their demand for capacity as to be prepared to fund that study. The 2013 Undertaking provides:
 - a Standard Studies Funding Agreement and process to select funding users, based primarily on who is most likely to use the capacity;
 - in recognition of the significant cost of a feasibility study, funding users will be granted a provisional capacity entitlement to the capacity that will be created from the project;
 - agreement to the terms on which the expansion will be funded must be reached during the feasibility stage.
- The undertaking will support commercial negotiation as the primary means upon which expansion terms are agreed, involving:
 - the adoption of SUFA as the ‘safe harbour’ arrangement for funding expansions, where the parties cannot agree on terms under which Aurizon Network will fund the expansion;
 - as a result, the 2013 Undertaking removes the ‘standard outcomes’ of negotiations, and the ex-post QCA verification of outcomes, as contained in the 2010 Undertaking;

- further, Aurizon Network has withdrawn its voluntary commitment to fund expansions of up to \$300m. Consistent with its obligations to its shareholders and the demands of financial markets, Aurizon Network must allocate capital to areas that create shareholder value, and retaining this voluntary funding commitment is inconsistent with these obligations;
- Where Aurizon Network elects to fund expansions on regulatory terms, a user voting process will be used - this process has been substantially enhanced from that contained in the 2010 Undertaking, in particular to provide for improved quality of information; and
- This expansion process links back into the access contracting framework as well as the overall capacity planning and development framework. In particular, recognising that the CRIMP requirements have not created a planning framework that meets the needs of either Aurizon Network or stakeholders, the capacity planning process has been revised, with a new Network Development Plan to document medium-long term strategies.

This expansion process is established in a new Part 8 to the 2013 Undertaking.

7.1 Introduction

The focus of this chapter is on how negotiations for the expansion of capacity will occur under the 2013 Undertaking, including the interrelationship with Aurizon Network's capacity planning and project development processes and, in particular, the available funding mechanisms.

The negotiating framework outlined in Chapter 6 related to how access negotiations will progress where capacity is available to meet an access seeker's requirements. Given, however, the strong growth in demand over recent years, the CQCR is now capacity constrained. Thus, there is little prospect that the negotiation framework discussed in Chapter 6 will, on its own, be used to acquire access to increased capacity other than at the margins. Accommodating new requests for access will, instead, nearly always require network expansions. Given the exhaustion of most low-capital intensity projects, expansions are likely to be large, multi-user and coordinated with port development. As a result, the access undertaking now needs to accommodate a complex, multi-faceted process which includes multiple producers, operators, ports and funders (including user-funders).

To this end, Aurizon Network has developed a flexible and responsive framework for expansions in Part 8 of the 2013 Undertaking (consolidating multiple parts of the 2010 Undertaking).

Aurizon Network notes that the framework for developing and investing in future expansions was one of the most significant issues during UT3. It continues to be one of the most important issues – if not the most important issue – for Aurizon Network and industry during UT4. Aurizon Network has been reviewing its expansion framework in consultation with industry stakeholders, with most of the effort to date concentrated on the development and agreement of the SUFA. As advised to industry through the SUFA consultation, the intention of Aurizon Network has always been to finalise SUFA and then consult with industry on the incorporation of an expansion process into the regulatory framework.

To that end, in March 2013, Aurizon Network provided users with an exposure draft of the expansion process. The 2013 Undertaking has incorporated the expansion process into the text of the Access Undertaking, as at that given point in time, recognising however that a constructive and ongoing process

of consultation is ongoing. The only variations that Aurizon Network has made compared to the exposure draft are:

- clarifying that the expansion process as established in Part 8 does not apply to asset replacement and renewal projects;
- removing the proposed SUFA development fee; and
- adjusting the drafting, where necessary, to integrate it into the remainder of the 2013 Undertaking document.

Aurizon Network is committed to working with producers to best meet and address any issues raised by industry. This means that the submitted document may not reflect the current status of consultation at the time of submission. In some instances, the March exposure draft of the expansion process identified areas where Aurizon Network was seeking input from industry prior to finalising a policy position. In the absence of detailed feedback at the time of submission, Aurizon Network has not sought to finalise its position on these issues, which are identified and discussed in this submission. Aurizon Network understands and expects that the 2013 Undertaking will need to be amended to reflect the outcomes of these processes, once known.

7.2 Overview of the expansion and planning framework

7.2.1 Background

Aurizon Network is committed to the long term expansion and growth of the CQCR. Its commercial interests are fully aligned with those of producers and other supply chain participants in promoting supply chain expansion as, where the network expands, so too does Aurizon Network's asset base and revenue stream. To that end, with the 2013 Undertaking, Aurizon Network re-emphasises its commitment to the following investment principles, which were originally identified at the time of submitting the 2010 Undertaking:¹¹¹

- The undertaking should provide an overarching framework regarding the process of commercial negotiation of expansions, reflect agreed principles and not be overly prescriptive.
- Aurizon Network's legitimate business interests must be protected, in that it cannot be compelled to invest shareholder capital, or incur uncompensated costs as a consequence of an expansion.
- The expansion framework should be aligned with the objectives of Part 5 of the QCA Act to promote competition in upstream and downstream markets.
- An appropriate balance of interests between the service provider and access seekers should be sought, particularly in regard to the prudence and timing of infrastructure enhancements and the acceptable conduct of Aurizon Network in negotiations.
- A credible alternative to the acceptance of Aurizon Network's proposed commercial terms should be maintained (SUFA), such that funding outcomes are reached only after effective negotiation.
- The decision-making process should be clear, predictable, and subject to dispute resolution.

¹¹¹ QR Network (2010). QR Network's 2010 Draft Access Undertaking, Volume 1 – Policy Issues, pp.32-33.

These principles apply with even stronger force post the global financial crisis and the continued financial market instability it triggered, and particularly in the context of the investor focus on Aurizon Holdings Limited as a publicly listed company and the additional financial market rigours this imposes.

7.2.2 The key elements of the expansion framework

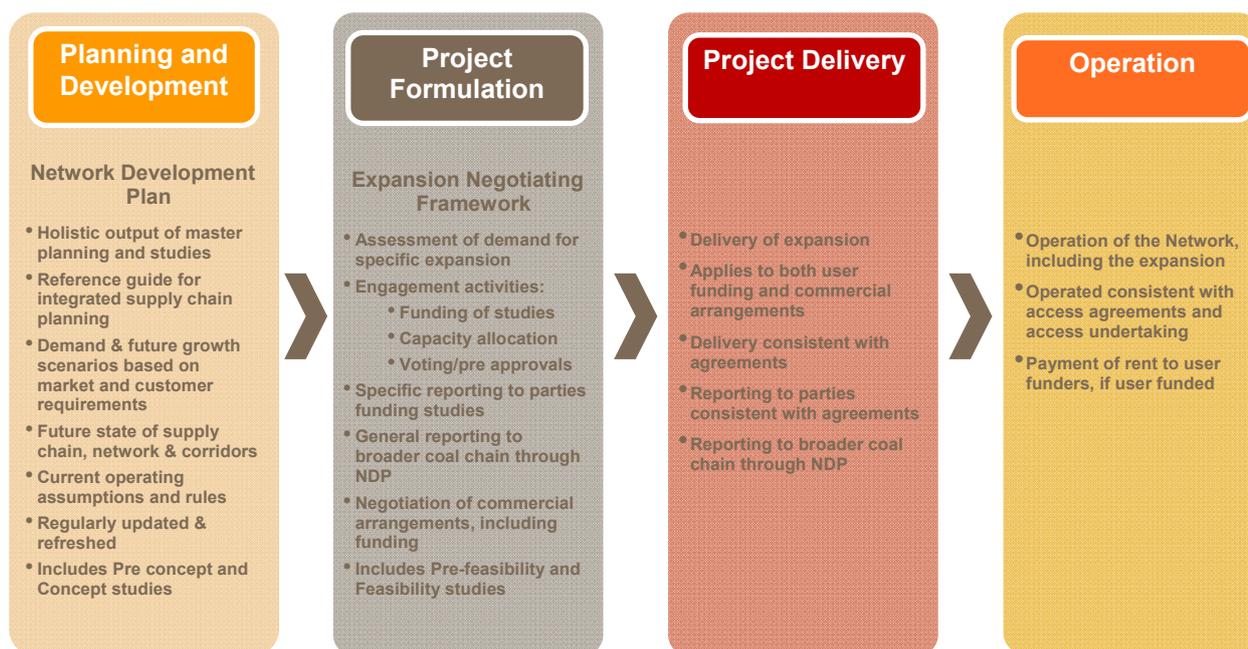
In developing its approach to the expansion framework, Aurizon Network is mindful that one of the most critical issues is ensuring that investment is appropriately scoped and timed in each element of the supply chain infrastructure to most efficiently realise a required increase in capacity. This requires a rigorous, supply chain focused planning process, both in terms of establishing the strategy for expanding capacity on the rail network, and for developing detailed plans for specific expansion projects. Because of this, the expansion process will remain closely contextualised by Aurizon Network's master planning process, referred to in the 2013 Undertaking as the Network Development Plan.

Further, given the scale of future expansion projects, many will share the same characteristics as greenfield investments, in the risks and costs associated with their development and construction. This creates quite different issues and risks that need to be considered in the negotiation process as, together with the issues associated with negotiation of access, it is necessary to gain agreement on the nature of the expansion required, and the arrangements for funding these significant expansions.

On this basis, the key elements of the framework for capacity planning and delivery under the 2013 Undertaking are:

1. The *planning and development framework* sets the planning context in which a project will proceed. This framework is centred around the medium term Network Development Plan, identifying how the rail system, as part of the broader coal supply chain, can, most efficiently and at lowest cost, expand to meet potential demand.
2. The *framework for negotiating expansions* provides for the progressive development of network expansions in close consultation with the relevant users, to ensure that scope of the expansion is optimised to reflect the needs of those users, and maximises capacity within the context of a broader supply chain expansion.

Figure 9 Overview of capacity planning and delivery framework



7.2.3 The process for negotiating an expansion

The expansion framework in the 2013 Undertaking sets out a sequential process that mirrors, in effect, the ‘project formulation’ stage of Aurizon Network’s capacity planning and delivery process. It provides for a logical progression of these key elements, but importantly retains flexibility to tailor this process to the needs of a particular project.

Aurizon Network, like all major infrastructure providers, progresses the development and assessment of projects through a stage gate process. The central concept underpinning this process is the progressive development of the technical and commercial detail of identified projects as confidence increases that the project will proceed. This process is applicable to all expansions of the rail network, whether small or large and regardless of whether they are triggered by a single user or multiple users. In all cases, it is important that the project is properly formulated and specified, consistent with the medium term efficient expansion path for the system. That noted, smaller and/or single user projects are likely to progress through the pre-feasibility and feasibility processes more rapidly than large multi user projects.

Each stage is briefly described below, with the remainder of this chapter structured to follow the sequencing of the expansion process itself.

7.2.3.1 Concept stage

The concept stage reflects the initial definition of the project. The 2013 Undertaking contemplates Aurizon Network undertaking concept studies at appropriate intervals and, given sufficiently foreseeable demand, as part of its network planning and development process. Typically a concept study would identify:

- the benefits of the project, including the rationale for undertaking the project and its strategic alignment;

- the potential users of the capacity generated by the project – this primarily relates to identification of the potential coal terminal development together with identification of the geographic range within which potential users are anticipated to lie;
- the risks associated with the project, in a qualitative form, together with an estimate of the likelihood of successful completion of the project; and
- the investment options that will be considered in the pre-feasibility stage.

7.2.3.2 Pre-feasibility stage

The purpose of a pre-feasibility study is to determine at a high level whether there is a case for the future expansion and, if so to assess the requirements for the expansion in a preliminary way, including:

- assessing and selecting the optimal design option for the project;
- identifying the likely users of the capacity generated by the project;
- identifying and prioritising risks, with mitigating actions being developed;
- establishing key financial targets for the project; and
- developing a high level execution plan.

This study will provide critical information to both Aurizon Network and users, so they can assess whether they are sufficiently confident in the net benefits of the project to proceed to feasibility assessment. The 2013 Undertaking contains detailed provisions setting out when a pre-feasibility will be undertaken and the arrangements for funding a pre-feasibility study (including provision for user funding).

7.2.3.3 Feasibility stage

The feasibility stage provides for completion of all plans and commitments necessary to support a decision to proceed with project construction, in particular:

- detailed planning of the project (including technical engineering);
- risk, contracting and procurement strategies;
- funding arrangements;
- commitments from access seekers or other counterparties; and
- a detailed project plan.

Finalising financial and contractual commitment to the project by users, based on the detailed technical studies and commercial arrangements established, is a critical milestone to be achieved in the feasibility stage. While acknowledging the increased role that commercial negotiations are to play in agreeing the terms for undertaking new investment, it is important to recognise that not all investments will be underwritten through individually negotiated commercial terms. The regulatory framework must, therefore, also retain alternative pathways for gaining the necessary commitments for projects to proceed.

7.2.4 Outline of Chapter

The following sections of this chapter explain this expansion process and its key elements in further detail, in particular:

- Section 7.3 deals with some preliminary issues, such as the type of projects that are governed by this expansion process, and the relationship between the expansion process in Part 8 of the 2013 Undertaking and the access negotiation process in Part 4;
- Section 7.4 explains how the *pre-feasibility study* will commence and be progressed;
- Section 7.5 explains the progress of the *feasibility study*, including identifying the participating users and their rights to the capacity from the project, as well as arrangements for funding and progressing the study;
- Section 7.6 discusses how the 2013 Undertaking will support negotiation as the primary means upon which expansion terms are agreed, involving:
 - the adoption of SUFA as the ‘safe harbour’ arrangement for funding expansions, to apply where the parties cannot agree on terms under which Aurizon Network will fund the expansion; and
 - as a result, the removal of other prescribed negotiating processes and ‘standard outcomes’ contained in the 2010 Undertaking;
- Section 7.7 identifies how Aurizon Network will confirm customer support for a project in the event that it elects to fund an expansion on regulatory terms; and
- Section 7.8 discusses how the outcomes of this expansion process are then converted into access rights in an access agreement, and the processes that apply in the event that an expansion does not create the expected amount of capacity (i.e. a capacity shortfall).

Finally, section 7.9 links this expansion process back into the overall capacity planning and development framework, discussing Aurizon Network’s medium term capacity planning process, and how this will guide the selection of individual expansion projects so as to ensure that the expansion of the rail system reflects an efficient expansion path.

7.3 Preliminary issues

7.3.1 Relationship between negotiations for access and the expansion process

As discussed in section 6.4.3, clause 4.4(c) of the 2013 Undertaking provides for parties to ‘step out’ of the standard access negotiation process in order to negotiate arrangements for funding and constructing an expansion. The 2013 Undertaking then contemplates parties being able to ‘step back in’ to the process for negotiating access, once some level of certainty has been reached regarding the funding and other terms of the expansion. It is expected that, in most instances, it will only be commercially feasible for an access agreement to be concluded once the terms of the expansion itself are agreed, particularly as the CQCR is now capacity constrained and new requests for capacity will, as a result, nearly always require network expansions.

That noted, Aurizon Network is well aware that in practice, negotiations rarely occur in such a structured, sequential order. Nor is there always a strict distinction between a ‘negotiation for access’ and a ‘negotiation for an expansion’, as clearly a party with an interest in one such process will also typically (although not always) be interested in the other. It follows that the access undertaking must not constrain the negotiations for funding and access from occurring through parallel processes, if that reflects the

need of the particular project or the preferences of the participants to the negotiation. This option is specifically recognised in Clause 4.4(c).

7.3.2 Scope of projects governed by the expansion process

Aurizon Network can be required, under the QCA Act, to extend, or permit the extension of, the rail network in order to create capacity to meet the requirements of an access seeker.¹¹² This obligation relates to extensions, as defined in the QCA Act, which includes enhancement, expansion, augmentation, duplication or replacement of all or part of the facility.

This requirement in relation to expansion of the network is expressly recognised in the 2013 Undertaking, which identifies the circumstances in which Aurizon Network is obliged to expand the rail infrastructure in accordance with the provisions in the access undertaking. Neither the QCA Act, nor the access undertaking, can compel Aurizon Network to fund any such expansion.

The process for expanding the rail network is now set out in Part 8 of the 2013 Undertaking. The scope of application of this expansion process is established in Clause 8.2.1.

7.3.2.1 Asset renewals and replacements

Consistent with the 2010 Undertaking, the expansion process will not be applied in relation to asset replacement or renewals. Aurizon Network has existing obligations to maintain the network in a fit state in order to meet the requirements of its access agreements and its safety accreditation, including renewing or replacing the assets as necessary to do so. The costs of such renewal or replacement are included in the assessment of the MAR and, hence, provided for in the applicable reference tariffs.

This is achieved in the 2013 Undertaking through the explicit exclusion of asset replacement from the definition of Expansions, and through the inclusion of clause 8.2.1(c) confirming that Aurizon Network will be responsible for funding any asset replacement expenditure that is necessary to maintain the existing capacity of the rail infrastructure.

7.3.2.2 Obligation to expand the facility

Clause 8.2.1(b) provides that Aurizon Network will fund, construct or permit an extension of the network (where the activities reflect the broad definition of an extension under the QCA Act) in certain circumstances, including where it meets the definition of an expansion in accordance with the 2013 Undertaking. As noted in 7.3.2.1 above, this clearly excludes asset renewal and replacement expenditure that is necessary to maintain the existing capacity of the rail infrastructure, in respect of which Aurizon Network's obligations are established through its access agreements, rather than through the access undertaking.

The remaining circumstances where Aurizon Network's obligation to expand the network apply are established in Clause 8.2.1(b)(ii)-(v). Clause 8.2.1(b)(ii) provides that Aurizon Network must be satisfied (acting reasonably) that:

- the expansion is technically and economically feasible and consistent with the safe and reliable operation of the rail infrastructure;

¹¹² S118, Queensland Competition Authority Act, Queensland 1997 provides that, in an arbitration, a determination may be made that requires an access provider to extend or permit the extension of a facility, while s119 restricts this to only be in circumstances where the access provider is not required to pay the costs associated with that extension and that the authority is satisfied that: the extension is technically and economically feasible and consistent with the safe and reliable operation of the rail infrastructure; and that the legitimate business interests of the owner or operator are protected.

- Aurizon Network's legitimate business interests are protected; and
- if Aurizon Network is not the owner of the relevant Rail Infrastructure, the legitimate business interests of the owner are protected.

These requirements directly reflect the matters that the QCA would be required to consider under s119 of the QCA Act in enforcing Aurizon Network's obligation to extend, or permit the extension of, the facility. As such, it is important to incorporate these concepts into the 2013 Undertaking as issues that must be satisfied in order for Aurizon Network's obligation to expand the network to be triggered. This recognises that, even if an access seeker is prepared to fund an expansion, Aurizon Network retains a fundamental interest in ensuring that the expansion is reasonable and appropriate in the context of its existing railway and that Aurizon Network's legitimate business interests are protected.

Clauses 8.2.1(b)(iii)-(v) reflect the underlying philosophy of Aurizon Network's commitment to expand the infrastructure, that is, that expansions will occur where either Aurizon Network agrees (at its election) to fund the expansion, or users agree to fund it. This is also consistent with the requirements of s119 of the QCA Act in that, while the QCA can enforce the obligation for Aurizon Network to expand the facility, it cannot require Aurizon Network to pay for that expansion.

7.3.2.3 Mine specific rail spurs

The capacity expansion process in Part 8 only relates to expansions of Aurizon Network's existing rail infrastructure, and not to the construction of new mine specific rail spurs. As discussed in sections 5.8.3 and 6.3.2, the development, ownership and management of mine specific rail spurs is, and should remain, a contestable service. As such, Clause 8.2.1(d) provides that the structured expansion process in the 2013 Undertaking does not apply to the development of mine specific rail spurs.¹¹³ Any negotiations between Aurizon Network and users in relation to such developments will occur on a purely commercial basis, noting that the connection of any private infrastructure to Aurizon Network's rail infrastructure is governed under Part 9 of the 2013 Undertaking.

7.3.2.4 Responsibility for investigation and design of expansions

Consistent with Clause 4.5.2(e) of the 2010 Undertaking, Aurizon Network retains responsibility for the investigation and design of expansions and extensions necessary to accommodate access to the rail infrastructure by an access seeker. This is implemented via Clause 8.2.1(j) of the 2013 Undertaking, which states that Aurizon Network will be the person responsible for the investigation and design of any Expansion or Customer Specific Branch Line. Importantly, the inclusion of customer specific branch lines in this provision only relates to those that will be owned or leased by Aurizon Network. Where such branch lines are developed privately and connected to the rail network, Aurizon Network's interest in the investigation and design of the private infrastructure relates to the connecting infrastructure, in accordance with Part 9 of the 2013 Undertaking.

7.3.2.5 Obligation to not delay expansions

Consistent with the 2010 Undertaking, Aurizon Network commits in Clause 8.2.1(g) that it will not unnecessarily and unreasonably delay any expansion that it is obliged to construct in accordance with the 2013 Undertaking.

¹¹³ Clause 8.2.1 sets out the rights and obligations of Aurizon Network to fund, construct or permit the creation of new infrastructure. Clause 8.2.1(b) sets out the circumstances where Aurizon Network will extend, or permit the extension of, the rail network, while Clause 8.2.1(c) specifically notes that Aurizon Network is not obliged to develop customer specific branch lines, and as such, the terms of this Undertaking don't apply to any negotiations with respect to the development of those branch lines.

As Aurizon Network's primary commercial incentive is, in fact, to create and sell capacity, it has a clear interest in identifying where there may be demand for an expansion. There is no incentive for Aurizon Network to fail to commence an expansion project, or to delay that project, where there is demand - in fact, quite the opposite, given the financial incentive in expansions.

However, Aurizon Network acknowledges that there remain concerns from some quarters that it may choose not to commence the expansion process, or to 'go slow' in progressing an expansion project, even in the presence of industry demand.

The 2010 Undertaking provided that, if Aurizon Network did not progress an expansion in response to user demand, access seekers could refer this issue to dispute. In any arbitration of such dispute, the QCA has the power to require Aurizon Network to allow users to 'step in' and undertake the necessary scoping and planning studies themselves.

While Aurizon Network accepts the policy basis for this provision, the use of such 'step in' provisions will be problematic in practice. While it may be possible for users to collectively procure a concept, pre-feasibility or feasibility study, the end result of that study still needs to be an expansion project that is acceptable to Aurizon Network, who is the party ultimately responsible for implementing it. Therefore, while Aurizon Network acknowledges the legitimacy of the users' concerns about how they can ensure that the studies required prior to the execution of any funding arrangements for an expansion project will be progressed in a timely manner where there is demand for the project, Aurizon Network would like to explore whether there are mechanisms that will more effectively address these concerns in practice.

7.3.3 Interdependent expansions

It is important to recognise that expansion projects are not developed in isolation of each other. For any coal system, there may be multiple expansions that incrementally build on each other in sequence to increase the capacity of the system. Further, the interconnection of the systems means that an expansion on one system may affect proposed expansions on another system.

As a result, it is critical that the expansion process recognises the sequential and interdependent nature of the projects, particularly:

- that the scope and cost of an expansion may assume the completion of an earlier expansion, and as such will necessarily be impacted if for any reason the earlier expansion does not proceed in the manner or timeframe as expected; and
- the capacity created by an expansion cannot be allocated unconditionally until the outcome of any earlier expansions is known with certainty.

Clause 8.2.2 of the 2013 Undertaking establishes the principles of how the expansion framework will be applied, given the interdependence of expansions. These principles are reflected in the process set out in Part 8 itself.

7.3.4 Participation of end users in the expansion process

Recognising that, in many cases, end users will play a lead role in the expansion process regardless of whether they are technically the access seeker for an expansion, the 2013 Undertaking includes specific arrangements to recognise the role of end users in the expansion process.

Noting that the 2013 Undertaking's requirements on access seekers may technically not apply to end users, provisions have been included in Part 8 of the 2013 Undertaking to confirm the processes that will

bind end users where they elect to participate in negotiations for expansions. Consistent with the approach taken for access negotiations, the 2013 Undertaking also identifies the circumstances where Aurizon Network can cease negotiating with either an access seeker or end user regarding an expansion.

These arrangements are established in Clause 8.2.4 of the 2013 Undertaking, which provides:

- for an end user to notify Aurizon Network that it will be the negotiating party with respect to a pre-feasibility study, feasibility study or expansion, and including confirmation that it will be bound by the terms of the Undertaking (Clause 8.2.4(a)-(b));
- allowing Aurizon Network to cease expansion negotiations with an end user or access seeker where they have materially failed to comply with the provisions of the 2013 Undertaking in relation to funding the cost of a pre-feasibility study, feasibility study or expansion (Clause 8.2.4(c)).

7.3.5 Identification of sufficient demand to commence expansion process

7.3.5.1 Background

The catalyst for the commencement of the expansion process is a determination that there is sufficient real demand for capacity to warrant the expense of a pre-feasibility study.

Aurizon Network is in regular contact with the port authorities, port terminal owners and developers within the CQCR. This, together with information that Aurizon Network receives through access inquiries and applications as well as its own market analysis, means that Aurizon Network is well placed to anticipate market demand for additional capacity, and determine when an expansion might be warranted.

In prior access undertakings, the question has arisen as to whether Aurizon Network's assessment of prospective demand is sufficient, or whether an additional level of prescription is required. The intent of such has been to make the scoping of a project essentially determined by prospective users rather than Aurizon Network's market assessment, or at least, by objective criteria.

In this respect, the 2010 Undertaking required that Aurizon Network would conduct a request for proposals (RFP) process in a number of pre-determined circumstances (e.g. where requests for additional capacity exceeded a certain benchmark). The intent of the RFP was to enable all potential users to submit an expression of interest in relation to obtaining capacity resulting from an expansion. The purpose of this process was to identify the parties that may be interested in obtaining capacity (and how much capacity they would be interested in obtaining), their willingness to fund studies, and if necessary the expansion project itself, if required by Aurizon Network.

7.3.5.2 Issues with mandatory RFP processes

Prior to a particular project being scoped, and a pre-feasibility study commenced, the key issue for Aurizon Network is to be able to understand the potential size of a supply chain expansion (i.e. the potential port terminal capacity) and the geographic region from which coal will be sourced. The compulsory RFP process in the 2010 Undertaking was essentially aimed at the transparent discovery of that information.

However, an RFP can be a highly ineffective way to gauge interest in expansion capacity, particularly when undertaken at an early stage. If entry to the process is costless and essentially amounts to a 'free option' to gain expansion capacity, an RFP can result in total capacity requests varying wildly from the size of any likely expansion. This means that a poorly-timed RFP will generally provide limited useful

information as to actual market demand. In this regard, the RFP process undertaken by Aurizon Network in late 2011 received requests for in the order of 700mtpa additional capacity to a range of port locations – an impracticable number of inquiries at too early a stage in the planning process.

More generally, Aurizon Network considers that automatically ‘triggering’ an RFP through a pre-determined benchmark is commercially unsound. Assessing whether the demand for capacity is ‘real’, as opposed to speculative, requires judgment and discretion. At any one time, Aurizon Network is typically processing numerous access inquiries and other market intelligence that relate to highly prospective demand. The risk of an automatic trigger is that this sort of data is wrongly identified as representative of short-run market demand, and thus costs are needlessly incurred.

The other justification for a mandatory RFP process has been to ensure that all interested users gain an opportunity to participate in the expansion process. By requiring a mandatory RFP process be followed, Aurizon Network is prevented from progressing an expansion project directly with known interested users in order to ensure that this does not exclude potential users that Aurizon Network is either not aware of, or that Aurizon Network does not consider sufficiently prospective. The mandatory RFP process was, in part, designed to reduce barriers to entry into the market for mining tenements and export coal markets by giving all potential users an opportunity to participate in the expansion process on an equivalent footing.

As has been discussed in Chapter 4, the access undertaking is intended to promote effective competition in dependent markets. This concept was discussed in detail in section 4.4.1.1, which established that most markets that are dependent on rail access (including the coal tenements market and the global export coking and thermal coal markets) are already globally competitive. As a result, the terms of Aurizon Network’s access undertaking are not likely to have any material impact one way or another on the effectiveness of competition in these markets. The existence of any economic or public benefit from including a mandatory RFP process in the access undertaking in order to minimise barriers to entry to the coal market is therefore highly uncertain.

Of course, if undertaking an RFP were costless, then perhaps the inclusion of such a process in the undertaking would be benign. However, for Aurizon Network to scope, design and solicit responses to an RFP will generally take 4-6 months, followed by an extensive and impracticable process to filter responses. This can add significantly to the time required to progress a project and, as a result, significantly detracts from Aurizon Network’s ability to respond to user demand in a flexible and timely way.

Aurizon Network acknowledges that, at the time of inclusion of the mandatory RFP process in the 2010 Undertaking, there was also some concern that Aurizon Network may be able to advantage its related operator through the way that it would progress expansion projects, including the selection of projects and the speed of negotiation. However, as has been evidenced in negotiations for major expansions to date, including GAPE and WIRP, these expansion projects are typically progressed by the end users well in advance of their selection of their preferred rail operator. In both of these cases, most users did not select their preferred rail operator until the commitment to all of the supply chain infrastructure expansion projects were secured. In this context, Aurizon Network considers that concerns about it using the expansion negotiation process to advantage its related operator are misplaced.

As such, Aurizon Network has not retained a regulatory obligation to conduct an RFP process as part of initiating an expansion project, although such a process may well be adopted on a case by case basis if this is necessary.

7.3.5.3 UT4 proposal

Aurizon Network does not consider that any level of regulatory prescription is required as to how prospective demand for an expansion is discovered, and the expansion process commenced. As noted above, Aurizon Network has no incentive to fail to commence an expansion project where there is demand.

To that end, clause 8.2.3 of the 2013 Undertaking provides that Aurizon Network will, from time to time, determine whether there is likely to be sufficient demand for an expansion. In making this assessment, Aurizon Network will use whatever means and information it considers appropriate, including access applications received, any expression of interest process that it may conduct and general market information from a range of sources. Clause 8.4(a) further provides that, having made that assessment, if Aurizon Network determines that there is likely to be sufficient demand for an expansion, it will undertake a pre-feasibility study in response, subject to acceptable funding arrangements being agreed (discussed below).

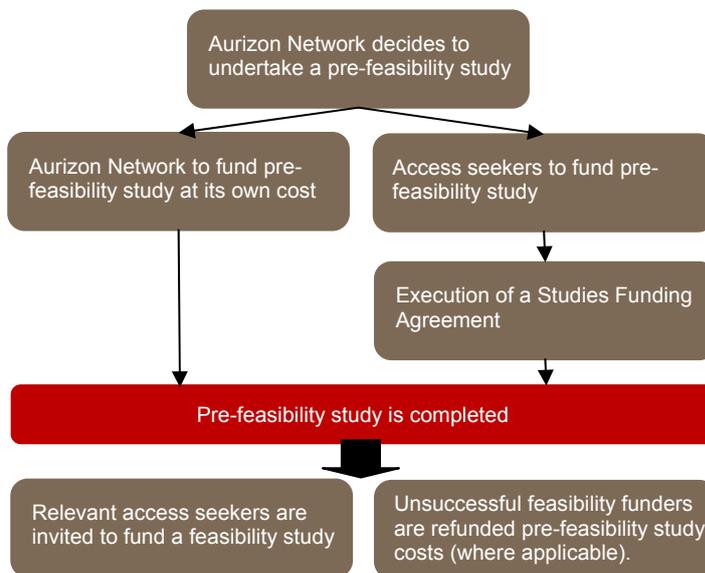
As discussed in section 7.3.2.5 above, Aurizon Network is also willing to explore with users and the QCA whether there is an effective and practical remedy that can apply in the event that Aurizon Network does not progress the expansion process as required under this framework.

As previously noted, where Aurizon Network has received an access request that cannot be met in the absence of an expansion, Clause 4.4(c) of the 2013 Undertaking provides for the negotiation to be suspended until such time that the arrangements for funding the extension are agreed. Where there is insufficient demand to warrant commencing the expansion process, then the negotiation process will remain suspended. Clause 4.4(f) requires the access seeker to confirm to Aurizon Network its ongoing requirement for the access rights, every six months. Where an access seeker fails to do so, Clause 4.4(g) provides that Aurizon Network may cease the access negotiation process.

7.4 Pre-feasibility study

The pre-feasibility stage provides for progressive development of the technical and commercial aspects of a project. The 2013 Undertaking sets out arrangements for the commencement of a pre-feasibility study, the funding of that study, the capitalisation of study costs, and the transition of relevant access seekers for the project from the pre-feasibility stage to the feasibility stage. This is illustrated stylistically in the diagram below.

Figure 10 Stylised representation of pre-feasibility stage



7.4.1 Progressing a pre-feasibility study

7.4.1.1 Options for commencing and funding of a pre-feasibility study

Issues

A pre-feasibility study is a substantial body of work, with the total cost of the study typically ranging from 1.5-2% of the total project cost. Determining which party funds those costs, and then how those costs are recovered, is a central issue in commencing a pre-feasibility study.

In the 2010 Undertaking, the costs incurred in undertaking a pre-feasibility study are recovered from all end users through the reference tariff, initially via inclusion in the capital Indicator. They are ultimately included in the RAB (and recovered through reference tariffs) either on commissioning of the project (as part of the total project cost) or on formal cessation of the project. The QCA accepted that:

“...the costs associated with the studies are a legitimate cost of QR Network’s capital expenditure regime.”¹¹⁴

The treatment of those overall project costs (e.g. allocation between expanding and non-expanding users) is then considered as part of the development of the relevant reference tariffs.

At pre-feasibility stage, while potential users for the capacity created by the project may have been identified, there is likely to be significant uncertainty about which of these users will eventually proceed. In fact, it is quite likely that the potential users identified at this stage will substantially exceed the expected built capacity of the project, e.g. there may be 60 mtpa worth of identified potential volume for a rail network expansion which is aligned with a studied port capacity expansion of 30mtpa.

¹¹⁴ Queensland Competition Authority (2009). Draft Decision, QR Network 2009 Draft Access Undertaking, December, pp.31-32.

Thus, in many cases, it will be appropriate for Aurizon Network to undertake and fund the pre-feasibility study. This approach is likely to be preferred where there is significant uncertainty around the ultimate users of the capacity (indeed, whether producer or operator) and their sources of coal. If Aurizon Network were to seek user funding of the pre-feasibility study, the funders will reasonably seek to focus the study on their specific requirements. By retaining full responsibility for the pre-feasibility study, Aurizon Network can ensure that the study addresses a broad range of matters encompassing the potential impacts on the network.

Where Aurizon Network does elect to fund a pre-feasibility study, and expects the costs to be material and/or there to be a broad range of potential beneficiaries, Aurizon Network may seek a user vote prior to commencing the study. This process is discussed further in section 7.7. This approach has previously been taken in relation to pre-feasibility studies for capacity expansion, e.g. in the Goonyella system, a user vote supported \$50 million of expenditure.¹¹⁵ This pre-feasibility study identified 15 projects that are now substantially technically progressed and which can be further developed once demand has been confirmed.

There will be some cases where user funding of a pre-feasibility study is appropriate. Most simply, in some instances, Aurizon Network will elect not to fund a study, for example, where Aurizon Network is less confident of the likely demand than prospective users. Equally, where a project has only a small range of feasible sources of coal, it may be appropriate to target the pre-feasibility study to the specific requirements of the most likely relevant users.

UT4 proposal

Clause 8.4(a) of the 2013 Undertaking provides that, where Aurizon Network determines that there is likely to be sufficient demand for an expansion project, it will progress a pre-feasibility study, subject to either:

- Aurizon Network choosing, at its discretion, to fund the pre-feasibility study itself; or
- where Aurizon Network chooses not to fund the study, access seeker/s (or their customers) agreeing to fund the full cost of the pre-feasibility study.

7.4.1.2 User funding of pre-feasibility studies

Identification of pre-feasibility funders

As noted above, at pre-feasibility stage, there may be significant uncertainty about which potential users will eventually require capacity from the expansion. Further, it is quite likely that the prospective demand identified at this stage will substantially exceed the expected built capacity of the project. In all likelihood, as the pre-feasibility study progresses, the pre-feasibility studies for other necessary investments such as the mine development and port terminal will also be underway. As these assessments advance, the most viable users of the expansion capacity will emerge.

In this context, Aurizon Network does not consider it appropriate to seek to identify the most likely eventual users of the expansion project at this stage. Instead, where Aurizon Network elects not to fund a pre-feasibility study, it will give the opportunity to fund that study to a broad range of users – only requiring that they can show that there is a reasonable prospect that they may use capacity created

¹¹⁵ Queensland Competition Authority (2010). Final Decision re; 2009 Customer Vote, 23 April, approved concept and pre-feasibility studies totalling \$64m being for \$11m in Blackwater, \$50m in Goonyella, \$1.5m for new feeder station at Wotonga and \$1.5m for renewing/replacing /Callemondah feeder station.

by the extension. The alternative, which is Aurizon Network attempting to assess the most likely user of the capacity, will amount to Aurizon Network 'picking winners'.

A consequence of this is that participation in a pre-feasibility study cannot be assumed to create a provisional right to the capacity from the eventual project. Such an approach would be highly inappropriate, as there is unlikely to be sufficient expansion capacity to meet such a provisional right for all likely users.

Therefore, to protect the legitimate commercial interests of funding users, the 2013 Undertaking ensures that, in the event that they do not ultimately gain capacity from the project, they are reimbursed their pre-feasibility costs. To achieve this, when a project proceeds to feasibility stage, Aurizon Network will include the pre-feasibility costs as part of the funding requirements for the feasibility study, and reimburse all pre-feasibility funders the costs that they incurred.

Studies Funding Agreement

Where potential users agree to fund a pre-feasibility study, they will enter into a pre-feasibility studies funding agreement with Aurizon Network. To facilitate this process, Aurizon Network has developed a suite of Standard Studies Funding Agreements (SSFA) including one specifically designed for the pre-feasibility study stage (Pre-feasibility SSFA). As is the case with other aspects of negotiating with Aurizon Network, it is always open to negotiate non-standard terms. However, the Pre-feasibility SSFA provides a reasonable 'safe harbour' for such negotiations.

Chapter 15 of this submission provides an explanation of the key terms of the SSFAs.

An important element of negotiation for a pre-feasibility study funding agreement is acceptance of the scope of the pre-feasibility study, its budget and the timeframe within which it will be completed. These are all required to be documented in schedules the pre-feasibility study funding agreement.

Dispute resolution

The raising of disputes in relation to the schedules to the pre-feasibility study funding agreement (i.e. matters around the scope, budget and timing of the study) leads to some unique issues under the undertaking. First, it is essential that the same parameters are included in all of the pre-feasibility study funding agreements in relation to a given project. This is imperative, as Aurizon Network cannot have different obligations in different agreements in relation to issues such as scope and cost of a single pre-feasibility study. Therefore, it is necessary for the 2013 Undertaking to provide that, to the extent that these issues are disputed by one pre-feasibility funder, the outcomes of the dispute will be binding on all pre-feasibility funders.

However, there is a real risk in a multilateral negotiation such as this, that not all parties will have the same preferences and objectives in relation to the study, and it is quite conceivable that not all users will be operating to the same target timeframe. While one participant may be happy to delay finalisation of an agreement to resolve an issue through dispute, this may be contrary to the interests of other participants. Creating a framework that encourages rapid resolution of disputes in these circumstances is the most effective means of allowing valid concerns to be resolved, while still ensuring that the expansion process meets the timing requirements of users. The ability for disputes about the pre-feasibility studies funding agreement to be rapidly resolved has been highlighted by users in response to Aurizon Network's consultation on the expansion process.

Further, Aurizon Network believes that it would be highly desirable to provide the expert with guidance about how such a dispute should be resolved. These guidelines may include matters such as:

- a requirement that the scope of a study be not inconsistent with the Network Development Plan;
- the need for capacity decisions to reflect the then current System Operating Assumptions;
- a requirement that the scope of the study reflect infrastructure standards and reliability standards consistent with the existing network;
- guidance in terms of the acceptable impact of the project on existing users of the network; and
- guidance in terms of how the expert should balance the objectives of the various pre-feasibility funders.

Aurizon Network has sought the views of industry participants on the matters to be addressed in such guidelines, and as such has not sought to include specific guidelines in the 2013 Undertaking at this point.

UT4 Proposal

Clauses 8.4(b)-(i) of the 2013 Undertaking address the circumstances where a pre-feasibility study is funded by users. It specifically provides for the following:

- that the parties who will be given an opportunity to fund the pre-feasibility study will be those access seekers (or their customers) who have borne the impact of a capacity shortfall or who are otherwise reasonably likely to use capacity arising from the expansion (Clause 8.4(b));
- the pre-feasibility funders will enter into a pre-feasibility studies funding agreement in the form of the SPFA incorporated in the 2013 Undertaking, unless otherwise agreed between the parties (Clause 8.4(c));
- at minimum, Aurizon Network and the pre-feasibility funders will need to agree the scope of the pre-feasibility study (Clause 8.4(d));
- where a dispute arises in relation to the scope of the pre-feasibility study or the completion of the schedules to the pre-feasibility funding agreement, the dispute will be directed to an expert for resolution, and the determination of that dispute will be binding on all pre-feasibility funders (Clause 8.4(e)-(g)); and
- where the expansion progresses to a feasibility study, the pre-feasibility funders will be reimbursed their costs, which will from that point then be treated as a feasibility study cost (Clause 8.4(h)).

While Aurizon Network considers that there would be significant value in incorporating principles to guide the resolution of disputes on the scope, budget and timing of pre-feasibility studies, it is preferable to gain the views of industry participants on these matters prior to such guidelines being drafted. As such, no such guidelines have been included in the 2013 Undertaking at this stage.

7.4.1.3 Treatment of study costs

As with the 2010 Undertaking, pre-feasibility study costs will be treated as a project cost which will therefore be incorporated into the RAB either on commissioning of the project or on cessation of the project.

The only exception to this will be in the event that pre-feasibility funders have not been fully reimbursed their costs, in which case those costs that have not been reimbursed to those funders will be excluded from the project costs to be incorporated into the RAB.

UT4 Proposal

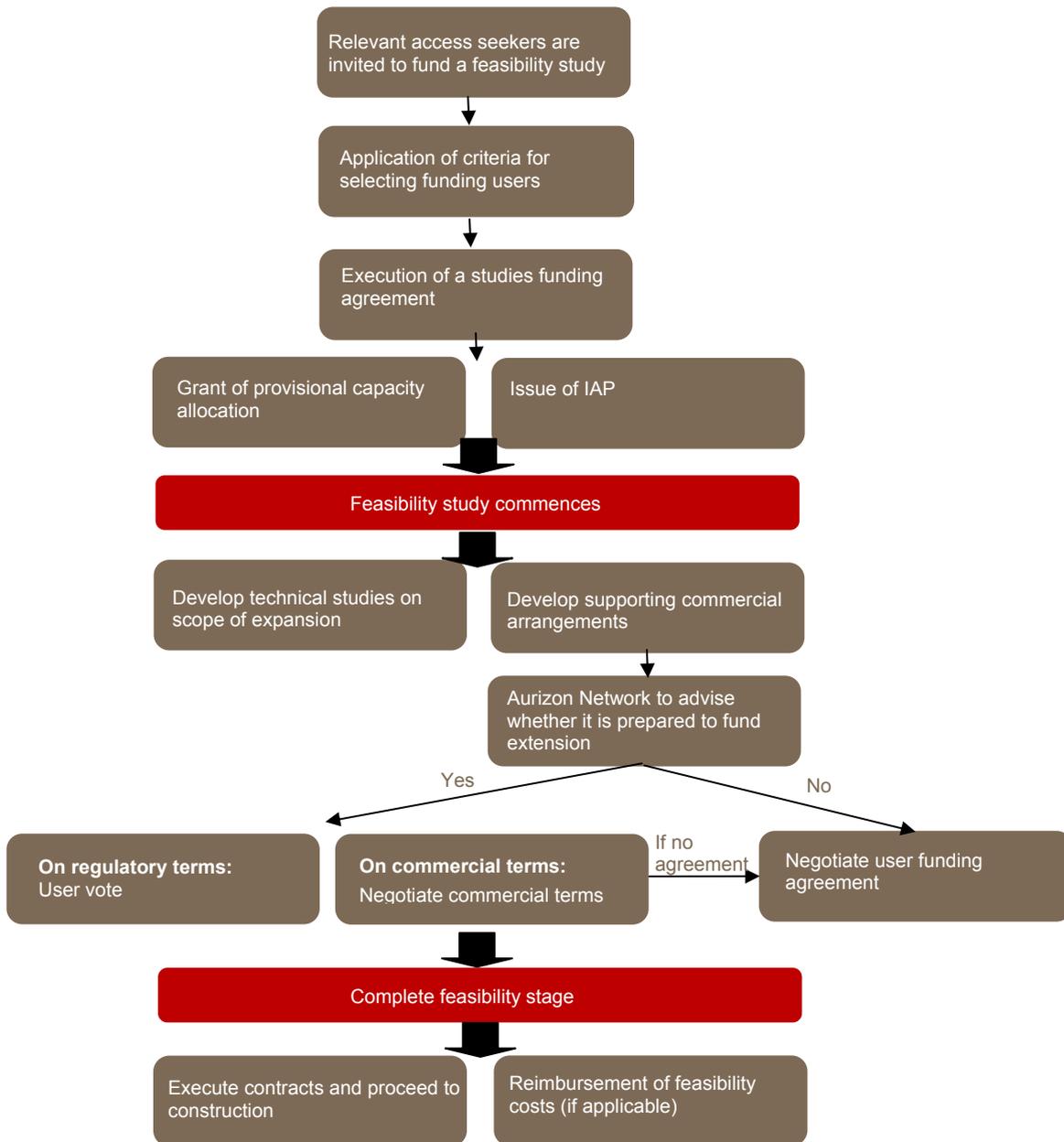
Clause 8.4(i) confirms that the capital expenditure for an expansion includes the costs of the pre-feasibility study for that expansion, but excludes any pre-feasibility costs not reimbursed to pre-feasibility funders.

7.5 Feasibility study

As noted earlier, the feasibility stage provides for completion of all plans and commitments necessary to support a decision to proceed with project construction. Finalising contractual commitment to the project by users, based on the detailed technical studies and agreed commercial arrangements, is a critical milestone to be achieved in the feasibility stage.

The 2013 Undertaking sets out arrangements for the commencement of a feasibility study including the funding of that study, the rights of funding users to capacity from the extension. It also establishes matters that need to be addressed during the feasibility stage, most particularly reaching agreement on the terms for the expansion. This is illustrated stylistically in the diagram below.

Figure 11 Stylised representation of feasibility stage



7.5.1 Progressing to feasibility study from pre-feasibility

Upon completion of a pre-feasibility study, Aurizon Network will advise potential users (including user pre-feasibility funders, where applicable) of the outcomes of the pre-feasibility study. Where users have funded the pre-feasibility study, they will be provided with the full pre-feasibility report. Otherwise, users will be provided with summary information on the key outcomes of the pre-feasibility, which may include:

- the proposed enhancements;
- the expected increase in available capacity;

- the expected cost of the enhancements; and
- an indicative timeline for the expansion.

Potential users will need to advise Aurizon Network if they remain interested in participating in the expansion and, if so, confirm the amount of capacity they require.

Based on this information, if Aurizon Network determines that there is likely to be sufficient demand for the extension, then it will undertake a detailed feasibility study. In most cases, given the cost of the study, a feasibility study will only be progressed where Aurizon Network has identified users who, in aggregate, have firm intentions to use all of the capacity to be created by the project. In these circumstances, the study will be progressed in close consultation with these users, who will also be required to fund the study. However, Aurizon Network has retained the option to elect to fund a feasibility study itself.

This proposal is reflected in Clause 8.5(a) of the 2013 Undertaking.

While recognising the need for feasibility studies and the likelihood that they would be required to be funded by users, the 2010 Undertaking did not provide any framework for how such studies would be progressed, or the rights and obligations of the funding parties. Aurizon Network considers that including this framework within the 2013 Undertaking will substantially improve clarity for all stakeholders around the process for progressing an expansion proposal to a feasibility study.

7.5.2 User funding of the feasibility study

7.5.2.1 Identification of feasibility funders

Feasibility studies are the most complex and detailed of studies that are typically undertaken on the rail infrastructure, with total costs typically ranging from 2-3% of the total project cost. By the end of the feasibility stage, approximately 4-5% of the total project cost may have been spent on the concept, pre-feasibility and feasibility studies.

As noted above, given the advanced nature of the study, it will typically only be progressed where users have demand that will, in aggregate, fully utilise the capacity to be created by the project. To ensure that this user demand is sufficiently firm, these users will be required to fund the feasibility study, which will be progressed in close consultation with those users. These are referred to as the feasibility funders.

If it is not possible to accommodate all users who are seeking capacity, Aurizon Network will select the feasibility funders based on the following criteria:

- first, where a prior capacity shortfall exists, and this expansion will create capacity that could reduce or remove that capacity shortfall, those access seekers (or their customers) who have previously borne the impact of that capacity shortfall - Aurizon Network considers it essential that these access seekers be given the first opportunity to obtain capacity from the expansion, as is discussed in more detail in section 7.8 below;
- then, those access seekers (or their customers), who are best able to utilise the capacity that will be created by the expansion – in making this assessment, Aurizon Network will take into account the same factors as it will consider in relation to whether Aurizon Network is prepared to enter into an access agreement with an access seeker (as discussed in section 6.7), in particular:
 - whether they have secured, or are likely to secure, the rights to unload at their destination or to exit the network;

- whether they have secured, or are likely to secure, a rail haulage agreement for the services;
- whether they (or their rail operator) have sufficient facilities to enable them to run those services; and
- whether the anticipated output of the mine is sufficient to support full utilisation of the access rights sought;
- finally, where Aurizon Network cannot reasonably distinguish between access seekers on this basis, then Aurizon Network will select those access seekers (or their customers) who best meet Aurizon Network's legitimate business interests, based on the same criteria used when allocating existing capacity, as discussed in section 6.7.

In recognition of the significant financial commitment required from users for the feasibility study, it will be necessary at this stage to provide feasibility funders with confidence around their expected allocation of capacity. As such, Aurizon Network will create and allocate provisional capacity allocations to users who are funding feasibility studies. This is discussed in section 7.5.3 below.

7.5.2.2 Feasibility Studies Funding Agreement

Where potential users agree to fund a feasibility study, they will enter into a feasibility funding agreement with Aurizon Network. As with the pre-feasibility study, to facilitate this process, Aurizon Network has developed a Feasibility SSFA, again explained in Chapter 15 of this submission.

Consistent with the approach to funding pre-feasibility studies, any disputes on the scope of the feasibility study or the completion of the schedules to the feasibility funding agreement will be directed to an expert for resolution, and any outcomes resolved by expert resolution will be required to be incorporated in all feasibility funding agreements for that project. Again, consistent with the pre-feasibility approach, Aurizon Network intends to develop, in consultation with users, principles to guide an expert in resolving disputes.

7.5.2.3 UT4 Proposal

Clauses 8.5(b)-(i) of the 2013 Undertaking address the circumstances where a feasibility study is funded by users. It specifically provides for the following:

- Clause 8.5(b) provides that, where the capacity created by an expansion will be insufficient to meet the aggregate demand from all interested users, the parties who will be given an opportunity to fund the feasibility study will be:
 - first, those access seekers (or their customers) who have previously borne the impact of a capacity shortfall;
 - then, those access seekers (or their customers) who are best able to utilise capacity from the expansion, having regard to the factors specified in clauses 8.4(b)(ii)(A)-(D); and
 - finally, where Aurizon Network cannot reasonably determine which access seeker is better able to utilise capacity, then Aurizon Network will allocate capacity based on its legitimate business interest, having regard to the matters referred to in clause 8.2.1(c).
- the feasibility funders will enter into a studies funding agreement, in the form of the SSFA incorporated in the 2013 Undertaking, unless otherwise agreed between the parties (clause 8.5(c));

- at minimum, Aurizon Network and the feasibility funders will need to agree the scope of the feasibility study (Clause 8.5(d)); and
- where a dispute arises in relation to the scope of the feasibility study or the completion of the schedules to the feasibility funding agreement, the dispute will be directed to an expert for resolution and the determination of that dispute will be binding on all feasibility funders (clauses 8.5(e)-(h)).

7.5.3 Provisional capacity allocations

7.5.3.1 Issues

As discussed above, in most cases, feasibility studies will be funded by the users who will benefit from the expansion project. However, in order for them to be prepared to fund studies, Aurizon Network accepts that they will need to have confidence in the allocation of capacity that they will receive in the event that the project goes ahead.

To address this issue, Aurizon Network has introduced the concept of provisional capacity allocations. Provisional capacity allocations will be created and assigned to feasibility funders once the feasibility funding agreement becomes unconditional. Subject to the expansion achieving the expected increase in capacity (discussed below), this will then be converted to an access entitlement when the project proceeds.

While the purpose of the provisional capacity allocations are to create certainty of future capacity allocations for those users who are funding the feasibility study, there may be some circumstances where it is necessary to reallocate these provisional capacity allocations in order to ensure that projects are able to proceed without undue delay and that capacity is ultimately allocated to its highest value use. Therefore, Aurizon Network will preserve the ability to withdraw a provisional capacity allocation where it is no longer likely that the access seeker will be able to use the access rights. In such case, and subject to any restrictions in the feasibility funding agreement, Aurizon Network may reallocate the access rights to another party or alternately, if it considers that demand for that expansion has weakened, it may demote that expansion in the planned expansion sequence, or cease to further consider that expansion altogether.

7.5.3.2 UT4 proposal

The 2013 Undertaking establishes arrangements for the creation and allocation of provisional capacity allocations in clause 8.5(i)-(k). Once a feasibility funding agreement is unconditional, clause 8.5(i)(i) provides that the feasibility users will be issued with an IAP in relation to the access rights sought and, subject to them providing a notification that they intend to proceed with that access application as required by clause 8.5(j), they will be granted a provisional capacity allocation in accordance with clause 8.5(i)(ii). This also provides a mechanism to 'step back in' to the access negotiation process in Part 4 of the 2013 Undertaking, as the access negotiation process may then proceed from this point.

Clause 4.4(d) provides that, where access seekers have sought access to capacity that will be created by an expansion, access negotiations may be suspended with any access seekers who do not hold a provisional capacity entitlement. This ensures that provisional capacity entitlement holders are given a priority in negotiating access in relation to expansion capacity.

Aurizon Network may only withdraw a provisional capacity allocation from a feasibility funder where the circumstances in clause 8.5(k) apply. This provides that the provisional capacity allocation can be withdrawn where:

- the access seeker is unlikely to be able to fully utilise the relevant access rights having regard to the matters in clauses 8.4(b)(ii)(A)-(D) – this is consistent with Aurizon Network’s ability to cease access negotiations with an access seeker where they are unlikely to be able to fully utilise the access rights, considering the same factors;
- the relevant mine or port (including expansion, where relevant) is not proceeding, so that it is reasonably likely that the access seeker will not be able to use the relevant access rights;
- the relevant feasibility funding agreement is terminated, or the funding user does not pay amounts due under that agreement; or
- Aurizon Network and the access seeker (or its customer) do not execute an agreement in relation to the funding and/or construction of the expansion within six months (or such longer period as agreed) after the feasibility study is completed.

In such circumstances, subject to the terms of the relevant feasibility funding agreement, Aurizon Network may take whatever action it considers appropriate, including either reallocating the provisional capacity allocation, demoting the expansion in its proposed expansion sequence, or ceasing to consider the expansion altogether.

7.5.4 Treatment of feasibility study costs

7.5.4.1 Issues

As is the case for the pre-feasibility study, the cost of the feasibility study will be treated as a project cost which will therefore be incorporated into the RAB on commissioning of the project.

To ensure that this does not result in any double recovery of costs, the feasibility funding agreement provides that:

- once agreement to the terms of funding the expansion has been reached and the parties have unconditionally committed to proceeding with the expansion project (whether funded by Aurizon Network or by users); and
- provided that the feasibility funder is a party to those agreements and will use access rights that will be created by the expansion project;

then the costs of the feasibility study contributed by that feasibility funder will be refunded.

7.5.4.2 UT4 proposal

The circumstances where feasibility costs are reimbursed to funding users are specified in clause 8.5(l). Clause 8.5(m) then confirms that the capital expenditure for an expansion includes the costs of the feasibility study for that expansion, but excludes any feasibility costs not reimbursed to feasibility funders.

7.6 Negotiating the terms for funding an expansion

As noted in Chapter 3, one of the main changes between the UT4 environment and prior regulatory periods is the predominance of private, rather than public, capital in the funding of expansions. As with other supply chain participants, Aurizon Network does not have unlimited access to capital and is subject to rigorous financial market and investor scrutiny. It must, therefore, allocate scarce capital to whichever competing investment has the greatest potential to promote shareholder value. This means, simply, that Aurizon Network funded expansions will only proceed where the risk/return of the expansion is attractive

relative to other investment opportunities open to the Aurizon Group. This capital rationing issue is a basic business driver applying to all businesses. It, therefore, should not be considered controversial, even where shareholders are owners of natural monopoly infrastructure.

In Aurizon Network's case, delivering value to its shareholders means undertaking investments in new network capacity where it is able to earn an appropriate rate of return for the risk involved. The QCA Act entitles Aurizon Network to earn a return on investment that is "at least commensurate with the regulatory and commercial risks involved" (s 168A(a)). Whereas opinions may differ on the exact level of risk (and, thus, return) the simple premise is that, where Aurizon Network believes the return to be inadequate, it retains an ability under the QCA Act to withhold funding. In this event, the purpose of the SUFA framework is to provide users of the network with a funding alternative.

That noted, there may well be circumstances where Aurizon Network is prepared to invest on the basis of the arrangements established in the regulatory framework. In such circumstances, it is appropriate that the regulatory framework continue to include mechanisms for confirming user acceptance of those projects, through a user vote process.

7.6.1 Users may elect to fund an expansion

7.6.1.1 Issues

The 2013 Undertaking provides users of the CQCN with the option of funding an expansion in the event that Aurizon Network is not willing to fund it, or is only willing to fund it on terms unacceptable to the users. As such, it prevents Aurizon Network from exerting monopoly power from its position as the only party who can expand the network, in order to demand unduly favourable terms for an expansion.

The 2013 Undertaking does not provide for user funding of investments as a 'first option' for users. This differs from the 2010 Undertaking, where clause 7.5.5(a) provides that users are able to fund extensions even if Aurizon Network is willing to do so.

Aurizon Network considers it appropriate that it has the first option in relation to funding an expansion where it is willing to fund on terms equivalent to that of a user funder (i.e. for a regulated return). Aurizon Network is responsible for the CQCN under a 99 year lease from the State Government, and under the *Transport Infrastructure Act 1994*, and is responsible for any expansions to that network. The provision enabling users to elect to fund even when Aurizon Network is willing to do so, suggests that the first option in relation to funding rests with users, rather than the party who is responsible for the asset – Aurizon Network. Otherwise, if both Aurizon Network and users are willing to fund an expansion, it is not clear how the responsibility for funding would ultimately be resolved, which could unnecessarily delay projects.

Therefore, the 2013 Undertaking provides that users may fund an expansion only if Aurizon Network is either not willing to do so, or is only willing to do so on terms that differ from the standard regulatory terms (that is, on commercial terms). This position is a reasonable balance between the interests of the access provider and the access seeker. In effect:

- where Aurizon Network is prepared to 'match' the expected return of a user-funder, by investing without requiring any additional terms or conditions (or return) other than that compensated through the SAA, it will maintain full control over the asset, which is key to the preservation of its legitimate business interests;

- where Aurizon Network is not prepared to accept an equivalent return to a user-funder, but rather requires terms and conditions in addition to those in the SAA (which may include requiring an additional return to compensate it for additional risks), then user funding on the terms in SUFA (or as otherwise negotiated) becomes available.

In order to allow users adequate time to consider the best funding model, Aurizon Network recognises that it is essential that they are provided with timely advice on whether Aurizon Network is prepared to fund the expansion and, if so, the terms upon which it is prepared to fund it. Consistent with its philosophy that the 2013 Undertaking facilitates effective commercial negotiations, Aurizon Network confirms that it will be willing to progress negotiations on a user funding agreement in parallel with negotiations in relation to the terms on which it would be willing to fund an expansion.

7.6.1.2 UT4 proposal

Clause 8.6 of the 2013 Undertaking establishes the right for users to fund an expansion. Clause 8.6.1(a) allows users to elect to fund an expansion where Aurizon Network is not willing to do so, or is only willing to do so on commercial terms that are unacceptable to the users.

Clauses 8.6.1(b) establishes that, where an expansion is subject to a feasibility study being funded by users, Aurizon Network is obliged to notify the funding users, within 60 business days of the feasibility funding agreement becoming unconditional, of whether it may be willing to fund the expansion. Where Aurizon Network is funding the feasibility study itself, it will provide this notification to all relevant access seekers at an appropriate point during the feasibility study. While this notification will include an indication of the terms upon which Aurizon Network is prepared to fund the expansion, this need not be a comprehensive statement of terms, e.g. in the form of draft agreements. If no notice is provided, then Aurizon Network is taken to be not willing to fund the expansion (clause 8.6.1(c)), although Aurizon Network may subsequently notify the parties of its willingness to fund an expansion in accordance with clause 8.6.1(f).

Clauses 8.6.1(d)-(e) provide that, if Aurizon Network does indicate it is willing to fund the expansion, then it and the relevant users will negotiate in good faith to agree the terms upon which this funding will occur. Such negotiations may occur in parallel with negotiations for a user funding agreement, allowing the users to preserve and progress both options until such time that they have determined whether they are willing to accept Aurizon Network's commercial terms.

7.6.2 SUFA provides a reasonable 'safe harbour' for negotiations

7.6.2.1 Background

A SUFA has been developed to provide a reasonable and effective framework where users elect to fund an expansion themselves. Clause 7.5 in the 2010 Undertaking required Aurizon Network to develop and submit to the QCA, in consultation with stakeholders, a proposed SUFA. SUFA was initially submitted to the QCA in December 2010 and since then, Aurizon Network has negotiated a number of iterations with industry, with the most recent version resubmitted to the QCA in December 2012.

The SUFA framework – comprising the SUFA model and the associated legal documents – provides a robust and credible option for rail expansions to proceed should Aurizon Network not be willing to fully fund them. In this situation, SUFA enables access seekers to fund the costs of an expansion in a workable, efficient, non-prejudicial and flexible way.

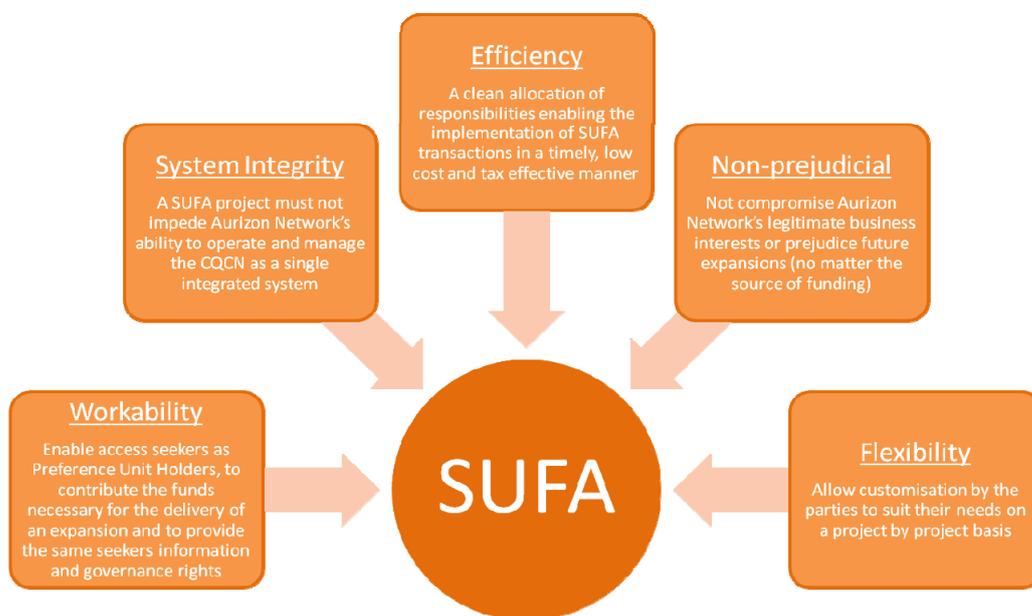
An overview of the SUFA framework is provided below, with more detail provided in Chapter 14 of this submission. The proposed SUFA framework is fully consistent with Aurizon Network’s December 2012 SUFA submission to the QCA.

7.6.2.2 The SUFA model

Noting that there are no established SUFA models for common-user railroads anywhere in the world, an innovative contractual framework was required to both ensure SUFA was effective, and also compliant with the QCA Act.¹¹⁶ To that end, as noted, the SUFA model has been developed over a relatively long and involved consultation process, with Aurizon Network having worked with stakeholders for some eighteen months. Some of the key issues considered via the consultation process include tax effectiveness, hybrid funding arrangements, the trust funding mechanism, the credit standing of preference unit holders under the unit trust, and the direction to pay arrangements.

The SUFA model includes nine interrelated agreements that, together, create a framework for user funding of expansions. In developing and negotiating SUFA, the principles of system integrity, workability, efficiency, non-prejudice and flexibility have been enshrined in the framework, as summarised below. These principles ensure that the key concerns of participants have been formally recognised and where mitigation mechanisms are required, a set of conditions have been collectively agreed between users, Aurizon Network and the State (as ultimate owner of the CQCN).

Figure 12 Principles for the development of the SUFA model



A comprehensive outline of the SUFA model is set out in the Explanatory Notes accompanying Aurizon Network’s lodgement of the SUFA in December 2012. The SUFA model is centred around a unit trust (the

¹¹⁶ Importantly, the SUFA framework gives effect to the provisions that relate to expansions in the QCA Act, which state that the QCA cannot “...require an access provider to pay some or all of the costs of extending the facility” [s119(2)(c)]. Further, if the QCA does make a determination requiring an access provider to extend the facility, it must also impose: “...a requirement under the determination on a person other than the access provider to pay the costs of extending the facility.”[s 119(5)(c)]. In addition, s 119(2)(b) prohibits the QCA from making an access determination that results in “the access seeker or someone else, becoming the owner, or 1 of the owners of the facility, without the existing owner’s consent”

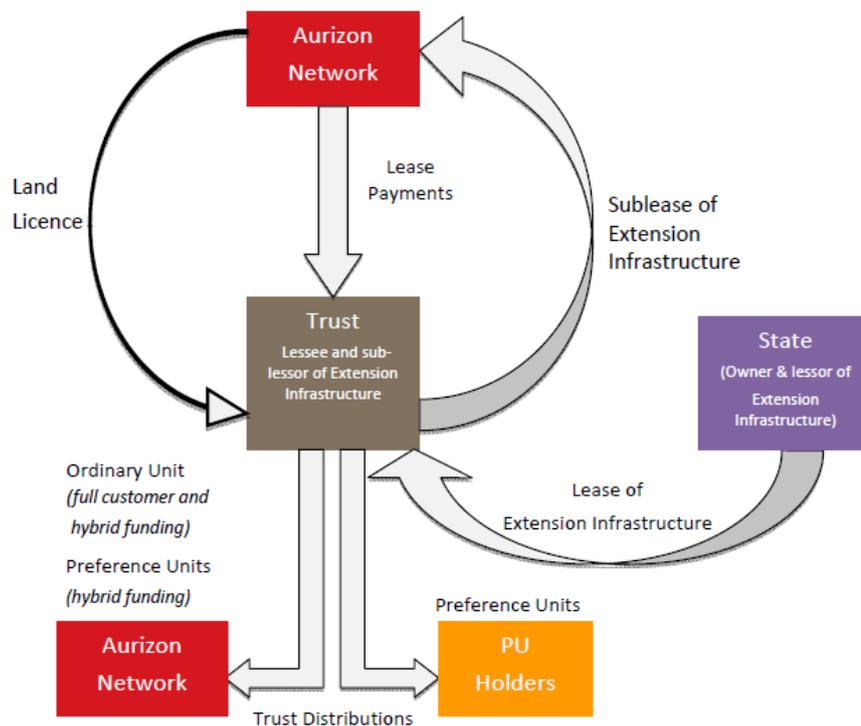
Trust), where SUFA project assets incorporated into the relevant railway system are owned by the State and leased to the Trust, which sub-leases them to Aurizon Network (extension infrastructure). The SUFA model is presented below.¹¹⁷

Importantly, the SUFA framework can be applied flexibly to different expansion circumstances. For example, it can be used:

- for single user expansions;
- for multiple user expansions; and
- for multiple user expansions where some users wish to fund their share of the expansion themselves, and others are happy for Aurizon Network to fund the expansion on agreed terms.

By ensuring that the resulting rail infrastructure continues to be managed by Aurizon Network, the use of SUFA for one expansion does not impact on funding choices that are available to users of a subsequent expansion.

Figure 13 Overview of the SUFA Model



7.6.2.3 SUFA provides a reasonable ‘safe harbour’ for negotiations

Users have always had an effective option under the QCA Act to fund expansions by obtaining an access determination requiring Aurizon Network to expand the network. However, the time and cost involved in developing a reasonable, tax-effective legal framework for this to occur has made this option prohibitive. The investment of Aurizon Network and industry in SUFA however, has meant that the option for users to

¹¹⁷ For simplicity, the diagram and the subsequent description are restricted to Queensland Treasury Holdings (QTH), which owns most of the infrastructure currently leased to Aurizon Network. If a SUFA project requires changes to the rail infrastructure leased to Aurizon Network by Queensland Rail (Aurizon Network’s other infrastructure lessor), an additional SUFA lease from Queensland Rail to the Trust is required.

fund expansions themselves has now become an effective constraint on Aurizon Network's negotiating power.

In effect, SUFA reflects a reasonable 'safe harbour' position, constraining Aurizon Network's ability to charge an uncompetitive rate for new investment. This is because the cost of investment for a user via SUFA is not inherently higher than if Network invested directly. In particular:

- the cash flows associated with an infrastructure enhancement are effectively risk neutral between Aurizon Network as owner or the user as an effective economic owner (within the statistical margin of error of the CAPM); and,
- the SUFA model is transaction cost effective, given the extensive work that has undergone for the development of the standard agreements, and also relative to the overall costs of expanding the network.

On this basis, Aurizon Network considers that the proposed SUFA framework represents an appropriate balance between Aurizon Network's interests and the interests of users, and therefore is a suitable 'base case' for negotiations around the funding of expansions. Importantly, this 'base case' ensures Aurizon Network is not able to abuse a position of market power in negotiations on expansions, for example, by requiring unreasonable terms and conditions. This is because, if the parties fail to agree on these terms and conditions, user funding can be invoked.

Aurizon Network considers that the inclusion of SUFA as a 'safe harbour' for negotiations has a number of key benefits. First, it reinforces the primacy of commercial negotiations in all matters relating to access, including the funding of expansions. It does this in a way that provides for an appropriate balance of interests between the service provider and access seekers. Second, it provides a credible and robust path for users to fund expansions where Aurizon Network is unwilling to do so (as originally contemplated under the QCA Act). As a result, it acts as a material constraint on misuse of market power, as users have a clear option, if they do not want to accept terms and conditions that Aurizon Network might seek to impose in order for it to fund an expansion. This should ensure timely and efficient investment in below rail network infrastructure.

Equivalent investment risk

Effectively, SUFA ensures that users will receive essentially the same returns on their investment in the rail infrastructure and take on an equivalent level of risk as would Aurizon Network, had it invested itself in accordance with the regulatory framework. This has been confirmed through a detailed analysis, performed by Deloitte, of the cashflows returned to users under SUFA compared to those that Aurizon Network earns through the standard regulatory framework (refer to Annexes for the full report).

Deloitte identify that, compared to an expansion fully funded by Aurizon Network in accordance with the regulatory framework, users will have a slightly higher risk profile under SUFA. This is attributable to:

- Aurizon Network having direct control over the operation and maintenance of the network;
- users being exposed to the broader risk of Aurizon Network default; and
- user funders being exposed to the potential default of another user funder during the construction phase.

However, Deloitte concluded that the materiality of any risk differential between a user funded expansion and one funded by Aurizon Network would be within the statistical margin of error for the CAPM. In effect,

this suggests that there is no materially greater risk of a user funded expansion as against one funded by Aurizon Network, such as to suggest that the cost of capital on the former would be higher than on the latter.

Transaction-cost effectiveness

In its report, Deloitte identifies that there are some additional costs that will be imposed on user funders under SUFA that would not necessarily be incurred if Aurizon Network funded the investments. Amongst these additional costs are increased transaction costs (i.e. the costs of negotiating the final SUFA document with Aurizon Network, the costs of negotiations between the individual user funders in terms of how the negotiation will proceed, and the costs involved in establishing and maintaining the necessary SUFA structures).

Aurizon Network acknowledges that there will be some level of 'SUFA specific' transaction costs, though there is no reason to expect that these costs are such as to undermine the effectiveness of the model.

Most obviously, many costs that will be incurred in setting up a SUFA model will be of a similar order as would be the case if Aurizon Network funded the expansion. While an Aurizon Network funded expansion might appear simpler from the user's perspective, in that it is contractually more straightforward, there will still be a very detailed consultation process with expanding users regarding the scope and procurement of the expansion. Further, many of the 'back end' costs in obtaining and securing finance are in fact still incurred. Privatisation has brought a diversity of capital sources to Aurizon Network, but this has necessarily meant increased complexity in prudent management of capital and project finance.

Of course, some costs that will be incurred under the SUFA model would not have been incurred if Aurizon Network funded the investment in accordance with the regulatory framework. For example, such costs include the project management fee and the transaction costs associated negotiating the various agreements. Whilst these costs are not immaterial, they must be considered in the context of the overall project, and the cost of alternative funding mechanisms. As noted previously, most expansions of the network will be large, lumpy and coordinated with port expansions. The negotiations around matters such as the scope of the supply chain expansions required, and the terms for funding and use of those expansions will be major endeavours, for both users and service providers. In this context, the cost of establishing a trust and associated legal structures under SUFA will reflect a small fraction of the transaction costs being incurred as part of the development of the whole supply chain expansion.

Noting the above, it is important to highlight that the benefit of SUFA as a *standard*, is that the vast majority of the costs associated with its negotiation and design of the user funding framework have already been incurred. The substantial costs incurred by both Aurizon Network and industry in developing SUFA are essentially a front-loading of the costs that might otherwise have needed to be incurred in the context of a particular expansion. The front-loading of costs in this way has meant that most SUFA specific costs can reasonably be expected to be administrative, and consistent with the ordinary, reasonable business costs associated with setting up and operating a trust.

In the SUFA DAAU, these costs (the SUFA development costs) were proposed to be held in a cost pool, and progressively recovered from users of all expansions with a value in excess of \$25 million (whether funded by users or Aurizon Network), by charging a SUFA development fee. However, in framing the 2013 Undertaking, Aurizon Network has elected to absorb these costs. As such, the SUFA development fee arrangements have not been included in the 2013 Undertaking.

The position of small producers and SUFA

Aurizon Network notes that some parties may raise concerns about the accessibility of the SUFA model for small mining companies who may be seeking to develop a coal deposit. Similar concerns were raised in the context of the 2010 Undertaking and essentially revolve around the concern that a small company will not be able to cost effectively access funds to invest in rail infrastructure expansions.

Aurizon Network acknowledges that some small companies may have difficulty in raising the finance required to fund a major investment in rail infrastructure. However, this is not because of any particular feature of the SUFA model. Developing a mine is, by its nature, a highly capital intensive exercise, and a mine developer needs to raise a substantial amount of funds for both the mine development and the development of a range of supporting infrastructure. It is an unfortunate fact that not all companies will be in a position to raise all of the funds required for mine development, nor in a position to raise the funds to participate in a SUFA funded expansion.

However, the important issue for Aurizon Network's access undertaking is not whether it minimises barriers for small mining companies to enter the export coal market. The export coal market is clearly a globally competitive market, and as discussed in section 4.3.1, there is no need for specific provisions to be included in Aurizon Network's access undertaking in order to protect and enhance competition in the export coal market.

By providing users with an option to ensure that the rail infrastructure will be expanded where it is commercially viable to do so, whether through Aurizon Network or users funding that expansion, the SUFA model will support further development and expansion of the export coal market. Importantly, by facilitating development of the export coal industry, this investment framework will allow small mining companies to maximise the value of their deposits. Even if they are not initially in a position to raise all necessary funds themselves, they will be in a position to ensure that the development pathway for their deposit is clear, should a funding source become available.

7.6.2.4 UT4 Proposal

Clause 8.6.2 of the 2013 Undertaking sets out the process that will apply where users intend to fund an expansion. Essentially, this provides for:

- users to give notice that they intend to fund the expansion;
- a requirement for Aurizon Network and the funding users to negotiate in good faith for a user funding agreement; and
- the user funding agreement will be in the form of SUFA unless otherwise agreed.

Consistent with the approach to funding pre-feasibility and feasibility studies, in order to ensure that disputes can be resolved quickly, any disputes on the scope of the expansion project or the completion of the schedules to the user funding agreements will be directed to an expert for resolution. Any party to the negotiations may refer an issue to dispute, but the resolution of that dispute will be binding on all parties to the user funding agreements, as it is essential for all of the user funding agreements for an expansion project to be consistent. These arrangements are established in clause 8.6.3. Again, principles to guide the resolution of disputes on a schedule to a user funding agreement will be developed in consultation with users.

7.6.3 Removal of the voluntary commitment for Aurizon Network to fund expansions

At the time of finalising the 2010 Undertaking, (the then) QR Network gave a voluntary commitment to fund infrastructure enhancements valued at below \$300 million at the regulated WACC. As noted by the QCA at the time:¹¹⁸

“QR Network has included in its 2010 DAU a voluntary commitment to fund infrastructure enhancements, valued at below \$300 million, to expand the network to meet the requirements of an access seeker. This is a significant commitment as it is not an obligation imposed by the QCA Act.”

QR Network made this voluntary commitment in the context of significant uncertainty around how an acceptable and cost effective user funding framework could be developed, given the transaction costs applicable to such an arrangement at the time. Moreover, this voluntary commitment was given in response to industry concerns about the prospect of an investment deficit post QR National’s IPO. However, the circumstances applying at that time have changed significantly. First, the aforementioned industry concerns about an investment deficit have not been borne out. Since privatisation, there has been no suggestion, in any context, that Aurizon Network has failed to expand or invest in the asset. Indeed, Aurizon Network is proposing in the order of \$2 billion in additional capital expenditure over the four years of the 2013 Undertaking.

Additionally, since this voluntary commitment was provided, Aurizon Network has become part of a publicly listed company, which has a legal obligation to only invest in projects that will improve shareholder value. Aurizon Holdings Limited does not have an unlimited capital base and Aurizon Network is competing for capital that could be allocated to other opportunities within the Aurizon Group that may offer a more attractive risk/return profile for its investors. It is, thus, not appropriate for this voluntary commitment to be maintained, as the Aurizon Group is required to assess every project against whether it is in the interests of its shareholders for capital to be committed. It is not sustainable for Aurizon Network to maintain this commitment, as it would mean that it is locked into an obligation to fund expansions that would not necessarily provide an appropriate return on capital.

It is important to note that this voluntary commitment to invest in enhancements below \$300 million is separate and in addition to the clear contractual obligation in the access agreements and the 2010 Undertaking for Aurizon Network to maintain the network in a fit for purpose state. Aurizon Network will need to fund and undertake the necessary renewals and replacement capital expenditure to meet those obligations.

Further, as discussed above, there now exists a credible alternative for the funding of infrastructure.

7.6.3.1 UT4 Proposal

In light of these changes, and against this background, Aurizon Network has not included in the 2013 Undertaking a pre-committed funding obligation for network expansions.

It is noted that Aurizon Network cannot be obliged under the QCA Act to commit the business to allocate capital to new investment where it does not consider the rate of return on that investment to be commensurate with the commercial and regulatory risks involved. Equally, where Aurizon Network earns a rate of return commensurate with the commercial and regulatory risks, and there is sufficient certainty that this will prevail over the economic life the asset, it will be appropriately incentivised to fund all or part

¹¹⁸ Queensland Competition Authority (2010). QR Network’s 2010 DAU: Final Decision, September. p 31.

of an expansion. Further, with SUFA now part of the 2013 Undertaking, there is a clear alternative to Aurizon Network funding expansions, making the policy basis for the voluntary commitment redundant.

7.6.4 Removal of QCA approval of non-standard terms for expanding the network

As outlined in section 6.4, Aurizon Network considers it important that the regulatory framework allows for parties to negotiate non-standard, commercial terms. This is particularly important in relation to facilitating expansions of the rail infrastructure, as it has already been established that the risks associated with expansions are likely to be materially different to the risks associated with the existing infrastructure.

The 2010 Undertaking contains numerous restrictions on Aurizon Network's ability to negotiate non-standard terms in the context of funding an expansion. These are referred to as 'Access Conditions' in clause 6.5 of the 2010 Undertaking. These provisions limited the circumstances where Aurizon Network could require access conditions as part of an access agreement. Further, where it could require access conditions in relation to 'Significant Investments', the 2010 Undertaking imposed prescriptive processes about how they would be negotiated, including the requirement for QCA review and approval of the access conditions.

Restrictions on the circumstances where Aurizon Network could require access conditions have been included in access undertakings since UT1, in recognition of the significant uncertainty around alternate means of funding investments. As there was no clear path for users to fund investments themselves, Aurizon Network has historically been prepared to offer restrictions on when and how it could seek non-standard terms to support its investment in the rail infrastructure.

For the 2010 Undertaking, as discussed above, stakeholders were concerned that a privatised Aurizon Network would potentially attempt to abuse its market position, by threatening to delay or withhold investment in order to secure favourable terms for expansions. In the absence of an available alternate to Aurizon Network funding these expansions, Aurizon Network agreed to apply additional constraints on how it would negotiate access conditions in relation to 'Significant Investments'.

The hope of stakeholders was that, by requiring that access conditions for 'Significant Investments' be approved by the QCA, this framework would, in effect, be able to force Aurizon Network to fund 'Significant Investments' either on standard regulatory terms, or on regulatory endorsed variations to these terms. However, this hope is fundamentally inconsistent with the statutory framework and, as a result, is impossible to achieve.

As discussed above, Aurizon Network cannot be obliged under the QCA Act to commit the business to allocate capital to new investment where it does not consider the rate of return on that investment to be commensurate with the commercial and regulatory risks involved. Therefore, if the QCA determines through this process that the access conditions are unreasonable and need to be altered, it cannot force Aurizon Network to then invest on the basis of the altered access conditions.

As a result, the access conditions framework is, at its core, futile, in that the outcome that it is designed to achieve is incompatible with Aurizon Network's statutory rights. Additionally, this framework fundamentally alters the dynamics of the commercial negotiation by prescribing what terms and conditions can (and cannot) be negotiated, and also involves the QCA at the beginning and end of any negotiation process. This is inconsistent with the intent of an access undertaking, and the negotiate-arbitrate model itself. In this respect, the QCA has previously acknowledged that:

"The rationale for having an approved undertaking is that it provides the baseline for the provision of access, however, the parties are ultimately free to negotiate access on any terms

they may require. The provisions in an undertaking will therefore only apply to the extent that the parties are unable to agree.”¹¹⁹

Aurizon Network considers that the access conditions framework is fundamentally at odds with this view. For example, the requirement to lodge an access conditions report (clause 6.5.4(a) of the 2010 Undertaking) at the commencement of the negotiation is contrary to allowing parties to be “free to negotiation on any terms they may require.” The initial terms and conditions included in an access conditions report, even to the extent they can be identified within the prescribed ten business day window, will only reflect the starting point of the negotiation. The eventual terms and conditions that are agreed could be quite different to that starting point. However, these initial terms and conditions must then become the focus of a public consultation process, involving the same stakeholders with whom Aurizon Network is attempting to negotiate.

Apart from the fact that the specifics of the terms and conditions that are the focus of the QCA’s review could become irrelevant, the public provision of this information constrains the negotiation process and encourages gaming. This will impede the ability of the parties to agree a mutually beneficial outcome and, ultimately, could serve to deter any negotiations occurring at all.

The QCA Act itself supports the view that the negotiate-arbitrate model allows access seekers and access providers the freedom to agree commercial terms, as long as they do not offend provisions of the Act, and the view that such agreements do not require review or approval by the QCA. In this regard it is noted that:

- there is no power or role specified in the QCA Act for the QCA to approve an access agreement before or after it is made (other than under s 107 which is not relevant to this discussion on access conditions and in any case, only applies to allow approval on application of the parties to a relevant agreement affecting transfer rights);
- the fact that s 107 is the only section that deals with an approval process for access agreements, reveals that the Legislature turned its mind to the issue and elected not to invest the QCA with any other powers in this regard; and
- the Act recognises in s 138A that an access undertaking may permit an access provider to treat access seekers differently in negotiating access agreements, as long as in doing so, the access provider does not offend the pricing principles in s 168A. Allowing commercially negotiated benefits (access conditions) to be agreed on a case by case basis is consistent with s 138A and the negotiate-arbitrate model identified in the Act.

Against this legislative framework it is submitted that Aurizon Network and access seekers should be free of constraints, beyond those expressly provided for in the QCA Act and in the *Competition and Consumer Act, 2010* (Cth), to agree commercial terms (i.e. access conditions), and that a requirement for approval by the QCA is both unwarranted and beyond the contemplation of the QCA Act.

7.6.4.1 UT4 Proposal

The prescriptive constraints on the negotiation of access conditions and the requirement for Aurizon Network to obtain QCA approval for access conditions for ‘Significant Investments’ have been removed from the 2013 Undertaking, as they purport to create obligations on Aurizon Network that are inconsistent with the statutory framework and are simply not sustainable.

¹¹⁹ Queensland Competition Authority (2001). Final Decision re QR’s Draft Undertaking, p.39.

Providing additional prescription about how Aurizon Network can negotiate commercial terms for funding expansions is not considered necessary under the 2013 Undertaking, due to the clarity provided in relation to the users' ability to fund expansions through the SUFA framework. The impact of SUFA is two-fold:

- where Aurizon Network and access seekers are not able to reach an agreement through commercial negotiations regarding the terms on which Aurizon Network is to fund an expansion, the SUFA framework presents an alternative investment pathway for users to fund the expansion. This also imposes constraints on the potential misuse of market power by Aurizon Network if it sought to impose unreasonable terms and conditions; and
- the presence of the SUFA as a viable alternative for users will provide parties with stronger incentives to reach a negotiated outcome that is beneficial to both Aurizon Network and access seekers.

Requiring Aurizon Network to secure QCA approval for access conditions that it negotiates with access seekers on a commercial basis is not consistent with encouraging commercially negotiated outcomes. The 2013 Undertaking subsequently provides Aurizon Network with the ability to negotiate non-standard terms and conditions with access seekers regarding the funding of network extensions, without having to obtain QCA approval for these conditions.

By reinforcing the founding principle of the negotiate-arbitrate model which gives primacy to commercial negotiations, this approach should achieve outcomes that better promote the Objects Clause of the QCA Act.

7.6.5 Limitations on commercial terms

7.6.5.1 Issue

As has been established, the 2013 Undertaking provides a right for users to fund an expansion, either where Aurizon Network is not willing to do so, or is only willing to do so on commercial terms that are unacceptable to the users.

Aurizon Network has already highlighted the importance of the 2013 Undertaking providing for parties to be free to negotiate the nature of these commercial terms, given the ability of users to fund the expansions themselves through the SUFA framework in the event that agreement cannot be reached. However, Aurizon Network acknowledges that, in order to ensure that these negotiations remain balanced, there are certain terms that it should not be entitled to request as part of these negotiations.

7.6.5.2 UT4 proposal

Limitations on the commercial terms that Aurizon Network may require are set out in Clause 6.9.

Consistent with the 2010 Undertaking, Clause 6.9(b)(i) provides that Aurizon Network will not be permitted to request any terms that restrict access seekers or their customers from raising disputes with the QCA or disclosing proposed commercial terms or other contract terms to the QCA. The ability of access seekers to have disputes resolved by the QCA is acknowledged as a fundamental element of the access regime, and Aurizon Network will not in any way seek to undermine this framework.

Also consistent with the 2010 Undertaking, Clause 6.9(b)(ii) requires that Aurizon Network cannot require any terms that requires the disclosure of confidential information in any way other than as permitted by the 2013 Undertaking.

Clause 6.9(b)(iii) establishes that Aurizon Network cannot require any commercial terms that in any way restrict the right of an access seeker or their customer from proposing or entering into a user funding agreement for the infrastructure. This ensures a user can maintain the option of user funding unless and until such time that commercial terms for the expansion are agreed. This replaces the prohibition in the 2010 Undertaking on earning a rate of return on the expansion that varies from the regulatory WACC. This is consistent with the discussion in section 7.6.4 above regarding the removal of the prescribed 'standard outcomes' of a negotiation from the 2013 Undertaking in favour of providing a 'safe harbour' for negotiations through the SUFA framework.

Finally, Clause 6.9(b)(iv) provides that Aurizon Network may not require any terms that contravene a provision of the 2013 Undertaking or the QCA Act. This reflects the requirements of Clause 7.7 of the 2010 Undertaking, albeit with significantly simplified drafting.

7.7 The endorsement of capital projects by user vote

7.7.1 Background

While the expansion process provides for an increased role for commercial negotiations to determine the terms upon which expansions will proceed, this approach will not necessarily be used for all projects. For example, expansions aimed at improving the overall reliability and robustness of a system will be inappropriate to progress only in consultation with 'expanding users' via a user funded feasibility study. This would typically include general supply chain improvement initiatives e.g. the project for introducing increased automation in train scheduling, as discussed in Volume 3.

Where expansion projects are not negotiated with users in accordance with Clauses 8.2-8.6 of the 2013 Undertaking, an alternate means of consulting with and confirming users' acceptance of expansion projects is required. In addition, even where expansion projects are negotiated with users as discussed above, there may be aspects of these projects which require a broader user acceptance.

7.7.2 Consultation with users and role of a 'user vote' process

7.7.2.1 Issue

In a large, multi-user supply chain such as the CQCR, coordinating stakeholders to make an effective commitment to supporting capital expenditure can be difficult. This is particularly so when there is a broad range of beneficiaries of a project. In recognition of this, current and previous access undertakings have included a user voting process, designed to allow users to indicate whether they support specific investment proposals, recognising that the costs of these investments will then be recovered through reference tariffs. This voting process has been linked to the identification of projects and consultation with users via the CRIMP.

Under the 2010 Undertaking, this vote is then used as the basis for gaining QCA pre-approval of the scope of projects for inclusion in the RAB, as well as giving operators, ports and other suppliers certainty as to the regulator endorsed path for expansion. Endorsement of scope is one of the three prudency tests that must be satisfied before capital expenditure is included in the RAB, the other two being the standard and cost of works.

The voting process associated with the CRIMP has, therefore, been a key avenue for both the involvement of producers in the development of expansion projects and for gaining their explicit support for capital expenditure projects. However, both Aurizon Network and producers have expressed dissatisfaction with the application of this process in the past. In particular, producers have highlighted

that they believe that the information provided through the CRIMP process is not sufficiently robust or detailed for them to make an informed decision about whether they believe a project should proceed. On the other hand, Aurizon Network has felt that the timeframes required for the development of the CRIMP and the voting process itself mean that it has no choice but to prepare these documents well in advance of finalisation of the relevant studies.

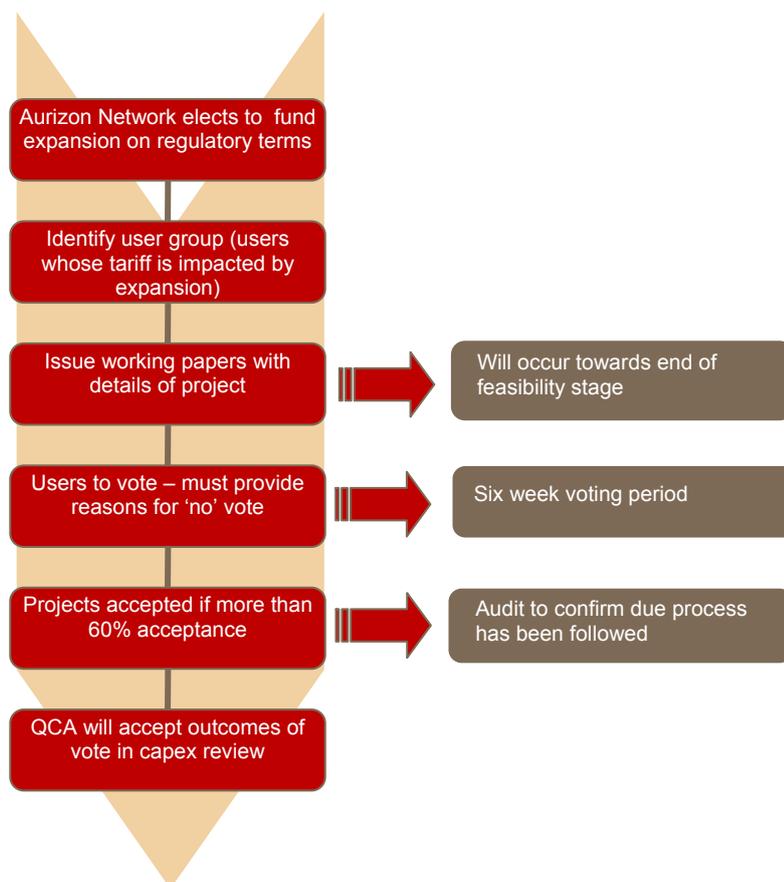
As discussed further in section 7.9, this inherent tension has led to Aurizon Network's choice to not release a CRIMP, or to put projects to the user voting process, for the last two years. During this time, Aurizon Network's development focus has been on major supply chain expansions which have been progressed with the detailed involvement of the expanding users. This has led to the required user commitment for those expansions being negotiated directly with those expanding users, rather than through a broad user vote.

That said, Aurizon Network believes that it is important that the access undertaking retain the user voting process as a mechanism for consulting with users and gaining coordinated user commitment for individual projects. However, Aurizon Network acknowledges that there is the potential to significantly improve the process than has been applied in the past. The key elements of the user vote and regulatory pre-approval process to be retained in the 2013 Undertaking are:

1. Aurizon Network has the option to seek user endorsement for planned expansion projects;
2. Users whose tariffs would be impacted by a proposed expansion project will have a right to vote on whether a project should proceed;
3. Projects will be deemed to be accepted by users if there is more than 60% acceptance (based on total access entitlements); and
4. A positive user vote forms the basis of regulatory pre-approval of those aspects of a project for inclusion in the RAB.

However, within this broad framework, there are a number of improvement opportunities, each highlighted in the discussion below. The resulting user vote process proposed by Aurizon Network is stylistically shown as follows:

Figure 14 Stylised representation of user voting process



7.7.2.2 UT4 proposal

In line with the 2010 Undertaking, the 2013 Undertaking provides that Aurizon Network may seek acceptance of the prudence of scope of works for a project through a user vote, and extends this to also allow a user vote on the prudence of standard of works.

The purpose of the user vote process is outlined in clause 8.10.1 of the 2013 Undertaking, which provides that a user vote process can be used in relation to:

- prudence of scope of a project;
- prudence of standard of a project; and/or
- cost allocation principles for the development of a reference tariff in relation to an expansion project.

The voting process is an alternative to seeking QCA pre-approval of those matters in accordance with the capital expenditure approval process set out in Schedule E. Clause 2.1(c) of Schedule E further provides that, where Aurizon Network has sought a user vote and the vote has been successful, then the QCA must accept the outcome of that vote in any subsequent regulatory determination on the prudence of the scope and standard of that capital expenditure. If the vote is unsuccessful, Aurizon Network is not prevented from seeking the QCA's acceptance of that matter or, alternately, a future vote.

The arrangements to apply for the user vote on the scope and standard of projects are then addressed in the remainder of clause 8.10 of the 2013 Undertaking. The following sections discuss significant elements of this process, in particular the refinements that have been made as compared to the 2010 Undertaking.

7.7.3 Point at which a user vote is requested

Aurizon Network acknowledges that it must provide robust and detailed information on projects, to ensure that users are sufficiently informed in order to make decisions on capacity expansions consistent with their best interests. Where Aurizon Network fails to provide adequate information to users, they should not be required to vote on whether they wish the project to proceed. The 2013 Undertaking contains the same 'relief valve' as was the case in the 2010 Undertaking; namely, users are able to vote down an expansion where they lack the information necessary to make an informed decision.

However, in order that Aurizon Network can provide robust and detailed project information, the user vote must necessarily occur later in the project development process, once the relevant feasibility study has been finalised. It will also be important to ensure that, if necessary, Aurizon Network can seek a further vote if there are material changes to a project that had previously been endorsed under this framework.

The user voting concept shares several similarities with the stakeholder engagement process that has been implemented through ARTC's 2011 Hunter Valley Coal Network Access Undertaking, with the key difference being that ARTC is required to seek endorsement from a standing customer representative group - the Rail Capacity Group (RCG) - at each stage in the development and implementation of a project.

While Aurizon Network accepts that this process may work effectively in the Hunter Valley supply chain, the characteristics of the CQCR make such a process unworkable here. As discussed above, the Hunter Valley is based on a single rail system transporting coal to a single port precinct. This results in substantial commonality of key stakeholders for all project options. This allows the Hunter Valley coal chain to develop a single RCG that represents the supply chain, all with a direct interest in creating the most efficient expansion solutions.

In contrast, the multitude of rail systems and port precincts in the CQCR mean that there is likely to be no single representative group of users that will have a direct interest in all of the options considered for a project. As such, Aurizon Network is concerned that there will not be sufficient alignment of interests within a 'standing user group' to be confident that it will, in all circumstances, seek the most efficient overall system outcomes. That is, just as it is important to ensure that users that will be legitimately impacted by a project have the opportunity to participate in a vote (including non-expanding users who may be underwriting the cost of an expansion through an increase to their reference tariffs), it is also important to ensure that outcomes cannot be influenced by participants who will not be impacted by the project, recognising that the producers in the CQCR are operating in a highly competitive market.

In order to avoid this misalignment of interest creating barriers to project development, Aurizon Network has retained the approach of seeking formal user commitment only at the feasibility stage of the project, once the costs and benefits of the project have been assessed. At this stage, all affected users will have an opportunity to vote on the acceptability of the project.

7.7.4 Scope of matters that may be subject to a user vote

The scope of the voting process has been expanded via clause 8.10.1(a) of the 2013 Undertaking to include the prudence of standard of works of a project and cost allocation matters relating to the development of a proposed reference tariff. Previously, a user voting process could only be held based

on the prudence of the scope of a proposed capital expansion. Providing for the voting process to consider the standard of works for capital expansions allows users to have more input on the detailed specification of expansion projects, which can impact significantly on the total project cost.

The inclusion of cost allocation matters within the voting framework is also an important revision to the process. Noting that the scale and complexity of network expansions may mean that their cost will be high, there is a fundamental question as to if and how the costs of (shared network) expansions should be shared between expanding and non-expanding users.

Rather than prescribe a cost allocation approach in the access undertaking, Aurizon Network considers that having the ability to refer this to a vote is an effective way of resolving this issue. Further discussion on this issue can be found in section 9.7.

7.7.5 Improved information provision

7.7.5.1 Project information provided by Aurizon Network

The most important refinement to the voting process is the provision of more targeted working papers to participants, setting out the information necessary for them to make an informed vote on a project.

Concerns with the 2010 Undertaking arrangements

Under the 2010 Undertaking, users are provided with information on projects via the CRIMP. The CRIMP was originally envisaged as a holistic planning document that provides a comprehensive framework for identifying constraints in the rail network and planning for capacity expansions. Through the CRIMP, a range of matters is intended to be taken into consideration to identify the preferred paths for network expansion. This includes taking into consideration alternative solutions to identified capacity constraints, such as investment in additional port terminal capacity or increasing above-rail capacity.

The central objectives of the CRIMP are to specify the short to medium-term investment path for rail capacity increases and to present the details of the analysis performed on proposed investments, providing sufficient information for producers to vote on proposed expansion projects (in accordance with section 3.2 of Schedule A of the 2010 Undertaking). The consultation process was developed in acknowledgement of the need to involve industry stakeholders in the development of project proposals. This position is demonstrated in the following submission by Aurizon Network's predecessor, QR Network, on its 2005 Undertaking:¹²⁰

“QR's intended approach is to educate its users in below rail and system capacity, with transparent provision of sufficient detail for the users to become informed customers, and increase certainty and understanding of possible future network capacity expansions.”

However, over time it has become increasingly apparent that the dual objectives of the CRIMP are essentially incompatible, that is:

- identifying the medium term pathway for rail network development; together with
- providing sufficient supporting information to enable customers to vote on whether they wish these projects to proceed.

The requirement to provide detailed information on the costs and benefits of projects identified in the CRIMP results in the inability to include medium to long term plans that are not yet developed to this level

¹²⁰ QR Network (2005). Submission re Draft Undertaking Draft Decision, August, p 103.

of detail. However, the long timeframes associated with the development of the CRIMP and the customer voting process means that the development of the CRIMP cannot be delayed until such time that the required project studies have been completed.

This inherent tension has intensified as the focus of infrastructure planning has turned to major supply chain expansions, where expanding users are intimately involved in the development of the feasibility studies. Both Aurizon Network and the users have been reluctant for details of such projects to be published in the CRIMP until they have been fully assessed – however, in the absence of including information on these major supply chain expansions, the CRIMP can only be a piecemeal document with little value. This conflict has led to Aurizon Network's choice to not issue a CRIMP for the last two years.

Given these circumstances, Aurizon Network acknowledges that the CRIMP process as established in the 2010 Undertaking has been ineffective in meeting either of its objectives.

UT4 proposal

Aurizon Network's revised approach involves a decoupling of project specific information provided for voting purposes from its broader network planning documents (which are discussed separately in section 7.9 below). As a result, Clause 8.10.6(c) of the 2013 Undertaking provides that project specific information will be included in specific working papers that will be provided to users to support a requested vote. Clauses 8.10.6(d)-(f) sets out the required content of these working papers, in order to ensure that there is sufficient information for users to make an informed decision on the project. The type and detail of information required for inclusion in the working papers reflects an enhancement as compared to the information that was previously required for this purpose under the CRIMP.

For example, the information that will be provided in these working papers in relation to the scope of a project includes, as set out in clause 8.10.6(d), includes:

- capacity analysis information demonstrating the need for the expansion, including the reason for the project, information on committed capacity, expected capacity to be delivered by the project and the operating assumptions upon which the project is based;
- the project's scope and general standard of works;
- preliminary expenditure requirements; and
- rationale for the choice of scope with reference to the pre-feasibility study and the Network Development Plan.

Although the specification of required information for a project does not directly require discussion of the consistency of the project with any system master plan, the need to provide sufficient information to persuade users of the reasonableness of the project will inevitably require that all relevant information (including the extent of compatibility or otherwise with any system master plan) will be disclosed by Aurizon Network, otherwise users will legitimately be able to vote against the project.

Where the vote relates to a project's standard of works, clause 8.10.6(e) requires that the working paper will need to include further information on the standard of the project, including demonstrating reasonableness of the proposed standard of works in the context of its consistency with adjacent infrastructure and any established standards or codes.

Clause 8.10.6(f) sets out the information required to be provided for a vote on cost allocation matters, which is discussed further in section 9.7.

Clause 8.10.6(b) continues the arrangement from the 2010 Undertaking where stakeholders may jointly appoint a consultant to peer review the outputs of Aurizon Network's capacity analysis model and Aurizon Network will run capacity scenarios as requested by the consultant. Further, clause 8.10.5(c)(i) provides that Aurizon Network will provide information, engage in discussions and participate in forums with users during the voting period in order to further explain the rationale for the project.

These changes will substantially improve the quality of information that is provided to participants in the voting processes.

7.7.5.2 Information provided by users

Aurizon Network considers that there is also significant opportunity to improve the quality and detail of information provided by users, particularly in the event of a 'no' vote on a project. In particular, if a user votes against a project, Aurizon Network believes that they should be required to provide specific information on their reasons for not supporting the project.

Requiring users to specify the reason behind a 'no' vote will provide Aurizon Network with more information regarding user concerns in relation to the project. As a guide, Aurizon Network has identified a range of matters that users may base a 'no' vote upon, which are set out in clause 8.10.5(d) of the 2013 Undertaking. This may, for example, be that the user does not agree that the operating parameters upon which Aurizon Network has based the project are efficient, or that it would materially adversely affect the user's access rights.

Importantly, clause 8.10.5(d) clarifies that the matters identified in the 2013 undertaking are not intended to restrict the reasons why a user may vote against a project. A user may choose to vote a project down for a different reason, for example a failure by Aurizon Network to provide sufficient information. However importantly, the user will still need to provide reasons explaining the basis of its 'no' vote.

This information will enable Aurizon Network to reassess the project and to determine if there is still a reasonable basis to proceed. If so, Aurizon Network may revert to a further user vote after addressing the concerns raised by users, or alternately it can seek QCA approval for a project that has been rejected by users through the voting process. With the reasons for the rejection known by the QCA, Aurizon Network will need to demonstrate why the investment should proceed and satisfies the prudence tests.

In order to ensure that this information is provided by producers, clause 8.10.5(f) provides that Aurizon Network will be able to exclude 'no' votes that are not accompanied by a legitimate reason. This means that the vote is excluded from the count (i.e. not treated as either a yes or a no vote) and the associated voting entitlement is excluded from the total voting entitlement.

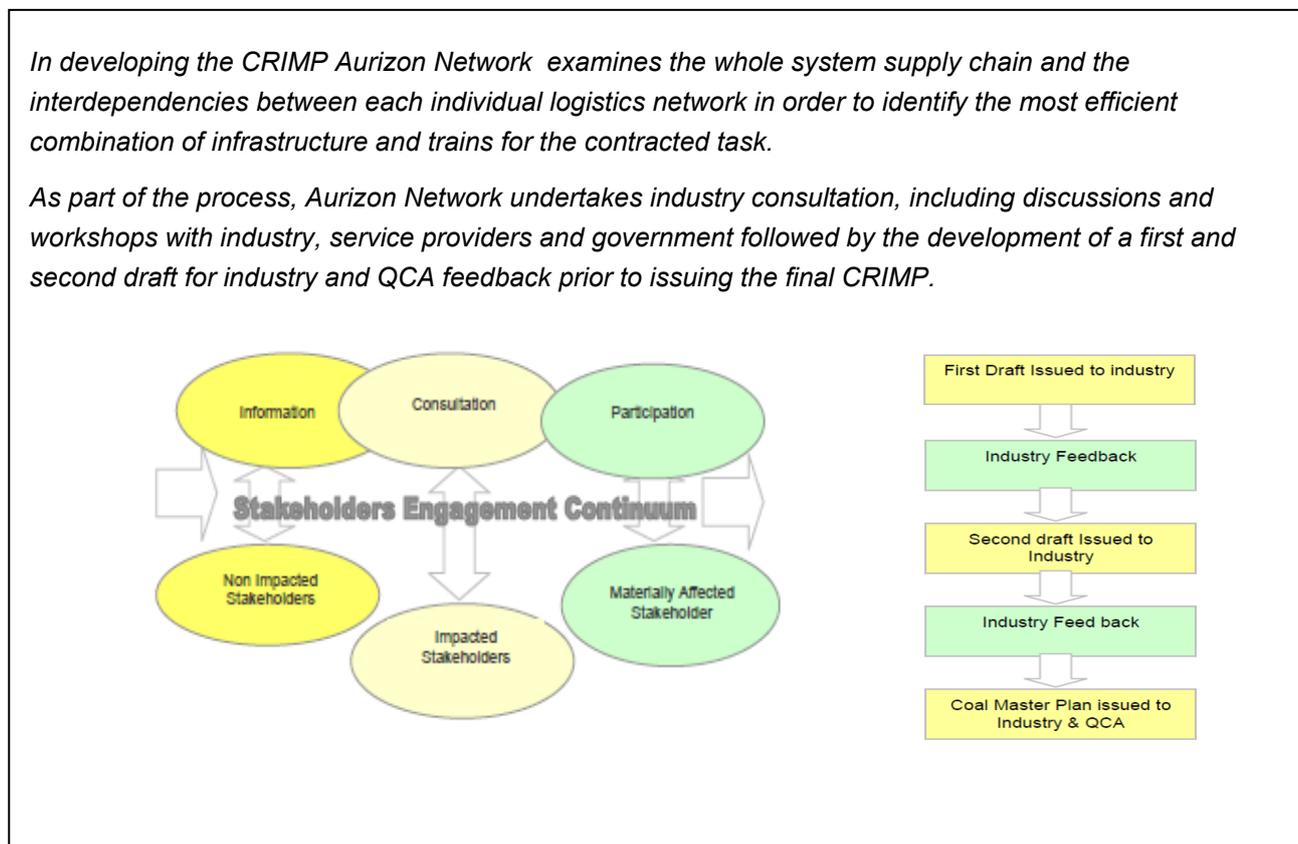
Consistent with the 2010 Undertaking, clause 8.10.5(e) provides that if no response is received, the user will be deemed to have voted 'yes'. Clause 8.10.5(g) confirms that the users are deemed to have accepted the voting proposal if at least 60% of the voting entitlements vote (or are deemed to vote) 'yes'.

7.7.6 Streamlining the voting and regulatory pre-approval process

A consequence of delaying the user vote until the relevant information has been developed is that finalisation of the regulatory pre-approval for a project is likely to be on the critical path for completion of the feasibility study. Completion of the regulatory pre-approval process in the 2010 Undertaking can take up to six months from the publishing of project information in the final CRIMP. However, the period from when a project is identified, to achieving regulatory pre-approval, is significantly longer, as the

development of the CRIMP itself is a lengthy process involving multiple periods of stakeholder consultation. The development of the CRIMP is illustrated in the box below.

Figure 15 Coal Rail Infrastructure Master Plan



It will be imperative that this process is streamlined in order to avoid the user vote process delaying investment.

The primary opportunities to streamline this process are:

- decoupling the user vote from capacity planning;
- streamlining the voting process; and
- streamlining accountability requirements.

7.7.6.1 Decoupling the vote from the capacity planning process

As discussed above, under the 2013 Undertaking, Aurizon Network will separate the information that it provides on capacity planning from the specific project information that is provided for the purpose of securing user endorsement of a project. This enables information to be documented in a form and timeframe that is more appropriate for each purpose.

The working papers will be prepared for specific projects. They will be distributed at the commencement of the voting process, meaning that the time required from completion of the relevant studies and assembly of the information in the working papers, to commencement of the voting process, is minimised.

7.7.6.2 Streamlining the voting process

The voting process set out in clause 8.10.5 of the 2013 Undertaking allows users a six week period to consider the project before the vote is required to be lodged. The length of this voting period has been retained from the 2010 Undertaking, and Aurizon Network considers that this timeframe is reasonable given the significance of the matters to be considered by users.

However, the actual length of the voting period in the 2010 Undertaking may actually be longer than six weeks as a result of disagreements regarding the constitution of the user groups being referred to the QCA. In order to streamline the voting process, the 2013 Undertaking removes the potential for these matters to be referred to the QCA during the voting process.

Importantly, these changes to the voting process do not undermine the rights of users to question and resolve disagreements about the constitution of the user groups. Clause 8.10.3 of the 2013 Undertaking establishes the eligibility criteria for users to participate in a voting process. These eligibility criteria remain consistent with the criteria used in the 2010 Undertaking, albeit they have been redrafted to improve clarity. It also provides that, if a person has not been invited to participate in the vote when they believe they should have been, they may notify Aurizon Network of this. Aurizon Network will assess the reasons and include them in the vote if they are subsequently found to be eligible.

A further amendment to the voting process relates to the calculation of voting rights. Previously, voting rights were assessed based on the tonnage capacity allocations held by producers. Under clause 8.10.4 of the 2013 Undertaking, this has been amended so that voting rights are to be specified in terms of train path entitlements. The purpose of this is to align the methodology for counting voting rights with the definition of capacity entitlements.

7.7.6.3 Streamlining accountability requirements

Under the 2010 Undertaking, the process of gaining regulatory pre-approval of the scope of a project is significantly lengthened by the need to apply to the QCA for pre-approval following completion of the vote. Experience during UT2 and UT3 shows that this process alone will typically take three months. As the 2010 Undertaking is quite clear that a project will be accepted into the RAB if it has been accepted by users, the primary purpose of this additional process is to ensure that Aurizon Network has properly complied with the voting process.

Aurizon Network acknowledges that stakeholders need confidence that the voting process has been properly applied, and accepts that this needs to be independently reviewed and confirmed. However, the time required for this process can be significantly reduced by providing for an independent audit of the voting process, rather than the existing QCA review. As such, an independent audit arrangement has now been established in clause 8.10.7 of the 2013 Undertaking. By adopting this process, the auditor can be appointed prior to the vote commencing, with elements of the audit being conducted as the stages of the voting process occur. This will allow the audit to be potentially completed within weeks of the close of the voting period, not months.

The key features of the accountability and audit process established in clause 8.10.7 are:

- any person who is entitled to vote on a project can register with Aurizon Network any concerns that they have about Aurizon Network's compliance with the user vote procedure – any such concerns must be lodged with Aurizon Network in writing prior to the completion of the voting period;

- Aurizon Network may take whatever action is reasonably required in order to achieve substantial compliance with the user voting procedure, for example, if subsequent to the voting period commencing, Aurizon Network identifies that another participant has met the eligibility criteria for the vote, one remedy may be to provide the voting materials to that participant and allow them six weeks to respond with their vote;
- Aurizon Network is not obliged to repeat a vote process where remedying the concern would not be expected to change the outcome of the vote, or if it can remedy the concern in order to achieve substantial compliance;
- Aurizon Network will not be able to rely on the outcome of the vote for the purposes of the QCA's acceptance of prudence of scope or standard of capital expenditure until an audit of the voting process is completed;
- Aurizon Network must provide the auditor with all material necessary for them to conduct the audit, including any user concerns about Aurizon Network's compliance with the user vote procedure.

If the auditor identifies flaws in the voting process that Aurizon Network cannot remedy and which would be expected to change the outcome of the vote, Aurizon Network may redo the voting process.

Clause 2.1.(c) of Schedule E, combined with clause 8.10.7, have the effect that, as long as the audit confirms the integrity of the audit process, a positive user vote on the scope and/or standard of a project must be accepted by the QCA. By removing the additional QCA review process, the incentive for Aurizon Network and users to directly resolve any concerns about planned projects through negotiation will be strengthened, consistent with Aurizon Network's overall objective for the 2013 Undertaking.

However, in the event that Aurizon Network secures approval for a capital expenditure project through the voting process (with respect to the scope and/or standard of work), Aurizon Network acknowledges that the inclusion of this expenditure in the RAB is still contingent on QCA approval of the prudence of the project cost.

7.8 Capacity shortfalls

7.8.1 Background

As the network expands, it is critically important that the rights of existing users of the network are protected. Experience in rail/port based supply chains across Australia has shown that supply chain expansions are not always effective in creating the additional capacity expected. In this context, it is important to identify who bears the risk of whether or not the expansion creates the required additional capacity – expanding users, or all users (including non-expanding users).

7.8.2 Risk that expansion will not create sufficient increase in capacity

As part of a feasibility study, users will be intimately involved in the assessment of the preferred option to create the required additional capacity. This can be seen from experience in recent major projects such as GAPE and WIRP, where users have been a driving force in the optimisation of the investment to minimise the total system cost of the expansion to the supply chain.

However, it is necessary to recognise that there will remain uncertainty about the actual capacity that will be delivered by the expansion until commissioning. Actual capacity may be less than planned capacity for a number of reasons, including, for example, changes in the design or timing of complementary supply

chain infrastructure, or an inability for the supply chain operating parameters to be reliably and consistently achieved in practice.

Consistent with the preference of non-expanding users to not underwrite this risk for expanding users, the 2013 Undertaking maintains the approach implemented in the 2010 Undertaking, where expanding users will be the ones to bear the risk of whether or not the agreed capacity expansion will, in fact, be sufficient to create the additional capacity that they require. Therefore, where access rights sought by an access seeker require an expansion or a customer specific branch line, then clause 8.7.1 of the 2013 Undertaking provides that Aurizon Network will only enter into an access agreement with that access seeker for conditional access rights, that is, where the agreement:

- is subject to a condition precedent that requires the relevant investment to be complete; and
- limits the access rights for that access holder to the available capacity created by that investment.

7.8.3 Obligations regarding capacity shortfalls

Clause 11.3 in the 2010 Undertaking sets out the process that is to be followed in allocating capacity where a capacity expansion delivers less capacity than is required to satisfy committed access rights (i.e. the access rights contracted based on the capacity that the expansion was expected to deliver). Under this clause, Aurizon Network is to pro rata the capacity that is available amongst the expanding users; place the access seekers in a queue for the remaining capacity rights; and commence planning the enhancements necessary to address the shortfall in capacity rights.

7.8.3.1 Investigating an expansion to rectify a capacity shortfall

Issue

Aurizon Network recognises that it is reasonable to prioritise 'shortfall' access seekers (i.e. access seekers who hold conditional capacity rights which cannot be met due to a capacity shortfall for that expansion) when considering capacity allocation for a subsequent expansion. As such, this shortfall will be taken into account in the planning of future capacity enhancements, with Aurizon Network required to first offer capacity up to the shortfall amount to affected access seekers before granting a provisional capacity allocation to access seekers for the subsequent expansion.

However, the obligation on Aurizon Network to immediately commence planning the enhancements required to address a capacity shortfall as a result of an extension creates problems, as it may not be practicable nor economic to create an expansion that only addresses the capacity shortfall – the available supply chain expansions may only be economic for a much larger scale expansion.

UT4 Proposal

Aurizon Network considers that a reasonable approach is to provide that:

- where a capacity shortfall is identified such that all conditional access rights cannot be converted to train service entitlements, unless otherwise notified by the access seeker, the access seeker has automatically made a further access application for the amount of the capacity shortfall;
- consistent with the discussion earlier in this chapter, Aurizon Network will commence the expansion process where there is sufficient demand for an expansion (including demand from capacity shortfall access applications); and

- as part of that expansion process, Aurizon Network will give priority to capacity shortfall access applications in the allocation of capacity from expansions.

Aurizon Network believes that this reflects a reasonable balance in the interests of access seekers and the access provider. It protects the legitimate business interests of access seekers by providing some certainty over capacity allocation for capacity expected to be delivered by an extension, but recognising that any capacity allocation in these circumstances will inevitably depend on the final delivered capacity. In the event of a shortfall, the affected access seekers are given priority in capacity allocation for a subsequent expansion.

This approach is consistent with the treatment of expansion capacity elsewhere in the supply chain. In particular, it is consistent with the approach used by DBCT Management, which is reflected in its approved access undertaking.¹²¹

To implement this policy, clause 8.7.2 (a)-(e) sets out a process for assessing the actual amount of capacity created by an expansion, and the actions to be taken with respect to any capacity shortfalls. This process is similar to that adopted for the 2010 Undertaking, and requires that Aurizon Network assess actual capacity no more than six months after commissioning the expansion, to identify whether any capacity shortfall exists. If a capacity shortfall exists:

- the conditional access rights of the access holder will be reduced to reflect the available capacity; and
- the access holder will be taken to have lodged an access application with Aurizon Network for the shortfall capacity.

As previously discussed in section 7.5, any capacity shortfall access applications will be given priority in the process of identifying parties to participate in a feasibility study and be granted a provisional capacity allocation with respect to future expansions.

7.8.3.2 Funding an expansion required to address a capacity shortfall

Issue

A further issue to consider is which party is responsible for funding an expansion to the extent it is required to address a capacity shortfall.

Consistent with the QCA Act, which specifies that the access provider is not obliged to fund an expansion, where there is a capacity shortfall following an expansion, Aurizon Network should not generally be obliged to undertake an investment to make up for the shortfall.¹²² To require Aurizon Network to undertake an expansion in these circumstances may place it in a situation where it must fund an expansion which is contrary to its legitimate business interests – a situation which is clearly inconsistent with the QCA Act.

However, in order to reflect a fair balancing of the interests of the various parties, where Aurizon Network agreed to fund the original expansion, it is prepared to commit that it will also fund the further investment necessary to make up for a shortfall in capacity. Where the original expansion was funded by users,

¹²¹ Dalrymple Bay Coal Terminal Access Undertaking, (2010) clause 5.4(i)(3), p. 12, (March) - provides for expansion capacity to be allocated first to catch up a shortfall in capacity that is below already contracted tonnages.

¹²² QCA Act, section 119

however, it will be the responsibility of those relevant users to fund the further expansion required to address their capacity shortfall.

UT4 Proposal

The obligation to fund an expansion, to the extent that it is addressing a capacity shortfall, is identified in clause 8.7.2(f), which provides that Aurizon Network will bear the obligation to fund the expansion required to rectify the shortfall if (and to the extent) it funded the original expansion, otherwise the access holder will be required to bear this funding obligation.

7.9 Aurizon Network's capacity planning framework

As discussed at the beginning of this chapter, it is essential that the selection of specific expansion projects for increasing capacity is guided by an effective, medium-long term capacity planning framework that establishes how the supply chain, and within this the rail network, can be efficiently expanded to meet reasonably foreseeable demand.

The 2010 Undertaking includes significant detail on Aurizon Network's capacity planning process, embodied in the CRIMP process, which has been progressively developed as the CQCR market environment has evolved. However, as noted above, stakeholders have identified significant shortcomings in these planning processes, in that they claim to have not received timely and transparent information on Aurizon Network's capacity plans. Further, it has been claimed that users have not had sufficient information on individual projects in order to make an informed vote.

Moreover, these provisions have proven to be commercially impracticable from Aurizon Network's perspective. As a result, the CRIMP process has not been undertaken over the course of UT3. While Aurizon Network has continued to develop its capacity and infrastructure plans, it is acknowledged that there has been reduced transparency to users than was the case under CRIMP.

7.9.1 Capacity planning framework

7.9.1.1 Capacity planning for the CQCR

The importance of effective coordination across all elements of the supply chain is discussed in detail in Chapter 8. In an expanding supply chain, such as the CQCR, one of the most critical aspects of supply chain coordination is in the planning and investment in new capacity – so that the necessary investment occurs in each element of the supply chain infrastructure in order to most efficiently realise the required increase in capacity across the whole of the supply chain.

The planning task for the CQCR is significantly complicated by the operational complexity of multiple, interconnected supply chains. In recent years, the extent of integration between the various systems in the CQCR has exponentially increased, particularly with the completion of the GAPE project. The CQCR now consists of four connected rail systems, servicing 45 export mines¹²³, and, upon completion of WICET, will connect to six different export coal terminals in three separate port precincts. Plans for further coal terminal developments are progressing in each of these port precincts. In addition to this, plans now exist for the development of new coal basins, which will bring – in addition to substantial volume growth – new technologies and operating practices.

¹²³ Based on the 2010 CRIMP, p 13

This high level of integration throughout the CQCR gives producers a range of transport options to support mine development. For example, a mining company proposing to develop a specific deposit will have options over which port precinct, and within that which coal terminal, it can transport its coal to. It will determine its preferred option based on a range of criteria, including cost, availability and timing of that capacity. Alternately, a mining company seeking to develop additional supply capacity to meet anticipated market demand may consider the transport of coal from a range of different deposits to its preferred coal terminal/port precinct. It will, depending on scale, also have the option of greenfield, stand-alone infrastructure, as is contemplated in the Galilee Basin and by some large Bowen Basin producers.

The different transport options have vastly different impacts on the infrastructure requirements, e.g. a mine in the central Goonyella region has transport options to port precincts at Abbot Point, Hay Point and Gladstone, each of which have completely different implications for rail system expansions. The supply chain participants that may be impacted by an expansion, and therefore that need to be consulted, will differ for each of these options.

This high degree of optionality is unique to the CQCR and is quite different to other coal supply chains in Australia. The Hunter Valley coal supply chain is often raised as a comparator to the CQCR, and while this is a large and complex supply chain, with 30 load points¹²⁴ mines transporting coal to three coal terminals, there is far less optionality available in this system. All three coal terminals are in the same port precinct, and the vast majority of coal is transported within a single rail system. There is therefore significant commonality in rail system solutions required for capacity expansions, notwithstanding that there may be options being considered both in relation to the mining deposit being developed, and the export coal terminal to be used. This allows for more predictability in the likely expansion path for the supply chain, and creates a common set of stakeholders who will be impacted by the proposed expansions.

In light of this environment, it is not practicable to develop a single expansion plan for the CQCR, as the CRIMP was originally envisaged to be. Rather, what is necessary is a planning framework that provides sufficient information for stakeholders to identify their transport options and the possible implications of selecting one option over another. Further, the planning framework must be flexible and driven primarily by the commercial imperatives of stakeholders. Aurizon Network considers that the most effective and timely expansions are those that are driven by genuine commercial negotiation and the shared interest of stakeholders in industry growth. The framework for negotiation of expansions, as discussed earlier in this chapter, provides a strong foundation the expansion projects to be developed in concert with a commercially-driven planning framework.

7.9.1.2 Aurizon Network's capacity planning approach

In its capacity planning, Aurizon Network will take a whole of CQCR perspective, but then apply this to create corridor based strategies for future network development which is aligned to future mine and terminal planning and are informed by medium to long-term demand projections. This will be referred to as the Network Development Plan.

It will identify the medium to long-term development pathways that can accommodate potential future states, which in turn reflect prospective demand. Investment choices for individual expansions will then be guided by these strategies – providing for individual expansions to be made in a way that supports the most effective long term development of the network. This approach supports a whole of supply chain

¹²⁴ HVCCC Map of Operations: downloaded on 5 April 2013, <http://www.hvccc.com.au/AboutUs/Pages/MapOfOperations.aspx>

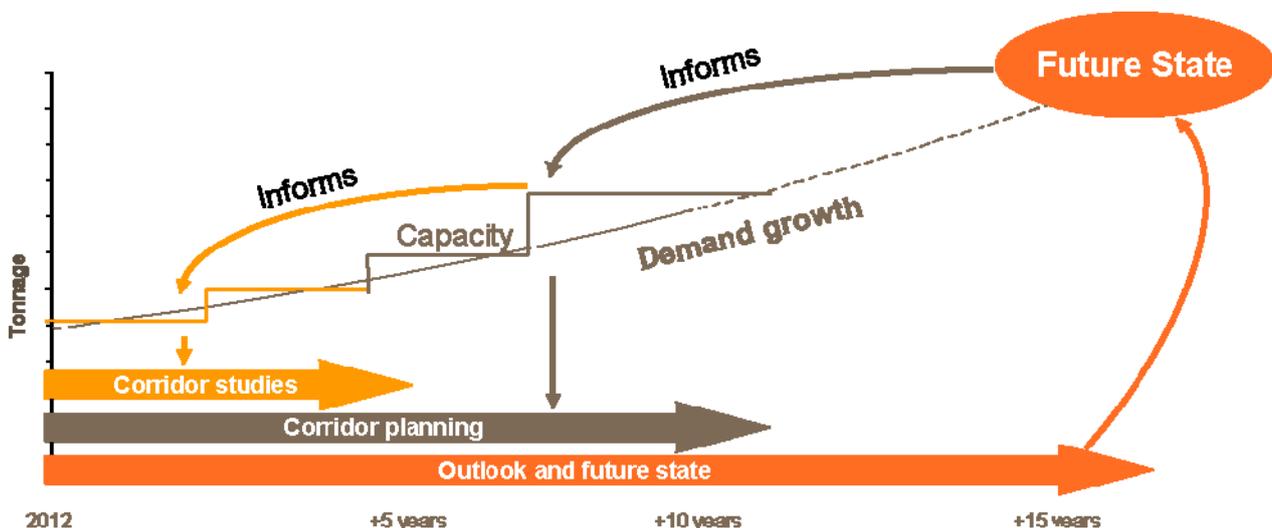
assessment of preferred expansion pathways, and provides for Aurizon Network to look beyond single increment expansions when identifying capacity enhancements.

At a high level, Aurizon Network’s capacity planning framework consists of three main components:

- a medium-long term outlook for the entire CQCN – based on demand forecasts over a 10 to 15 year horizon, the medium-long term outlook identifies a competitive future state for the supply chain based on a combination of continuous improvements and supply chain step changes;
- corridor planning – reflecting medium-long term demand projections for each corridor, the identified future state for the supply chain is tailored and applied for each corridor; and
- corridor studies – pre concept and concept assessments for specific expansion works are developed as part of the capacity planning framework, with pre feasibility and feasibility assessments progressed for individual expansions as required, guided by the corridor plan.

The relationship of these three components is illustrated below:

Figure 16 Aurizon Network’s planning framework



7.9.1.3 Status of Aurizon Network’s planning process

Aurizon Network is well advanced in preparing its first Network Development Plan in accordance with this planning framework. Consultation with users has been progressing since December 2012, and Aurizon Network anticipates releasing a consultation draft of the Network Development Plan to stakeholders in June 2013.

7.9.1.4 Benefits of this approach

Aurizon Network’s revised capacity planning approach will best support continued development of the coal systems in an efficient way, by establishing desired future states for each system, and using this to guide investment in individual capacity enhancements. A progressive approach to capacity planning and project development means that the robustness of the planning and project information is progressively developed as confidence in a required expansion increases.

The development of medium to long-term corridor strategies to guide short term project identification is consistent with the approach successfully adopted by ARTC in the Hunter Valley. ARTC develops a

corridor strategy that looks at network expansions over a ten year time horizon. This strategy is updated on an annual basis and sets out how ARTC plans to ensure that the capacity of the rail network remains ahead of demand for coal exports. The central purpose of the strategy is to identify constraints, options and a proposed course of action for alleviating these constraints.

Importantly, Aurizon Network's planning approach, which embeds flexibility through progressive development of the detail of both corridor development plans and individual projects, will support the objects of the QCA Act, as it underpins the efficient investment in rail infrastructure. By providing for the progressive development of both the corridor plans and individual projects as certainty of their need increases, this framework both ensures the interests of access seekers are met while protecting the legitimate business interests of Aurizon Network. Producers, through their detailed involvement in the pre-feasibility and feasibility studies, are able to ensure that the specific investments contemplated will be in accordance with their requirements. Further, this process ensures that the costs associated with further development are incurred only where all parties have sufficient information to determine that they wish the investigations to proceed.

7.9.2 Implementing this capacity planning framework in UT4

7.9.2.1 Background

The framework for the planning of capacity expansions under the 2010 Undertaking largely revolves around the CRIMP, which was envisaged as a holistic planning document that provides a comprehensive framework for identifying constraints in the rail network and planning for capacity expansions.

As discussed above, it has become clear that the dual objectives of the CRIMP are essentially incompatible, that is:

- identifying the short to medium term pathway for rail network development; together with
- providing sufficient supporting information to enable customers to vote on whether they wish these projects to proceed.

This conflict has led to Aurizon Network's choice to not issue a CRIMP for the past two years, and Aurizon Network acknowledges that the CRIMP process as established in the 2010 Undertaking has been ineffective in meeting either of these objectives.

The 2013 Undertaking replaces the CRIMP process with a more targeted approach to capacity planning centred upon the development of a medium to long term Network Development Plan, consistent with the capacity planning approach outlined above.

7.9.2.2 UT4 proposal

Clause 8.9 of the 2013 Undertaking establishes the framework for preparing and updating the Network Development Plan. The issues that have been considered in developing this framework are discussed below.

Capacity planning documentation

The 2010 Undertaking places a range of obligations on Aurizon Network regarding the content of the CRIMP as the primary capacity planning document. As discussed above, this content is aimed at both informing stakeholders of the short to medium term development pathway for the rail network, as well as providing sufficient information on individual projects to support a user vote.

As discussed above, for the 2013 Undertaking, Aurizon Network plans to separate the information that it provides on capacity planning from the specific project information that is provided for the purpose of securing user commitment to a project. This enables information to be documented in a form and timeframe that is more appropriate for each purpose.

The capacity planning document – the Network Development Plan – will therefore be solely targeted at providing higher level information about the medium to long term development pathways for each system. The Network Development Plan will document identified options for increasing the capacity of each of the rail corridors as well as other options for developing or improving the performance of a coal supply chain.

As described in section 7.7, Aurizon Network will develop separate targeted working papers for the purpose of the user voting process.

Aurizon Network therefore considers that, as the Network Development Plan will not include information as a basis for a customer vote on specific projects, there is no need to retain the level of prescription previously specified for the CRIMP. In fact, limiting the access undertaking's prescription in the process and content for the Network Development Plan will provide Aurizon Network with more flexibility to respond to the dynamic operating environment in the CQCR. Reflecting this, clause 8.10(b) provides only high level guidance on the content of the Network Development Plan.

Anticipating demand

A critical input to the Network Development Plan is the demand forecasts upon which it is based. There are a number of approaches that can be used for establishing the anticipated demand, basically falling into two categories:

- a structured approach of regularly requesting users to nominate their expected capacity requirements; or
- relying on more general sources of market intelligence regarding likely future demand.

Aurizon Network considers that, given the degree of integration of the various rail systems that make up the CQCR, relying on an expressions of interest process from users is likely to overstate the demand for which it should plan. As a result, Aurizon Network does not propose to include an obligation for a regular expression of interest process for gauging likely demand for planning purposes. Inclusion of such a process would place a regular administrative obligation on users, but, as shown by the 2011 RFP process, will not necessarily result in reliable information from an overall capacity planning perspective.

Instead, clause 8.9(d)(ii) reflects Aurizon Network's plan to use a wide range of sources for assessing future demand, including general market forecasts and relevant port terminal developments together with the results of any expressions of interest processes that Aurizon Network does conduct, as well as relevant access applications.

System operating assumptions

Chapter 8 discusses the need for effective supply chain coordination, and how Aurizon Network will participate in this. Part of this includes the development and regular update of operating assumptions for each coal system, that reflect how the supply chains are used and the interfaces between each element of the supply chain.

These operating assumptions are important in the capacity planning process, as together with the existing physical description of the infrastructure, they establish the starting point for future planning.

However, these parameters should not be assumed to be fixed, as plans for future development of the supply chains may well identify changes in operating parameters that will enable cost effective increases in capacity.

Therefore, clause 8.9(d)(ii) provides Aurizon Network will have regard to these system operating assumptions in developing its Network Development Plan. However, the intent of the Network Development Plan to identify 'future states' for each system reflects Aurizon Network's expectation that the development pathways identified in the Network Development Plan may ultimately reflect different operating assumptions to those that currently exist on the systems.

Consultation

As has already been highlighted, coordination of investment planning throughout the supply chain is essential in order that investment in rail infrastructure achieves the expected increase in supply chain capacity. Aurizon Network remains committed to consultation with supply chain participants and other stakeholders as part of its capacity planning process, and this is reflected in clause 8.9(d)(i). This consultation will occur through a variety of mechanisms, including individual discussions, formal submissions and stakeholder forums. Importantly, to the extent that a supply chain master plan is developed, clause 8.9(d)(ii) provides that Aurizon Network will continue to refer to that master plan in its planning process.

Once finalised, clause 8.9(a) provides that Aurizon Network will publish its Network Development Plan on its website, ensuring this planning information is readily accessible by all stakeholders.

Network Development Plan will be updated regularly

In recent years, one of the major criticisms of the CRIMP has been the irregularity of the process – as noted above, given the difficulty in framing a document that complied with the 2010 Undertaking information requirements, Aurizon Network has not published a revised CRIMP for over two years.

Aurizon Network agrees that, for it to be useful in achieving its purpose of guiding future expansions of the CQCR, the Network Development Plan will need to be regularly updated to ensure that it remains current. Reflecting this, clause 8.9(c) provides that Aurizon Network will review and update the Network Development Plan at minimum on an annual basis. It will also review the plan more frequently if circumstances change in a way that will affect the appropriateness of the Network Development Plan.

8 Coordinating the Supply Chain

Summary:

In complex and fragmented supply chains such as the CQCR, there is a well-recognised risk of coordination failures occurring, which can cause capacity losses and bottlenecks. In recognition of this, in the last five or so years, there has been significant effort by all CQCR supply chain participants to improve the coordination of the CQCR supply chains. Aurizon Network supports these continued efforts.

However, Aurizon Network emphasises that supply chain coordination can only be effective where:

- there is commitment by *all of the participants* to adopt effective supply chain coordination measures; and
- the coordination measures adopted reflect tailored solutions to local problems.

Aurizon Network's access undertaking only governs one element of a complex and integrated supply chain. As a result, it is critical to recognise that the undertaking cannot create or impose an effective coordination model across the supply chain - this can only be done effectively on the basis of industry-driven, cooperative arrangements.

However, the access undertaking can play a constructive role in supporting the cooperative efforts of industry to address coordination issues. To do this, it needs to be sufficiently flexible to be able to accommodate and adapt to changes in supply chain coordination and planning that may develop over time. Reflecting this, the key measures that Aurizon Network has included in the 2013 Undertaking are:

- retaining its commitment to actively participate in industry-wide initiatives to improve supply chain performance;
- continuing to base its assessments of capacity on overall system operating parameters – these system operating parameters will be published on its website and reviewed where a permanent change to the system occurs – and to formally review capacity when the system operating parameters change or following an expansion; and
- most importantly, to incorporate flexibility in the 2013 Undertaking to enable it to respond and implement specific coordination measures as agreed for a particular supply chain, e.g. increased flexibility in how a train service will be defined.

Aurizon Network's commitment to supply chain coordination is established in Part 8 (clause 8.9) of the 2013 Undertaking.

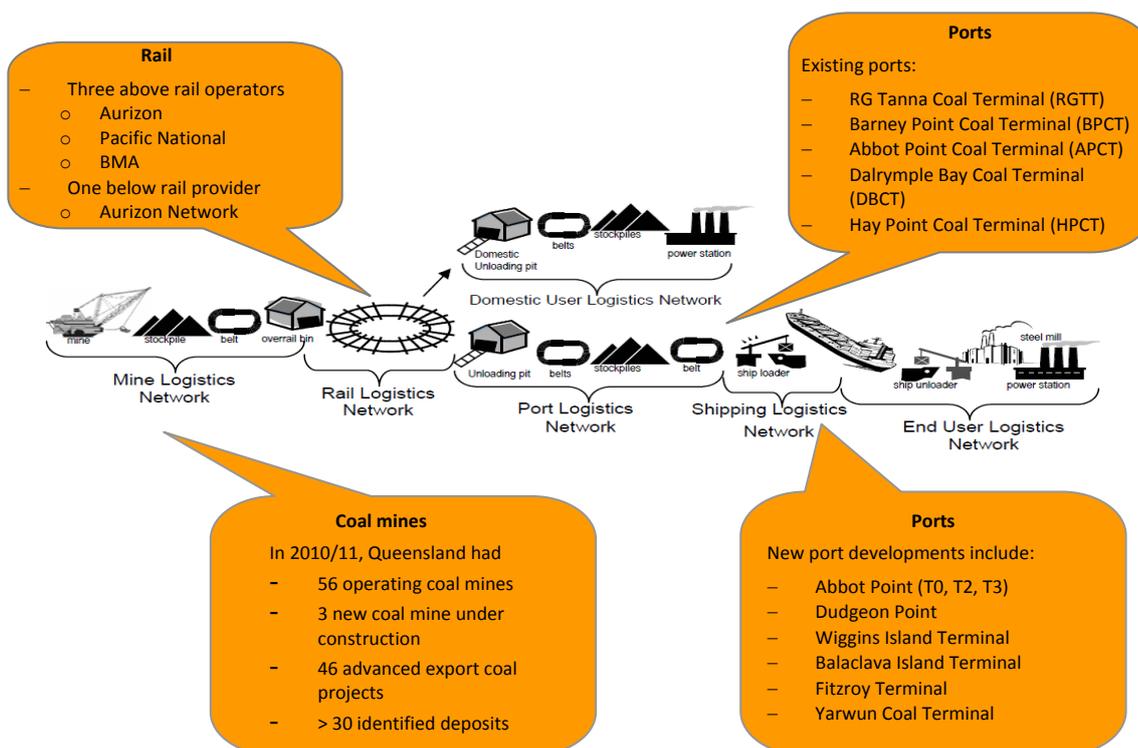
8.1 Introduction

Coal supply chains in the CQCR are highly complex and fragmented, with multiple participants, assets, and end-customers. The number of participants and the gaps in the contracting framework¹²⁵ means that there is a well-recognised risk of coordination failures occurring in the CQCR. Indeed, this has previously occurred in the CQCR, particularly in periods of high demand where there are overall system capacity shortfalls. In these circumstances, a degree of effective supply chain coordination is necessary to minimise the risk of coordination failures. This has been recognised by the QCA itself:

... [S]upply chain coordination issues have not arisen by accident or by chance. Indeed, these issues are the accumulated result of individual entities acting in their own best interests and, inadvertently, not in the collective interests of the supply-chain as a whole.¹²⁶

In a fully vertically integrated supply chain (such as the Pilbara iron ore railways), as there is a single owner, coordination is internalised within the firm, which faces a single set of incentives. In contrast, in highly fragmented supply chains there are multiple participants, each with differing (and at times competing) interests. The multitude of participants in the CQCR is shown in the figure below.

Figure 17 Coal supply chain



¹²⁵ Despite the fact there are significant operational interfaces between many supply chain participants, not all of these interfaces are governed by contractual relationships. For example, mines contract separately with below rail, above rail and port service providers. However, there is no contractual relationship between the below rail service provider or above rail operators and the coal handling terminals. This has meant that the necessary coordination between these parties is achieved through cooperative arrangements and operational protocols, rather than formal contracting mechanisms.

¹²⁶ QCA, October 2008, *Issue Paper: QR Network 2009 Draft Access Undertaking*, p.iv

In this situation, in the absence of effective supply chain coordination mechanisms, there is a risk of coordination failures occurring.

These may include:

- contractual misalignment between port and rail infrastructure due to the lack of a consistent approach to assessing deliverable capacity;
- the lack of an integrated approach to long-term capacity planning, resulting in capacity bottlenecks;
- capacity losses due to ineffective coordination of scheduling and maintenance activities; and
- sub-optimal risk management.

In recognition of these coordination issues, there has been significant effort in the last five years to improve the coordination of the CQCR supply chains – by Aurizon Network as well as other supply chain participants. This is reflected in a range of reviews and initiatives intended to address the problems that have arisen as a result of coordination failures, including the following:

- The 2007 O'Donnell Review. This identified misalignment of contractual entitlements as well as the lack of coordinated operating practices and long-term planning processes as factors contributing to long vessel queues at DBCT. This review resulted in the establishment of the Dalrymple Bay Coal Chain (DBCC) Central Coordinator, leading to improvements in short term operational performance through improved coordination of operations and maintenance scheduling.
- The application by DBCT supply chain participants to the ACCC for authorisation of several queue management systems (QMS). The ACCC first granted authorisation of a QMS for DBCT in 2005 as a provisional measure to reduce demurrage costs for the central Queensland coal industry. The ACCC also granted a short-term extension to the authorisation in 2008 (through to the end of 2008) to enable supply chain participants to implement a long term solution to the ongoing capacity constraints. However, the ACCC denied a request from the applicants for a further extension to the authorisation beyond 2008, on the basis that it required participants to commit to developing a long term solution to the supply chain coordination failures.
- The agreement by DBCC supply chain participants to a set of coordination principles, as reflected in the Long Term Solution Implementation Memorandum (LTSIM). Participants then sought to agree on detailed actions and plans to implement the principles (the DBCC LTS). However, this process ceased in 2011 when the parties were ultimately unable to reach agreement. Nevertheless, other aspects of this coordination process continued, in particular, the creation of the Integrated Logistics Company (ILC). The ILC assumed the responsibilities of the DBCC Central Coordinator and has also developed other improvements to operations and long term planning.
- Other supply chain efficiency initiatives, in which Aurizon Network is an active participant, including the activities of the ILC for the DBCC and other supply chain groups such as the Gladstone Coal Exporters Executive (GCEE).

Aurizon Network's access undertaking governs only one element of a complex and integrated supply chain. As a result, it is critical to recognise that the undertaking cannot create or impose an effective coordination model across the supply chain. However, the access undertaking can play a constructive role in supporting the cooperative efforts of industry to address coordination issues. To do this, it needs to be sufficiently flexible to be able to accommodate and adapt to changes in supply chain coordination and planning that may develop over time. Further, it needs to ensure that the contractual and pricing

framework incentivises behaviour that is consistent with the efficient operation of the supply chain, or, where price signals alone will not be sufficient, provides for appropriate controls on behaviour.

The role of the access undertaking in addressing coordination problems is explored further below.

8.2 Access regulation in context of supply chain coordination

The objective of the third party access regime is to promote the economically efficient operation of, use of and investment in, significant infrastructure by which services are provided, with the effect of promoting effective competition in upstream and downstream markets. Aurizon Network believes that supply chain efficiency considerations are relevant to the interpretation of the objective of the regime given the dimensions of economic efficiency and the inter-relatedness of the different elements of supply chain operations.

Accordingly, it is appropriate for the access undertaking to provide a framework supporting Aurizon Network's participation in any supply chain coordination and planning initiatives. As will be discussed below, Aurizon Network considers that can only be done effectively on the basis of industry-driven cooperative arrangements.

However, it is not the purpose of Aurizon Network's access undertaking to operate as a de facto mechanism for regulatory supervision of the entire Queensland coal industry. Fundamentally, the access framework is directed at improving the efficient use of the below rail asset by ensuring that dependent markets (particularly, the above rail market) are contestable; not to provide a framework for control of the entire supply chain. In this respect, the tradeoffs between above rail competition (characterised by differentiation in price and service levels) and a vertically integrated supply chain have been frequently noted.¹²⁷

In considering the design of coordination mechanisms, it is important to have regard to the role and limitations of access regulation and the potential conflict between the two. While regulation aims to promote efficiency, a balance must be struck between regulatory arrangements that promote competition (such as open access) and imposing standardised requirements that are intended to improve coordination. As administrative coordination mechanisms can result in a standardisation of some aspects of supply chain operations (for example, train performance characteristics), this may serve to undermine competition in the contestable elements of the supply chain. For example, by promoting standardisation of the service offering of train operators through excessive prescription regarding service characteristics, above rail competition can be inhibited.

Aurizon Network remains committed to improving supply chain coordination as this has the potential to generate significant efficiency benefits for all participants, including maximising utilisation of the existing network infrastructure and avoiding unnecessary investment. However, it is important to balance the efficiency benefits of competition within contestable elements of the supply chain, against the efficiency losses associated with coordination failures in a disaggregated supply chain. It is essential that this balance is achieved in the regulatory framework, having regard to the impact of coercive coordination mechanisms on the competitive environment for those contestable markets.

¹²⁷ This issue was discussed in Aurizon's submission to the ARTC Hunter Valley Access Undertaking Capacity Loss Review (7 December 2012). Available at: <http://www.artc.com.au/library/Aurizon.pdf>

8.3 Aurizon Network's approach to supply chain coordination

Aurizon Network has sought to develop a framework in the 2013 Undertaking which supports cooperative coordination initiatives to improve efficiency within individual supply chains. However, it is essential that such coordination measures be primarily industry driven and conducted on a commercial basis. The access undertaking can play an important role in supporting such cooperative initiatives, but should not be used as a vehicle to impose them on a single supply chain participant.

As noted above, the key reason that coordination failures can occur is because of the misalignment of the commercial incentives of supply chain participants. This misalignment is in part driven by the operational tradeoffs that exist throughout the supply chain. For example, a mine operator may have the opportunity to reduce the costs it incurs in constructing and managing its loadout facility, for example, by avoiding large stockpiles at the loadout, and providing only adequate loadout capacity and recharge capability. However, this may act to the detriment of the rail schedule, as it will constrain how regularly trains can be loaded at that facility to assemble a ship cargo. Similarly, a cargo assembly operating mode at the port may require significant variability in rail operations. To support this, significant peaking capacity may be required in the rail infrastructure, which may reflect an inefficiently scaled rail system.

Misaligned incentives can also arise as a result of strategic considerations. For example, a producer may seek to holdup infrastructure investment by withholding information from the below rail and port infrastructure providers regarding future tonnage projections. This may occur because the investment involves a high incremental cost which may flow through to its tariffs, or because the expansion creates additional sources of competition for similar or preferable coal types in the export coal market. While this strategic behaviour may lead to the mine operator achieving its goal with respect to holding up a capacity expansion, it will be to the detriment of the efficiency of the entire supply chain.

8.3.1 Elements of effective supply chain coordination

Effective coordination can occur through a number of key elements.

Arguably the most important feature of an effective supply chain is contractual alignment. This is where an access holder has contracts for capacity across the supply chain that are matched (i.e. below rail, above rail and port access entitlements), resulting in effective incentive alignment across multiple service providers. As previously discussed, the misalignment of contracted capacity entitlements for the different elements of the logistics task is one of the key causes of coordination failures in bulk supply chains. The benefits of ensuring contractual alignment include:

- greater certainty for producers that their access entitlements will be met;
- reduced risk that an infrastructure owner will over-contract capacity, as contracted entitlements must be consistent with system capacity; and
- minimising the potential for misalignments at the operational level resulting in inefficient use of capacity.

Contractual alignment may also be an issue after the completion of capacity expansions. As discussed in Chapter 7, the capacity entitlements associated with expansion works are typically contracted to access seekers prior to the works being undertaken. However, there is the potential for a capacity expansion to result in an increase in capacity that is less than was predicted prior to the works being undertaken. Coordination mechanisms can operate to promote alignment both across the supply chain and also between contracted and actual (as opposed to expected) system capacity.

There are a number of other elements of effective supply chain coordination, including:

- *Master planning has a whole of supply chain focus* – Planning of possible future expansions must be undertaken within the context of the wider supply chain and not just focus on individual elements in isolation. This will help predict where capacity constraints are likely to emerge and allow for the identification and assessment of options to address them, ensuring a least cost expansion path for the supply chain as a whole (rather than focusing on ‘least cost’ for an individual element of the supply chain).
- *Consistent system operating assumptions* – The measurement of port and rail capacity based on different operating assumptions has previously caused significant problems in the east coast coal supply chains. This misalignment can result in producers holding access rights for one element of the logistics task that exceed actual supply chain capacity. Ensuring appropriate consistency between these parameters is important in assessing capacity, planning expansions and maximising the efficient utilisation of existing capacity.
- *Operation of services across the supply chain* – This refers to effective coordination of all supply chain participants within the scheduling environment, so as to ensure that capacity is not lost. Capacity losses in the operating environment can readily occur where producers do not have equivalent usage rights across all elements of the supply chain, where service providers don’t fully coordinate maintenance activities or as a result of service cancellations.
- *Accountability for capacity consumption* - A key problem that is observed in fragmented supply chains is where participants are not held accountable for capacity consumption that diverges from contracted entitlements, particularly where the impact of the disruption is felt most keenly elsewhere in the supply chain. For example, delays at a mine loadout may disrupt train schedules and port operations, causing system capacity loss and lower asset utilisation.
- *Scaled technology choices* - Many of the supply chain technologies that are currently deployed, or being considered for deployment, require the participation of the entire supply chain to fully realise potential efficiencies. That is to say, they will provide for a lower total cost of ownership for the supply chain only where there is adequate scale to support the technology’s viability. In this respect, the ability for one or more supply chain participants to opt out of a technology can undermine the efficiencies that were sought to be realised.

8.3.2 Coordination models

A range of coordination models may be used to achieve coordination in the above matters. These may range from informal and voluntary initiatives to the establishment of an independent supply chain entity. Experience to date clearly demonstrates that, to be effective, any coordination mechanisms must satisfy two essential conditions: firstly, a commitment from all participants that is underwritten by a genuine commercial incentive; and secondly, the delivery of localised solutions.

8.3.2.1 Need for commitment by all participants

Given the inter-related nature of supply chains, any coordination action must necessarily involve all participants to be effective. The actions of any one participant can have an impact on others, such that the costs of supply chain failures tend to be ‘socialised’ across the supply chain. Similarly, any benefits of improved coordination accrue to all participants. As such, any initiative designed to address coordination failures must encompass all participants in order to be effective, fair and reasonable.

This is not to suggest that obtaining commercial agreement between competing coal producers and operators to coordinate their activities (in such a way as to be consistent with the *Competition and Consumer Act 2010*) has proved to be a straightforward task. In this respect, it is acknowledged that, over the UT3 period, the DBCC LTS process ultimately failed to deliver a single, comprehensive agreed solution to supply chain coordination issues for DBCC. Despite significant progress in developing coordination mechanisms during this process, the ultimate reason for failure to reach an agreed position (contemplated as a 'LTS Outcome' in the 2010 Undertaking) was that *producers* were unable to agree on the extent of application of the supply chain coordination framework.

This, in turn, has only reinforced the ineffectiveness of a 'regulated solution', for example through Aurizon Network's access undertaking. The key challenge in seeking effective supply chain coordination is that ownership in dependent markets is fragmented and different parties have different business interests (with some of those parties being direct competitors in what is an intensely competitive global market). The key hurdle remains the simple incentive problem that, depending on each participant's existing contracted positions, while the supply chain as a whole may be better off with improved coordination, there is a potential for individual 'winners' and 'losers' from any coordinated outcome. Further, there is no compensation for those who might be made worse off.

Indeed, even to the extent that some consensus could be achieved on key areas, the failure to agree to the LTS outcome reflected a concern by producers that they could not be certain other producers in the supply chain would 'sign up', potentially leaving those outside the scope of LTS obligations with a competitive advantage over those that had signed up and, therefore, had to comply with coordination arrangements.¹²⁸ In effect, without certainty that it would apply to all participants in the supply chain, producers preferred to have no LTS outcome. A key lesson from this experience is the importance of a commitment by all supply chain participants to abide by a coordination model in order for it to be effective.

Accordingly, it should be recognised that supply chain coordination is as much about coordinating the behaviour of users of the supply chain as it is about coordinating the behaviour of providers of supply chain infrastructure. Given this, any coordination mechanism which seeks to impose coordination obligations on a single party (i.e. infrastructure providers) in the supply chain will be both ineffective and inequitable. This would not be in the interests of any supply chain interest as, ultimately, a 'coordinated solution' that is not broadly accepted by all parties will be neither a durable nor safe basis for the long dated investments coordination is intended to encourage.

It is therefore consistent with the legitimate business interests of Aurizon Network, as the owner and manager of the network, for the access undertaking to reflect an approach of supporting and facilitating supply chain efficiency initiatives on a 'best endeavours', voluntary basis, given the absence of a symmetrical obligation on any other supply chain participant.

It is important to note that the inappropriateness of using Aurizon Network's access undertaking to establish procedures and protocols to apply under a supply chain coordination mechanism was recognised by key stakeholders and the QCA in the consideration of QR Network's 2009 Draft Access Undertaking. For example, while noting that the access undertaking should require Aurizon Network to cooperate with the development of a supply chain coordination process and to have regard to its outcomes, BMA did not consider that the QCA should take an active role in the development of the coordination process itself:¹²⁹

¹²⁸ This is a clear example of the 'prisoner's dilemma' problem in economics.

¹²⁹ Queensland Competition Authority (2009). Draft Decision – QR Network 2009 Draft Access Undertaking, p 243.

“...the Authority should have no role in coal chain coordination and this issue is not relevant to the Authority’s consideration of the draft undertaking.”

The QCA’s draft decision acknowledged that the appropriate role of the access undertaking was to facilitate the effective coordination of the coal chain, as opposed to being the vehicle by which the coordination process is to be established:¹³⁰

“It is the Authority’s view that, where possible, the undertaking should facilitate coordination of a coal chain. However, it appears that there is little support for an approach where the undertaking is the forum in which coal chain coordination is established.”

The QCA’s conclusions on this matter were not varied in its final decision.

In summary, the central issue for the access undertaking is ensuring that it does not inhibit or constrain Aurizon Network from participating in coordination frameworks, whether because the regulatory framework creates incentives that work against supply chain coordination or because there are specific provisions in the regulatory framework that prevent Aurizon Network from agreeing to certain coordination measures. Certainly, as noted by Aurizon Network in the Electric Traction DAAU, the access undertaking should not itself be the cause of a coordination failure.¹³¹ Consistent with this approach, the 2013 Undertaking provides a framework that is intended to support cooperative, industry-driven coordination initiatives, but does not set out a mandatory framework for coordination.

8.3.2.2 Local solutions

An effective coordination approach must also deliver local solutions for local problems. As noted above, each supply chain is different and poses a different set of challenges in optimising the efficiency of the supply chain. It is important that the specific circumstances of the supply chain are taken into consideration when designing a governance framework aimed at achieving effective coordination. As the owner and manager of a rail network servicing a number of interrelated supply chains, a key challenge for Aurizon Network is to have regard to the particular issues that are specific to each supply chain.

For example, as part of the DBCC LTS process, some producers sought to effectively ‘transplant’ certain Hunter Valley solutions into DBCC. Under the Hunter Valley coordination approach a separate, independent coordination entity, the Hunter Valley Coal Chain Coordinator (HVCCC) has been established, with membership from all supply chain participants, to perform supply chain planning and coordination functions. This arrangement reflects a collective commitment to participate in an agreed independent coordination framework by all participants in that supply chain.

It is also important to remember that the framework that is now in place in the Hunter Valley was a consequence of the Greiner review, which was commissioned by the New South Wales Government. The Government also had specific requirements that had to be met by the solution, which included ensuring that sufficient provision was made for access to capacity by new entrants. While the Queensland Government commissioned the O’Donnell review of the Goonyella supply chain in 2007 (which resulted in the appointment of the DBCC Central Coordinator), it has not sought to take such an active role in addressing coordination failure, nor has it sought to mandate specific solutions over industry led initiatives.

The other issue that was unique to the Hunter Valley – and which underpinned its coordination problems – was the absence of long term contracts given the open access regime that existed at the port. This

¹³⁰ Queensland Competition Authority (2009). p 248.

¹³¹ QR National Network (2012). Submission to QCA: Electric Access Draft Amending Access Undertaking, September

meant that contractual alignment could not be achieved (which as noted above, is considered fundamental to effective coordination). The introduction of long term contracts was one of the main benefits of the Greiner review, which also resulted in the incorporation of the HVCCC as a separate legal entity.

Lastly, and most importantly, while the key sources of coordination failure were similar to those faced by DBCC participants (being the absence of contractual alignment, albeit for fundamentally different reasons), the different circumstances of each supply chain meant that the solutions needed to be different. Further complicating this issue is that the CQCR has four interrelated supply chains, each of which face different challenges and constraints. This makes coordination significantly more complex as the behaviours of many more parties must be captured by the coordination mechanism to be effective.

There are other important differences in local circumstances within individual CQCR supply chains. For example, Gladstone producers have historically argued that the issues in that supply chain are different to those in Goonyella. This fundamentally reflects two factors. First, the Blackwater system does not suffer from the same extent of contractual misalignment as occurs in Goonyella, with the operating assumptions underpinning contractual entitlements at the port and on the rail network being broadly consistent. Second, the larger stockpile capacity at the Gladstone ports allow for significantly less variability in the system – the increased variability within the Goonyella system intensifies the demand for operational coordination. As a result, Gladstone users do not want to use the same type of formal coordination arrangements that were being developed for DBCC through the LTS process.

These considerations underline the fact that effective coordination mechanisms must be tailored to the circumstances and issues facing particular supply chains. A prescriptive ‘one size fits all’ approach will simply not work. This view underpins the approach in the 2013 Undertaking of providing a framework which supports cooperative, industry-driven coordination initiatives, rather than seeking to impose a single coordination framework via the access undertaking.

8.3.2.3 Implications for UT4

The key implication from this discussion is that Aurizon Network’s access undertaking is simply inappropriate as a primary vehicle to implement coordination across the various supply chains. This is for a number of reasons:

- the access undertaking and the QCA Act generally can only bind one supply chain participant, being Aurizon Network – coordination cannot be achieved by imposing obligations on Aurizon Network as, by definition, supply chain coordination requires that *all parties* in the supply chain commit to coordinate their activities;
- Aurizon Network participates in multiple supply chains in the CQCR, each of which has specific challenges and characteristics – there is no single model for improved supply chain coordination across the CQCR, as the mechanisms required to achieve improvements in coordination will differ for each system;
- finally, the implementation of coordination mechanisms in the access undertaking needs to be considered within the context of the legislative framework (refer Chapter 4 above) - it is unclear what, if any, legislative support there would be in the QCA Act for many potential coordination activities.

Instead, the access undertaking should complement or support industry driven cooperative efforts, of which there are many current examples (discussed further below). Where all parties within a supply chain

have committed to a coordination framework, this is typically documented to reflect this commitment – and, if legally binding, appropriate documents executed. In this case, it is unnecessary to incorporate these obligations in the access undertaking as Aurizon Network will have made commitments to comply with these obligations as part of the documented agreement (the same as the other parties to the agreement). In this situation, it is not appropriate for a regulatory instrument such as the access undertaking to be used to enforce agreed commitments on one party to the agreement alone.

8.3.3 Aurizon Network’s role in supply chain coordination in the CQCR

Despite the cessation of the formal DBCC LTS process,¹³² efforts towards improved supply chain coordination are continuing in individual supply chains with Aurizon Network playing a proactive and constructive role in such initiatives. This section sets out, at a high-level, the current level of voluntary coordination activities that Aurizon Network is participating in, and indeed in many cases, proactively managing. Current coordination initiatives can be categorised into three broad levels: (1) growth planning; (2) integrated planning initiatives; and (3) operational coordination. Examples of current coordination efforts being undertaken by Aurizon Network within each of these broad categories are given in the table below.

Table 3 Examples of current coordination initiatives in the CQCR

Coordination activity	Example
Growth planning	Goonyella to Abbot Point Expansion (GAPE) Wiggins Island Rail Project (WIRP) Integrated Logistics Company (ILC) System Master Plan
Integrated planning initiatives	Participation in corridor-specific integrated planning groups: <ul style="list-style-type: none"> - ILC for DBCC (initiatives evaluated include proposal in relation to DBCT stockyard capacity, train loadout performance and RCS signalling) - Capricornia Coal Chain Steering Committee for Blackwater and Moura coal chain - Abbot Point User Group
Operational coordination	System Rules Corridor-based user groups (e.g. Blackwater User Group; Moura User Group, DBCT User Group) Integrated operational planning and scheduling system

8.3.3.1 Growth planning

Growth planning initiatives primarily affect growth users and, in terms of initiatives, this encompasses commercially negotiated outcomes for the scope and operational parameters for new rail infrastructure projects developed as part of coordinated supply chain expansions, such as the Wiggins Island Rail Project (WIRP) and the Goonyella to Abbot Point Expansion (GAPE). This also includes any system based master planning initiatives, including that for DBCC under the auspices of the ILC. For new infrastructure projects, a commercial solution to supply chain performance optimisation issues can usually be achieved given the small number of parties involved.

The GAPE project provides an example of Aurizon Network engaging with producers and train operators to develop an optimal operational approach for this new infrastructure. As part of the negotiated outcome for GAPE, Aurizon Network effectively compensated above rail operators and end users for the ‘float’ of

¹³² The ILC continues to operate. It is only the LTS processes and objectives that were being progressed under the ILC that have ceased.

the BRRT.¹³³ This demonstrates an improved supply chain outcome being achieved through commercial negotiation with affected parties.

The ILC undertakes certain coordination activities on behalf of its shareholders (which includes Aurizon Network) in the DBCC, including master planning, tactical/long term planning, coal chain forecasting and coal chain performance management. As part of this role, the ILC develops a System Master Plan for the DBCC in consultation with supply chain participants. This is an example of an initiative that is specific to a single supply chain.

8.3.3.2 Integrated planning initiatives

Affecting all users of a system, integrated planning initiatives are system-wide improvements that involve cooperation and an integrated approach between various parties that are aimed at improving overall system performance. Reflecting the fact that coordination problems and their solutions are corridor specific, Aurizon Network has actively sought to promote initiatives to improve efficiency and optimise system capacity through various forums and mechanisms in each supply chain.

These initiatives include:

- Producer groups:
 - the DBCT User Group – discusses specific producer issues, develops strategy around coal chain operations;
- Coal chain groups:
 - ILC – conducts independent master planning and coal chain capability forecasting, performance monitoring and reporting and coal chain improvements;
 - Executive Leadership Group – undertakes ILC Business Plan development, development and implementation of improvement initiatives, Coal Chain Performance Review;
 - Stakeholder Operational Monthly Meeting – technical group undertaking operational performance reporting and information sharing;
- Service provider groups:
 - Service Provider Leaders – collaborative group of service provider CEOs providing advice and direction to IPR/IPT teams;
 - Integrated Planning Regime (IPR) – conducts integrated operational and tactical planning and systems development. Provides direction to IPT, with co-located planning;
 - Integrated Planning Team (IPT) – responsible for execution of integrated planning offer.

These groups cover both strategic and operational aspects of performance. Some groups (such as the ILC, IPR and IPT) specifically provide an opportunity to consider and develop integrated planning initiatives. There are a number of proposals for supply chain performance improvement that have been raised through such forums. In relation to the DBCC, Aurizon Network undertook a capacity improvement evaluation which sought to identify steps that could be taken to optimise available capacity in this supply

¹³³ Aurizon Network modeled an approach of a 'floating' below rail transit time (BRTT), and then found the approach that gave the lowest total cost of ownership (TCO), which reflects the optimal combined above and below rail solution. Aurizon Network then negotiated with above rail operators around train types and with producers around BRTT.

chain. Aurizon Network presented this analysis to the ILC Board in early 2012.¹³⁴ Specifically, Aurizon Network identified and proposed several reforms which could increase DBCC capacity, including:

- Remote Controlled Signalling (RCS) in Newlands, including for GAPE – this has the potential to increase capacity in DBCC by 1 to 2 mtpa.
- improving actual capacity of mine loadouts – by improving loadout performance, there is an opportunity to increase loadout rates and lift supply chain throughput. Loadout capacity may be lost by conflicting objectives of supply chain operators (i.e. maximise payload, avoid overload, avoid exceeding maximum load time, avoid ‘unhealthy’ train status). This initiative has the potential to increase capacity by 4 to 5 mtpa by increasing some low loadout rates to an agreed minimum standard for the benefit of the coal chain.
- implementing the DBCT Stockyard Augmentation Project – this proposal would deliver more stockyard space, allowing more mines to concurrently build stockpiles, increasing the distribution of railings across the system hence reducing demand for intense loadout and branch line utilisation and, thus, increasing supply chain capacity. This has the potential to increase capacity by 4 to 5 mtpa.

Such initiatives are thought to be able to deliver benefits for the entire supply chain. However, as they require investments in some cases by individual elements of the supply chain, such initiatives can only be undertaken where the relevant party is willing to do so. Nevertheless, forums such as the ILC provide a means of evaluating and progressing options and seeking to achieve industry agreement to initiatives. In some cases, commercial solutions may be able to be negotiated to achieve mutually beneficial outcomes. Other initiatives reflect relatively low cost changes to operational practices that have the potential to yield material benefits in terms of increased capacity.

8.3.3.3 Operational coordination

Initiatives in this category are all about improving operational coordination within the medium to short term time frame, including day of operation, to achieve incremental improvements.

For example, Aurizon Network presented information to the Capricornia Coal Chain Steering Committee in October 2011 in relation to its development of Capricornia System Rules, supply chain operating assumptions and Blackwater/Moura Operating Principles. The Capricornia System Rules, which have been submitted to the QCA for approval,¹³⁵ set out rules for scheduling train orders and provide steps for dealing with contested train paths. The supply chain operating assumptions are a data book of input parameters that are used in capacity modelling. They have been developed in consultation with the GCEE’s nominees and operators. The Blackwater/Moura Operating Principles identify the system operating assumptions which are used in capacity analysis and are intended to be a guide for operators in developing their operating plans. Each of these initiatives has been developed in close consultation with industry.

As part of the Capricornia Coal Chain Steering Committee Aurizon Network also identified a range of operational improvements that could be made across all elements of the supply chain, including rail network, above rail operations and port. For example, suggested improvements identified for:

- the below rail network, include changes to path separation and departure times;

¹³⁴ ILC Board Meeting, 29 February 2012

¹³⁵ The QCA published its decision to not approve the Capricornia System Rules on 24 April 2013.

- above rail, include reduced dwell times on the main line; and
- the port, include RGCT pre-unloading time improvements by using E Reader technology.

Another initiative being progressed by Aurizon Network is the development of the integrated operational planning and scheduling system, which includes an automated scheduling and planning tool that determines optimal schedules given supply chain constraints. This project was triggered by WIRP as it became apparent that the scheduling task would become too complex to be done manually, as is currently the standard procedure. This project is still in the development stage, and will eventually be implemented across the CQCR. More on this project is set out in Volume 3 of the 2013 submission materials.

In summary, as demonstrated by its ongoing participation in the above initiatives, Aurizon Network remains committed to supporting efforts by industry to improve the efficiency of the CQCR supply chains. The access undertaking will continue to reflect Aurizon Network's commitment to improving supply chain efficiency through its active participation in supply chain forums designed to achieve this goal.

8.4 Participation in supply chain management groups

The supply chain coordination and planning provisions in the 2010 Undertaking include provisions relating to coal supply chain coordination for the CQCR, system master planning and contracting for capacity. As discussed, Aurizon Network's 2013 Undertaking will support effective supply chain coordination by ensuring the regulatory framework allows Aurizon Network the flexibility to participate in initiatives and respond to supply chain improvements, while avoiding imposing prescriptive regulatory obligations that could constrain supply chain improvements. This approach also recognises the fact that different approaches will be required for different supply chains, given the specific operating circumstances and challenges for planning and coordination that apply.

8.4.1 Background

The 2010 Undertaking recognises the DBCC LTS process by providing for the implementation of an 'LTS Outcome'. It also commits Aurizon Network to participate in a 'Supply Chain Group'¹³⁶ and includes processes for consultation in the development of any system operating assumptions and in system master planning.

8.4.2 Issues

As discussed above, the access undertaking is not the appropriate mechanism for implementing a supply chain coordination framework, which should be driven by industry and reflect local issues for each supply chain. The role of the access undertaking is to facilitate and support industry-driven initiatives. Aurizon Network remains committed to industry-wide efforts to improve the efficiency of CQCR supply chains.

¹³⁶ A Supply Chain Group is defined as a group: (1) that has been established as a whole of supply chain coordination group for the purpose of coordinating some or all aspects of the planning or operation of a coal supply chain within the CQCR; and (2) which Aurizon Network reasonably considers has the support of sufficient participants in the coal supply chain to effectively perform that coordination purpose.

8.4.3 UT4 proposal

8.4.3.1 Commitment to participate

Aurizon Network intends to continue this approach of active engagement in industry-wide initiatives in future. Accordingly, the 2013 Undertaking retains Aurizon Network's voluntary commitment to participate in a supply chain group in relation to the coordination and effective performance of a coal supply chain and, if applicable, the development of a supply chain master plan. Aurizon Network also volunteers to participate in discussions with service providers and other supply chain participants on request to coordinate its maintenance activities in order to minimise any adverse impacts on available capacity (clause 8.8.1). Clause 11.1.4(f) of the 2010 Undertaking has been deleted on the basis that it is already covered by this provision in the 2013 Undertaking.

8.4.3.2 Recognition of LTS outcomes

As the DBCC LTS process has now ceased, without agreement from the parties on a final set of actions, the clause in the 2010 Undertaking that required a review of the access undertaking following a LTS outcome is now redundant and has therefore been deleted. This does not reflect any change in Aurizon Network's commitment to supply chain coordination. Indeed, despite the fact the DBCC LTS process did not deliver an agreed LTS outcome, Aurizon Network has reaffirmed its commitment in the 2013 Undertaking to participate in supply chain coordination groups that are established.

If, in order to implement supply chain coordination improvements, Aurizon Network agrees to do certain things that require changes to the access undertaking, then it would submit a DAAU to do this. It is not necessary to have a specific provision in the access undertaking which requires Aurizon Network to do this, given that it would have agreed to in the supply chain group. Aurizon Network has therefore not retained clause 11.1.5 from the 2010 Undertaking.

8.5 Assessment of capacity

8.5.1 Background

The 2010 Undertaking includes commitments for Aurizon Network to develop system operating assumptions for each coal system and to review these at least once per year or more frequently where there is a material change. Where a supply chain group is developing system operating assumptions, the 2010 Undertaking also commits Aurizon Network to participate in this process. The access undertaking also provides for regular reviews of capacity.

8.5.2 Issues

Supply chain efficiency will be promoted where each element of the supply chain uses consistent system operating assumptions to underpin their contracts and capacity planning. Aurizon Network therefore supports and engages in initiatives within individual supply chains to consult and reach agreement on system operating assumptions. As discussed above, Aurizon Network has developed its own system operating assumptions for each coal system in consultation with other participants in that system. These system operating assumptions then form the basis of Aurizon Network's capacity assessment.

Aurizon Network will continue to base its capacity assessments on system operating assumptions that reflect overall system operation – that is, capacity assessments will not be conducted from a 'stand alone railway' perspective. It has always been Aurizon Network's view that it must assess below rail network capacity having regard to the wider supply chain, including any capacity constraints. This is a

fundamental requirement of effective supply chain coordination and is the basis on which Aurizon Network conducts its capacity analysis, consistent with the good management of the network.

As coal supply chains are highly dynamic environments, the system operating assumptions will need to be reviewed from time to time. As with the initial development of system operating assumptions, any such reviews will require consultation with supply chain participants to ensure a consistent view of capacity is adopted across the supply chain. However, Aurizon Network should not be required to adopt system operating assumptions that it does not agree with as this would be fundamentally inconsistent with its responsibility as a network owner and manager and, ultimately, with its other legislative responsibilities as railway infrastructure manager. The QCA acknowledged the validity of Aurizon Network retaining its commercial discretion when participating in coal supply chain group activities in its Final Decision on the 2010 Undertaking:¹³⁷

“The Authority does not accept the argument that QR Network should be obliged to adopt the supply chain group’s system operating assumptions in its master plan, as this would impinge on QR Network’s responsibility to operate and develop its network.”

Further, to ensure that an unnecessary compliance burden is not imposed and that the costs of regulation do not outweigh the benefits, reviews of system operating assumptions and also of capacity should only be required where this is justified, for example, where there has been a material change.

8.5.3 UT4 proposal

8.5.3.1 Operating assumptions

The system operating assumptions for each system have already been developed, forming a baseline for each system. These have been documented and circulated to all supply chain participants for comment in each of the four CQCR systems. As a result, clauses 11.1.3(a) and (b) from the 2010 Undertaking regarding the development of supply chain operating assumptions are now redundant.

8.5.3.2 Changes in operating assumptions

Recognising that coal supply chains are a dynamic environment and capacity can be affected by a range of factors, the 2013 Undertaking includes a commitment for Aurizon Network to review its system operating assumptions for its coal systems as soon as practicable after it becomes aware that a permanent change has occurred or will occur to a coal system that materially adversely affects the system operating assumptions (clause 8.8.2(b)). This reflects a pragmatic approach in which reviews are triggered when they are required as a result of a material and sustained change, rather than trying to identify upfront the circumstances that will change the parameters – an exercise which is destined to fail given the dynamic operating environment. An example of the type of change which might trigger such a review would be an expansion of the infrastructure.

Aurizon Network recognises the need to gain the views of the various system users prior to making any changes to the system operating assumptions. This is critical because of the interrelationships and tradeoffs in the system, meaning that changes in the operation of one part of the system may have unexpected consequences elsewhere. As a result, consultation is essential in order to promote alignment of system operating assumptions across all elements of the supply chain. For this reason, the review process for Aurizon Network’s system operating assumptions in the 2013 Undertaking commits Aurizon Network to notifying any applicable supply chain group of the review and to invite submissions

¹³⁷ QCA (2010), Final Decision – QR Network’s 2010 Draft Access Undertaking, p.193

(clause 8.8.2(a)). Aurizon Network will respond to any such submissions as soon as reasonably practicable, including explaining whether and, if so, how, Aurizon Network has varied its system operating assumptions.

Aurizon Network also commits to keeping its most current system operating assumptions available on its website (subject to not disclosing confidential information) (clause 8.8.2(d)). This will help ensure any interested stakeholders have access to current information regarding system operating assumptions.

Consistent with Aurizon Network's responsibility as a network manager to make its own decisions regarding system operating assumptions for its network, while stakeholder views will be taken into account in a review, there is no obligation on Aurizon Network to vary the system operating assumptions based on the content of submissions received. In line with this, Aurizon Network has removed the ability to refer any disputes in relation to its own system operating assumptions for dispute resolution.

This approach reflects a coordination and planning framework for the 2013 Undertaking which supports and seeks to facilitate discussion amongst participants on system operating assumptions, but which does not seek to impose unilateral obligations on a single party. This is appropriate given that the system operating assumptions relate to Aurizon Network's assets. As has been recognised by the QCA, it is unreasonable to require Aurizon Network to adopt system operating assumptions for its business or take actions that it does not endorse and which would impinge on its ability to operate and develop its network.¹³⁸

It should also be recognised that there is a very strong incentive for Aurizon Network to adopt system operating assumptions that are a reasonable reflection of how the system operates given it bears contractual liability in the event it contracts for capacity that it cannot provide. This also means that it is essential the access undertaking does not require Aurizon Network to adopt system operating assumptions that it does not endorse, given the risk of it then breaching its access contracts if these system operating assumptions are unachievable, create a capacity shortfall or otherwise prevent it from meeting its contractual obligations.

Nevertheless, amendments have also been made to the user vote process for capital expenditure projects to further address differences in views regarding the system operating assumptions for the coal systems. The proposed amendments require that the working papers that Aurizon Network prepares and distributes to users as part of a user vote process will identify the applicable system operating assumptions. If a user disagrees with Aurizon Network's proposed assumptions (to the point where it cannot support the project), this should be provided as one of the reasons for a 'no' vote. The improvements to the voting process are discussed in Chapter 7.

This mechanism will provide a strong incentive for Aurizon Network to develop system operating assumptions that have the support of users as this will help ensure the 60% user approval threshold is met, which in turn will mean that the scope and/or standard of that project must be accepted by the QCA as part of its prudency assessment. If users do not support the project due to disagreement on the system operating assumptions and the 60% threshold is not met, then Aurizon Network will need to satisfy the QCA that the project scope is prudent. Any such assessment by the QCA would necessarily address the assumed system operating assumptions for the project, particularly if this was the expressed reason for the failure to meet the user approval threshold.

¹³⁸ QCA (2010), Final Decision – QR Network's 2010 Draft Access Undertaking, p. 193.

Aurizon Network believes this mechanism provides transparency in regard to its system operating assumptions (and whether users agree with them or not) and also provides an avenue for affected users to convey their support or otherwise for these assumptions. Further, as capacity expansions are likely to be the most sensitive issue in terms of changes to system operating assumptions, it makes most sense to address this through the voting mechanism rather than through a periodic general review of system operating assumptions.

8.5.3.3 Regular reviews of capacity

The 2010 Undertaking required Aurizon Network to undertake a review of capacity, and the difference between Capacity and Committed Capacity, within six months of the approval date. As this has been completed, it is therefore proposed to remove this from the undertaking as this will now be addressed via the periodic reviews of capacity which may be undertaken for a coal system in conjunction with the development or review of the Network Development Plan (clause 8.8.3(a)). Aurizon Network will review capacity if the system operating assumptions are varied as a result of a review under clause 8.8.2(b) (i.e. when Aurizon Network becomes aware of a permanent change that will materially adversely affect system operating assumptions) or are otherwise varied in a way that materially decreases the existing capacity in that coal system (clause 8.8.3). This provision also addresses the situation where a capacity review reveals a deficit. In this situation, Aurizon Network must have regard to that deficit prior to entering into an access agreement that would increase the size of that deficit and prior to constructing any extension for that coal system.

These provisions will result in capacity reviews being undertaken when they become necessary rather than at defined intervals. Aurizon Network considers this more pragmatic approach will ensure a review occurs when it is genuinely necessary.

Aurizon Network will also be obliged to undertake capacity reviews to determine whether expansions have achieved their forecast capacity increase (clause 8.7.2(a)). The actions that will be taken where an expansion has not delivered the increase in capacity that was expected are addressed in Chapter 7.

8.6 Contractual alignment

As discussed previously, ensuring contracted access rights align as far as possible with expected usage and also across different elements of the supply chain is an important means of optimising the use of existing capacity.

8.6.1 Issues

Consistency between port and rail infrastructure capacity entitlements is important in order to maintain consistency between contracted and actual capacity entitlements across the supply chain. Where contracting approaches across different elements of supply chain infrastructure are not aligned, a consequence may be the underutilisation of either port or rail capacity and a subsequent reduction in supply chain efficiency.

Optimisation of the use of supply chain capacity requires alignment between the definition of capacity entitlements and the expected utilisation of supply chain infrastructure. Annual entitlements are currently specified on a monthly basis reflecting an equal distribution between months. However, this does not reflect the actual operating environment where there is some variability between months due to a range of factors, for example, seasonal variations. Greater flexibility in the monthly specification of the annual

entitlement will promote alignment of contracted with actual usage, and will enable Aurizon Network to meet its annual contractual commitments without diminishing its accountability.

8.6.2 UT4 proposal

8.6.2.1 Requirement for entitlement to unload

In order to promote the alignment of capacity entitlements across the supply chain, Aurizon Network has strengthened the provisions in the 2013 Undertaking that require access seekers to demonstrate that they possess sufficient capacity entitlements at an unloading point (clause 4.11(c)). For access holders, the SAA requires them to demonstrate that they possess the necessary access rights that will enable them to continue to fully utilise their capacity entitlements, noting that failure to provide this guarantee could trigger a capacity resumption review (these issues are discussed in Chapter 7). These provisions will ensure the continued alignment of capacity entitlements across the supply chain.

8.6.2.2 Definition of train service entitlement

Under the 2010 Undertaking, capacity entitlements are defined as equal monthly entitlements. This is not consistent with actual usage in the supply chain, with usage varying over a 12 month period in accordance with predictable changes in supply chain capacity (e.g. seasonal factors, major planned outages etc) as well as unpredictable changes (e.g. specific weather events, mine production problems).

The provisions in the 2010 Undertaking define a 'Reference Train Service' in terms of cyclic traffic which will operate evenly throughout each yearly, monthly and weekly period. The 2013 Undertaking proposes to amend this definition to allow greater flexibility in managing entitlements to better align with expected usage and to be more reflective of changes in supply chain capacity availability throughout the year. Specifically, Schedule F (clause 1.3(e)(ii)) states that the reference train service:

"....has a Train Service Entitlement:

- (i) based on Trains being available for operation 24 hours per day and 360 days per year; and
- (ii) specified in terms of Cyclic Traffic which will:
 - (A) operate evenly throughout each monthly and weekly period consistent with the monthly distribution published by Aurizon Network by 30 May prior to the relevant Year;
 - (B) have regard to Planned Possessions and any other matters agreed between Aurizon Network and other service providers in the coal supply chain; and
 - (C) comply with the applicable scheduling procedures as set out in the Network Management Principles."

This definition of capacity entitlements is still based on even railings, but with the ability to vary this under clause 1.3(e)(ii)(B) of Schedule F to reflect operational variations, such as outages or maintenance, or any other matter. This will provide greater flexibility to vary the distribution of entitlements between months, while maintaining the same annual total. In addition to achieving alignment between the definition of capacity entitlements and the expected availability of the network, this provision may:

- assist in the management of decisions involving contested train paths in months where it is known that capacity availability will be greater than is assumed based on equal monthly entitlements, as decisions will be based on a more realistic view of available capacity; and

- improve Aurizon Network’s ability to respond to the demands of operating under a cargo assembly system without having to change the definition of a capacity entitlement.

It is important to note that while altering the definition of train service entitlements in this way provides Aurizon Network with scope for greater flexibility in how it meets its annual obligations, this provision does not reduce Aurizon Network’s accountability with regard to the use of the rail network progressively throughout the year as it is still assumed to be on an even railings basis, with any variability being by exception.

8.7 Scheduling and operation of services

The scheduling and operation of train services is the area where coordination across the supply chain is most critical in order to ensure that actual throughput of the system reflects the user’s contractual entitlements for each component of the supply chain, to the extent that this is feasible (noting that scheduling cannot be relied upon to address problems arising from mismatched capacity entitlements). It also helps to minimise capacity losses due to coordination failures in scheduling, for example, due to cancellations of train services or uncoordinated maintenance activities.

8.7.1 Issues

Aurizon Network has developed system rules for the Goonyella and Capricornia coal chains. The purpose of these system rules is to provide additional detail in relation to the planning and scheduling process¹³⁹ while ensuring transparency with respect to Aurizon Network’s decision making. The objective of the system rules is to provide flexibility in the scheduling of rail operations while also providing certainty to customers with respect to their contracted capacity entitlements. Aurizon Network’s rail systems can form part of several coal supply chains with varying operating modes, complicating the scheduling of rail operations. The rules serve to provide consistency for the planning and scheduling of rail operations on these systems.

8.7.2 UT4 proposal

Aurizon Network has previously developed, in consultation with stakeholders, system rules for the Goonyella and Capricornia (Blackwater and Moura) systems. The QCA published its decision to not approve the Capricornia System Rules on 24 April 2013. The 2013 Undertaking maintains the requirement for system rules to be maintained for each system and that variations of the system rules (once approved) will be in accordance with the 2013 Undertaking provisions (Schedule H – Network Management Principles). As with the 2010 Undertaking, once approved, the system rules will sit outside the access undertaking as they reflect a level of operational detail that is not appropriate for inclusion.

8.8 Accountability for capacity use

The interdependencies that exist between participants and the operational trade offs that occur throughout the supply chain mean that the actions of one participant can have a significant impact on the efficiency of capacity utilisation of other elements of the supply chain. For example, delays caused by the loading of ‘sticky coal’ at a mine loadout facility can result in operational disruptions at the port terminal, leading to a reduction in overall system capacity.

¹³⁹ Note that planning and scheduling is addressed specifically in the Network Management Principles at Schedule H of the 2013 Undertaking

However, the benefits of administrative mechanisms to promote accountability need to be balanced against the costs of implementing them, noting that attributing 'cause' for capacity losses can be very difficult in a complex and interrelated network. The key accountability mechanisms in this regard are take or pay, the AT2 price signal and the capacity multiplier. These pricing mechanisms are addressed in Chapter 9 of this submission.

9 Pricing Principles and Reference Tariffs

Summary:

This Chapter addresses Aurizon Network's pricing framework, which is primarily contained in Part 6 of the Access Undertaking (some matters are also addressed under Schedule F). Aurizon Network's overarching objective for pricing is to ensure that they provide appropriate signals to influence efficient network utilisation and investment decisions, in order to promote the Objects Clause under the QCA Act.

Aurizon Network does not propose any changes to the tariff structure for UT4. The changes that have been proposed mainly emanate from concerns regarding the extent to which the existing pricing framework promotes the Objects Clause and complies with the pricing principles. The proposals affect how Aurizon Network recovers its approved revenue, rather than the total amount of revenue that it is entitled to earn.

The key proposals are as follows:

Pricing limits: For the purposes of determining price limits for individual Train Services or combination of Train Services, the MAR will be based on the DORC value of assets used to provide the Train Service(s) in question, rather than the relevant RAB value. The MAR for all coal systems in aggregate will continue to be based on the RAB value. The reason for the change is that linking the concept of the ceiling price to the RAB value can be inconsistent with its actual stand alone cost (which should reflect the current cost of bypass). Aurizon Network is not proposing to re-price all services on this basis. Instead, the change is intended to provide future flexibility where pricing anomalies arise because of a material difference between the RAB value and replacement cost.

Price differentiation: Aurizon Network is permitted to price differentiate between users of the same service for cost or risk differences. While already permitted under the 2010 Undertaking, amendments are proposed to make it clear that parties can negotiate non-standard train services (including terms of access that differ from the Standard Access Agreement). It will also be clear that if this gives rise to a cost or risk difference, Aurizon Network can charge a differential price. Otherwise, while no immediate changes are proposed for UT4, consideration is being given to:

- the imposition of a price penalty for non-compliance with Aurizon Network's coal dust management requirements;
- the capacity multiplier.

Nominal Train Configuration: Aurizon Network therefore considers it appropriate to set the Reference tariffs for a system to reflect the weighted average payloads of the services actually operating in that system. This will be referred to as the 'nominal payload'. Aurizon Network will publish the relevant nominal payload for each system in Schedule F.

Pricing expansions: Aurizon Network is concerned that requiring that users who are seeking new or additional access rights bear the incremental costs of necessary expansions to the shared network creates a form of price differentiation (based on time of entry into the market) that could distort competition. Rather than prescribe a pricing solution in the Access Undertaking, Aurizon Network is proposing to broaden the user voting provisions in Schedule A to include the cost allocation methodology (that is, should the costs of an expansion be shared between new and existing users, or should they be borne by the new users). Aurizon Network can still submit its proposed solution to the QCA for approval, regardless of whether a vote has been sought and obtained. It is also proposed to vary the nature and application of the minimum contribution to common cost, including allowing for a discount for spur and mainline haul length.

Rebates: Aurizon Network is proposing to replace rebates for contributed capital on single user spurs with a discount to the access charge (avoiding the double handling of revenue and transfer of volume risk for mine specific infrastructure to other access holders). Rebates will not be relevant for new spurs given these costs will not be included in the common system price in the future.

AT2: A material increase in AT2 has been proposed, to align this price signal for incremental investment with current replacement costs.

EC: It is proposed to publish the EC charge that will apply in the relevant financial year on or about the end of May in the previous financial year. This will provide users with upfront certainty as to the price for electric energy that will apply in the relevant year.

Updates have also been made to the reference train service descriptions.

9.1 Introduction

Prices play a critical role in markets as they drive consumption and investment behaviours, coordinate commercial activity, and influence the efficient allocation of resources. The efficient setting of prices is a critical issue in the design of the regulatory framework.

Aurizon Network's pricing framework must promote the objects of Part 5 of the QCA Act (the Objects Clause), which is to:

“...promote the economically efficient operation of, use of and investment in, significant infrastructure by which services are provided, with the effect of promoting effective competition in upstream and downstream markets.”

It also needs to reflect the pricing principles in s 168A of the QCA Act, which require that the price charged for access should:

- generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved;
- allow for multi-part pricing and price discrimination when it aids efficiency;

- not allow a related access provider to set terms and conditions that discriminate in favour of the downstream operations of the access provider or a related body corporate of the access provider, except to the extent the cost of providing access to other operators is higher;
- provide incentives to reduce costs or otherwise improve productivity.

The pricing structure is independent of the total amount of revenue that Aurizon Network can recover. Prices only determine how the revenue that Aurizon Network is permitted to earn will be distributed and recovered from access holders. In other words, decisions in relation to pricing structure do not influence the total 'size of the pie' (i.e. the Maximum Allowable Revenue (MAR) does not increase).

Aurizon Network's overarching objective for pricing is to ensure that prices provide appropriate signals to influence efficient network utilisation and investment decisions. It is also necessary to provide adequate flexibility in pricing to enable an appropriate response to the ongoing growth and development of the CQCR and any future changes in the environment.

No fundamental changes to the tariff structure have been proposed in the 2013 Undertaking. However, Aurizon Network has identified a number of specific areas that could be refined and improved, which are outlined in this chapter.

9.2 Aurizon Network's approach to pricing

As evident from the above, the pricing framework is designed ensure economic efficiency. There are a number of dimensions to economic efficiency, all of which are important in pricing access to the below rail network service. These include:

- Allocative efficiency*: requires resources to be allocated to their most highly valued use. There are practical constraints in achieving this under Aurizon Network's existing pricing framework as it is limited to price differentiation based on cost or risk differences, not willingness to pay. Overall, the access regime also has an important role to play in maximising the economic value of the state's mineral resources, having regard to the legitimate business interests of Aurizon Network and the other supply chain participants.
- Productive efficiency*: achieves maximum output for a given set of inputs. Maximising the efficient utilisation of existing network infrastructure is one of Aurizon Network's most important responsibilities and this can reduce the need for additional network investment.
- Dynamic efficiency*: ensures there are sufficient incentives to invest in future innovations that improve efficiency. Aurizon Network has historically been limited in its ability to capture and retain any benefits from such investments.
- Transactional efficiency*: minimises transaction costs, including information costs, and reduces exposure to opportunistic behaviour and hold-ups.

The Productivity Commission has noted that implementing an efficient access pricing regime is challenging, as:

"...meeting the objectives of efficient use of, and efficient investment in, essential infrastructure implies putting in place access regimes that generate the right level of prices

as well as the right *structure* of prices. There can be significant efficiency consequences from getting either of these wrong.”¹⁴⁰

At the start of the development of (what is now) Aurizon Network’s first access undertaking in 1999, the QCA identified the key issues in relation to the pricing structure being to:

- “create an environment where capacity is efficiently rationed and appropriate signals are provided to QR for augmentation of the system’s capacity;
- recover costs in a way that creates minimal distortion upon the production decisions of mines; and
- ensure that users face the full economic costs of their decisions.”¹⁴¹

In relation to the second point, the QCA noted that the regulatory process was inherently cost-based but it anticipated that as the regime matures and becomes more sophisticated, a more value-based approach may emerge to pricing capacity. It also acknowledged the role of the pricing principles in influencing the evolution of the above rail market, which at the time, had only one service provider:

“The pricing principles will also influence the evolution of the above rail market and the efficient utilisation and expansion of the network. In a competitive market, above rail operators will develop rail transport solutions that take into account the access charge they will be levied. Access charges must therefore be consistent with the efficient utilisation and expansion of the rail infrastructure.”¹⁴²

The QCA also advocated simplicity and transparency (noting that there may be a trade-off between the two). The result was the multi-part tariff structure, which has been in place since the approval of Aurizon Network’s first undertaking in UT1.

Aurizon Network has not identified a reason for major tariff reform at the present time. However, it has identified a number of necessary refinements to the way in which prices are derived. These refinements are necessary because some aspects of the current market and cost structures were not foreseen when the pricing principles and tariff structures were originally developed.

These include:

- the sustained increase (above CPI) in the cost of providing additional infrastructure, which has given rise to a material disparity between the average incremental costs of additional capacity and the average cost of the installed capacity;
- the change in the relative competitive position of Central Queensland coal producers and whether this change in relativity requires a different approach, for example, the application of Ramsey pricing principles¹⁴³ and price differentiation based on commodity type or extraction method (noting that Aurizon Network is not currently proposing any change to the uniform pricing approach that is applied); and
- the promotion of contestable service delivery for the management and operation of mine specific infrastructure.

¹⁴⁰ Productivity Commission (2001). Review of the National Access Regime, Inquiry Report, 28 September, p.337.

¹⁴¹ Queensland Competition Authority (1999a). Queensland Rail’s Draft Access Undertaking – Reference Tariffs, Reference Train Services and Rate Regulation, Issues Paper, p.15.

¹⁴² Queensland Competition Authority (1999b). Final Decision re QR’s Draft Undertaking, p.126.

¹⁴³ Ramsey pricing differentiates prices based on willingness to pay (as measured by the price elasticity of demand). That is, users whose demand is less elastic (or sensitive) to changes in prices are assumed to have a higher willingness to pay.

In addition, one of the most significant pricing issues to emerge during the UT3 period has been the pricing of electric traction, which has been the subject of a separate review. On 24 April 2013, Aurizon Network lodged a separate Draft Amending Access Undertaking on this issue. It is therefore not addressed in this submission.

The main proposals are summarised in the following table.

Table 4 Summary of UT4 pricing proposals

Issue	Proposal	Implications for access seekers and holders
Pricing limits	<p>Price limit for individual train services aligned to DORC value, rather than the RAB value. This better aligns the ceiling price with the efficient stand alone cost.</p> <p>It is not proposed to systematically re-price all services on this basis – it may be applied in future where there is a material difference between the RAB and DORC values and efficiency could be enhanced.</p>	<p>No immediate impact.</p> <p>In future, prices for individual services could increase relative to others (subject to QCA approval).</p> <p>This proposal will not impact the total revenue that Aurizon Network can earn – it only impacts how this total revenue is allocated between services.</p>
Reference train service characteristics	<p>Reference train service characteristics have been reviewed and updated to enable clarity and alignment with current practices.</p> <p>The reference train service descriptions for Blackwater and Goonyella have been amended to utilise electric traction only.</p>	<p>Provides greater clarity as to reference train service characteristics.</p>
Price differentiation	<p><i>Price differentiation principles</i></p> <p>Clarify and reinforce the ability to negotiate non-standard terms (and/or operating characteristics of a train service), which could give rise to a differential price if it leads to a difference in cost or risk.</p> <p><i>Expected access revenue</i></p> <p>Links the revenue that Aurizon Network is entitled to earn to the reference train service and standard access agreement terms. This enables the preservation of any (higher or lower) revenues that arise as a consequence of negotiating a differential price.</p> <p><i>Coal dust mitigation</i></p> <p>Relevant reference train service characteristic has been amended to refer to compliance with Aurizon Network’s Coal Loss Management Standard.</p> <p><i>Capacity multiplier</i></p> <p>Aurizon Network has clarified the methodology used to measure the capacity multiplier in accordance with the QCA’s 2002 Arbitration Guideline. Further, as the capacity multiplier reflects the expected performance differential between a proposed train service and the reference train, it is also proposed to apply a capacity performance charge to</p>	<p><i>Price differentiation principles and expected access revenue</i></p> <p>This has no direct impact other than reinforcing the ability to negotiate non-standard terms, which is already permitted under the 2010 Undertaking.</p> <p><i>Coal dust mitigation</i></p> <p>Provides greater clarity as to reference train service characteristics.</p> <p><i>Capacity multiplier</i></p> <p>This could lead to price increases for non-reference train services that consume more network capacity than the reference train. Ultimately, sending a stronger price signal that makes users accountable for their consumption of network capacity should drive more efficient investment and utilisation decisions across the network.</p>

Issue	Proposal	Implications for access seekers and holders
	reflect any differences between this expected performance and actual performance.	
Nominal train configuration	Reference tariffs for a system will be set based on weighted average payloads and gross to net tonne ratios for the services expected to operate in that system over the relevant year. This will ensure that operators of more efficient train services (e.g. a higher payload capacity per train) are not inadvertently penalised, particularly where take or pay applies.	Users remain incentivised to operate efficient services that maximise the utilisation of the existing network infrastructure.
Pricing new expansions	<p><i>Cost allocation methodology</i></p> <p>Aurizon Network considers that in many cases, it is appropriate for the costs of expanding common network infrastructure to accommodate new or additional volumes should be shared between expanding and non-expanding users. This avoids the situation where differential prices are charged for the same (or a highly similar) service depending on when the user entered the market. Rather than prescribing a pricing outcome in the undertaking, Aurizon Network proposes to address this by expanding the matters that can be put to a customer vote.</p> <p><i>Minimum contribution to common costs</i></p> <p>For the pricing of new adjoining infrastructure connected after 30 June 2012 (requiring either a new reference tariff or a variation to an existing reference tariff), the access charge will be the higher of:</p> <ol style="list-style-type: none"> (1) the Minimum Revenue Contribution (AT2 plus 25% of AT3 and AT4); (2) the relevant reference tariff less a Distance Discount (which reflects spur and mainline haul length). 	<p><i>Cost allocation methodology</i></p> <p>Could result in a variation (increase) to an existing reference tariff to incorporate expansion costs, which will impact existing access holders whose access charge is based on that tariff (in effect, they are being asked to underwrite that new investment). This will either be the outcome of a customer vote or QCA approval. This should also prevent new access seekers from being discouraged from entering the market.</p> <p><i>Minimum contribution to common costs</i></p> <p>Provides more certainty to access seekers as the Minimum Revenue Contribution will be known upfront. This method also avoids the need to disclose private infrastructure costs.</p> <p>It should be noted that given the proposed increase in AT2 (refer below), this could have an adverse impact on Minerva, Lake Vermont (to RG Tanna), Rolleston and Middlemount. Aurizon Network has therefore calculated the minimum contribution to common costs for these mines as equivalent to the contribution to common cost payable in the 2012/13 reference tariffs, expressed as a dollar per thousand ntk and escalated by 5% per annum.</p>
Process for acceptance of a new reference tariff	The provisions have been redrafted to clarify the process for acceptance of a new reference tariff. Aurizon Network has not retained the provisions allowing the QCA to require it to develop a reference tariff, or for the QCA to be able to develop a reference tariff itself.	Other than clarifying the process that should apply, these changes should have no direct impact on access seekers or holders. Aurizon Network considers that the most likely situation that would give rise to a new reference tariff is an expansion, and there is already a clear process set out in the undertaking to address this.
Rebates for capital contributed to mine specific	Rebates that apply to existing single user spurs will be replaced with a discount to the relevant access charge, avoiding the need for the 'double handling' of revenue. Rebates will still apply for multi-user	This simplifies pricing (and cashflow) arrangements for existing access holders who are eligible for rebates, avoiding the need to pay an amount to Aurizon Network that would subsequently be

Issue	Proposal	Implications for access seekers and holders
infrastructure	spurs. It is intended to make the adjustment for rebates to System Allowable Revenue not Total Actual Revenue – this will also transfer volume risk on mine specific infrastructure back to the holders of Access Facilitation Deeds.	returned to them. Adjusting System Allowable Revenue (not Total Actual Revenue) for rebates means that they should not impact take or pay. It also means that holders of Access Facilitation Deeds will assume responsibility for volume risk on their mine specific infrastructure (consistent with the revenue cap that applies to common network infrastructure).
AT2 and common cost contributions for existing tariffs	Aurizon Network has proposed a material increase to AT2 for Blackwater and a moderate increase in Goonyella. This is offset by a reduction in AT4, which also preserves the distance taper. The calculation of cross-system tariffs has been amended to ensure that this change does not unreasonably disadvantage a cross-system service.	The increase in AT2 and offsetting reduction in AT4 does not impact the total revenue that Aurizon Network can earn. The potential implications of this for certain mines via the minimum contribution to common costs were discussed above. The increase in AT2 could also have a more pronounced pricing impact for non-reference train services via the capacity multiplier (as it is applied to AT2), sending a stronger price signal.
EC	Aurizon Network proposes to remove the update of this charge from the Endorsed Variation Events. Instead, it proposes to publish the new charge (which is levied as a cost pass through) by the end of May prior to the beginning of the relevant year.	Provides certainty as to the level of EC prior to the beginning of the relevant financial year.

Details of the proposals are provided below.

9.3 Pricing limits

9.3.1 Background

A standard pricing principle of access regulation is that prices must be maintained between the ‘incremental’ and ‘stand alone cost’ of providing access, in order to avoid cross-subsidy between one or more services. Incremental cost in this context means those costs that would be avoided if access was not provided to the relevant user. Stand alone cost represents the maximum (or ceiling) price that could be charged in a competitive market before the user of the service (or any other party) has an incentive to bypass that service.

The principles and objectives of incremental and stand alone costs are well understood, even if subject to different interpretations of what costs should be included in their measurement. This is summarised by Faulhaber’s note on his seminal 1975 paper regarding cross-subsidisation in the pricing of public enterprises:

If the revenues of a regulated enterprise just cover total economic costs, then all prices are subsidy-free if the revenues of each service *and each group of services* is at least as great as the incremental cost of that service or group of services; equivalently, prices are also subsidy-free if the revenues of each service and each group of services is no greater than the stand-alone cost of that service or group of services. I show in the paper that under the

assumption that **revenues equal economic cost**, these two tests for cross-subsidy are equivalent.¹⁴⁴ [emphasis added]

The QCA Act does not prescribe how incremental and stand alone cost must be set, however these costs would need to be efficient in order to promote the Objects Clause, as well as be compatible with the pricing principles. As cited above, the assumption that underpins this test is that 'revenues equal economic costs'. The primary purpose of applying the Depreciated Optimised Replacement Cost (DORC) valuation principles is to ensure that revenues reflect economic costs. However, if the change in the asset value over time does not align to replacement costs then revenues may not reflect economic costs.

9.3.1.1 Incremental cost

Incremental cost, also referred to as marginal cost, is defined as the total additional cost incurred in providing an additional unit of a product or service, taking other outputs as given. Incremental cost excludes any joint or common costs that are associated with providing the service (i.e. costs that are incurred as a result of providing the service to several users).

In terms of its use in regulatory pricing, incremental cost will vary significantly depending on the timeframe over which it is being applied. In the short-term, incremental cost refers solely to the additional costs that are incurred as a result of the provision of an additional unit of a product or service (i.e. short run marginal cost). Alternatively, the long run incremental cost includes all costs that would be avoided if the regulated business stopped providing a particular service altogether. Regulators often set prices based on the long run incremental (or marginal) cost of service provision on the basis that this is intended to ensure that the regulated business can fully recover its costs of providing access to the regulated service.

9.3.1.2 Stand alone cost

Stand alone cost represents the maximum (or ceiling) price that could be charged before a user is induced to bypass the service (or in this case, the construction of a duplicate network). Given the economies of scale in investing in natural monopoly infrastructure, bypass could result in an outcome that is not economically efficient.

Baumol and Willig have described stand alone cost as follows:

“...it is held that final product price should not be permitted to exceed the amount at which an efficient entrant-rival could afford to supply the product in a competitive market in which inputs are available on competitive terms. This price ceiling is called the “stand-alone cost” of the final product. A price constrained not to exceed stand-alone cost ensures that purchasers will pay no more for this item than they would have if it were sold in an effectively competitive (contestable) market.”¹⁴⁵

Baumol has also aligned the concept of stand alone cost with the ‘entry inducing rate level’:

“The stand-alone cost of a service (which might better have been called its entry-inducing ceiling rate level) is defined as the cost (including a competitive return to capital) that would be incurred by an efficient entrant if it were to undertake to provide that service alone, or if it were instead to provide that service in combination with some other services of the enterprise whose regulation is at issue...Since stand-alone cost is the ceiling that complete competitive freedom of entry imposes upon rates, then the goal of offering customers of

¹⁴⁴ Faulhaber, G. (2002). Cross-subsidy analysis with more than two services, University of Pennsylvania, August, <http://assets.wharton.upenn.edu/~faulhaber/cross%20subsidy%20analysis.pdf>

¹⁴⁵ Baumol, W. and Willig, R. (1999). “Competitive Rail Regulation Rates: Should Price Ceilings Constrain Final Products or Inputs”. *Journal of Transport Economics and Policy*, 33(1): 43-54, pp.43-44.

the regulated firm all the protection against overpricing that competition would bring them is achieved if the regulator adopts stand-alone costs as the ceiling upon rates.”¹⁴⁶

The QCA has similarly observed:

“The stand-alone cost represents the maximum amount the owner of a natural monopoly can charge its users without providing those users (or someone else) with an incentive to replicate QR’s network and operate an alternative service.”¹⁴⁷

If prices exceed this level, “a hypothetical competitor would have an incentive to duplicate QR’s network and offer a lower price to QR’s existing customers.”¹⁴⁸

The concept of stand alone cost as applied in regulation is intended to replicate the outcome that would occur if there was effective competition in the market. Relevantly, in the US, rail services for which there is no competitive transportation market (including coal services) are subject to light-handed regulation, which is overseen by the Surface Transportation Board (STB). Revenues and prices are not set by the STB (although it does set the cost of capital). Instead, if a ‘captive shipper’¹⁴⁹ is of the view that the rates charged by the railway are unreasonable, it can bring a rate dispute to the STB.

The STB maintains detailed rules regarding rail freight rates. Central to this is the stand-alone cost (SAC) test:

“Under this test, also referred to as the Full-SAC test, the rate at issue cannot be higher than the rate a hypothetical efficient railroad would need to charge to serve the complaining shipper while fully covering all of its costs, including a reasonable return on investment. In other words, we judge the challenged rate against a simulated competitive rate a captive shipper would enjoy if a competitive transportation market existed.”¹⁵⁰

The Full-SAC test involves the following process:¹⁵¹

- Design of a stand alone railway that is tailored to service an identified traffic group using the optimum physical plant or rail system.
- Selection of a subset of the identified traffic group, including the shipper’s own traffic to which the contested rate applies, that the stand alone railway would serve.
- Development of an operating plan for that traffic group.
- Estimation of the investment requirements and operating expenses. The investment costs include a return on investment and accounts for the time value of money during the construction period.

The application of this test has been controversial because it is a complex and costly exercise (particularly for the shipper, who bears the onus of proof as the complainant). While the STB considers the test as “sound and has been affirmed repeatedly by the courts”¹⁵², it has recently introduced simplified guidelines that can be applied. This includes a Simplified-SAC test, which focuses on determining whether the shipper is being forced to cross-subsidise other parts of the network it does not use. It does

¹⁴⁶ Baumol, W. in Lenard, T., Bettendorf, M. and McGonegal, S. (1992). “Stand-alone Costs, Ramsey Prices, and Postal Rates”. *Journal of Regulatory Economics*, 4:243-262, p.249.

¹⁴⁷ Queensland Competition Authority (1999b). p.349.

¹⁴⁸ Queensland Competition Authority (1999b). p.349.

¹⁴⁹ That is, a shipper with no economic transport alternative to rail.

¹⁵⁰ Surface Transportation Board (2012). Decision: Rate Regulation Reforms, Docket No. EP 715, 25 July, p.2.

¹⁵¹ Surface Transportation Board (2012).

¹⁵² Surface Transportation Board (2012). p.2.

not require the development of a hypothetical railroad. Another approach is the Three-Benchmark approach, designed for small disputes, which employs rate comparisons that are generally based on system-wide benchmarks.

Importantly, the below rail access charge is only one of many input costs associated with an extractive export industry. As all other inputs are procured through a competitive market, the producer is required to pay the allocative efficient price which prevails in the relevant market for those goods and services. The overarching objective of the theory of contestable markets that underpins the application of the stand alone cost test, including in the US rate cases, is to seek to replicate the price which would prevail in the market for the essential service if there were no barriers to entry or exit.

9.3.2 Issues with price limits in the 2010 Undertaking

9.3.2.1 The definition of incremental cost

The 2010 Undertaking defines Incremental Cost as:

“...those costs of providing Access, including capital (renewal and expansion) costs, that would not be incurred (including the cost of bringing expenditure forward in time) if the particular Train Service or combination of Train Services (as appropriate) did not operate, where those costs are assessed as Efficient Costs and based on the assets reasonably required for the provision of access.”

The current definition is contradictory in both language and operation with respect to capacity expansions. In part this is attributable to the inclusion of the term ‘expansion’ within the definition. This is because the economic concept of ‘incremental costs’ differs before and after an expansion. Once an expansion has occurred, the costs of that expansion are sunk and no longer incremental. Accordingly, the definition seeks to apply the broader concept of avoidable costs in order to establish a floor price for services that do not require an expansion and a different floor price for those that do require an expansion.

When this definition is applied to the requirements for a new reference tariff in clause 4.1.2 of Part B, Schedule F in the 2010 Undertaking, there is uncertainty as to the interpretation of Incremental Costs. This clause requires a new reference tariff applicable for a new coal carrying train service to be at least:

“The sum of the new coal carrying Train Services Private Incremental Costs (if any), the Incremental Costs of using any Rail Infrastructure **specifically related** to the new coal carrying Train Service and the required minimum Common Cost contribution (being the AT2 + 50% of AT3).” {emphasis added}

This requirement is based on an expectation that AT2 is representative of the mainline expansion costs and therefore not within the construct of incremental costs (as it is a cost that is common across multiple users). However, the drafting has given rise to uncertainty among stakeholders, with different applications of the term ‘specifically related’ giving rise to the following problems:

- it can refer to only those expansion costs that are ‘unique’ to that service, in which case the minimum contribution to common costs may not be commensurate with the mainline expansion costs; or
- it refers to those expansion costs that are attributable to these services and therefore the service is required to pay both the minimum contribution to common cost and the expansion costs. In this instance the minimum contribution to common costs is likely to grossly overstate the required reference tariff where the unit rate of the expansion costs exceeds the current average price.

The application of incremental costs needs to reflect that these costs are relative to different services and not the same service at a different point in time.

9.3.2.2 The linkage of stand alone cost and the RAB

Under clauses 6.2.2 and 6.2.3 of the 2010 Undertaking, the concept of stand alone cost for an individual train service, or combination of train services, is directly linked MAR. The return on, and return of, capital in the MAR is based on the value of the Regulated Asset Base (RAB), which was set at the start of Aurizon Network's first undertaking period (UT1) and can only be reopened under limited circumstances.¹⁵³ As a consequence, the stand alone cost is dependent on a RAB value that was set at the start of UT1 and is rolled-forward on an annual basis for actual inflation, capital expenditure, depreciation and asset disposals and transfers.

Aurizon Network is concerned that the treatment of stand alone cost in the 2010 Undertaking does not align with the true stand alone cost, which should reflect the current capital costs of establishing a bypass alternative, rather than costs in the RAB. Given the stand alone cost is the price that would induce a user (or another other party) to bypass the regulated service, the ceiling price needs to reflect the current cost of bypass, not the RAB value.

The actual costs incurred by the incumbent in the past cannot be relevant to this assessment because they are historical costs and are unlikely to reflect the costs of constructing a duplicate network (for the relevant service or services) today. Indeed, if the value of the incumbent's infrastructure is materially lower than the costs it would incur in constructing that same network today, and this value is used to set the ceiling price, there would be no third party entry and there is therefore no 'contestable market outcome' to replicate. This is contrary to the concept of stand alone cost, as described above.

Notably, the STB's Full-SAC test is based on replacement costs, as is the Simplified-SAC test.¹⁵⁴ Further, Kessides and Willig state:

“Since the stand-alone cost is the cost of service by a hypothetical entrant who offers alternatives to the shippers at issue, **it is not determined by any of the costs actually incurred by the actual regulated railroad**”.¹⁵⁵ (emphasis added)

As noted above, the 2010 Undertaking aligns stand alone cost with the RAB value. This RAB value was initially established in UT1 based on the Depreciated Optimised Replacement Cost (DORC) methodology and has since been rolled forward annually based on inflation. Given the significant increase in construction and input costs since this time, the RAB value could be expected to be materially below the current replacement costs of those assets. This is evidenced by the costs of recent major expansions, such as GAPE. An additional issue is that the RAB values for different assets across the entire system are unlikely to be uniformly under-valued. That is, some assets that have been constructed more recently and rolled into the RAB at the efficient cost of construction will have a more current value than assets rolled into the RAB in an earlier period where construction costs were lower.

The 'lock in and roll forward' methodology is currently standard regulatory practice in Australia. The prices that Aurizon Network charges are set to ensure that overall, it will only recover its MAR, including a return on, and return of, capital that is calculated based on the RAB value. However, there is no economic or legislative basis for linking the stand alone cost of *individual* services to the RAB value - indeed to link

¹⁵³ Refer 2010 Undertaking: Schedule A, Clause 1.4.

¹⁵⁴ Surface Transportation Board (2012).

¹⁵⁵ Kessides, I. and Willig, R. (1995). Restructuring Regulation of the Rail Industry for the Public Interest. Policy Research Working Paper 1506. World Bank.

stand alone cost to what is (now) a historical cost is inconsistent with the economic concept of stand alone cost.

For example, under the National Electricity Rules (clause 6A.22.3) the share of costs allocated for a category of prescribed transmission services¹⁵⁶ provided by a Transmission Network Service Provider (TNSP) is based on the ratio of:

- the costs of the transmission system assets directly attributable to that category of prescribed services; to
- the total costs of all of the TNSP's transmission assets that are attributable to the provision of all of its prescribed services.

The “costs of the transmission system assets” is based on optimised replacement cost (ORC) or an accepted equivalent to ORC that is referable to values contained in the TNSP's accounts. This in turn is used to allocate the Aggregate Annual Revenue Requirement, which is determined based on the building blocks approach, to each category of prescribed services (the Annual Service Revenue Requirement). In effect, the costs for a service are allocated based on the ORC for the assets used to provide the service as a proportion of the total ORC value of the regulated asset base. This is a different approach to Aurizon Network's regime, which requires an allocation of revenue between different services based on each service's share of the RAB.

9.3.3 UT4 proposal

9.3.3.1 Establishment of a new coal reference tariff

The requirements for establishing a new coal reference tariff in clause 4.1.2 of Part B, Schedule F in the 2010 Undertaking have been reviewed and modified to replace the reference to Incremental Costs with a Minimum Revenue Contribution. This is discussed in greater detail in section 9.7.

9.3.3.2 Align the price limit for individual train services with the DORC value

Aurizon Network has made amendments to the provisions dealing with the assessment of stand alone cost, which is used to determine the ceiling price.

Pricing limits are now addressed in clause 6.3 of the 2013 Undertaking. While the drafting has been simplified, the intent of the 2010 Undertaking provisions has been retained, with the exception of price limits for individual train services. For the purposes of determining price limits for individual train services or combination of train services, the MAR will be based on the DORC value of the assets used to provide the train service(s) in question, rather than the relevant RAB value. This is consistent with the treatment of a category of prescribed transmission services under the National Electricity Rules. The MAR for all coal systems in aggregate will continue to be based on the building blocks approach applied to the approved RAB value.

It is important to make clear that Aurizon Network is not proposing to systematically re-price all individual services on the basis of DORC as this would likely violate the aggregate MAR limit, which is based on the RAB value. Indeed, the proposed amendment may result in no change to prices in the short term.

¹⁵⁶ Separate prices are determined for each 'category of prescribed transmission service', which includes prescribed entry services, prescribed exit services, prescribed common transmission services, prescribed TUOS services (locational component) and prescribed TUOS services (adjusted non-locational component).

Instead, Aurizon Network is proposing to provide for future flexibility in pricing individual services in the future, to the extent that it considers that the ceiling price for that service is materially misaligned with its (economic) stand alone cost. That is, subject to QCA approval, where:

- the RAB value of assets attributable to an individual train service, or combination of train services, differs materially from the DORC value; and/or
- where efficiency could be enhanced,

the allocation of costs for individual train services, within the approved MAR for all coal systems in aggregate, will be based on DORC values rather than RAB values.

Examples of where this principle would be applied include:

- an expansion occurs on a highly depreciated system, which could result in a material price disparity between expanding users and existing users, where those users utilise the same rail infrastructure and the nature of the services provided is the same;
- volumes materially decline on a particular branchline and Aurizon Network recovers revenue from users of the system who do not utilise that branchline, which would exceed the revenue limit for the system infrastructure used by the combination of services.

It is important to re-emphasise that this will not have any implications for the total revenue that Aurizon Network will earn across all of the coal systems. As total revenue will continue to be based on a MAR that reflects the approved RAB value, Aurizon Network will not obtain any windfall gain from the change.

Rather, the proposal has the potential to impact the distribution of revenue between services depending on their efficient stand alone cost, subject to approval by the QCA. Approval would depend on an assessment of the efficient stand alone cost of the relevant service, and acceptance that repricing services on this basis would better promote efficient utilisation of, and/or investment in, the network.

Further, it is proposed to amend the definition of Stand Alone Cost to make it clear that it “includes an allowable rate of return expressed in nominal post tax terms (with the cost of debt expressed on a before tax basis), as agreed by Aurizon Network and the QCA, or failing such agreement, as determined by the QCA”. If a third party was to construct a bypass asset it would also need to earn an appropriate return on capital. Although this is inherent in the current treatment of Stand Alone Cost in the 2010 Undertaking the definition has been amended to make this explicit.

9.4 Reference train service characteristics

9.4.1 Issues

Clause 1.3 of Part A, Schedule F of the 2010 Undertaking lists the characteristics of the reference train service. There are a number of issues that have been identified here.

The first is that relevant characteristics currently reside in clause 1 of Part A, clause 1 of Part B and the relevant system information (clauses 5 to 8). All of the common characteristics should reside in the one location in Schedule F.

The second issue is that the intent of some of the clauses remains unclear. For example, clause 1.3.1(j) of Part A, Schedule F in the 2010 Undertaking states that the reference train:

“...has the ability to operate on the configuration of the Nominated Infrastructure existing at 1 July 2009 without limiting the ability of existing Train Services to operate in accordance with their Train Service Entitlements.”

Aurizon Network interprets the intent of this provision to mean that the train service can operate without any additional investment being required, as this could impact the relevant reference tariff as established at the beginning of the relevant undertaking period. However, that approved reference tariff may already contemplate enhancements to accommodate growth via the approved Capital Indicator. It is therefore considered appropriate to limit the scope of this provision to the capital costs that Aurizon Network has incurred in providing access rights for a train service that were included in the calculation of the relevant reference tariff.

The other provision that is unclear is clause 1.3.1(l), which addresses measures taken to minimise coal spillage and/or leakage en route. This is discussed in section 9.5 below.

The third issue is that the reference train service descriptions for Blackwater and Goonyella (clauses 5 and 6 of Part B, Schedule F of the 2013 Undertaking) currently refer to the utilisation of electric or diesel traction. It is now well established that the performance characteristics of electric traction represent not only the predominant train but also the most efficient traction type in each system. It is therefore considered appropriate to amend the reference train service description in Blackwater and Goonyella to utilise electric traction only.

Finally, Aurizon Network has identified any provisions that are no longer required. Clause 1.1(b) in Part B, Schedule F of the 2010 Undertaking states that a Reference Train Service “in respect of Train examinations, does not exceed a ratio of 1 return journey in 7.” As discussed in section 9.5.4, the capacity impacts of provisioning time in yards is an issue that may warrant a separate price signal. This more flexible approach is preferable to prescribing the maximum ratio of train examinations in the reference train service characteristics.

9.4.2 UT4 proposal

The general reference train service characteristics are now consolidated in clause 1.3, Schedule F in the 2013 Undertaking. Amendments have also been made to clarify specific characteristics and remove unnecessary ones, as identified above.

The reference train service descriptions for each system have been updated (clauses 7 to 11 in the 2013 Undertaking). This includes limiting the reference train service description for Blackwater and Goonyella to one that utilises electric traction.

9.5 Efficient price differentiation

9.5.1 Background

One of the pricing principles in s 168A of the QCA Act is that prices should “allow for multi-part pricing and price discrimination when it aids efficiency”. Over time, the regulatory framework has increasingly prescriptive, with the effect of severely limiting the scope for efficient price discrimination. This is arguably counter to the intent of the QCA Act.

The 2001 Undertaking precluded QR from charging differential prices between access seekers (or between access seekers and holders) for the purpose of adversely affecting competition in the relevant market, which was interpreted to mean:

- eliminating or substantially damaging a competitor of (then) QR;
- preventing an access seeker from entering any market;
- deterring or preventing a person from engaging in competitive conduct in any market.¹⁵⁷

The test for compliance with this requirement is that price differentiation is limited to differences in cost or risk. In the review of the 2005 Undertaking the QCA expressed concerns with the burden of proof required in demonstrating that QR had applied a differential price with the intent of adversely affecting competition. It therefore removed these words, retaining a prohibition on price differentiation other than for cost or risk differences, which remains in UT3.

Currently, the main example of price differentiation is the capacity multiplier, which has been applied to diesel services operating in predominantly electric systems but is intended to be able to be applied to any service which consumes more network capacity than the reference train. Aurizon Network is currently undertaking a detailed review of the capacity multiplier based on the QCA's 2002 Arbitration Guideline (see below).

Aurizon Network is also currently contemplating a number of other areas where price differentiation might be applied (discussed below). This includes, but is not limited to:

- non-reference train service configurations and the agreement of terms and conditions of access that differ from the Standard Access Agreement terms; and
- non-compliance with coal dust mitigation requirements.

Any consequential price differentiation would continue to be limited to cost or risk differences and would be subject to approval by the QCA.

9.5.2 Non-standard services and/or terms and conditions

9.5.2.1 Issues

During the term of the 2010 Undertaking, various industry stakeholders have expressed a desire for Aurizon Network to adopt a risk position that differs from that assumed by the reference tariff.

Thus, Aurizon Network considers it important that the 2013 Undertaking makes it clear that an access seeker can seek to negotiate:

- a train service that has different operating characteristics to the reference train service; and/or
- terms and conditions of access that differ from the Standard Access Agreement terms, noting that one of the general characteristics of the reference train service is that it operates in accordance with the Standard Access Agreement terms (in other words, if an access seeker proposed to operate a train service with the same operational characteristics as the reference train service but agrees terms that are different to the Standard Access Agreement terms, it would be classified as a non-reference train service).

To the extent that an access seeker and Aurizon Network agree to either or both of the above, this could give rise to cost or risk differences. This in turn potentially justifies a (higher or lower) price.

¹⁵⁷ Queensland Competition Authority (2001). Decision on QR's 2001 Draft Access Undertaking, December.

It is important to note that neither party can be compelled to negotiate or agree an alternative to the Standard Access Agreement. If:

- the characteristics of the train service are consistent with the reference train service; and
- the terms and conditions of access are the same as the Standard Access Agreement,

then the relevant reference tariff will apply, subject to consideration of any expansion costs that are necessary to the provision of that access, which is discussed below.

The most likely implication of different operating characteristics is a capacity impact. This impact can be estimated by applying the QCA's 2002 Arbitration Guideline, which addressed determination of the incremental capacity consumption charge.¹⁵⁸

The agreement of different commercial terms and conditions of access could also have cost implications, usually by changing the allocation of risk between the parties. Some indicative examples are provided in the table below.

Table 5 Examples of non-standard terms and conditions of access and potential cost/risk impacts

Example of change	Consequence	How could the cost impact be measured
Aurizon Network agrees that an access seeker can pay its access charges in US dollars (and Aurizon Network has no ability to recover any losses it might incur from adverse movements in the exchange rate).	Aurizon Network bears currency risk.	The cost of hedging the exposure over the life of the contract. This would require Aurizon Network to establish: (1) that the hedging strategy is efficient consistent with normal commercial practice; and (2) the costs of the hedging strategy are reasonable based on conditions in the financial markets.
Aurizon Network agrees to waive security requirements when security would have reasonably been required under the Standard Access Agreement.	Aurizon Network bears credit risk over and above the credit risk borne under the Standard Access Agreement terms.	Estimate the value at risk to Aurizon Network based on: (1) the actual (or notional) credit rating of the access holder, which has an associated probability of default; and (2) the amount of the access charges.
Aurizon Network agrees to a different take or pay terms (e.g. 50%)	Aurizon Network bears volume risk over and above the volume risk borne under the Standard Access Agreement terms.	Estimate the value at risk to Aurizon Network based on: (1) a reasonable assessment of the probability that the access holder will under-rail relative to contract; (2) 50% of the revenue that Aurizon Network is entitled to earn from that access holder based on its contracted Train Service entitlements, taking account of any circumstances under which Aurizon Network would not have been entitled to recover the revenue foregone under take or pay.

This level of differentiation would not extend to matters that are unable to be differentiated between access holders. For example, it is unlikely to be feasible to negotiate a different infrastructure standard between two access seekers who will use the same rail infrastructure. It is also unlikely that an access seeker would be willing to negotiate non-standard terms and conditions of access where the benefits are not able to be constrained to that party. For example, an access seeker would be unwilling to pay a

¹⁵⁸ Queensland Competition Authority (2002). Rail Access Arbitration Guideline No.1. Incremental Capacity Consumption Charge, November.

higher access charge for a higher infrastructure standard if other parties obtain the benefit without making a contribution.

In accepting a higher level of risk than is currently compensated for in its approved revenues, Aurizon Network should be entitled to earn additional revenue from an access holder to compensate it for the additional risks associated with that access holder's agreement. This additional revenue should be excluded from the scope of the revenue cap, otherwise any additional compensation that it receives for risk will be returned to access holders. This will be achieved by continuing to assess revenue cap adjustments as if Aurizon Network had contracted on the Standard Access Agreement terms. This also ensures that access holders who are not a party to negotiated terms are not exposed to changes in the allocation of risk.

For example, if Aurizon Network and the access holder agreed to 50% take or pay (instead of 100%), Aurizon Network should be entitled to collect additional revenue to compensate it for the additional risk (as shown in the example above). However, for the purpose of assessing annual revenue cap adjustments, it would be assumed that full take or pay is collected under this agreement, rather than 50%. This ensures that Aurizon Network could not otherwise recover foregone revenue under this access agreement from access holders.

It is also important to ensure that this differential price is not utilised in other contexts that are inappropriate. For example, in establishing the maximum access charge that Aurizon Network is entitled to levy under the rail infrastructure utilisation provisions, it would be unreasonable to allow this to be set with reference to an access charge that has been adjusted to specifically reflect cost or risk differences that are only relevant to that particular train service. In other words, this could allow a higher access charge to be set for a service that does not impose those same additional costs or risks. This is also relevant in other areas, such as the assessment of revenue cap adjustments.

9.5.2.2 UT4 proposal

Price differentiation principles

Parties should already be able to negotiate non-standard train services under the 2010 Undertaking (including terms and conditions of access that differ from the Standard Access Agreement). To the extent this occurs, Aurizon Network should also already be entitled to charge a different price provided it can demonstrate that:

- this gives rise to a cost or risk difference; and
- the quantum of the price adjustment is reasonable.

However, consistent with Aurizon Network's objective of simplifying and clarifying the undertaking, and in line with the previous discussion, Part 6 has been amended to clarify the above treatment. Clause 6.2.2(b) of the 2013 Undertaking now provides that where there is an applicable reference tariff, the access charge will be consistent with that reference tariff unless:

- (i) the characteristics of the relevant train service are different from the characteristics of the reference train service; and
- (ii) the cost or risk to Aurizon Network of providing access for that train service differs from the cost or risk to Aurizon Network if that train service had the same characteristics as the reference train service;

or as otherwise agreed with the QCA.

Expected Access Revenue

The concept of Expected Access Revenue has been included as a Definition in the 2013 Undertaking, making an explicit link between the revenue that Aurizon Network is entitled to earn, the reference train service and the Standard Access Agreement terms. Expected Access Revenue is defined as:

- a) “For an individual Train Service, the revenue reasonably expected from the Access Charge from that Train Service; and
- b) for a combination of Train Services, the aggregate revenue reasonably expected from the Access Charges for all Train Services comprising that combination of Train Services, where the expected Access Charges for different Train Service types will be developed on a basis consistent with:
 - i. if a Reference Tariff is to be developed for a Train Service type, the proposed Reference Tariff;
 - ii. the terms of the relevant Standard Access Agreement; and
 - iii. if paragraph (b)(i) of this definition does not apply, current applicable Access Charges, except as provided in clause 6.4.1(b)(iii).”

Expected Access Revenue is also referred to in the setting of price limits (clause 6.3.2 of the 2013 Undertaking). Clause 6.4.1(b) of the 2013 Undertaking retains the 2010 Undertaking provision (clause 6.3.1(b)) allowing Aurizon Network to determine the highest access charge that it is likely to achieve from current or likely access seekers, in the interests of maximising rail infrastructure utilisation. Consistent with the above definition, that highest access charge assumes that the access seeker operates a train service consistent with the reference train and has contracted on the Standard Access Agreement terms.

No specific amendments would be required to the 2013 Undertaking provisions relating to the estimation of take or pay amounts for the purpose of determining Total Actual Revenue (TAR) and hence revenue cap adjustments. Clause 3.2.3(b) of Part B, Schedule F of the 2010 Undertaking provides that take or pay will be “calculated on the basis that QR Network is deemed to have contracted on the terms of the relevant Standard Access Agreement (as defined in the Applicable Undertaking).” This wording has been retained in the equivalent provisions in the 2013 Undertaking (the assessment of TAR for AT2-4 now appears in clause 4.3(c) of Schedule F).

9.5.3 Coal dust mitigation

9.5.3.1 Background

In February 2010, QR Network’s Coal Dust Management Plan (CDMP) was published. This implements key actions and strategies arising from the Environmental Evaluation, which was approved by the Department of Environment and Resource Management (DERM) in 2008. The CDMP was developed in consultation with supply chain participants, with coal producers represented by the Queensland Resources Council (QRC).

The key mitigation strategies in the CDMP are as follows:

- coal surface veneering using dust suppressants at the load-out;
- improved coal loading techniques at the load-out to reduce parasitic load on horizontal wagon surfaces and reduce over-filling and hence spillage during transport;
- load profiling to create a consistent surface of coal in each wagon, to be implemented at the load-out; and

- improved unloading techniques to minimise coal ploughing and parasitic load in wagons.

The mitigations require the installation of profiling and veneering equipment at the load-out facility. The obligation to do this has been included in the Transfer Facilities Licence (TFL), which is currently being agreed with each mine. Some mines already have a TFL in place, which requires that an amendment is made to the existing agreement.

9.5.3.2 Issues

Coal fouling is an important issue for Aurizon Network and can have a number of potentially significant consequences. As shown in Chapter 4 of Volume 3, it has also been a source of regulatory and revenue risk for Aurizon Network, including the risk that:

- the QCA may refuse to fully compensate Aurizon Network for the costs of preventing and/or remediating coal fouling, via the capital and maintenance cost allowances; and
- the QCA may optimise the RAB for a deterioration in network condition. This provision was introduced in UT3 and Aurizon Network proposes to remove it from UT4 (see section 10.8).

The installation of profiling and veneering equipment at all load-out facilities, and consistent use of that equipment prior to the operation of all train services, is therefore of critical importance to Aurizon Network in managing coal spillage and the associated costs.

Aurizon Network continues to bear the costs of ongoing coal fouling. While the obligations included in the TFL should materially reduce this risk, there may remain some residual risk.

It is therefore necessary that Aurizon Network continues the arrangements in the 2010 Undertaking, which provide for some level of price differentiation where coal fouling is not minimised. Under the 2010 Undertaking (clause 1.3.1(I) of Part A, Schedule F), one of the characteristics of the reference train service is specified as being:

“...utilises measures to minimise coal spillage and/or leakage en route that are reasonable, having regard to the practices existing at 1 July 2009”.

The issue with this provision is that the nature of the “practices existing at 1 July 2009” is unclear.

The complications associated with identifying the costs attributable to coal spilled within the rail corridor and the consequential impact that individual coal service imposes on the system is discussed in Chapter 4 of Volume 3 and the accompanying report from Evans and Peck (report annexed). This is particularly relevant given the various sources of spillage and the different causative factors that influence how much coal is spilled from an individual train service. The continued technical complexity of assigning the costs of spillage to the party responsible means that differential pricing for services that do not comply with the reference train service characteristic in relation to coal spillage would be very difficult to implement in practice.

9.5.3.3 UT4 proposal

Notwithstanding the difficulties of pricing on this basis, the ability of Aurizon Network to differentially price a service that has not utilised measures to mitigate coal spillage has been preserved.

The unclear component of the relevant reference train service characteristic in Schedule F (namely, the unspecified nature of the “practices existing at 1 July 2009”) has been clarified in the 2013 Undertaking. It now states that the reference train service will be expected to comply with the Coal Loss Management

Standard (clause 1.3(b)(ix) in Schedule F). Currently, profiling and veneering is a key part of that Coal Loss Management Standard. Depending on experiences with current practices and ongoing developments in technology, this Standard may need to be varied.

9.5.4 Capacity multiplier

9.5.4.1 Background

As outlined in section 8.8, accountability for capacity consumption is fundamental in driving efficient consumption and investment behaviours.

The capacity multiplier is intended to provide a price signal to operators of non-reference train services where those services consume more network capacity than the reference train. Currently, it is typically applied to diesel trains operating in electrified systems as this is currently where different train performance characteristics occur. However, it is not specific to diesel trains and should apply to any service that departs from the standard section run times for the relevant system.

The measure itself, which is applied to the AT2 tariff component, is based on the number of reference train paths (rtp) used by the proposed train service:

$$\text{rtp} = \max [(A/B), (B/A)]$$

where:

A = maximum number of reference train services at full utilisation

B = maximum number of proposed train services at full utilisation

provided, that if:

- the maximum number of proposed train services at full utilisation exceeds the maximum number of reference train services at full utilisation; and
- the scheduled section running times of the proposed train service are the same as the nominated section running times for the reference train service,
- the rtp will be deemed to be 1.

Based on the above formula, the multiplier only applies where the proposed service will use more paths than the reference train if the network is fully utilised, and where the scheduled section running times for the proposed service are different to (higher than) the section running times for the reference train service. It is intended to represent opportunity cost, that is, the expansion costs that could be avoided in relation to that service. While the service itself may not consume any additional capacity where it is scheduled to operate nominated train paths, the avoided congestion impacts of the interactions of that service with the reference train services limits the number of additional services that could operate when the network is fully utilised.

9.5.4.2 Issues

The QCA's Arbitration Guideline

Following the approval of UT1 there was residual uncertainty regarding the quantification of the capacity multiplier. The QCA addressed this in an Arbitration Guideline published in 2002 (the Guideline), which sets out how it would resolve any dispute regarding the access charge to apply to a non-reference train

service.¹⁵⁹ In that Guideline it stated that the following principles would apply in determining the access charge for a non-reference train service:

- estimates of the system capacity, in terms of maximum number of train paths available for a reference and non-reference train service should be carried out using a readily available simulation package;
- the estimate of the incremental capacity consumption of a non-reference train service should be determined according to:

$$r = \frac{\text{maximum number of reference trains at full utilisation}}{\text{maximum number of non-reference trains at full utilisation;}}$$

- the incremental capacity consumption charge of a non-reference train service should be determined as the product of the ratio 'r' and the reference tariff.¹⁶⁰

Aurizon Network considers that there is not sufficient transparency in terms of how these calculations are performed and whether the assumed approach in the Guideline can be effectively administered. This section includes a discussion on the issues relevant to the QCA's Guideline and the estimation of the capacity multiplier.

As discussed in Aurizon Network's November 2012 submission to the QCA as part of the Draft Amending Access Undertaking addressing the pricing of electric network assets¹⁶¹ (the November 2012 Submission), there are two types of impacts if a proposed train differs from the reference train:

- direct impacts, being the ability of the train to traverse the network at a speed equivalent to the reference train. This is influenced by section run times as well as start and stop times; and
- indirect impacts, which are the capacity impacts of multiple train types operating on the network with different operating performance.

Estimating the multiplier based on the Guideline only considers the direct impacts, having been originally developed based on a static analysis of section run time performance that assumed green light running. It was not based on a dynamic analysis of system losses that captures the issues and conflicts that are more likely to be experienced on a day to day basis.

Importantly, as outlined in the November 2012 Submission, one of the key cycle time differentials between electric and diesel services is provisioning times, which is not reflected in the pricing structure. For example, bottlenecks are still occurring in the Callemondah yard where electric services are required to queue behind diesel trains while they provision on the way to the port. As the estimation of the capacity multiplier assumes green light running, it will not address such impacts.

Historically, the QCA has chosen to exclude these impacts because of:

- the complexity involved; and
- a concern that if a new operator was required to bear these costs, it could adversely impact the development of a competitive above rail market.

¹⁵⁹ Queensland Competition Authority (2002).

¹⁶⁰ Queensland Competition Authority (2002). p.15.

¹⁶¹ QR Network (2012). Submission to QCA: Request for Further Comment on Draft Decision, 23 November.

While there is now effective competition in the above rail market, the issue of complexity remains a legitimate concern.

Consideration of indirect impacts

Where there are multiple train types with differing performance characteristics operating on the network, the interaction of these trains will cause some loss of capacity. The effect of this interaction is proportional to:

- the relative numbers of each type of train;
- the number of train services required for each train type; and
- their origins and destinations.

Identifying the impact of the interactions caused by these factors requires the use of a full system discrete event model such as Aurizon Network's Central Queensland Network Capacity Model (CQNCM), which is built on the Planimate platform. This modelling also requires knowledge of all of the inputs into the network.

The Guideline considered that these indirect impacts should not be considered in determination of the capacity multiplier for the following reasons:

- Not all costs arising from the interaction of different train types are attributable to the non-predominant train. Aurizon Network considers this position remains valid.
- Conflict costs arising from interactions should be attributed to all users of the system. It would be discriminatory to allocate all these costs to the non-predominant train. Aurizon Network considers this position remains valid.
- Conflict costs would be recouped through the existing components of the reference tariffs. Aurizon Network does not agree with this position and is concerned that it is inconsistent with the objective of providing a price signal to the services that impose a greater contribution to those conflicts.
- The methodology required to assess the impact of interactions is necessarily complex and does not meet the requirement for transparency due to the need for a complex model and the input of ringfenced information. Aurizon Network considers this position remains valid.

Taking these considerations into account, with the exception of introducing a yard occupancy charge for provisioning as discussed above, pricing would not appear to provide a transparent, robust or simple basis for allocating conflict costs. Aurizon Network considers that a clear performance-based measure could be used to provide a price consequence for conflict costs that are directly attributable to the operational performance of an individual train service.

Actual versus expected performance

The application of the capacity multiplier only applies where the number of reference train paths consumed by the non-reference train is based on the *expected* performance of the train over the constrained section. However, as the ratio is based on expected train performance and headway separation is determined assuming green light running, this multiple may not adequately represent the *actual* capacity loss attributable to a train service that does not clear the constrained section within the nominated headway separation interval.

The existing capacity multiplier signals the opportunity cost of capacity based on the expected performance differential between the proposed train service and the reference train. However, recognising the inherent complexities in the supply chain that impact actual performance, the pricing framework should also address any differences between the expected performance differential and the *actual* performance differential. This is necessary to ensure an effective capacity-based pricing framework that incentivises efficient investment and utilisation decisions.

Summary: issues with the capacity multiplier

In summary, there are three main issues that have been identified with the capacity-based pricing framework, which is currently based on the capacity multiplier.

The first is that while Aurizon Network endorses the continued application of the key principles defined by the QCA in its Arbitration Guideline, a methodology for effectively implementing them needs to be established. In particular, a robust and transparent methodology is needed to calculate the reference train paths utilised to reflect the direct costs attributable to the proposed train service (including the opportunity cost of foregoing investment).

The second issue is that capacity multiplier reflects the expected performance differential between the proposed train service and the reference train service. However, the actual performance differential between the proposed train service and the reference train service may differ from this expectation.

The third issue is that there are other capacity impacts that are not addressed by the capacity multiplier, such as differences in provisioning times.

Ways in which the above issues could be addressed are considered below.

9.5.4.3 Treatment of the above issues

Application of the QCA's Arbitration Guideline

The Guideline defines a set of procedural notes to follow in order to implement its principles. This procedure cannot currently be followed as it specifies steps that imply consideration of the conflict issues arising from interaction of trains, which the principles have excluded.

That is, while the intention of the Guideline is to not account for conflict costs, it explicitly requires Aurizon Network to consider conflicts by determining crossing delays at full utilisation. This issue is partially ameliorated once the system becomes fully duplicated (as it removes crossing delays). However, there is a need to apply a methodology that avoids the requirement to estimate crossing delays and complies with the principles.

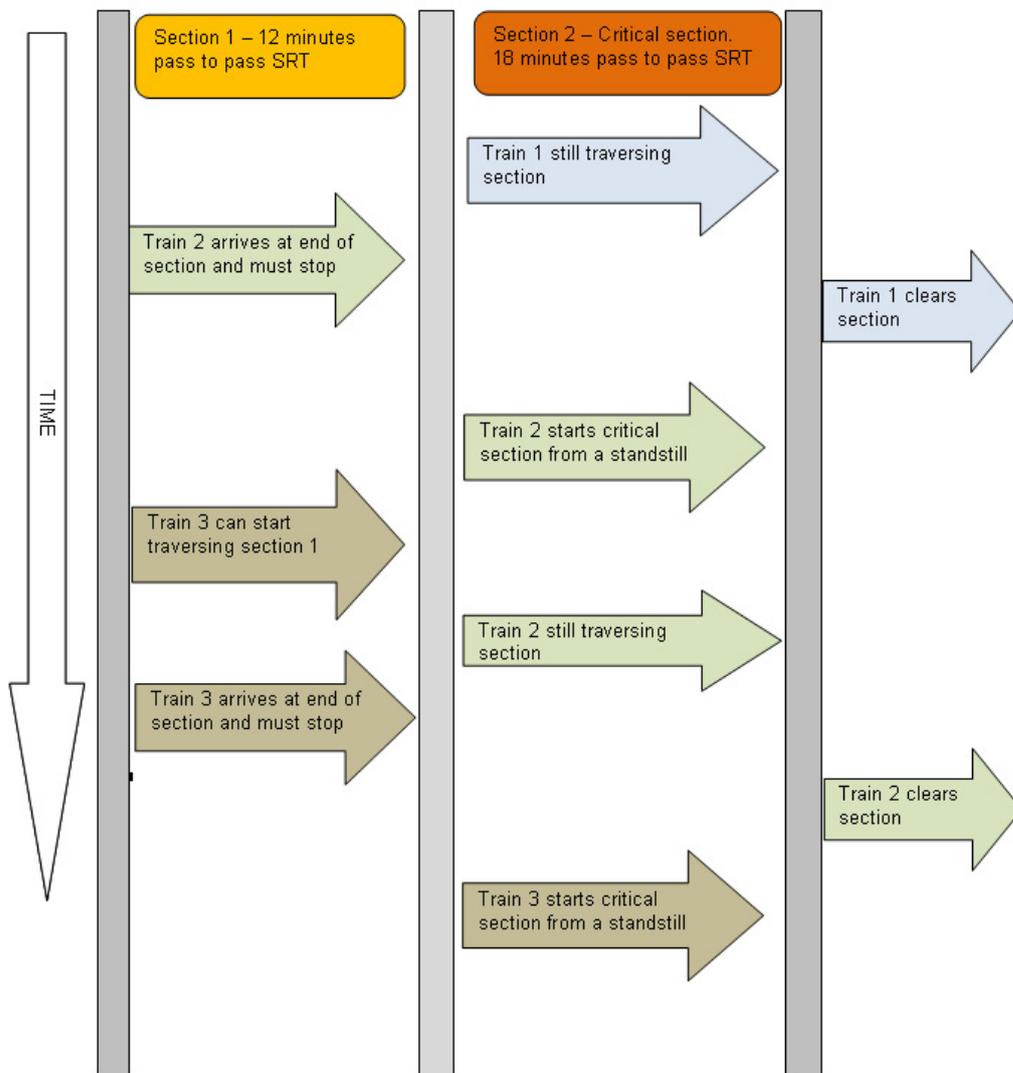
The key aspects of such a methodology are:

- validation of input parameters for train characteristics;
- the concept of saturation of the network, implying that the network is utilising all available train paths, hence there is a train on every section;
- reflects the differential performance of the proposed and predominant train consists traversing the critical section of the network, including starting time;
- the critical section of the network is used by all traffic;

- the branch lines can feed sufficient traffic to the part of the network containing the critical section to saturate this part of the network;
- the critical section is identified by use of a train performance calculator package (such as Mtrain or a variety of other available software packages) to determine the section with the longest time to traverse, including the time for the train to start from a standstill at the beginning of the section;
- the critical section will also be preceded by a section that takes less time to traverse.

The methodology will establish the maximum number of train paths the network can deliver based on all predominant trains using the network and all proposed trains using the network. It is therefore assumed that the critical section will dictate the number of train paths that the network can deliver. The determination of the critical section is demonstrated in the following diagram.

Figure 18 Capacity multiplier analysis: determination of the critical section



The diagram illustrates that in a saturated network, the critical section will result in all trains stopping at the end of the previous section due to the disparity in section run times, thus resulting in trains starting on the critical section from a standstill. Once the critical section is identified based on this methodology, then

times to traverse the critical section from a standstill can be used for the proposed train service and reference train services. The ratio of the times taken by each service will represent the difference in capacity consumption.

This methodology can be best illustrated through the following example.

Figure 19 Deriving reference train paths

Time for reference train over critical section from standing start = 20 minutes

Maximum number of trains per day for benchmark train:

= 1440 minutes per day/20 minutes per train

= 72 trains per day

Time for proposed train over critical section from standing start = 24 minutes

Maximum number of trains per day for proposed train

= 1440 minutes per day/24 minutes per train

= 60 trains per day

Capacity Consumption No. of paths/train =	max. no. of benchmark trains at full utilisation	
	max. no. of proposed trains at full utilisation	
Capacity Consumption No. of paths/train =	72	= 1.2
	60	

Multiple: The proposed train will consume 1.2 reference train paths per train.

Actual versus expected performance

In order to price a service based on its actual consumption of capacity in the day of operations, an assumption needs to be made regarding network utilisation. Aurizon Network considers it appropriate to calculate the number of reference train paths used by a service based on a conservative utilisation assumption that utilises a static approach to capacity modelling and is representative of the network configuration.

Where a service fails to clear the nominated constrained section within the nominated separation time, the service effectively sterilises an additional train path in addition to the path it is operating. The consumption of two train paths may result in consequential delays and cancellations for other train services. However, this may not always be the case. Accordingly, setting the capacity multiplier (rtp) equal to two may overstate the actual capacity impact because this assumes that the failure to clear the nominated constrained section in the nominated time will always have an adverse consequential impact on other services.

Aurizon Network therefore considers it appropriate to derive the utilisation rate for a constrained section by adjusting the ‘theoretical’ number of network train paths available in a day for:

- the number of paths assumed to run for coal and non-coal services in order to meet contractual commitments; and
- planned maintenance losses.

This is generally consistent with the approach applied by ARTC in the development of its Hunter Valley Corridor Capacity Strategy.¹⁶²

This calculation is shown below, based on the assumptions contained in the table.

Table 6 Indicative Calculation of RTP utilisation rates: assumptions

Component	Parameter	Example
Nominated separation time for the nominated constrained section	A	20 minutes
Daily minutes	B	1440
Network train paths (=A/B)	C	72
Coal train paths	D	33
Non-coal train paths	E	2
Planned maintenance losses	F	11

$$\begin{aligned} \text{Available train paths (G)} &= C - (D + E + F) \\ &= 26 \end{aligned}$$

$$\begin{aligned} \text{Utilisation rate (H)} &= (C - G)/C \\ &= 64\% \end{aligned}$$

This utilisation rate represents the proportion of an additional path that is assumed to be consumed where:

- a train service does not clear the nominated constrained sections within the nominated transit times; and
- it has a green light for the next section (as an operator should not be accountable if it is held within that section).

In other words, where a service fails to clear the nominated constrained section within the nominated separation time, rather than set the rtp equal to two (paths), it will be calculated as one path plus the relevant utilisation rate. For example in the above case, it would be 1.64.

Pricing other capacity impacts

As noted above, there are factors that can influence network capacity that are not reflected in the capacity multiplier, such as provisioning times. This could be addressed through a different pricing signal, such as a time-based charge for provisioning. Aurizon Network has not sought to develop this as part of its UT4 proposal but it may be appropriate to introduce such a charge in the future.

¹⁶² Australian Rail Track Corporation (2009). 2009-18 Hunter Valley Corridor Capacity Strategy Consultation Document, Appendix 1.

9.5.4.4 UT4 proposal

It is proposed to move the capacity multiplier provisions from Schedule F to Part 6 (clause 6.2.2(d)) in the 2013 Undertaking given that the capacity multiplier is fundamental to price differentiation and therefore the pricing principles.

Aurizon Network has also reviewed the measurement and application of the capacity multiplier and considers that improvements to this pricing framework can be made.

First, it has proposed to clarify the methodology used to measure the capacity multiplier in accordance with the principles in the QCA's Arbitration Guideline. The details of this methodology were set out above. This does not require specific amendments to the 2010 Undertaking.

Second, as the current capacity multiplier reflects the *expected* performance differential between the proposed train service and the reference train service, it is proposed to apply a capacity performance charge to reflect any differences between the expected performance differential and the actual performance differential. Aurizon Network has therefore amended the requirements for the number of reference train paths consumed to be deemed to be calculated as one plus the relevant utilisation rate for billing purposes where:

- a train service does not clear the nominated constrained sections within the nominated transit times; and
- it has a green light for the next section.

The method used to calculate the utilisation rate was described above.

Aurizon Network's analysis has identified that the above issues will emerge for sections in the Blackwater following the commissioning of WIRP infrastructure enhancements. Aurizon Network also has concerns with respect to the potential capacity impacts of underperforming train services in the Goonyella system, in light of subsequent expansions of that system that are likely to involve signalling improvements and further reductions in separation times. It is also reasonable that the commencement of a performance multiplier be delayed to allow rail operators to assess the performance of their train configurations and assets and implement any necessary operational improvements. The nominated constrained sections, transit times and utilisation rates from 1 July 2015 are provided in the table below.

Table 7 Proposed nominated constrained sections, nominated transit times and RTP utilisation rates (from 1 July 2015)

System	Nominated Constrained Section	Nominated Separation Time	RTP Utilisation Rate
Blackwater	Between Edungalba and Tunnel	20 minutes	59%
Goonyella	Between Broadlea and Coppabella	20 minutes	63%

Accordingly, a new definition of the capacity multiplier has been included in Schedule F of the 2013 Undertaking which includes a performance multiplier, providing that:

- prior to 1 July 2015, the performance multiplier will be 1; and
- after 1 July 2015, it will be:

- 1.59 for the Constrained Section of the Blackwater system (between Edungalba and Tunnel); and
- 1.63 for the Constrained Section of the Goonyella system (between Broadlea and Coppabella).

After 1 July 2015, the nominated Constrained Sections may be amended within the Operating Parameters. A definition of Nominated Separation Time has also been included, being the:

“Maximum transit time for a Train Service to clear a Constrained Section of the Rail Infrastructure without imposing consequential delays and cancellations for other Train Services as specified in the operating characteristics included in Schedule F for each Coal System.”

A third issue that has been identified is the pricing of capacity impacts not reflected in the capacity multiplier, specifically, a time of use charge for provisioning activities. Aurizon Network has not included this in its UT4 proposal but seeks stakeholder comments on the reasonableness of this approach for possible introduction in future.

In conclusion, Aurizon Network considers the proposed changes to the capacity multiplier improve the clarity of its calculation and, in conjunction with the review of AT2, provide a more cost reflective price signal for the capacity implications of train services that do not conform to the reference train service's operating characteristics.

9.6 Nominal Train Configuration

9.6.1 Background

Reference tariffs have been based on the section run time performance of the predominant train service in the relevant system with the access charge levied for each service based on the actual characteristics of that service. However, for non-reference trains, Aurizon Network is able to price differentiate for cost or risk differences.

Currently, the payload characteristics are not specified for the reference train service. Setting reference tariffs based on the predominant train service therefore has the potential to result in more efficient services being inadvertently penalised, particularly where take or pay applies, as shown below.

Take or pay for coal carrying train services is calculated with reference to the AT2, AT3 and AT4 tariff components. As such, the most significant determinant of how an access holder's take or pay liability will be determined is the payload assumption used to calculate the AT3 and AT4 components (which are based on net tonne kilometres and net tonnes respectively).

The reference tariff rates will benefit a train operator with a higher payload capacity per train as it will incur a lower average dollar per net tonne rate per train path. However, where the take or pay amounts are calculated with reference to a higher nominal payload in the access agreement, the take or pay amounts for that access holder will be higher than those payable for an access holder with a nominated payload commensurate with the predominant train service.

For example, assume that there are two services operating on the same part of the network, one has a nominated payload of 5000 net tonnes (and is the predominant train service) and the other has a nominated payload of 5100 net tonnes. Assuming:

- a train path charge of \$2000;

- both services operate over 400 kilometres;
- an AT3 rate of \$2 per thousand net tonne kilometres; and
- an AT4 rate of \$1 per net tonne,

the following table demonstrates the access charge and take or pay payable by both services.

Table 8 Example showing impact of nominal payload differences on take or pay liability

System	Access Holder A	Access Holder B
Payload (net tonnes)	5000	5100
Train kilometres	400	400
Access Charge		
AT2	$2 * \$2000 = \4000	$2 * \$2000 = \4000
AT3	$(400 * 5000)/1000 * \$2 = \4000	$(400 * 5100)/1000 * \$2 = \4080
AT4	$5000 * \$1 = \5000	$5100 * \$1 = \5100
Access Charge per net tonne	\$2.60	\$2.58
Take or Pay liability per train path	\$13,000	\$13,080

The example shows that while the cost of operating the more efficient train service is lower, the cost of not operating the train service (i.e. take or pay) is higher. Aurizon Network considers that the take or pay liability between these two services should be comparable on a train path basis. This is because it is train paths that have been sold and this has driven the investment in network capacity.

Similarly, where the reference tariff is calculated on the basis of the higher payload train, then at the time of setting the tariffs the expected Total Actual Revenue from access charges will not align to the System Allowable Revenue. Determining reference tariffs for the purpose of establishing access charges should therefore achieve the following two objectives:

- the tariffs should be representative of the gross tonne kilometre and net tonne kilometre estimates expected to be railed for the expected net tonnes; and
- take or pay amounts for origin and destinations subject to the same reference tariff and haulage distance should be equivalent on a train path basis.

9.6.2 UT4 proposal

Aurizon Network considers it appropriate to set the reference tariffs for a system with reference to the Nominal Train Payload, which is the weighted average net tonnes of the forecast train services expected to operate in the relevant system, as assumed in the relevant approved reference tariffs. The Nominal Train Payload for each system will be published with the reference tariff inputs in clauses 7 to 11 of Schedule F.

The calculations for take or pay (clause 2.4 of Schedule F) have been amended to make it clear that:

- (i) “where the rtp for the relevant Train Services under the Train Service Entitlement:
 - (A) equals one, the payload for a loaded Train in respect of that Train Service equals the Nominal Train Payload applicable to the relevant Reference Train Service; or

- (B) does not equal one, Aurizon Network will calculate the Take or Pay charges in a manner consistent with the relevant Train Service Entitlement”.

9.7 Reference tariffs for new coal carrying train services

9.7.1 Background

In the 2010 Undertaking (clause 4.1 Part B, Schedule F), for a new coal carrying train service the price of access will be based on the higher of:

- “the Reference tariff for the relevant system infrastructure; or
- the sum of the incremental costs of mine-specific infrastructure (Private Incremental Costs), the Incremental Costs of any necessary enhancements to mainline infrastructure, and the minimum contribution to common costs. The minimum contribution to common costs is equal to AT2 plus 50% of AT3.”

As previously discussed, the key principle underpinning this is that where a new user’s incremental mainline expansion costs would exceed the common system price (even without applying AT2 in the minimum contribution to common costs), then that user should be required to pay a differentiated price. Otherwise, the expansion that user has triggered would raise the common system price.

The existing pricing framework was developed in a relatively subdued demand environment and did not contemplate major step changes in capacity (such as GAPE), which will potentially continue to occur across the network. In the current environment the costs of new capacity is high and the scale of some of the expansions is large.

Where a new or expanding user is required to bear the costs of the additional infrastructure required to provide their access rights, the entry costs represent an increased barrier to entry, both for a new service and for existing participants who want to expand production. This may discourage future development and growth of the CQCR. Aurizon Network has an important role in facilitating this future growth and the pricing framework is one of the key ways in which this can be influenced.

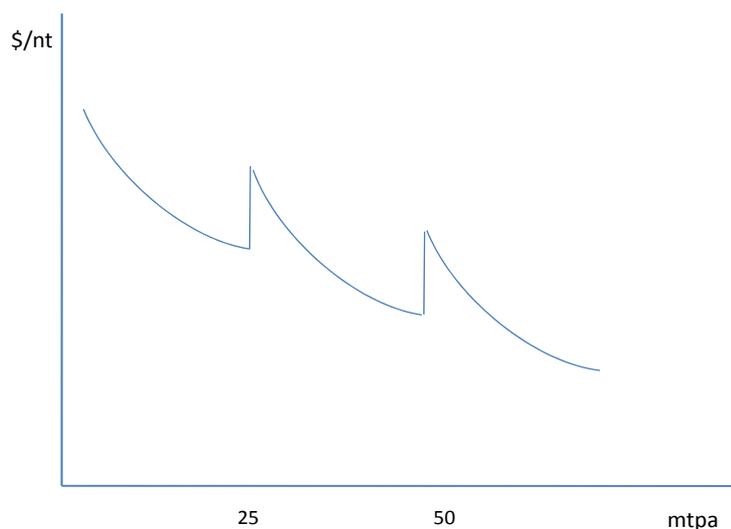
9.7.2 Incremental versus average cost pricing

Consistent with the economic theory of a natural monopoly, infrastructure assets typically exhibit declining average costs as volumes increase (as fixed costs are spread over more units of output such as coal volumes). However, infrastructure tends to be characterised by lumpy expansions.

If the average cost of an expansion¹⁶³ is higher than the average cost of the existing assets, the result will be a ‘saw-tooth’ cost curve. An example of this is shown below, assuming two expansions that increase average cost (one at 25 mtpa and the next at 50 mtpa).

¹⁶³ That is, the expansion cost divided by the tonnes of capacity created.

Figure 20 Long-run average cost curve in the presence of lumpy expansions



This problem is more pronounced where the incremental expansions do not follow a constant cost curve. An example of such a situation is where capacity is constrained on a fully duplicated section of track. A relatively low cost investment in signalling infrastructure can be made to maximise the capacity of that section. However beyond this, triplication would be required. Achieving the same step change in capacity that was achieved with the signalling investment will be considerably more expensive if triplication is required.

Two main alternatives exist in allocating expansion costs (recognising that there will be variants in between). The first is that the new or expanding user bears all of the additional costs associated with that expansion, or the costs that would not have otherwise been incurred in the absence of that user's request for access rights (referred to here as the 'incremental' approach). There is usually an expectation that the user will also make some contribution to existing shared network costs.

The second approach is that the expansion costs are shared with existing users, based on each user's contracted access rights as a proportion of total access rights (referred to as the 'average cost' approach). In other words, there is no distinction made between existing users and new or expanding users.

Average cost pricing is the approach that is taken at DBCT. In the development of DBCT Management's first access undertaking, the QCA concluded:

"The Authority believes that, given the nature of the terminal as a multi-user terminal, it would be inappropriate to recover the incremental costs of capacity expansions only from the incremental users/tonnes. The Authority agrees with stakeholders that adopting a marginal approach would result in numerous tariffs involving burdensome administration and transaction costs.

Given the absence of objection by stakeholders, the Authority agrees that expansion costs should be shared on an average cost basis, with the TIC¹⁶⁴ applying to each access holder. This would involve recalculating the TIC upon a terminal expansion to take into account the cost of existing and expanded capacity."¹⁶⁵

¹⁶⁴ Terminal Infrastructure Charge

¹⁶⁵ Queensland Competition Authority (2004). Draft Decision, Dalrymple Bay Coal Terminal Draft Access Undertaking, October, p.49.

This proposal was expressly supported by the DBCT User Group.¹⁶⁶

9.7.2.1 Incremental cost approach

The implication of the incremental cost approach is that the additional costs incurred in accommodating the new or additional access rights are specifically attributable – and remain attributable – to the user whose access rights were dependent on that expansion. This therefore creates a distinction between users, depending on their time of entry into the market and the actual costs that were incurred at that time.

The price charged to existing users reflects a depreciated RAB that was set at the start of UT1 and has been subsequently rolled forward based on CPI. Particularly given the dramatic increase in construction costs that has been observed since the start of UT1 (having grown by substantially more than CPI), those prices do not reflect current replacement costs. The new user's incremental price will reflect current replacement costs. As a consequence, participants in the CQCR would face materially different access charges depending on their timing of entry into that market. This could also create perverse incentives and gaming in the negotiation process with users seeking to avoid periods of high incremental costs.

To illustrate by way of a simple example, assume a new entrant has a potential cost advantage in mine production for the same commodity of \$2.00, but that entrant is required to pay an incremental access charge that is \$2.50 higher than the price paid for fundamentally the same service by a less efficient incumbent producer. In this case, the more efficient producer may be displaced by the less efficient producer and not enter the market. Clearly, net economic welfare would be improved by allocating capacity to the more efficient producer.

Another relevant consideration is the characteristics of a below rail access service, which is fundamentally a homogeneous service. Product differentiation is only possible through offering different levels of service quality, however this is impractical to implement on a shared network without adversely impacting another access holder's access rights. Although this is not the case for discrete extensions or links (such as the GAPE section of track that connects the Goonyella system with Newlands), in most of the CQCR infrastructure is shared. Further, what was formerly a discrete set of systems is becoming more integrated.

Incremental pricing effectively becomes a form of 'vintage' pricing, which has been categorised by Parmesano and Martin in the context of electricity:

"Under a vintage pricing scheme, new customers are charged a higher price for electric service than existing customers. The justification for this price disparity, as asserted by its proponents, is that the costs of new generating plants needed to serve the demand of additional customers are much higher than the costs of existing plants; therefore, new customers should bear the burden of these additional costs. A number of economists disagree with this premise.

Opponents of vintage pricing argue that if the cost of producing the unit of a service for any customer is the same, then the price charged to each customer should likewise be the same."¹⁶⁷

¹⁶⁶ DBCT User Group (2004). Submission in Response to Draft Decision on Dalrymple Bay Coal Terminal Draft Access Undertaking, 26 November.

¹⁶⁷ Parmesano, H. & Martin, C. (1983). The Evolution in U.S. Electricity Rate Design, Annual Review of Energy, Vol. 8 45-94, Annual Reviews, p. 72

The inherent inefficiency in these pricing concepts is demonstrated by the following example by Kahn:

“Suppose, for example, the utility has two groups of customers, one, A, whose demand is stable, another B, whose demand is increasing. And suppose expansion of the latter demand finally requires expansion of capacity. Does that mean, following our rules of peak responsibility pricing, that B are the marginal buyers on whom capacity costs alone should be imposed? Obviously not. True, it is the increase in B’s purchases that precipitates the additional investment; but the additional costs could just as well be saved if A reduced their purchases as if B refrained from increasing theirs. So A’s continuing to take service is just as responsible, in proportion to the amount they take, for the need to expand investment as B’s increasing needs, and A should therefore be forced just as much as B to weigh the marginal benefits of the capacity to them against the marginal costs they impose on society by continuing to make demands. This reasoning clearly applies even when incremental investment costs per unit of capacity are rising and where, again, it might appear on first consideration that since it is the expansion of the B demands that is responsible for the supplier’s incurring the higher costs, it is that group that ought to bear the additional burden. Even though B’s demand is “marginal” in the temporal sense, both groups are marginal in the economic sense. Both should be forced to match those higher capacity costs against the satisfaction they derive from continuing to use the service.”¹⁶⁸

In summary, Kahn’s point is that new services are incremental in a temporal (or time of entry) sense but all services are marginal in an economic sense. The application of incremental pricing to similar services using common infrastructure will discourage efficient investment in rail infrastructure, while preserving economic rents for incumbent producers.

Proponents of incremental pricing may also be concerned about the allocation of risk associated with pricing on this basis. Where prices are established based on system forecasts, under average cost pricing existing users may be exposed to potentially higher access charges associated with the short term under-utilisation of the incremental expansion by the parties who triggered the investment. However, Aurizon Network considers this issue is able to be readily addressed by pricing on the basis of contracted volumes, which is discussed in section 10.6.

9.7.2.2 Average cost approach

Expansions to a common user system can benefit existing users in a number of ways. Most importantly, they can improve service quality and bring forward upgrades or renewals that would otherwise been needed in the absence of the expansion. For example, in the case of GAPE, some \$40 million of costs were allocated to existing users of the Newlands system, representing the avoided costs of future upgrades and the improvement in the standard of the Newlands network.

Although existing users may benefit from an expansion, they have already contributed towards the funding of the existing assets. There may also be cases where an existing user may not derive any tangible benefit from the expansion (or the benefit may only be minimal). An average cost approach, where all users share the incremental costs of the expansion, effectively requires existing users to underwrite the stranding risk associated with the new investments. This risk can be heightened in the case where new marginal operations have been able to be developed (or expanded) on the back of high commodity prices that are not sustainable. However, the sharing or ‘socialisation’ of mine-specific risk has been an inherent feature of the existing common user regime in the CQCR.

Average cost pricing is also consistent with the allocation of risk between users. As discussed in Chapter 6 of Volume 3, incremental users are most likely to bear the greatest exposure to longer term demand risk for the existing asset base. Aurizon Network expects that some stakeholders will have genuine

¹⁶⁸ Kahn, A. (1988). *The Economics of Regulation: Principles and Institutions*, MIT Press, Vol. 1, p. 140.

concerns regarding over-investment for peak demand and that average cost pricing would not provide a sufficiently strong price signal to new or expanding users regarding the costs of expanding in an environment of high capital costs. However, this can be addressed by providing existing users with the opportunity to demonstrate why the expansion is uneconomic and accordingly should not proceed, or proceed only at the risk of the contracting parties (effectively an unregulated investment), as discussed further below.

An expert report developed for Aurizon Network by Sapere Research Group (Sapere) on this issue highlights that while cost-reflective pricing is a well accepted principle in regulatory decision making, it can be challenging to apply when costs are common to different customer groups (that is, which customer or group of customers 'caused' the price change). A review of key literature in the field reveals that there are a number of different ways to select the preferred allocation method, and:

“...the “best” method will depend on the circumstances—especially the nature of the characteristic cost function, and the purpose of the allocation (i.e., regulated utility pricing, management accounting, etc.)”¹⁶⁹

Sapere also notes the incentive problems that sometimes occur, and that:

“The socially optimal investment may be difficult to achieve because certain agents or combinations of agents have a commercial incentive to prevent it.”¹⁷⁰

Sapere establishes a number of criteria that it considers must be satisfied in determining the allocation of costs, which are that:

- competitive neutrality between mines must be preserved;
- cross subsidies (as formally defined by floor and ceiling tests) must be prevented; and
- perverse incentives regarding the timing of mine development should be avoided.

It concludes that a full incremental pricing approach is inconsistent with the above principles. It states:

“Some degree of socialisation of new investment costs is preferable, provided that the investment in capacity meets the fundamental welfare test on an expected value basis. The optimal degree of socialisation of new common costs depends on the application of stand-alone cost ceiling and incremental cost floor tests to ensure that an average cost-type rule does not lead to cross-subsidy between mines.”¹⁷¹

The Sapere report is presented in the annexures to this submission.

9.7.3 Contributions to common costs

One of the core features of the access pricing regime is that users are typically required to make a minimum contribution to the shared network costs because a large proportion of below rail network costs are fixed costs, which cannot be specifically attributed to the provision of access to an individual user. In Aurizon Network's regime this has been referred to as the 'minimum contribution to common costs'. Recovery of these costs is necessary to satisfy s168A(a) of the QCA Act, which is that prices should

¹⁶⁹ Sapere Research Group (2012). Review of Cost Allocation Methodology and Treatment of Mine Specific Infrastructure – Report to QR National, p.9.

¹⁷⁰ Sapere Research Group (2012). p.9.

¹⁷¹ Sapere Research Group (2012). p.10.

“generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service”.

All services are required to make some contribution to shared network costs and access charges are typically set between incremental and stand alone cost. Prices for a new service, currently addressed in clause 4.1 of Part B, Schedule F of the 2010 Undertaking, will be set at the higher of the reference tariff and that service’s incremental costs, plus a minimum contribution to common costs.

As highlighted by Sapere, to avoid cross-subsidisation between mines it is important that each user makes an appropriate contribution to common costs, although this does not require making an equal contribution. In UT3 the minimum contribution to common costs is equal to AT2 plus 50% of AT3. There are three main issues with this approach, which are discussed below.

9.7.3.1 Uncertainty as to indicative prices

The first issue is the uncertainty this creates in providing access seekers with an indicative tariff, especially for access rights that require additional network investment. The inclusion of AT3 in the minimum contribution to common costs introduces material modelling complexity because changes in the allowable revenues that result from the inclusion of the new service’s costs in allowable revenues will flow through to a change in AT3. This results in uncertainty when providing access seekers with an indicative tariff, especially for access rights that require additional network investment.

The allocative tariff components (AT3 and AT4) are used to allocate the balance of Aurizon Network’s allowable revenues once the cost causative tariff components, being AT1 and AT2, have been set. These allocative (or non-causative) components also provide for the distance taper¹⁷², which is an important feature of the pricing regime that has underpinned the development of the CQCR. The distance taper assumes that all other things being equal, a mine with a shorter haul distance has a greater capacity to pay than a mine with a longer haul distance and is therefore able to make a higher contribution to common costs.

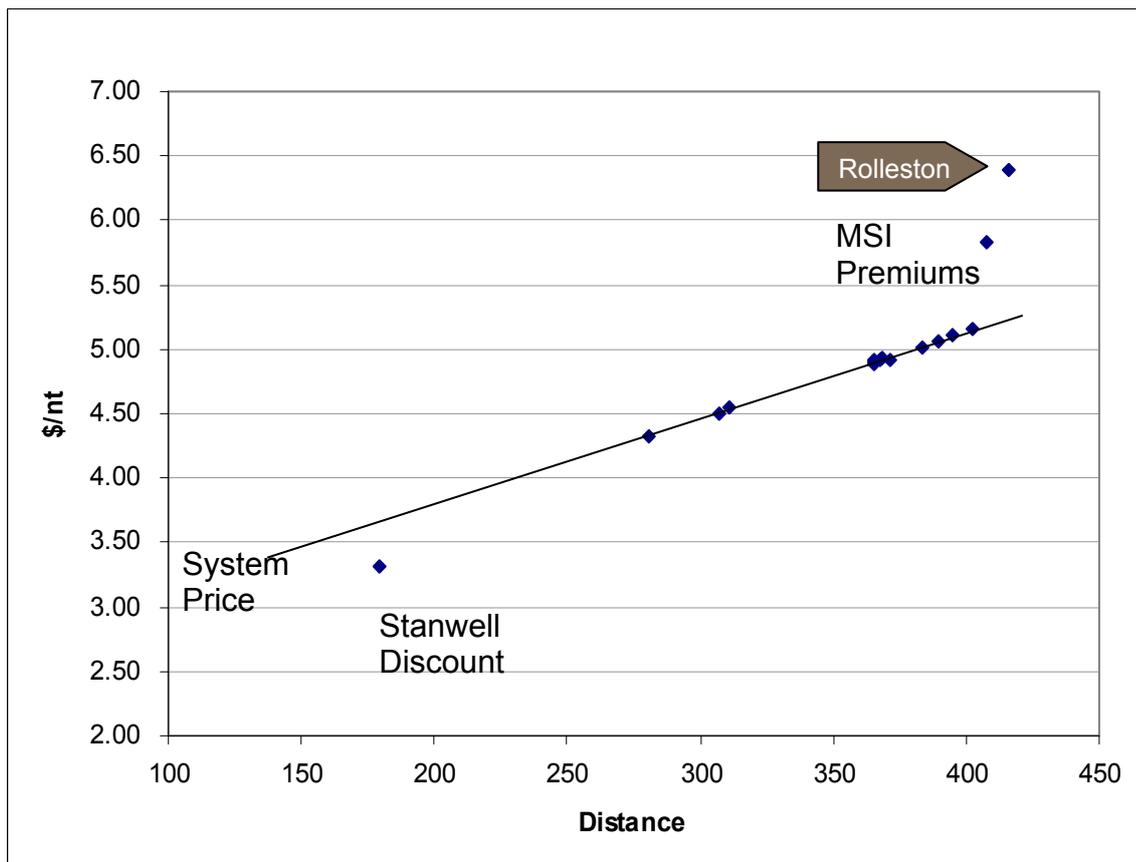
9.7.3.2 Variability in AT2

The second issue relates to the potential for the scale of AT2 to change materially from period to period. Where a user has undertaken material investment in adjoining rail infrastructure and is paying only the minimum contribution to common costs during a period where AT2 is low, a material change in AT2 in a subsequent regulatory period could adversely impact on that user’s economic viability. However, Aurizon Network considers that where a new development does receive a discount on the contribution to common costs associated with the adjoining rail infrastructure, that discount should be conditional on meeting at least the incremental mainline expansion costs in order to avoid incentivising inefficient investment in adjoining rail infrastructure.

For example, the Rolleston mine pays only the minimum contribution to common cost in the Blackwater System. As shown in the graph below, it also pays the highest access charge in 2012/13 due to the costs of the mine specific infrastructure.

¹⁷² That is, the access charge, when weighted by haul distance, falls as distance increases.

Figure 21 Access Charges for Blackwater System 2012/13 (dollars per net tonne)



Any increase in the AT2 rate would therefore materially increase Rolleston’s tariff relative to other users of the system. In relation to the additional access rights for the Rolleston mine for WIRP, the application of the discounting principle discussed above would require the contribution to common costs to at least reflect that user’s proportion of the net increase in the specific and common costs of the expansion.

9.7.3.3 Disclosure of private infrastructure costs

The third issue with the current approach is that in satisfying the second limb of clause 4.1 of Part B, Schedule F of the 2010 Undertaking (related to the coal carrying Train Service’s Private Incremental Cost) requires the disclosure of private infrastructure costs to the QCA.

The issues associated with this disclosure is illustrated in the case of the Middlemount mine, which is yet to provide Aurizon Network or the QCA with any information in relation to private efficient costs for the Middlemount spur. The problems associated with ‘partially’ regulating private undeclared facilities should be readily apparent.

9.7.4 Pricing network expansions: proposed solution

9.7.4.1 Cost allocation methodology

Principles

Aurizon Network has considered whether changes are required to the approach that is currently used to price new services. Fundamental to this is the question of the extent to which the costs of enhancements to shared network infrastructure should be shared between existing users and the access seeker/s that prompted that enhancement.

Aurizon Network considers that where the expansion is to shared network infrastructure that will be utilised by new or expanding users and existing users, it is appropriate for the costs of the expansion to be shared between these users. There are a number of reasons for this, the most important one being to avoid price differentiation between new and existing users of a homogenous service based on a user's time of entry into the market. A full incremental pricing approach forces a distinction between new and existing users depending on time of entry.

Existing users may also derive an economic benefit from the expansion, even if they do not have any immediate plans to expand beyond their existing access rights, for example avoiding future upgrade or renewal costs that they would have otherwise been required to fund. In any case, once the enhancements are commissioned, the distinction between 'new' and 'existing' users on that network (or 'expanding' and 'non-expanding' users) soon loses relevance.

Aurizon Network also recognises that in sharing these costs with existing users, the existing users are in effect underwriting the stranding risk of new (and potentially costly) expansions. However, the sharing of the costs and risks of existing sunk network investments is an inherent feature of the pricing framework that has been in place since UT1.

The circumstances of future expansions will differ, including the nature, cost, location (including terminal/s serviced), number of users and the extent of any economic benefits accruing to existing users. Consistent with the aim for UT4 to provide appropriate flexibility to be able to respond to the ongoing growth and development of the CQCR and any future changes in the environment, Aurizon Network has not proposed to prescribe a new pricing formula in the access undertaking. Instead, it proposes to expand the matters that may be sent to a vote by users to include the allocation of the costs of an expansion.

That is, in circumstances where Aurizon Network considers it appropriate that expansion costs be shared between expanding and non-expanding users, which would require variation to an existing reference tariff, it is proposed that Aurizon Network may seek acceptance of the proposed cost allocation methodology via a vote. This will also provide Aurizon Network and the relevant access seekers with the ability to obtain reasonable commercial and regulatory certainty as to the indicative pricing outcomes prior to committing to investment in the rail infrastructure, and any complementary supply chain infrastructure. Where user acceptance is not sought, or is sought and rejected, Aurizon Network could still seek the QCA's acceptance of the proposed methodology.

Process

The voting process is consistent with the process that would be used to seek user acceptance of the scope and/or standard of a project in clause 8.11 of the 2013 Undertaking, as described in section 7.7 of this Volume. In addition to setting out when the process might be applied, it describes:

- how Interested Participants (who are asked to vote) will be identified;
- how the voting rights will be determined;
- the acceptance process;
- the information that Aurizon Network will provide to Interested Participants, which will be in the form of a project-specific Working Paper; and
- how Aurizon Network will demonstrate that it has complied with this process.

The process also requires a 'no' vote to be accompanied by specific reasons. Issues that are considered to be of particular relevance in this context include:

- why the pricing proposal does not satisfy the pricing principles in s168A of the QCA Act;
- how a proposed reference tariff variation based on the cost allocation principles would adversely impact on that Interested Participant's ability to compete in a relevant market; or
- why the Interested Participant should not contribute towards the cost of the project now or at any time in the future.

If a user does not provide reasons for a 'no' vote, it will be excluded from the count.

Aurizon Network considers that the provision of specific and relevant feedback is critical to the effectiveness of the process, including in deterring gaming or anti-competitive behaviour. If the proposal is rejected under the customer vote but Aurizon Network remains of the view that the sharing of costs between expanding and non-expanding users best promotes the requirements of the QCA Act, it may still seek approval of this proposal from the QCA. If this occurs, the onus will be on Aurizon Network to identify and respond to objections raised by participants in its submission. For example, existing users may not consider it appropriate that they underwrite the risks of the relevant enhancements and they may have specific information or evidence to support this case.

It is important to emphasise that this is not seeking a vote on the reference tariff itself. Instead, it is the cost allocation methodology underpinning the determination of that tariff, which is either that:

1. the costs of the expansion will be borne by the expanding users, which requires the creation of a new reference tariff; or
2. the costs of the expansion will be shared between expanding and non-expanding users, which requires variation to an existing reference tariff.

Further, this issue only becomes relevant where the inclusion of the expansion costs associated with the provision of new or additional access rights would increase the average system price. Where the inclusion of that service would reduce the average system price this clearly benefits all users and it would be priced by way of a variation to the existing reference tariff.

The reference tariff itself, including the final costs of the relevant expansion, will still need to be approved by the QCA. The process for acceptance of a new reference tariff is addressed in clause 6.2.6 of the 2013 Undertaking. A variation to an existing reference tariff is addressed via a Review Event and accordingly provision will need to be made for the situation where Interested Participants approve a reference tariff variation under the voting provisions in clause 8.11.

Review Events are included in clause 5.3 of Schedule F of the 2013 Undertaking, along with the QCA review and approval process. A Review Event (g) has been included in the case of:

“...the acceptance by Interested Participants through a vote under clause 8.11, or the QCA, of the cost allocation principles that Aurizon Network will apply to a variation to a reference tariff”.

To reiterate, the final cost allocation methodology does not influence the total revenue that Aurizon Network can earn – it only determines how the approved revenue will be recovered from users.

Notwithstanding the implementation of a voting process with respect to proposed cost allocation methodologies, Aurizon Network considers that stakeholders would benefit from the QCA providing specific guidance on the issues relevant to the issue of incremental versus average cost pricing as previously suggested in the context of DBCT.¹⁷³

9.7.4.2 Contribution to common costs

Aurizon Network is also proposing to revise the assessment and application of the minimum contribution to common costs. A new methodology is proposed where an access seeker's access charge will be based on the higher of:

- a Minimum Revenue Contribution; and
- the relevant system reference tariff less a Distance Discount.

The key principles underpinning the above treatment are as follows.

1. The starting point for the access charge will always be the relevant system reference tariff. This could be a new reference tariff established for that service or a variation to an existing reference tariff to incorporate the costs associated with the provision of access to that service. This was discussed above.
2. A service may be eligible for a discount (the 'Distance Discount') to the relevant system reference tariff depending on its spur and mainline haul lengths. This is consistent with the distance taper principle (and was also consistent with the approach applied in UT2). The discount may be zero.
3. At minimum, the price the service will pay will be no less than the Minimum Revenue Contribution. This replaces the concept of the 'minimum contribution to common costs'.

The Distance Discount will be based on the following formula:

$$\{ART - MRC\} * \left\{ \left(\frac{\max[SL_{lower}, SL_{actual}] - SL_{lower}}{SL_{upper} - SL_{lower}} \right) * \left(\frac{ML_{actual}}{ML_{ave}} \right) \right\}$$

Where:

ART is the aggregate of the AT₁, AT₂, AT₃ and AT₄ reference tariff components on a \$/nt basis;

SL_{actual} is the new spur's length in kilometres;

SL_{upper} is 100 kilometres;

SL_{lower} is 25 kilometres;

ML_{upper} is the average mainline haul length from a Nominated Loading Facility to a Nominated Unloading Facility for the relevant reference tariff; and

ML_{actual} is the mainline haul length from the loading facility to the unloading facility for the new Train Service; and

MRC is the Minimum Revenue Contribution.

There are a number of elements to this formula, which are explained below.

The minimum price will equal the Minimum Revenue Contribution

The first element of the above formula reflects the principle that the minimum price the service will pay will be the Minimum Revenue Contribution. The Distance Discount is therefore only applied to the difference between the relevant existing reference tariff (converted to a dollar per net tonne charge) and the Minimum Revenue Contribution (that is, the term '{ART – MRC}' in the above formula).

¹⁷³ Queensland Competition Authority (2010). Final Decision – Dalrymple Bay Coal Terminal, p. 14.

The Minimum Revenue Contribution will now be specified as the AT1 input for the relevant reference tariff, plus the higher of:

(a) the amount calculated as:

- i. the increase in System Allowable Revenue that would occur if the relevant costs that would be incurred by Aurizon Network as a consequence of providing the new or additional access rights were included in that System Allowable Revenue; less
- ii. any cost allocation to existing access rights (associated with any economic benefit to existing access holders from the relevant expansion or customer specific branch line);
divided by 90% of the aggregated contracted tonnes (in net tonnes) for the relevant coal system;
or

(b) the sum of:

- i. the relevant AT2 component of the relevant reference tariff; plus
- ii. 25% of the System Allowable Revenue attributable to AT3 and AT4 for the relevant system, divided by the system forecast for that year,
both of which are converted to a dollar per net tonne basis, assuming a Nominal Train Payload.

The service will always pay the AT1 input for the relevant reference tariff, which reflects the long run incremental maintenance cost of an increase in volume.

The first limb of the Minimum Revenue Contribution formula, (a), reflects the additional expansion costs associated with the provision of access to the new service, where the inclusion of those costs in the allowable revenue for that system would increase the average price paid by users in that system. This amount will be reduced by any benefits that those enhancements will provide to existing users (as described in section 9.7.2 above), for example, avoiding future upgrade or renewal costs that existing users would have otherwise been required to fund.

The second limb of the above test, (b), replaces the current concept of minimum contribution to common costs, which was AT2 plus 50% of AT3. This will now be AT2 plus 25% of AT3 and AT4. The AT3 and AT4 components will be converted to a dollar per net tonne charge by dividing the System Allowable Revenues for those two tariff components for that year by the system forecast. This will also be based on the relevant nominal train payloads for that system (refer section 9.6).

Importantly, limb (b) requires no reference to private incremental costs, which avoids the need for a user to disclose these costs to the QCA. Further, because this will be based on the relevant System Allowable Revenues for those tariff components, which is reset at the beginning of each year, users will have more predictability in estimating the potential tariff outcomes that might apply to a new service.

Spur line length

The second term of the formula accounts for spur line length. The principle here is that no discount will apply to spurs less than 25 kilometres in length. If the spur length is greater than 25 kilometres, a discount will be applied. The size of this discount increases with spur length, up to a maximum of 100 kilometres.

Consistent with the distance taper, the rationale for this treatment is that longer spurs will also be bearing higher private infrastructure costs, impacting their capacity to pay relative to mines with shorter spurs.

However, there also needs to be a point at which a cap is applied to ensure that mines with very long spurs still make a reasonable contribution to shared network costs: the proposal is to apply this cap at 100 kilometres. The lower and upper bounds of this range (25 and 100 kilometres) are considered reasonable based on the characteristics of the CQCR.

The lower bound seeks to ensure that efficient mines are not displaced by less efficient mines based on the costs of the mine specific infrastructure. To the extent that access rights are mutually exclusive, then it should be allocated to the party who can afford to pay the common system price and their own costs. This is not unreasonable given mine specific infrastructure is a locational characteristic of the mine and should be considered part of the mine production costs (not the common rail infrastructure). Spurs greater than 25 kilometres begin to take on characteristics of a railway and also have the greater potential for multiple users.

The upper bound has been selected as it is commensurate with the spur lengths of the Minerva and Rolleston mines, which both pay the minimum contribution to common costs in relation to rail infrastructure east and north of Burngrove.

Main line haul length

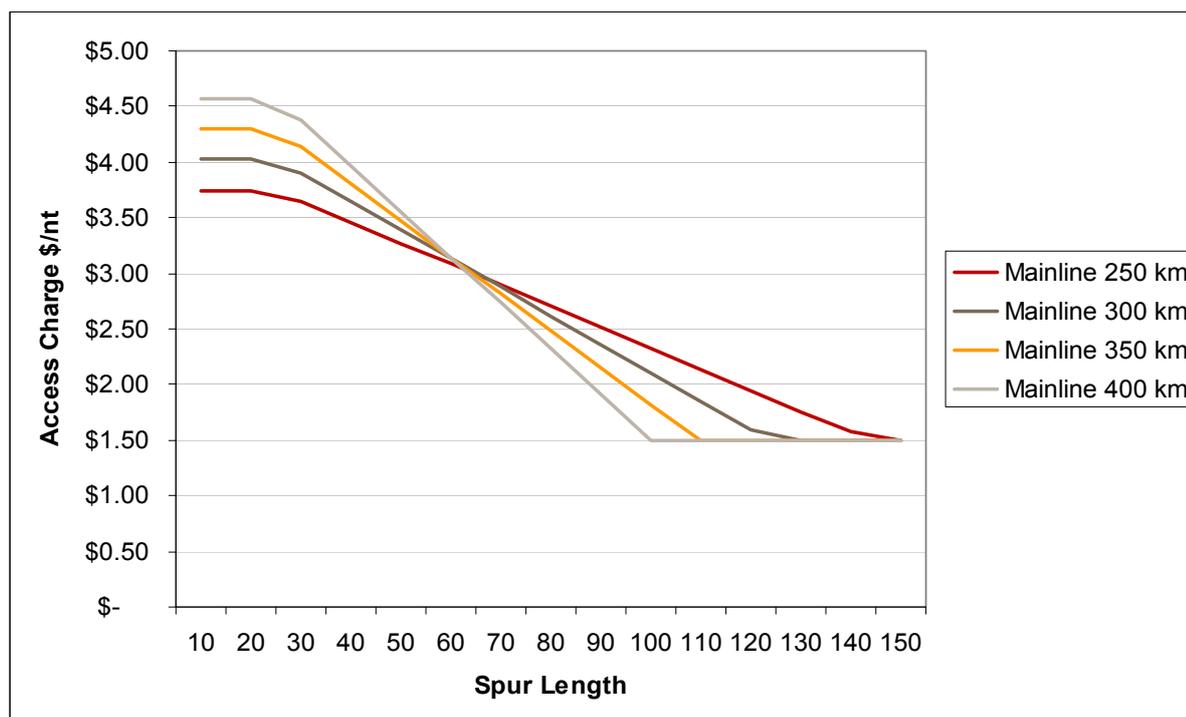
Main line haul length is also relevant to capacity to pay. The shorter the length of the mainline haul (compared to the average mainline haul length for an existing load point in the relevant system), the lower the discount. For example, if a 150 kilometre spur connects to only 50 kilometres of a 400 kilometre system, the capacity to pay for the use of that 50 kilometres will be much higher than users who pay an access charge commensurate with the use of the entire 400 kilometres of mainline.

The above approach is consistent with that applied in UT2, which considered both spur and mainline length in determining the minimum contribution to common costs, providing a more competitively neutral approach based on capacity to pay. However, this approach also required an assessment of the incremental costs associated with the service to determine whether the minimum contribution to common costs was necessary. The above method avoids that requirement and simply determines what level of discount (if any) is applied to the relevant system reference tariff.

Worked example

An indicative illustration of these concepts based on the Blackwater system is demonstrated in the graph below. The graph shows the access charge payable as a function of spur length (horizontal axis) and four different scenarios of mainline utilisation (250, 300, 350 and 400 kilometres). This shows that no discount applies until the spur length reaches 25 kilometres (that is, the service will pay the system reference tariff). As the spur length increases the level of the discount increases. This discount is offset by use of the mainline. As mainline use decreases so too does the quantum of the discount. At minimum, the service must pay the Minimum Revenue Contribution.

Figure 22 Impact of Distance Discount on access charge



The Sapere (refer Annexures) report notes that it remains efficient for pricing to reflect locational rents. This effectively acknowledges that mines closer to the ports will have a higher capacity to pay and are also likely to be the first to be developed and extracted. Accordingly, future growth in coal production in Queensland will necessarily come from mining developments located at greater distances from port infrastructure and at the extremities of the network. In some circumstances this may also involve large greenfield extensions that interconnect with the existing asset, such as Rolleston.

Aurizon Network considers that where the development costs of the extension infrastructure are likely to be material relative to the scale of the existing asset, then it is prudent and efficient for the access charges for those services to provide a discount in relation to the contribution to common costs.

9.7.5 UT4 proposal

9.7.5.1 Cost allocation methodology

Aurizon Network has included a new clause 6.2.4 in the 2013 Undertaking that addresses access charges for train services that require an expansion. Where the costs associated with providing new or additional access rights would increase an existing reference tariff (assuming that those costs were included in the revenue used to determine that reference tariff), Aurizon Network may seek the acceptance of:

- the relevant users¹⁷⁴ (Affected Parties) whose access charges would be affected by the proposed variation to an existing reference tariff; or
- the QCA,

of a cost allocation approach that shares the relevant costs between expanding and non-expanding users, by way of a variation to an existing reference tariff (clause 6.2.4(a)(iv)). Aurizon Network can still

¹⁷⁴ Includes Customers and Access Holders without Customers.

seek acceptance from the QCA if the proposed cost allocation approach is not accepted by Affected Parties.

Where that acceptance is not sought or obtained, Aurizon Network will submit a new reference tariff for the relevant access seeker's access rights for approval by the QCA, under clause 6.2.5 ('Reference Tariff for new Loading Points and Private Infrastructure').

The process that will be used to obtain user endorsement is outlined in clause 8.10 of the 2013 Undertaking. Reference is made to section 7.7 in this Volume for more detail of the process and how it will be applied where Aurizon Network seeks endorsement of the scope, standard and/or cost allocation methodology relevant to a particular project.

Whether or not a vote is sought remains at Aurizon Network's discretion. However, if Affected Parties endorse the cost allocation methodology as required under clauses 8.10 and 6.2.4(a)(iv), it is proposed that the QCA must accept that methodology provided it is consistent with the cost allocation principles that have been accepted (clause 6.2.4(c)). In other words, if users have endorsed the sharing of costs and stranding risk via a variation to an existing reference tariff, the QCA cannot reject this approach in favour of the creation of a new reference tariff for that access seeker (or access seekers). As explained in section 7.7, Aurizon Network proposes to provide an audit certificate to the QCA confirming whether it has followed the process in clause 8.10 in securing user endorsement.

As this process only relates to the acceptance of the methodology used to allocate costs, regardless of whether or not the cost allocation methodology is accepted, QCA approval will still be required for the proposed final reference tariff, including the costs underpinning the development of that tariff.

9.7.5.2 Contribution to common costs

Clause 6.2.5 of the 2013 Undertaking addresses reference tariffs for new loading points and private infrastructure (connected or established after the commencement date of the 2013 Undertaking). Unless a new reference tariff is being proposed for access rights requiring an expansion (discussed above), the access charge for these new or additional coal carrying train services will be determined based on:

- the relevant existing reference tariff, where:
 - the Distance Discount is zero; or
 - the Minimum Revenue Contribution is less than the relevant existing reference tariff;or, if this doesn't apply
- a new reference tariff, which when converted to a dollar per net tonne basis, is the higher of:
 - the Minimum Revenue Contribution;
 - the relevant existing reference tariff less the Distance Discount (with the Distance Discount first being applied to the AT3 tariff component and then any remainder applied to AT4), converted to a dollar per net tonne basis assuming a Nominal Train Payload.

The determination of the Distance Discount and Minimum Revenue Contribution, which were described above, is addressed in the Definitions.

As discussed earlier, Aurizon Network also does not consider it reasonable that an existing access holder's contribution to common costs should vary materially from one regulatory period to another. It has therefore sought to identify those mines that could be seen to be adversely affected by the change.

Given the changes in the quantum of the AT2 tariff discussed in section 9.10 below, Aurizon Network has therefore calculated the minimum contribution to common costs for Minerva, Lake Vermont (to RG Tanna), Rolleston and Middlemount (to DBCT) as being equivalent to the contribution to common cost payable in 2012/13 reference tariffs, expressed as a dollar per thousand ntk and escalated by 5% per annum. 5% is considered a reasonable price path towards the contribution to common cost that would be payable as a Minimum Revenue Contribution under the proposed framework. Aurizon Network notes that issues of capacity to pay may arise under this price path and those parties should provide the QCA with the necessary evidence to support an alternative contribution to common costs during the tariff approval process.

9.8 Development of a new reference tariff

9.8.1 Issues

9.8.1.1 Initiation of the development of a new reference tariff

Clause 6.4.2 of the 2010 Undertaking addresses the establishment of reference tariffs for new reference train services. The clause also provides that the QCA:

- can issue Aurizon Network with a notice requiring it to submit a proposed reference tariff for a new reference service if it expects that there is sufficient interest from access seekers to warrant development of such a tariff (clause 6.4.2 (c)); and
- can also develop a proposed reference tariff if: Aurizon Network fails to comply with a notice requiring it to submit such a proposal; the QCA refuses to approve a proposed reference tariff submitted by Aurizon Network; or Aurizon Network fails to resubmit a proposed reference tariff that the QCA has requested it amend (clause 6.4.2(e)).

It also describes the process for the review and approval of a new reference tariff.

Consistent with the requirements of the QCA Act, the 2013 Undertaking requires Aurizon Network to negotiate with access seekers, provide certain information and set access charges according to approved pricing principles and within prescribed limits. In the event that commercial negotiation fails to reach an agreement, access seekers have recourse to binding dispute resolution.

Aurizon Network considers that there is no need for the QCA to be able to require development of a reference tariff. Clause 6.5.1(a) of the 2013 Undertaking (formerly clause 6.4.1(e) from the 2010 Undertaking), acknowledges that a reference tariff is an efficient way to meet the requirements contained in s101(2)(a) to (c) of the QCA Act, which mandates that access seekers must be provided with price, cost and asset value information. There is no reason why Aurizon Network would not voluntarily submit a new reference tariff and no circumstances have arisen in the past where it has not done so.

The most likely situation where a new reference tariff would be required is in the context of an expansion. If the underlying demand requires an expansion, this will be addressed via the process outlined in section 9.7 above. Otherwise, Aurizon Network does not envisage any circumstances arising that would warrant demand for a reference tariff that it would be unwilling to develop itself.

With the exclusion of these circumstances, it is therefore no longer considered necessary for Aurizon Network to be able to seek an extension of time to submit, or resubmit, a proposed reference tariff (clauses 6.4.2(d) and (n) in the 2010 Undertaking). It is also not considered necessary to retain clause 6.4.2(m), which allows a proposed reference tariff to be withdrawn at any time.

9.8.1.2 Other process issues

In addition to improving the drafting where appropriate, there is an opportunity to make some improvements to the process.

The most material change that Aurizon Network has sought in this regard is providing it with an ability to respond to a 'draft decision' from the QCA on the proposed reference tariff. Currently, the process only allows for the approval or rejection of the proposed reference tariff by the QCA. In the case of a rejection, Aurizon Network has the opportunity to re-submit the reference tariff based on the issues identified by the QCA in its determination.

Aurizon Network proposes that if the QCA is considering rejecting a proposed reference tariff, it will provide Aurizon Network with a draft decision, which includes a statement outlining the way in which the reference tariff would need to be amended in order for it to be approved. Aurizon Network then has the option of:

- resubmitting the proposed tariff; and/or
- providing the QCA with more information to support its proposal,

within twenty business days of the draft decision. The QCA will then consider whether or not it will approve the resubmitted tariff.

Aurizon Network considers that the above process is more efficient, providing it with the opportunity to respond to any concerns that the QCA may have regarding a proposed tariff before it is rejected. It is also consistent with the approach applied to a Draft Amending Access Undertaking. There is no reason why this should not also apply in this case.

9.8.2 UT4 proposal

Clause 6.4.2 from the 2010 Undertaking has been redrafted, with the provisions now reflected in the following provisions in the 2013 Undertaking:

- clause 6.2.4: access charges for train services that require an expansion or (including the process for seeking acceptance of a variation to an existing reference tariff, as described above);
- clause 6.2.5: reference tariff for new loading points and private infrastructure (also discussed above); and
- clause 6.2.6: process for acceptance of a new reference tariff.

For the reasons outlined above, in clause 6.2.6 Aurizon Network has not retained the provisions allowing the QCA to require it to develop a reference tariff, or for the QCA to be able to develop a reference tariff itself. It has therefore also removed the provisions allowing it to seek an extension of time to submit or resubmit a proposed tariff, and allowing a proposed reference tariff to be withdrawn.

Other improvements that have been proposed to the process for acceptance of a new reference tariff are:

- if the QCA is considering rejecting a proposed reference tariff, requiring it to provide Aurizon Network with a draft decision, including a statement of reasons setting out how the reference tariff should be adjusted. Aurizon Network would then have the opportunity to respond to that draft decision within twenty business days, by revising the proposed reference tariff and/or providing further information (clause 6.2.6(e));
- consolidating the matters that the QCA must consider in approving a proposed reference tariff, or a re-submitted reference tariff, into the one clause (clause 6.2.6(b)). Currently, the approval of a proposed reference tariff and a re-submitted reference tariff are addressed in separate clauses, even though the key considerations are the same;
- replacing the 60 day calendar approval timeframe with 40 business days (clause 6.2.6(c));
- replacing one of the commencement dates for a proposed reference tariff from being “the date of the first Train Service servicing the new coal mine” with “if Aurizon Network and the Access Seeker have entered into an Access Agreement under clause 6.2.4(d), the date of that Access Agreement” (clause 6.2.4(d)(i)).

9.9 Rebates and single user spurs

9.9.1 Background

9.9.1.1 History

The pricing of mine specific network infrastructure (or spurs connecting the mine to the mainline network) is an issue with a long and complex history. The currently methodology was developed in a very different commercial environment characterised by excess track capacity and low coal prices. The track access pricing regime was specifically designed to promote mine development and investment. This involved ‘socialising’ mine specific investment and only required the owner of a mine with a mine specific spur to make a minimum contribution to common costs. The costs of this infrastructure have therefore been included in the common system price.

Where Aurizon Network has built mine specific infrastructure for a customer it has provided access under an Access Facilitation Deed (AFD). This is essentially a financing arrangement where the customer pre-pays the capital and interest costs. Aurizon Network must rebate any access revenue received equal to the return on and of capital for those assets. That is, that mine will pay access charges based on the relevant reference tariff (which will include mine specific infrastructure costs) and will then receive a rebate for the capital charges associated with that infrastructure.

Aurizon Network no longer offers AFDs due to the adverse accounting impacts and now typically requires mines to fund and own their own mine specific infrastructure. The 2010 Undertaking requires that where a mine does fund and own its spur, in order to promote competition in the market for mine specific infrastructure the pricing outcomes should be consistent with what the mine would have paid if Aurizon Network had funded and owned the asset.

9.9.1.2 Issues

Principles underpinning the future treatment of mine specific infrastructure costs

The key issue for consideration here is the treatment of mine specific infrastructure costs in the common system price.

This question has also been considered by Sapere in its report considering incremental versus average cost pricing approaches (refer Annexures). Sapere observed that on the one hand, the principle that each user should pay its own direct costs is well established, implying that the new mine should pay for its own spur line. It also recognised that the contrary argument has a number of aspects, including:

- “By joining the cluster, the new mine might help to improve utilisation and reduce average costs on the common mainline corridor. Thus it could reduce costs to the other cluster members, for which they may be willing to make some investment to encourage the new mine to enter;
- Of course, it is also possible that the new mine might force a costly upgrade of the common mainline, giving the other cluster members a strong reason to discourage the new mine;
- There may be legacy contracts on foot under which other cluster members received some form of financial support to construct their spur lines, either from the network owner or from earlier joiners of the cluster. Considerations of fairness and competitive neutrality might suggest that any historical cross-subsidy policies be continued.
- If the new mine pays for its own spur line, vulnerability is thereby created to opportunistic free-riding by later entrants that may attempt to use this spur line. These late entrants may attempt to use regulatory intervention to achieve an access price that is lower than the net cost paid by its host, the line’s foundation customer.”¹⁷⁵

Sapere concludes that while some form of average cost pricing is more appropriate for shared network infrastructure, the general rule that should be applied to mine specific infrastructure is that each mine should meet its own avoidable costs.

Aurizon Network concurs with this view. It considers that the most appropriate way to address some of the other arguments raised above is to take account of the length of the mine’s spur (that is, the materiality of its mine specific infrastructure costs) in determining the contribution to shared network costs that it makes via the application of the Distance Discount, as described in the preceding section.

The development and ownership of mine specific infrastructure should be a contestable service and should not form part of the common system price. This is consistent with how mine specific infrastructure has been developed and funded in the Hunter Valley Coal Network and how it is approached in new developments such as the Galilee Basin. Fundamentally, a spur should be seen as part of the mine infrastructure, not the common below rail network infrastructure. To the extent that these costs could be shared with other network users (via the inclusion of the costs in common system prices) this can promote inefficient investment in mine specific infrastructure.

As new mines are now required to own and fund their own mine specific infrastructure, the costs of this infrastructure should not be included in the common system price. The question is how existing costs should be treated.

The treatment of existing mine specific infrastructure costs

The inclusion of existing spur costs in the common system price gives rise to a number of problems. First, it results in a loss of transparency, which also means that users are not in a position to understand the extent to which these risks are being shared. For example, transfer fees should be determined only with reference to cost contributions to common user assets.

¹⁷⁵ Sapere Research Group (2012). p.15.

Second, the administration of rebate payments is also overly complex. This is particularly so for revenue cap adjustments and take or pay.

Many of the AFD arrangements were executed under a price cap framework where the volume risk relating to rebate assets was borne by Aurizon Network, aligning with the volume risk on the common user infrastructure. Following the change to a revenue cap in UT2, this alignment was broken, with volume risk on common user infrastructure transferred to users, while Aurizon Network retained volume risk on rebate assets. The creation of this financial risk was incompatible with the primary purpose of the AFD, being to mitigate revenue and investment risk on mine specific infrastructure.

Aurizon Network sought to address this problem in UT3 by adjusting the revenue cap provisions to offset for differences between actual rebates paid and the rebates assumed to be paid in the system forecasts. Under the 2010 Undertaking, for the purpose of assessing whether a revenue cap adjustment is required, System Allowable Revenue (the revenue Aurizon Network is permitted to earn) is not adjusted for rebates, whereas Total Actual Revenue (the revenue Aurizon Network has actually earned), is adjusted for the difference between actual and forecast rebate payments. Because no adjustment is made to System Allowable Revenue, this means that the under or over-recovery of rebates could impact take or pay.

The practical effect of the above is to transfer the volume risk on mine specific infrastructure from Aurizon Network to access holders, as opposed to the party to the AFD as intended under the rebate arrangements. As the definition of Total Actual Revenue in the 2005 Undertaking included no reference to rebates, the adjustment for rebates in the calculation of take or pay amounts and system capping only contractually applies to UT3 access agreements. As a consequence, the transfer of the volume risk for rebates is not borne by the system as intended but by a small group of access holders with access rights under the UT3 agreements. This was not an intended consequence of this adjustment.

9.9.2 Analysis

Aurizon Network has examined two main options to address the treatment of existing mine specific infrastructure costs.

9.9.2.1 Option 1: address via a new reference tariff component (AT6)

The first option involved the recovery of mine specific infrastructure costs through a new separate reference tariff component, AT6. This would involve:

- the removal of all existing mine specific infrastructure costs from the common cost base (these costs are currently primarily recovered via AT3 and to a lesser extent, AT4);
- a separate MAR will be established for all of these costs (the 'AT6 MAR'). The monthly AT6 charge will be a fixed price, being the AT6 MAR divided by 12;
- the AT6 charge for an individual user will be set to zero if that user has funded its mine specific infrastructure costs.

Eventually, AT6 would transition down to zero as the existing mine specific infrastructure costs are recovered. It would be able to be maintained outside of the scope of the revenue cap.

This option maximises transparency and eliminates any further cross-subsidisation of mine specific infrastructure costs, including via the revenue cap. As a fixed charge it would be known and predictable upfront. However, Aurizon Network also anticipates that the addition of another tariff component could

raise concerns about complexity. It could also have a significant impact on individual users and their ability to contribute towards shared network costs (or at least cover the Minimum Revenue Contribution).

9.9.2.2 Option 2: address via a user discount

The second option retains mine specific infrastructure costs in the common cost base but applies a discount to the reference tariff to the extent of a user's contribution to the capital costs of their spur. The main advantage of this approach is simplicity. It avoids the 'double handling' of revenue by Aurizon Network as any revenue that would otherwise have had to be rebated would not be collected in the first place. However, it does not improve transparency through to the underlying cost base.

9.9.2.3 Assessment of options

In both cases it is only considered appropriate for this to apply to single user spurs. If a spur has more than one user, or subsequently becomes multi-user, these costs will need to be included in the common system price in order to avoid inefficient bypass (that is, to avoid the situation where a new mine has to construct its own spur when it could have otherwise connected to any existing spur). This treatment of the costs would be necessary to ensure that the first party who contributed the assets will obtain the benefit of the use by the subsequent party.

Neither of the proposed options contravenes, or is incompatible with, the pricing principles in s168A of the QCA Act.

The key advantage of the first option over the second is that it clearly separates mine specific infrastructure costs from other shared network costs and is therefore more transparent. However, in adding a sixth reference tariff component Aurizon Network anticipates that concerns will be raised regarding complexity. While it has been acknowledged that a degree of complexity is needed to ensure efficient price signals in the CQCR, it is also considered desirable to avoid increasing complexity unless the benefits of doing so clearly outweigh the costs.

Aurizon Network is therefore proposing to apply option 2 in UT4. As outlined above, this will only apply to existing single user spurs. If an existing spur subsequently becomes multi-user, it would be necessary to revert back to a rebate arrangement to ensure that the original financier of the spur is adequately compensated, while the new user pays an appropriate charge. This in turn will necessitate a new Review Event provision, triggering a review of the relevant reference tariff to incorporate the new user's volumes.

9.9.2.4 Treatment of revenue cap adjustments

As rebates will still be payable for multi-user spurs, the other residual issue that still needs to be addressed is the potential impact of rebates on revenue cap adjustments. Currently, the adjustment is made to Total Actual Revenue.

This issue can be addressed by adjusting System Allowable Revenue instead of Total Actual Revenue (consistent with the treatment of discounts). Making the adjustment to System Allowable Revenue means that rebates will impact the revenue that Aurizon Network is approved to earn, rather than what it actually earned (or was entitled to earn). By addressing the difference between the rebates actually paid and the proportion of the System Allowable Revenue attributable to those assets as an adjustment to System Allowable Revenue (after the calculation of take-or-pay), then any differences are addressed in the revenue cap adjustment amounts applicable to all users.

The following tables demonstrate the proposed change based on a simple example, which assumes:

- System Allowable Revenue: \$200 million
- Total Actual Revenue (under-recovery): \$195 million
- Rebates expected to be paid: \$10 million.

The first table shows how the rebate adjustments were applied under the UT2 (price cap) and UT3 (revenue cap) arrangements, assuming that rebates were overpaid by \$2 million.

Table 9 Worked example: rebate adjustments (overpayment) under UT2 and UT3 arrangements

UT2 Position	\$ million	UT3 Position	\$ million
System Allowable Revenue	200	System Allowable Revenue	200
Less Rebates Expected to be Paid	10	Less Rebates Expected to be Paid	10
= Network SAR	190	= Network SAR	190
Rebates Actually Paid	12	Rebates Actually Paid	12
Less Rebates Expected to be Paid	10	Less Rebates Expected to be Paid	10
= Overpayment	2	= Overpayment	2
TAR	195	TAR	195
Less Rebates Actually Paid	12	TAR (adjusted for rebate overpayment)	193
= Network Net Revenue	183	Revenue Cap Adjustment	7
Add Revenue Cap Adjustment	5	Network Net Revenue (TAR less rebates actually paid)	183
= Revenue Cap Adjusted Revenue	188	Add Revenue Cap Adjustment	7
Network Economic Loss	2	= Revenue Cap Adjusted Revenue	190
AFD Gain	2	Network Economic Loss	0
		AFD Gain	2

The following table shows how an over- and under-payment of rebates would work under the proposed UT4 arrangements.

Table 10 Worked example of proposed change to treatment of rebates under Revenue Cap Adjustments

Overpayment of rebates	\$ million	Underpayment of rebates	\$ million
System Allowable Revenue	200	System Allowable Revenue	200
Less Rebates Expected to be Paid	10	Less Rebates Expected to be Paid	10
= Network SAR	190	= Network SAR	190
Rebates Actually Paid	12	Rebates Actually Paid	8
Less Rebates Expected to be Paid	10	Less Rebates Expected to be Paid	10
= Overpayment	2	= Underpayment	(2)
Adjusted SAR	202	Adjusted SAR	198
Less TAR	195	Less TAR	195
= Revenue Cap Adjustment	7	= Revenue Cap Adjustment	3
Network Net Revenue (TAR less rebates actually paid)	183	Network Net Revenue (TAR less rebates actually paid)	187
Add Revenue Cap Adjustment	7	Add Revenue Cap Adjustment	3
= Revenue Cap Adjusted Revenue	190	= Revenue Cap Adjusted Revenue	190
Network Loss	0	Network Loss	0
AFD Gain	2	AFD Loss	2

As shown in the example, the proposed arrangements achieve the objective of Aurizon Network not assuming volume risk on mine specific infrastructure - it is transferred back to the AFD holders. Aurizon Network notes that if reference tariffs are established based on contract volumes, the likelihood of an AFD financially gaining is substantially lower. In these circumstances any revenue attributable to under-utilisation of the contributed assets would be foregone by the AFD holder.

This circumstance should be distinguished from rail infrastructure funded under the user funding framework that applies to mainline expansions. The proposed arrangements described above only apply to mine specific infrastructure. The contractual framework under which the AFDs were executed was also not intended to compensate a party for the contributed assets. They are intended to ensure Aurizon Network does not earn revenue for assets it did not fund. As evident from the worked examples above this intention has been satisfied.

9.9.3 UT4 proposal

9.9.3.1 Treatment of existing mine specific infrastructure costs

'Unwinding' the treatment of existing spur costs is extremely complex and could also have material and adverse consequences on some users that would need to be addressed. Aurizon Network is therefore proposing a relatively simple solution. It is proposed to retain the existing mine specific infrastructure costs in the RAB, but where a user's spur assets are subject to a rebate, apply a discount to the reference tariff equivalent to the return on and of capital for those contributed assets.

The discount only applies to the capital costs. Incremental operating and maintenance costs will remain in the common system price. Where these assets subsequently become multi-user then the relevant portion of those assets will be included in the system reference tariff and the discount reduced accordingly. The original user will recover the capital contribution through a return to the rebate arrangement. This will only apply to 'existing' mine specific infrastructure, that is, assets that were in place as at 30 June 2013.

The key benefit of this proposal is that in most cases (i.e. single user spurs) it avoids the need to rebate revenue that should not have been collected and it avoids the complexity of calculating individual allowable revenues for each spur. This proposal does not directly address the lack of transparency about the underlying costs, nor does it address the socialisation of (non-rebated) mine specific infrastructure costs and risks amongst users. However, Aurizon Network's proposed solution is considered reasonable given:

- the original arrangements were developed based on the socialisation of mine specific infrastructure costs and risk; and
- to fully address this issue would increase complexity and could have material and adverse consequences for some users.

As the treatment of capital contributed to mine specific infrastructure costs is a form of price differentiation, a clause has been included at 6.2.2(c) (Price Differentiation from a Reference Tariff), which provides that:

"Where Aurizon Network has entered an agreement separate from the Access Agreement for Customer Specific Branch Line which provides for Aurizon Network to earn revenue that is in addition to the ongoing Access Charge (for example, an upfront contribution or Access Facilitation Charge), Aurizon Network may exclude the cost components separately funded through the additional revenue (for example, the value of any relevant Customer Specific

Branch Line to the extent supported by the additional revenue) from the cost base (including the asset base) used to determine the ongoing Access Charge.”

If a single user spur subsequently becomes multi-user, an adjustment will need to be made to the relevant reference tariff and the treatment of contributed capital will need to revert to a rebate arrangement. This requires the inclusion of a new Review Event (clause 5.3(d) in Schedule F), which is where:

- (i) “part of the Rail Infrastructure is used solely to connect an Access Holder or Customer’s single loading facility to a Coal System;
- (ii) a discount applies to the relevant Reference Tariff in respect of that Access Holder’s or Customer’s use of that part of the Rail Infrastructure to offset a rebate that would otherwise be payable by Aurizon Network to that Access Holder or Customer; and
- (iii) another Customer connects a loading facility to that part of the Rail Infrastructure.”

9.9.3.2 Treatment of revenue cap adjustments

To address the impact of any remaining rebate arrangements on revenue cap adjustments (which should only be in the case of multi-user spurs), the adjustment that was formerly made to Total Actual Revenue for rebates will be now made to System Allowable Revenue (clause 4.3(b)(vi) in the 2013 Undertaking).

As the addition (or subtraction) of the rebate over- (or under-) payment is made to the adjusted System Allowable Revenue, it does not impact on the calculation of Take or Pay and removes the discriminatory application of take or pay capping. The volume risk associated with the payment of rebates is also socialised across all users of the system, including UT1 access holders.

9.10 The level of the incremental capacity charge (AT2)

9.10.1 Background

Excluding the two electric tariff components (AT5 and EC), prices are based on a four part tariff structure.

The first two tariff components, the ‘cost causative’ components, are intended to signal the pricing impacts of an incremental increase in volume. AT1 is the incremental maintenance component and is levied on a dollar per thousand gross tonne kilometre (gtk) basis. It should signal the long run change in maintenance costs that would result from an increase in volume, recognising that some of these costs are fixed in the short run (see section 10.4). AT2 is the incremental capacity charge and is levied on a dollar per train path basis. It is intended to signal the cost of network capacity, where the incremental increase in volume would trigger an expansion of the network.

The two remaining tariff components, AT3 and AT4, allocate the remaining costs to ensure that Aurizon Network is able to fully recover its efficient costs.

AT2 was set at the start of UT1, based on the then prevailing cost of a forward-looking medium term investment path. Since then, the review of AT2 at the start of each regulatory period has been limited to rolling forward the AT2 charge at CPI.

The construction and cost environment has materially changed since the commencement of UT1. In particular, the incremental costs of capacity are considerably higher as a consequence of the growth in demand and the increase in construction costs, which have at least partly been influenced by the coal boom. The nature of the forward-looking investment path has also changed. For example, as highlighted in Aurizon Network’s November 2012 submission on the electric traction DAAU, in the Blackwater system

the investment path has been duplication, which will be completed with the Wiggins Island Rail Project upgrade. Following the completion of this upgrade, the forward-looking investment path for Blackwater will therefore focus on different issues.

If the level of AT2 is not cost reflective, it cannot effectively signal the price of the incremental costs of capacity and it cannot signal where network investment may be required. The level of AT2 also impacts on the contribution to common costs, which is proposed to be replaced by the concept of the Minimum Revenue Contribution (as outlined in section 9.7.4.2 above). As a consequence, the current tariff structure does not provide clear price signals regarding the opportunity cost of ongoing use of a train path relative to the costs of providing a new one.

The level of AT2 also has implications for the capacity multiplier, which is applied to AT2. As the capacity multiplier is intended to reflect the costs of operating a non-reference train service that consumes more network capacity than the reference train service, where AT2 is too low, it will also distort (or mute) this pricing signal.

9.10.2 Methodological issues

There are a number of changes associated with the pricing framework since AT2 was originally estimated that warrant a review, the overarching objective of which is to realign this tariff component with the current costs of capacity. The issues that need to be considered as part of this are discussed below.

9.10.2.1 Relevant expansion costs

Under the former cluster-based pricing model, consideration was given to the expansion path of the relevant cluster. The AT2 for the cluster was effectively set as the higher of the incremental train path charge for the mainline and the incremental train path charge relevant to the branchline. This ensured that AT2 also reflected any relevant locational cost drivers.

The implementation of a system reference tariff removed the ability to send a locational cost signal. Accordingly, in calculating the AT2 relevant to the system reference tariff, Aurizon Network has only considered the incremental expansion costs attributable to the mainline rail infrastructure, which is common to all train services subject to that tariff.

9.10.2.2 Assumed asset life

The assumption for the asset life can also influence the level of AT2. Historically, AT2 has been calculated with reference to a weighted average life of 35 years, with long life civil assets being capped at 50 years. If the intention of AT2 is to provide a price signal on the next increment of capacity, if that price signal is based on a different depreciation or life profile then AT2 will not accurately reflect the likely tariff impact. However, this is unlikely to have any material impact on efficiency for the following reasons:

- the primary purpose of AT2 is to price differentiate between a reference and non-reference train and depreciation policy is more closely aligned to revenue adequacy and mitigating asset stranding risks; and
- an increase in AT2 may require an offsetting reduction in the non-distance based AT4 charge to avoid creating winners and losers, with a resultant change in the slope of the distance taper (discussed below). It does not alter the dollar per tonne below rail access charge.

Aurizon Network therefore proposes to retain the 35 year life assumption when calculating the AT2 rates.

9.10.2.3 Relevant expansion path

The AT2 rate will be highly dependent on the scope, scale and timing of the expansions referenced in its derivation. The larger the next investment tranche assumed, the closer the AT2 rate will reflect a long run marginal cost. The benefit of this approach will be impacted by the degree of uncertainty as to the likely costs of necessary expansion and the impacts of any technology change or above rail investments.

For instance, there is a material difference between adding the next 30 million tonnes of rail capacity to the Goonyella system, which is principally based on investment in signalling infrastructure, relative to the next 60 million tonnes, which may require substantial track investment. As an alternate, for brownfield assets it may also be reasonable to include recent expansions in the analysis to provide a more robust estimate.

Taking these matters into consideration, Aurizon Network has adopted a pragmatic approach and assumed the following common corridor expansions for calculating the relevant AT2 rates:

- Goonyella system: assumes HPX3 and an additional 30 mtpa to Dudgeon Point (excluding any port-specific investment);
- Blackwater system: assumes the seven Blackwater mainline duplications; and
- GAPE and Newlands systems: assume a 25 million tonne expansion to Abbott Point (only considering the expansion costs in line sections common to both systems).

In relation to the Moura System, Aurizon Network has escalated the current AT2 rate by CPI. Based on concept study estimates for expanding the Moura system to support Wiggins Island Stage 2 and the connection of the Surat Basin Railway, establishing AT2 based on the next major investment would result in an AT2 charge materially in excess of the MAR, with the long run marginal cost being greater than the historical total actual cost.

Aurizon Network has prepared the incremental capacity charge per train path by calculating an annuity that amortises the relevant expansion costs over the assumed life. This is divided by the number of reference train paths that will be created by the relevant expansion, to provide a dollar per train path cost. This is shown in the following formula:

$$AT_{2_{RTP}} = \frac{PMT(WACC, Term, Capital_Cost)}{Incremental_RTP}$$

Where:

RTP	= Reference Train Paths
PMT	= Amortisation function
Term	= 35 years
WACC	= Approved WACC
Capital_Cost	= Indicative capital cost estimate
Incremental_RTP	= Additional Reference Train Paths provided by the incremental expansion.

The annual CPI escalation of the nominal annuity provides a more reasonable estimate of the long run incremental cost of increasing the capacity of the common corridor.

9.10.2.4 Impact on the distance taper

An increase in AT2 also increases the sensitivity of the distance taper to a given change in volume or revenue where the same cost allocation percentage for AT3 and AT4 are applied. The following table

provides an illustrative example of the price relativities for distance for a volume change, under a low and high AT2 rate.

Table 11 Example: impact of volume changes on distance taper – low and high AT2 rate

Assumptions	Distance	Payload (net tonnes)	Base Services	Adjusted volumes
Mine A	300	5000	10	7
Mine B	400	5000	10	7
Total			20	14

Tariffs	Low AT2: Base	Low AT2: Adjusted AT3 and AT4	High AT2 Base	High AT2: Adjusted AT3 and AT4
AT2	\$1,000	\$1,000	\$2,500	\$2,500
AT3	\$1.50	\$2.39	\$0.64	\$1.53
AT4	\$0.53	\$0.84	\$0.23	\$0.54

Access Charge (\$/nt)	Low AT2: Base	Low AT2: Adjusted AT3 and AT4	% Change	High AT2 Base	High AT2: Adjusted AT3 and AT4	Change
Mine A	\$1.38	\$1.95	142%	\$1.42	\$1.99	141%
Mine B	\$1.53	\$2.19	144%	\$1.48	\$2.15	145%
Difference	\$0.15	\$0.24	159%	\$0.06	\$0.15	238%

The example demonstrates that the distance taper is sensitive to changes in volume and revenue after the reference tariffs have initially been determined. It shows that if AT2 is increased from \$1000 to \$2500 per path and the same cost allocation percentages for AT3 and AT4 are applied, the distance taper is reduced. The difference between the two mines' dollar per net tonne access charges falls from \$0.15 to \$0.06 before the volume change, and from \$0.24 to \$0.15 after the volume change.

The following table shows this distance taper is effectively preserved by offsetting the increase in the AT2 rate with a reduction in the costs allocated to AT4. This relationship will hold provided the payload of train services within the system is reasonably homogeneous.

Table 12 Example: impact on distance taper where AT2 increase offset by reduction in AT4

Tariffs	High Base	High Adjusted
AT2	\$2,500	\$2,500
AT3	\$1.29	\$3.06
AT4	0	0

Access Charge (\$/nt)	%Change
Mine A	138%
Mine B	147%
Difference	238%

9.10.2.5 Impact on cross system tariffs

The cross system pricing principles in the 2010 Undertaking (clause 4.2 of Part B, Schedule F) requires that the service pays:

- the AT2 of the destination system;

- the AT2 of the origin system (if using a constrained section within that system);
- the higher of the origin or destination system AT3 tariffs; and
- the higher of the origin or destination system AT4 tariffs.

Under these principles a material change in the relativity of AT2 between systems can have a substantial impact on the cross system access charge. For example, if the destination system has a high AT2 and low AT4 but the origin system has a low AT2 and high AT4, the cross system service will pay the higher AT2 for the destination system and higher AT4 for the origin system.

Due to the cost advantages of operating to a port with a lower haulage distance (subject to the port pricing disparity not being sufficiently material to promote a longer haul), cross system services are most likely to be limited to services that operate in the vicinity of the lower end of the south Goonyella branch line and the upper end of the North Blackwater branch line.

While it is preferable to provide a price disincentive to cross system services to promote rationalisation of port and rail entitlements and therefore improve utilisation of rail infrastructure, the current principles have the potential to result in cross system services paying an AT4 rate that is not representative of the costs in the system in which they will predominantly operate (the destination system).

Similarly, the part of the origin system likely to be utilised by a cross system service will not be relevant to the incremental expansion costs of the common corridor used to calculate the AT2 for the origin system. As discussed above, this would require reverting to the development of location-specific AT2 rates for branch lines for application to cross-system services. Aurizon Network does not consider such further complexity is warranted.

9.10.3 UT4 proposal

Aurizon Network has reviewed the AT2 tariff component across all coal systems for UT4. This proposes a material increase in AT2 for Blackwater and a moderate increase in Goonyella. The following table includes the relevant assumptions for the calculation of the AT2 rates.

Table 13 UT4 proposed AT2 rates

Common Corridor	Incremental Capacity (mtpa)	Estimated Capital Cost (\$million)	Amortisation (\$ million)	Incremental Reference Train Paths	Proposed AT2 (2013/14 \$ per path)	Current AT2 (2012/13 \$ per path)
Newlands to Abbott Point	60	1,390	121.8	17,466	6,976	263 ¹
Burngrove to Parana	22	309	26.9	5,360	5,030	1,970
Coppabella to Hay Point Junction	45	255	22.3	8,954	2,488	1,248

¹ Newlands only

The proposal to increase AT2 will realign this tariff component in the Blackwater and Goonyella systems with the current incremental costs of capacity. It will therefore serve as a more effective price signal of the impacts of further increases in volumes in the current environment.

In order to limit Aurizon Network's revenue recovery to its approved efficient costs, any increase in the fixed price AT2 component could be offset by a reduction in the fixed dollar per net tonne AT4 (that is,

'fixed for fixed'). This will also ensure that the distance taper is preserved and therefore the price impacts on individual customers will be proportional, based on distance.

In order to avoid any adverse consequences of this change for cross-system services, Aurizon Network has proposed the following variations to the cross system pricing principles (clause 2.3 Schedule F of the 2013 Undertaking). A cross system service will pay an access charge which reflects:

- for AT2:
 - if the train service operates on a capacity constrained corridor in the origin system, the AT2 for the origin system for the rtp attributable to that system, and the AT2 for the destination system for the rtp attributable to that system;
- or, if this does not apply
 - the AT2 rate for the destination system only - however, Aurizon Network seeks stakeholder views as to the need for, and merits of, calculating an additional AT2 rate for the common corridor between Burngrove and Coppabella for cross system services;
- the AT3 rate for the origin system applicable to the ntk within the origin system;
- the AT3 rate for the destination system applicable to the ntk within the destination system; and
- the AT4 rate for the destination system.

For the purpose of the above clause, if a cross system service loads in Blackwater and unloads in Newlands, then GAPE is deemed to be the destination system for that service (clause 2.3(c) Schedule F of the 2013 Undertaking).

Clause 4.2(h) of Part B, Schedule F in the 2010 Undertaking referred to the capacity constrained corridors, which affects the pricing treatment of cross system train services as set out above. This list has been expanded to reflect the current status of the CQCR (clause 2.3(b) Schedule F of the 2013 Undertaking) and now incorporates railways between:

- (i) Coppabella and the Hay Point Junction;
- (ii) Newlands and Abbot Point; and
- (iii) Burngrove and the port of Gladstone (including domestic coal terminals in the vicinity of Gladstone).

9.11 Electric Energy Charge (EC)

9.11.1 Background

The EC charge is for the costs of electric energy required for the operation of electric services. While the provision of electric energy is not within the scope of the declared service, Aurizon Network has voluntarily committed to supply electric energy under the 2010 Undertaking and will continue to do so in UT4.

Aurizon Network has no direct control over the costs of electric energy and accordingly it is levied as a cost pass through. Currently, this change is made as an Endorsed Variation Event at the end of the

relevant year. This is therefore a source of price uncertainty for users of electric infrastructure as they will not necessarily know the charge that will apply prior to the commencement of each financial year.

9.11.2 UT4 proposal

Aurizon Network considers that a more efficient and streamlined process for the update of the EC charge is to remove it from the Endorsed Variation Events. Instead, it proposes to publish the EC charge that will apply in the relevant financial year on its website on or about the end of May in the previous financial year. This will provide users with upfront certainty as to the price for electric energy that will apply in the relevant year.

10 Revenue Management

Summary:

Revenue management refers to the mechanisms in the access undertaking to that deal with the overall revenue that Aurizon Network will earn, and in particular how this varies for factors that are beyond its direct control (including demand). The 2013 Undertaking is based on the existing revenue management framework, with some modifications to address issues that have been identified in UT3.

The key proposals for the 2013 Undertaking are as follows:

- *Revenue cap*: The exclusion of AT1 revenue from the revenue cap exposes Aurizon Network to volume risk because a significant proportion of these maintenance costs are not sensitive to changes in volumes in the short run. It may be feasible to adjust the maintenance program in advance for those costs that are genuinely sensitive to short run volume changes (i.e. short run variable costs), although Aurizon Network is still exposed to volume risk on those costs to the extent that actual volumes differ from the revised system forecast.

There are two key changes proposed here, being:

- an adjustment to SAR at the start of each year for any changes in (short run variable) maintenance costs attributable to the difference between the approved system volume forecast and the revised volume forecast; and
 - to bring any difference between the approved forecast AT1 revenue (which may have been adjusted at the start of the year for changes in volumes under the first proposal) and actual AT1 revenue.
- *System Allowable Revenue*: The annual adjustment to SAR has been modified, with the material issues being to:
 - Adjust for the difference between forecast and actual audit costs, which are difficult to estimate upfront; and
 - Adjust SAR, rather than Total Actual Revenue, for rebates.
 - *Take or pay*: While Aurizon Network remains concerned about individual accountability for capacity consumption via the system test on take or pay, it has not proposed any changes to this test for UT4. It has proposed changes to allow an operator to better manage take or pay liability. Minor amendments have been made to address practical application issues.

- *Cost pass throughs*: Changes have been made to the Review Event and Endorsed Variation Event provisions, with the most significant of these including:
 - removing EC from the Endorsed Variation Events as this will now be published prior to the commencement of each year;
 - allowing maintenance costs to be reviewed where market testing demonstrates that the approved maintenance cost allowance is insufficient and clarifying the changes that will result from a customer-initiated changes to maintenance practices;
 - including an additional Review Events to addresses the situation where the variation of an existing Reference Tariff is proposed to accommodate the costs of new or additional access rights.
- *Maintenance of the RAB*: a number of changes have been made to the circumstances in which the RAB value of assets can be changed:
 - clarifying the value of asset disposals or transfers that is deducted from the RAB, providing Aurizon Network with an incentive to maximise the sales proceeds (if any are realisable);
 - limiting the circumstances under which the QCA can optimise the RAB to where Aurizon Network has provided false or misleading information;
 - including scope to incorporate equity raising costs for new capital expenditure into the RAB, provided certain conditions are satisfied;
 - removing the Condition Based Assessment obligation.

10.1 Introduction

Revenue management relates to Aurizon Network’s ability to recover the revenue it is entitled to earn, noting that under section 168A(a) of the QCA Act, prices should:

“...generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved...”

There are a number of aspects to revenue management, some of which are addressed in the regulatory framework and others in the contracts.

Aurizon Network’s objective is to ensure appropriate protection to its revenues, especially for factors that are beyond its direct control (including demand). It is also important to maintain an appropriate distinction between regulatory (access undertaking) and commercial (access agreement) mechanisms. A number of proposals have been identified to ensure that Aurizon Network is not exposed to revenue risk for which it is not compensated.

10.2 Aurizon Network's approach to revenue management

There are a number of aspects to revenue management, as set out below.

1. Form of regulation. Aurizon Network is subject to a revenue cap, which (in theory) means that volume risk is borne by users who are best placed to assess and mitigate their own supply and demand risks. Each year Aurizon Network is entitled to earn the approved MAR regardless of actual volumes relative to forecast (unless an under-railing was due to an Aurizon Network cause). There is an annual revenue cap adjustment process in Schedule F of the 2010 Undertaking, which provides for the recovery/remittance of revenues (via reference tariffs) in the event of an under/over-recovery of revenue.

2. Take or pay. The revenue cap is a regulatory mechanism governing the recovery of approved revenues. Take or pay, on the other hand, is a contractual mechanism that mitigates revenue risk under individual contracts. Take or pay is a common commercial feature in pricing infrastructure assets. This reflects the capital intensive nature of infrastructure investment (with most costs incurred upfront), with infrastructure capital charges being largely invariant to short term demand changes (or commodity prices). An infrastructure provider is likely to have difficulty obtaining capital for major, sunk assets unless this is underwritten by long-term financial commitments from supply chain participants through take or pay contracts.

Another important objective of take or pay is to encourage accurate contracting by users by making them accountable if they under-rail relative to contract. This is important to deter capacity hoarding and maximise efficient utilisation of existing network infrastructure. It also minimises the extent to which an individual user's utilisation risk is transferred to others.

3. Annual update to System Allowable Revenues. This allows for the adjustment of specific components or inputs to Aurizon Network's approved revenues, such as:

- system volume forecasts;
- differences between the actual and forecast Maintenance Cost Index (MCI) and Consumer Price Index (CPI) (applied to the operating and maintenance cost allowances);
- differences between actual and forecast electricity distribution and transmission network costs, which are themselves an outcome from other regulatory processes.

4. Tariff review mechanisms. This addresses changes in certain costs that are generally beyond the control of Aurizon Network during the regulatory period. The two main mechanisms in Schedule F are Endorsed Variation Events (addressing issues such as change in law or taxes) and Review Events (addressing issues specific to the CQCN, such as a change in maintenance practices or a material force majeure event).

5. Maintenance of the RAB. An annual roll-forward of the RAB is undertaken, adjusting for changes in inflation, depreciation, asset disposals and transfers and capital expenditure. The QCA undertakes an ex post prudency review of actual capital expenditure on an annual basis, with differences between the forecast allowance (the Capital Indicator) and actual approved expenditure maintained in the Capital Expenditure Carryover Account. An adjustment is made for the final balance of this account following the end of the relevant regulatory period. Aurizon Network is also exposed to risk here, including the risk of optimisation of the RAB.

6. Incentive Regime. Due to the operation of take or pay contracts and the form of regulation, Aurizon Network is not subject to the same high powered volume incentives associated with a price cap. Despite the alignment of volume incentives associated with Aurizon Network’s vertical integration and the inherent difficulties in effectively designing an appropriate incentive regime, supply chain participants have sought to require Aurizon Network to develop and implement a framework that provides performance incentives. Aurizon Network has developed and submitted a Draft Incentive Mechanism, which at the time of lodgement of this submission was still under consideration by the QCA.

10.3 Restructure of Schedule F

Most of the revenue management issues are addressed in Schedule F of the 2010 Undertaking (Reference Tariffs). The maintenance of the RAB is contained in Schedule A. Consistent with the overall improvements to the structure and content of the 2010 Undertaking, Schedule F has been substantially redrafted and is now structured as follows.

Table 14 Structure of Schedule F in the 2013 Undertaking

Section	Description
1. General Provisions	Addresses the purpose and scope of Schedule F and the general characteristics of the reference train service (specified in terms of commodity carried, operational characteristics, use of below rail services, commercial terms of access and the characteristics of the train service entitlement).
2. Reference tariff	Describes the composition of a reference tariff, calculations for a cross system train service and the calculation of take or pay.
3. Capital Expenditure Carryover Account Adjustments	Addresses adjustments to System Allowable Revenues and reference tariffs made following finalisation of the Capital Expenditure Carryover Account from the previous regulatory period.
4. Annual Review of Reference tariffs	Addresses the annual review of reference tariffs, which encompasses the assessment and approval of: <ul style="list-style-type: none"> • updates to system volume forecasts; • the determination of System Allowable Revenue; • updates to specified components of System Allowable Revenue; • the calculation of Total Actual Revenue and the assessment of revenue cap adjustments; • the calculation of any increment for service quality performance; • amendments to the calculation of the increment for service quality performance.
5. Reference tariff Variations	Primarily addresses Endorsed Variation Events and Review Events, including the assessment and approval process.
6. Adjustment Charges	Addresses the situation where an: <ul style="list-style-type: none"> • Access Undertaking (including the reference tariffs) is finalised and approved after the commencement of the relevant regulatory period; or • approved variation to a Reference tariff applies or is effective from a past date.
7 – 11. System specific information.	Contains system-specific reference train service criteria, the reference tariff inputs, system forecasts and System Allowable Revenues for the Blackwater, GAPE, Goonyella, Moura and Newlands systems.

This chapter describes the following revenue management issues:

- scope of the revenue cap;

- System Allowable Revenue;
- take or pay;
- cost pass throughs; and
- maintenance of the RAB.

10.4 Scope of the revenue cap

10.4.1 Background

Aurizon Network moved from a hybrid price cap to a revenue cap form of regulation during UT2. In theory, a revenue cap means that volume risk is borne by users, in that Aurizon Network is entitled to recover its efficient fixed costs regardless of actual volumes.

The mechanism that was approved in UT2 is a 'hybrid' revenue cap that retained two variable revenue drivers, being AT1 and EC, outside of the revenue cap. It was recognised that the extent to which these tariff components served as genuine revenue drivers depended on the extent to which maintenance and electric energy costs actually vary with changes in volume. EC is genuinely volume sensitive. AT1, on the other hand is, not. The focus of this section is therefore on the relationship between volume changes and AT1 and whether it remains appropriate to continue to exclude AT1 revenue from the scope of the revenue cap.

The AT1 tariff component reflects the incremental maintenance costs associated with an increase in volume. Importantly, it reflects the long run maintenance costs associated with increases in volume, not the short run costs. This in turn reflects the role of this tariff component in signalling long run behaviour, as noted by the QCA in UT1:

“...it is critical to note that long term decisions are affected by the reference tariff structure. Consequently, the signals that are implicit in the charging structure should be based on long term rather than short term considerations. It would seriously undermine the efficacy of the above-rail market if there were frequent, substantial and unpredictable changes in these pricing signals.”¹⁷⁶

AT1 is therefore intended to be a price signal regarding an individual operator's contribution to the life cycle costs of maintaining the assets, which bears little correlation with current utilisation levels.

The scope of maintenance is reasonably insensitive to short term changes in volume. Major maintenance activities must be planned well in advance in order to secure the necessary resources and track possessions. A prudent railway manager is unlikely to reduce the scope of its maintenance activities in response to a short run change in volumes unless it expects that the volume change is material and sustained. In other words, the maintenance program is more likely to reflect expectations of the medium to long term trends in volumes rather than year on year volume changes.

The types of activities that are insensitive to volumes include preventative maintenance (for example, asset inspections) and work that is conducted off-track, including maintenance of the overhead feeder stations and telecommunications. Activities that will be affected by volumes are primarily works that involve fixing or remediating assets that experience increased wear as a consequence of increased volumes, for example, rail grinding.

¹⁷⁶ Queensland Competition Authority (2000). Draft Decision on QR's Draft Undertaking, Volume 3 – Reference tariffs, December, p.54.

In establishing the maintenance forecast at the start of the regulatory period, corrective maintenance activities will be planned based on expected volumes over that period. This includes some of the more significant track maintenance activities such as ballast cleaning, rail grinding and resurfacing. However, just because the need for a particular maintenance activity depends on the tonnages that are operating on the network does not mean that all of the costs of these activities are variable in the short run.

Similarly, while it is feasible for the railway manager to structure its maintenance cost inputs to respond to expected changes in volume, once those inputs and maintenance plan have been committed, the maintenance costs within that year will only vary for genuinely reactive maintenance, impacting the expenditure on inputs such as consumables and fuel. In other words, to the extent that maintenance activity (and costs) can vary with changes in volume, this can only be done on a forward looking basis because of the need to commit to planned activities in advance. This is facilitated by improvements in the use of predictive maintenance planning tools in asset management, including additional condition-based information from asset monitoring and measurement.

10.4.2 Issues

AT1 is levied as a charge per thousand gross tonne kilometres of usage. It is currently excluded from the revenue cap. This means that the total revenue recovered via AT1 is dependent on actual volumes. As described above, conceptually, AT1 is intended to reflect the change in maintenance costs as a consequence of changes in volumes in the long run. The scope of some of the volume-driven maintenance activities may need to be varied (either upwards or downwards) in the short run as a consequence of year on year deviations between actual and forecast volumes. However, consistent with most capital intensive infrastructure providers, a large proportion of these costs are fixed in the short run (that is, they would only be avoided if the network was mothballed).

This means that Aurizon Network is bearing volume risk on maintenance costs that it cannot avoid in the short run. If volumes are lower than forecast, AT1 revenue will be lower and Aurizon Network is unable to recover the proportion of that shortfall that is necessary to cover those costs. If volumes are below forecast, the only costs that will be avoided will be for those activities that are genuinely sensitive to short run volume changes. In other words, the reduction in AT1 revenue will exceed the amount of avoided costs.

On the flipside, if actual volumes are above forecast Aurizon Network will recover additional AT1 revenue. A portion of this additional revenue will cover the costs of undertaking any additional maintenance activities that are required as a consequence of the increased level of network activity. However, the step change in costs will be less than the step change in revenues.

In understanding the impact of volume changes on maintenance costs it is necessary to establish:

- what proportion of total maintenance costs are volume-dependent (over any time horizon); and
- of those volume-dependent costs, what proportion are genuinely sensitive in the short run.

This is examined below.

10.4.2.1 Analysis

An empirical analysis was undertaken to consider how the total maintenance budget would vary for a given change in volume. The maintenance costing model was also reviewed to identify those costs that could genuinely be considered as avoidable for a change in forecast volumes. With total maintenance

costs¹⁷⁷ comprising fixed and variable components, a simple linear regression equation can be utilised to predict costs for given levels of gross tonne kilometres (GTKs) hauled across the network. The 'cost line' that is plotted from this analysis represents the relationship between costs and volumes.

This simple equation can be represented as:

$$Y = F + VX$$

Where:

- Total maintenance cost (Y) is the total cost for a given level of GTKs hauled across the network. This is also referred to as the dependent variable, as its value depends upon other factors.
- Fixed maintenance cost (F) corresponds to the fixed cost of maintaining the network to a given standard, which is graphically illustrated by the point where the cost line intercepts the vertical cost axis.
- Variable maintenance cost (V) corresponds to the variable maintenance cost per billion GTKs hauled across the network and is graphically represented by the slope of the cost line.
- GTK hauled across the network is the measure of activity or output (X). It is known as the independent variable as it explains changes in the total activity cost.

Total maintenance costs under the UT4 volume forecast have been plotted against total forecast GTKs for the years 2013/14 to 2016/17. Based on this data, Aurizon Network's long-run maintenance cost can be represented by the following linear regression equation:

$$Y = 102,989,030 + 1,123,410X$$

From this equation, fixed maintenance costs clearly dominate overall maintenance costs and equate to approximately \$103 million, with the variable cost component approximately \$1.1 million per billion GTK.¹⁷⁸ By their very nature fixed maintenance costs do not change. By assuming a given level of track quality, fixed costs are a constant component that is required to ensure the continued reliable and safe operation of the asset.¹⁷⁹ Therefore, such activities are usually environmental or safety-related, encompassing tasks such as vegetation control, ballast drainage and regular inspection activity. In turn, inspection activity is a key determinant of the overall maintenance program, determining how often maintenance activity is required.

Further evident is the impact of usage or volumes on total maintenance costs, notably the variable component, which is otherwise referred to as avoidable or incremental cost.¹⁸⁰ For instance as volumes fluctuate, so too does the quantity of consumables needed to undertake infrastructure maintenance, such as ballast, rail track and concrete sleepers.¹⁸¹

Applying the parameters described above, if system volumes equal 90 billion GTKs in a particular year of UT4, then total maintenance costs (Y) would equal \$204.1 million. If system volumes subsequently increase by a further 10% to 99 billion GTKs, total maintenance costs (Y) would also increase to \$214

¹⁷⁷ Total maintenance costs exclude 'above the line' items such as inventory holdings, corporate overheads, working capital and return on assets (ROA).

¹⁷⁸ While smaller changes in system volume are usually absorbed by system characteristics such as capacity and quality, it is important to recognise that for large increments in railed volumes, a new preventative maintenance phase could be undertaken, thereby seeing a step change in fixed maintenance costs. As a consequence, it is usually expected that the slope of the linear regression could subsequently plateau then again increase. However for simplicity in explaining maintenance costs across the UT4 period, a simple linear regression approach has been applied.

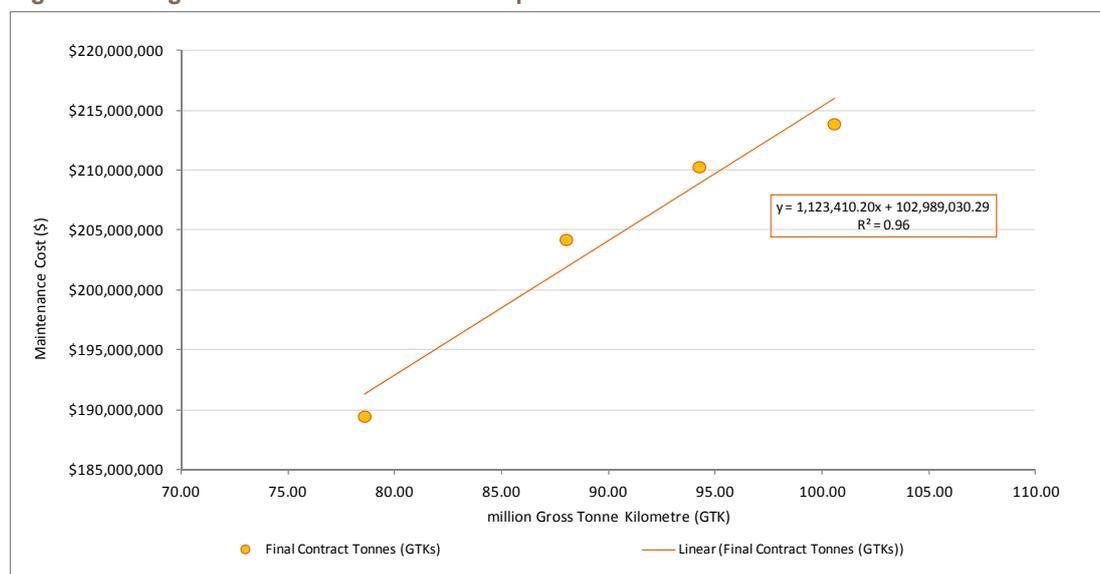
¹⁷⁹ The ongoing preservation of the existing track quality standard additionally impacts upon maintenance frequency and effort. Refer: Booz Allen Hamilton (1999). Railway Infrastructure Cost Causation – Report to the Office of the Rail Regulator – Final Report, available at: <http://www.networkrail.co.uk>.

¹⁸⁰ Queensland Competition Authority (2000). Usage Related Infrastructure Maintenance Costs in Railways.

¹⁸¹ For simplicity of discussion, commentary excludes time-based variable maintenance schedules.

million. The difference between these two scenarios (\$10.1 million) is equivalent to nine (99 billion GTKs less 90 billion GTKs) multiplied by the variable cost of \$1,123,410 (per billion GTKs). This is represented graphically below.

Figure 23 Long run total maintenance costs per million GTK



The R squared (R^2) value, or the coefficient of determination, is a measure of the how well the linear regression equation fits the data from a given number of observations. In other words in this case, the R^2 value measures the (percentage) change in the long run total maintenance cost that is explained by changes in volume (GTKs). A R^2 value of 1.0 indicates a perfect correlation between the independent and dependent variables.

R^2 values can range between -1.0 and 1.0. Values within this range indicate various levels of correlation strength, for example, values:

- between 0.0 and 0.2 indicate a slight positive correlation;
- between 0.2 and 0.4 indicate a mild positive correlation;
- between 0.4 and 0.6 indicate a moderate positive correlation;
- between 0.6 and 0.8 indicate a strong positive correlation; and
- greater than 0.8 indicate a very strong correlation.¹⁸²

The R^2 of the linear regression was 0.9564, indicating a very strong correlation between the independent and dependent variables. In other words, 95.64% of the variance in Aurizon Network's total maintenance costs can be explained by the level of GTKs, further indicating that the regression results are extremely useful in predicting total maintenance costs.

As the above regression analysis focuses on long run maintenance costs, further analysis was undertaken of Aurizon Network's shorter run maintenance cost forecast for each year of the UT4 period.

¹⁸² Weisberg, S. (2005). Applied Linear Regression, 3rd Edition, John Wiley & Sons Inc., USA: NJ.

Short run fixed costs are those costs that are considered sunk and are incurred regardless of maintenance effort, for example, leasing of factory space and equipment purchases. However over the longer term, time allows the majority - if not all - inputs to be variable (that is, capital, labour, leasing and equipment purchases). Hence, as the span of time increases, so too does the variable cost component, so that eventually long run total costs equal total variable costs.

Examination of Aurizon Network's maintenance costs across each year of the UT4 period confirmed the limited flexibility of maintenance costs, with fixed costs comprising approximately 62% of total costs. In other words, the variability in short run maintenance costs was determined to be approximately 38%. Given this variability, and with 'below the line'¹⁸³ maintenance costs totalling approximately \$189 million in 2013/14 (real dollars), the variability in the maintenance budget is expected to equal \$0.91 per thousand GTK.¹⁸⁴ That is, \$0.91 equates to the short run variable cost for a change in volume.

This differs from the variability identified earlier in the long run linear regression equation. For instance in the above example, while assuming system volumes equal 90 billion GTKs, the long run linear regression indicated fixed and variable costs are equally split, that is, 50% to each fixed and variable cost component. The disparity between the short and long run fixed/variable cost split can be explained by the fact that as timeframes increase, so too does the ability to re-allocate maintenance activity from being fixed to variable in nature.¹⁸⁵

10.4.2.2 Status of the Draft Incentive Mechanism

The exposure to volume risk under AT1 was identified in QR Network's 2008 Principles Paper on the form of regulation submitted to the QCA as part of the UT3 review.¹⁸⁶ One of the concerns that had been expressed by industry was that there was no incentive for the network business to maximise throughput under a revenue cap form of regulation. At the time, QR Network recognised that its exposure to volume risk in AT1 was one of the features of its incentive framework (even though it is not compensated for bearing volume risk) and accepted its exposure to this risk in this context.

The QCA did not consider that this incentive framework, and the proposed alternatives that QR Network had submitted, were adequate. It therefore included a provision requiring QR Network to develop and submit a Draft Incentive Mechanism (DIM) (clause 2.6 in the 2010 Undertaking). Aurizon Network submitted the DIM to the QCA in May 2012. This mechanism includes:

- service standard metrics that will apply to the Blackwater and Goonyella systems, addressing asset availability, asset reliability and asset performance;
- an operational and throughput performance incentive; and
- a supply chain coordination and efficiency incentive.

At the time of drafting this submission, the QCA had not released an Issues Paper or Draft Decision on the proposed DIM. Stakeholder submissions primarily focussed on addressing contractual accountability,

¹⁸³ That is, this relates to direct costs only (excludes indirect costs).

¹⁸⁴ Based upon 78,594,940,000 GTKs.

¹⁸⁵ Queensland Competition Authority (2000).

¹⁸⁶ QR Network (2008). 2009 Access Undertaking – Principles Paper, Form of Regulation (Revenue Cap), Volume 1, Attachment D, QR Network's 2009 Access Undertaking.

without considering the potential tradeoffs that may arise based on necessary investment and material changes in capacity and planning assumptions.

As previously indicated by Aurizon Network in various submissions, the design of an effective incentive framework is a complex exercise, which would necessitate the relevant stakeholders specifying the service standard that is required to be costed having regard to:

- the current performance levels;
- the current and expected asset standards and condition; and
- the asset renewals, maintenance and upgrades necessary to achieve the benchmark performance level, which must not be lower than the minimum requirement necessary to comply with the relevant rail safety obligations.

To date, stakeholders have not been able to specify these requirements.

In addition to these matters, and in contrast to electricity utilities where the service quality requirements of electricity consumers are reasonably constant over time, the performance objectives of coal producers change with changes in the price of the underlying commodity. As discussed in Chapter 2, in UT1 coal producers were primarily seeking cost minimisation. During UT2 (at least prior to the global financial crisis), the priority was on asset availability and reliability. Since the global financial crisis, while asset availability and reliability remain important, there is a renewed focus on cost minimisation.

It is not economically feasible to design a service quality or incentive framework where the asset performance is intrinsically linked to the asset and nature of the service, but is fundamentally invariant to changes in user preferences. As such, Aurizon Network is not confident that a regime can be developed and implemented if supply chain participants are unable to specify the service standards that are invariant to the commodity cycle and can address:

- the level of surge capacity desired, who should pay and what compensation is necessary for the infrastructure provider to be incentivised to invest (and potentially defer recovery of the costs of that surge capacity where system volumes reduce); and
- the specification of the relevant asset performance standards or other operational improvements and how those will be costed (and/or funded), where their achievement requires investment.

Aurizon Network notes that many of the issues can be addressed through direct commercial negotiation. If an access holder requires a level of surge capacity, then it can negotiate individual performance requirements by contracting for additional train paths (noting that Aurizon Network's regulatory obligation is limited to providing the reference service). In addition, if an access seeker is seeking Aurizon Network to assume a risk position commensurate with the volatility in coal producers' operating margins, then this also could be a matter for commercial negotiation.

For example, if a coal producer exporting through DBCT wishes to increase its reliability for exporting through a minimal stockpile terminal relative to a coal producer exporting through a port that has invested in stockpile capacity, then it should be able to negotiate additional access rights. The users of terminals with stockpile capacity are not disadvantaged as they assume no cost attributable to the additional access rights, provided the reference tariff is developed assuming the reference train service operates to a stockpile terminal with uniform railings.

Aurizon Network notes that ARTC recently withdrew its proposed performance incentives from the Australian Competition and Consumer Commission. As a consequence there remains no approved benchmark performance framework or relevant regulatory precedent applicable to the design of a service quality or incentive regime for a heavy haul railway.¹⁸⁷

10.4.2.3 Implications for UT4

The revenue cap is intended to protect Aurizon Network from exposure to volume risk. To the extent that certain maintenance costs are sensitive to changes in short run volumes, there is a legitimate argument that they should be excluded from scope of the revenue cap. Indeed, to the extent that a change in short run volumes is known in advance (i.e. as part of the annual review of system volume forecasts), it should be possible to predict the impact of this on the next year's maintenance program based on the known variability in short run maintenance costs, as demonstrated in the analysis above.

The other issue for consideration here is whether it is appropriate for Aurizon Network to continue to be exposed to uncompensated volume risk for its maintenance costs, noting that to the extent that the maintenance plan is adjusted for a change in short run volumes that is known in advance, Aurizon Network is still exposed to volume risk on:

- those costs that are not sensitive to short run volume changes, which still accounts for around 62% of total maintenance costs; and
- the cost adjustments that were made at the start of the relevant year for expected short run volume changes, because actual volumes for the year may still differ from the revised forecast. As outlined above, this reflects the fact that maintenance activities for the year must be planned in advance.

Aurizon Network also maintains the view that its vertical integration provides a strong commercial incentive to maximise throughput. The proposed Incentive Mechanism more than obviates the need for a volume 'incentive' under AT1.

Further, even if the DIM is not approved, Aurizon Network does not consider it appropriate to continue to be exposed to volume risk under a revenue cap. As Aurizon Network has previously submitted, it is not currently compensated for bearing volume risk via the rate of return.

10.4.3 UT4 proposal

10.4.3.1 AT1 and revenue cap adjustments

There are two key changes proposed to Schedule F to address the issues identified above. First, it is proposed to make an adjustment to SAR prior to the beginning of each year for changes in maintenance costs to the extent that expected volumes for that year differ from the approved forecast. This will be done as part of the annual review of reference tariffs, which requires Aurizon Network to submit revised system volume forecasts, SAR and reference tariffs by the 28th of May prior to the commencement of each year, which is now in clause 4.1 of Schedule F in the 2013 Undertaking.

¹⁸⁷ Aurizon Network acknowledges that performance frameworks do apply to predominantly passenger rail networks where the consequence of non-performance is funded by a government entity and the performance risks are not subject to commercial compensation.

That is, as part of the annual review of reference tariffs, where revised volumes (GTKs) for costing purposes¹⁸⁸ varies from those assumed in the approved maintenance cost allowance, SAR will be adjusted for changes in maintenance costs attributable to the change in forecast system volumes multiplied by the Short Run Variable Maintenance Cost Rate:

$$\text{(System Forecast – revised System Forecast)} \times \text{Short Run Variable Maintenance Cost Rate}$$

The Short Run Variable Maintenance Cost Rate for each year is specified in Schedule F (clause 4.1(b)(B)). The starting value for 2013/14 is \$0.98 per thousand GTK, which is the \$0.91 referred to above (which is in real dollars) converted to nominal dollars based on the MCI. The values for the remaining years of UT4 are escalated by the forecast MCI. As outlined previously, this reflects direct costs only.

The consequent change in SAR will be applied to AT1 revenue, with any consequent adjustments then made to AT2-4 to ensure that the overall change in SAR is limited to the net change in the maintenance cost allowance.

Second, with the AT1 revenue having been adjusted (upwards or downwards) for the expected change in short run variable costs arising from the expected change in volumes, Aurizon Network is still exposed to revenue risk on its fixed costs, as well as its expected short run variable costs (to the extent that actual volumes in that year differ from the revised forecast).

It is proposed to bring any such change within the scope of the revenue cap. The adjustment has been effected by way of an amendment to the assessment of Adjusted SAR at the end of each year. This adjustment is made to SAR because it represents the revenue that Aurizon Network is entitled to earn each year. This is then compared to Total Actual Revenue (TAR) for the purpose of assessing revenue cap adjustments. Clause 4.3(b)(viii) in Schedule F of the 2013 Undertaking provides for the addition of the following amount to Adjusted SAR:

- “(A) the revenue from the AT1 component of Access Charges that Aurizon Network was forecast to earn for that Year from coal carrying Train Services for the relevant Coal System based on the approved System Forecast and the AT1 input for the relevant Reference Tariff for that Year; less
- (B) the actual revenue for the AT1 component of Access Charges in respect of coal carrying Train Services for the relevant Coal System for that Year.”

The above process can be illustrated by a worked example, which is provided below.

¹⁸⁸ Gross tonne kilometres for costing purposes may be lower than the gross tone kilometres for pricing purposes where prices are set with reference to contract levels (i.e. GAPE)

Table 15 Example of maintenance cost volume adjustments

Forecast Maintenance Volume Assumptions	
Maintenance Allowance	= \$200 million
Volume Forecast	= 70 billion GTK
AT Rate	= \$1.10 per '000 gtk
AT1 SAR	= \$77 million
AT2-4 SAR	= \$123 million
Revised Maintenance Volume Assumptions at start of year (Change to SAR)	
Volume Forecast	= 80 billion GTK, representing an increase of 10 billion GTK
Maintenance Cost Variable Rate	= \$0.91 per '000 gtk
Volume Change to Maintenance Allowance	= \$0.91 x 10 million
	= \$9.1 million
Revised Maintenance Allowance	= \$200 million + \$9.1 million
	= \$209.1 million
Revised AT1 SAR (80 x 1.1)	= \$1.10 x 80 million
	= \$88 million
Revised AT2-4 SAR	= \$123 million - {(\$88 million - \$77 million) - \$9.1 million}
	= \$121.1 million
<i>The above change is implemented by way of an adjustment to SAR at the start of the relevant year, as part of the annual review of reference tariffs (clause 4.1(b)(iii) in Schedule F of the 2013 Undertaking).</i>	
Actual Maintenance Volumes outcomes at end of year (Revenue Cap Adjustment)	
Actual Volumes	= 75 billion GTK, representing a shortfall of 5 billion GTK
AT1 Revenue Received (75 x 1.1)	= 75 million x \$1.10
	= \$82.5 million
AT1 Revenue Shortfall (88 – 82.5)	= \$88 million - \$82.5 million
	= \$5.5 million
Revenue Cap Adjustment	= \$5 million
<i>This adjustment is effected by the end of year adjustment to SAR (clause 4.3(b)(viii) in Schedule F of the 2013 Undertaking)</i>	

The process involves adjusting the planned maintenance budget for forecast changes in volume and mitigating the variation between actual and forecast volumes via the revenue cap. While the actual maintenance costs in the year may be lower or higher than the forecast (where actual volumes differ from the revised forecast), this difference will be predominantly attributable to consumables for reactive maintenance. Provided the forecast maintenance GTKs are unbiased, then the probability of actual maintenance costs varying from the revised maintenance costs should be symmetrical and over the period the expected outcome from revenues above or below forecast should be zero.

To the extent that Aurizon Network is not able to adjust its maintenance planning and inputs to respond to a large reduction in forecast maintenance GTKs from the approved maintenance GTKs, then it will assume the financial liability of its actual maintenance costs being greater than the approved maintenance allowance.

10.4.3.2 Draft Incentive Mechanism

Given the issues discussed above and the status of the current submission with the QCA, Aurizon Network has not incorporated all elements of the proposed DIM into the 2013 Undertaking. The performance metrics for asset availability, reliability and performance have been removed. However, the increment relating to retention of access revenue where system throughput in a given month exceeds

110% of the contracted Train Service Entitlements for that billing period has been retained, as the probability of this scenario is proportional to the 90% performance obligation.

Aurizon Network notes that the given the limited stockpile capacity at DBCT and that contracted TSEs are based on the alignment with the nameplate capacity of the port, the threshold for the Goonyella system should be proportionally reduced to align to the system capacity (not rail capacity) shortfall. This increment provides a genuine high powered incentive to improve supply chain efficiency and throughput without requiring a complex and administratively burdensome assessment of root cause and Aurizon Network's contribution to the additional throughput.

An additional consideration as to how this increment could be varied would be whether the threshold is lowered and the rate of the increment progressively increases as the level of over-railing increases. This provides a more aligned benefit sharing mechanism with industry and also increases the level of compensation with the higher levels of coordination and railway manager performance needed to achieve those throughput levels. If the DIM is implemented, Aurizon Network considers it important to address these issues.

The UT4 proposal in relation to the incentive framework will be reviewed following the QCA's Draft Decision on the proposed DIM. Notwithstanding the outcomes from that decision, Aurizon Network has retained an ability to review or propose a new increment to the QCA during the UT4 period. For example, this may occur where stakeholders propose to Aurizon Network a specific performance standard or benchmark. This would operate in conjunction with the Review Event provisions to amend the maintenance cost allowance for a change in maintenance practices proposed by one or more users.

10.5 System Allowable Revenue

10.5.1 Background

SAR is established for each coal system at the start of the relevant undertaking period. As outlined above, a number of adjustments are made to SAR on an annual basis. Clause 3.2.2 of Part B, Schedule F of the 2010 Undertaking allows for adjustments for:

- the costs of maintaining new branchlines that became operational after the commencement date of the undertaking, based on an assumed cost of \$15,000 per kilometre;
- the difference between the actual and forecast MCI (less the approved X factor), as applied to the maintenance cost allowance;
- the difference between the actual and forecast costs of electric energy;
- the difference between the actual and forecast costs of connection to the relevant electricity transmission and distribution networks;
- the difference between the actual and forecast CPI (less the approved X factor), as applied to the operating cost allowance.

These adjustments are submitted and approved to the QCA as part of the annual review of reference tariffs, which also updates the relevant system volume forecast (refer clause 3.1 of Part B, Schedule F of the 2010 Undertaking).

10.5.2 Issues

There are three main issues that have been identified here.

First, the drafting related to SAR in the 2010 Undertaking presents the process for determining SAR in the Definitions, while other provisions relevant to the determination of SAR appear in different parts of Schedule F. This makes it more difficult to understand and interpret how SAR is determined and adjusted on an annual basis.

Second, amendments are needed to the scope of the matters that are included in the annual adjustment to SAR, being:

- the cost of maintaining new branchlines;
- the recovery of charges incurred by Aurizon Network from electricity retailers in relation to compliance with environmental initiatives;
- audit costs;
- the treatment of rebates for the purpose of the annual revenue cap adjustments; and
- if actual volumes are different from forecast, an adjustment to ensure that Aurizon Network is not exposed to volume risk on its maintenance costs, as discussed in section 10.4 above.

Third, Aurizon Network considers that improvements can be made to the review and approval process for the annual review of reference tariffs.

10.5.2.1 Cost of maintaining new branchlines

As outlined in section 9.9, going forward, the costs of new single user spurs will no longer be included in the common system price. The adjustment to allow for the costs of new branchlines that are commissioned following commencement of the 2013 Undertaking will therefore no longer be required.

10.5.2.2 Recovery of charges from electricity retailers for environmental compliance

From time to time Aurizon Network is required to pay charges to electricity retailers for compliance with environmental initiatives (for example, the 13% Gas Scheme). In the past, Aurizon Network has recovered this cost via the EC tariff component.

These charges are more in the nature of a tax or impost on the CQCN's operations rather than a charge that is specific to the provision of electricity. Accordingly, Aurizon Network considers it appropriate to recover these costs from all users, to maintain competitive neutrality between diesel and electric services. It is therefore proposed to address this via the annual adjustment to SAR.

10.5.2.3 Audit costs

Currently, the QCA has very wide discretion in its ability to require Aurizon Network to undertake audits. Under clause 9.8(a) of the 2010 Undertaking, the QCA can request Aurizon Network to undertake an audit in relation to whether any specific conduct or decisions of Aurizon Network comply with that undertaking, provided it has reasonable grounds to believe that the audit is necessary. Clause 9.7 also specifies an annual audit of Aurizon Network's compliance with reporting obligations in the access undertaking. There is no limit on the number and scope of audits that can be conducted.

Audits are costly and time consuming processes for Aurizon Network. There is also the potential for audits to be used as a substitute for more effective mechanisms that are available for the resolution of issues directly between Aurizon Network and an aggrieved access seeker or holder, being dispute resolution and complaints handling.

Aurizon Network bears the full cost of each audit, regardless of its ultimate findings. Aurizon Network does not have direct control over the amount of audit costs it will incur each year. A forecast is included in the operating expenditure allowance used to derive the MAR and this amount is therefore recoverable from access holders via access charges. However, it is very difficult to forecast likely costs as Aurizon Network has no way of anticipating the number and scope of audits that the QCA could require in any one year.

Aurizon Network has proposed amendments in the 2013 Undertaking (as described in section 12.5), to limit the frequency of report audits if required by the QCA to once a year. Further, consistent with adjustments made for a number of other costs that are beyond its control, Aurizon Network is proposing to make an annual adjustment to SAR for the difference between actual and forecast audit costs. The adjustment will be symmetrically applied. That is, SAR will be:

- increased if actual costs are greater than forecast costs; or
- decreased if actual costs are less than forecast costs.

This will allow Aurizon Network to fully recover the cost of audits required by the QCA, and also ensures it does not earn revenue for costs that are not incurred.

10.5.2.4 Impact of rebates on revenue cap adjustments

Aurizon Network has proposed an amendment so that the adjustment for rebates is made to SAR, not TAR. This was discussed in section 9.9.

10.5.2.5 Adjustment for non-volume sensitive maintenance costs

As described in section 10.4, Aurizon Network is proposing to make an adjustment to SAR to ensure that it is not exposed to volume risk on its maintenance costs.

10.5.2.6 Review and approval process

To provide certainty to access holders and Aurizon Network as to the reference tariffs that will apply in each year, it is important for the annual reference tariff review and approval process to be completed as efficiently and expeditiously as possible. To enable implementation the decision needs to be made prior to the commencement of the relevant financial year.

For example, one way the process could be delayed is if the QCA considers that an error has been made in proposed revised volume forecasts, the adjustments to system allowable revenue and/or the proposed revised reference tariffs. This could result in the rejection of the proposed revised tariff that could have been avoided if Aurizon Network had the opportunity to correct for the error, or demonstrate why it considers that an error has not been made.

Aurizon Network therefore considers it important that the QCA advises Aurizon Network if it believes that an error has been made prior to its final decision. This will provide Aurizon Network with the opportunity to either show why it does not believe an error has been made, or rectify the error and submit the corrected reference tariffs for approval (which it would also need to do expeditiously).

10.5.3 UT4 proposal

All of the provisions relating to the determination of SAR have been consolidated in Schedule F of the 2013 Undertaking. The key changes from the 2010 Undertaking are summarised below.

10.5.3.1 Definition of SAR

SAR is defined in clause 4.2(a). This reflects the definition in Part 12 of the 2010 Undertaking.

10.5.3.2 Calculation of SAR for Cross System Services

The calculation of SAR for cross-system services is addressed in clause 4.2(b). It is consistent with the intent of clause 4.2(b) of Part B, Schedule F of the 2010 Undertaking. This also clarifies clause 4.2(g)(i)(A) of the 2010 Undertaking, which bases the determination of SAR for AT2-4 for the Destination System on the “minimum contribution to the Destination System’s common costs”. This has been made more explicit in the revised drafting (now clause 4.2(b)(i)(A) in the 2013 Undertaking) by breaking it down into its relevant components.

10.5.3.3 Calculation of Adjusted System Allowable Revenue

Clause 4.3(b) addresses the calculation of adjusted SAR, retaining the key adjustments from clause 3.2.2 in Part B, Schedule F of the 2010 Undertaking. The main changes from the 2010 Undertaking are:

- Removing the assumed maintenance costs to apply to new branchlines constructed following the commencement of the 2013 Undertaking. This is no longer required because the costs of new single user spurs will no longer be included in the common system price.
- Deleting the reference to an X factor in the CPI and MCI adjustment, because Aurizon Network has proposed that this be set at zero (clauses 4.3(b)(i) and (ii)).
- Including an adjustment to recover any imposts levied by electricity retailers in relation to compliance with environmental initiatives, which relate directly and indirectly to the sale of electricity to Aurizon Network including:
 - the *Renewable Energy (Electricity) Act 2000* (Cth) and *Renewable Energy (Electricity) (Charge) Act 2000* (Cth); and
 - the 13% Gas Scheme and other arrangements under the *Electricity Act 1994* (Qld) (clause 4.3(b)(iii)).
- Including the adjustment for the difference between forecast and actual audit costs, that is, the difference between:
 - the forecast cost of audits required under this Undertaking for the relevant Year; and
 - the actual cost of audits required under this Undertaking for the relevant Year (clause 4.3(b)(v)).
- Adjusting SAR for the difference between actual and forecast rebate payments (clause 4.3(b)(vi)).
- Adjusting SAR for the difference between actual and approved AT1 revenue, as described in section 10.4 above (clause 4.3(b)(viii)).

10.5.3.4 Review and approval process

Aurizon Network has also included two new provisions with the intention of improving the efficiency and timeliness of the QCA's review and approval process, retaining the current deadline for Aurizon Network's submission as the 28th of February prior to the beginning of the relevant year. These provide that:

- if the QCA considers that there is an error in Aurizon Network's proposal (i.e. the revised system volume forecasts, adjusted system allowable revenues and/or reference tariffs), it must provide details of the error and how the proposal needs to be amended in order for the QCA to approve it. Aurizon Network must respond to this (either by demonstrating why it considers that an error has not been made or submitting a corrected version of the submission) within ten business days (clause 4.1(c)); and
- if Aurizon Network has made a submission (or resubmission) and the QCA has not made a decision by the (next) 4th of July, the submission (or resubmission) is deemed to have been approved (clause 4.1(f)).

10.6 Take or pay

10.6.1 Background

Take or pay is a contractual mechanism that serves two key objectives. First, it provides some protection to Aurizon Network's revenue stream where an access holder does not rail its contracted services (unless this is due to an Aurizon Network cause). Second, it makes users accountable for their capacity entitlements and discourages capacity hoarding, which can unfairly disadvantage other access seekers or holders.

The take or pay provisions have progressively strengthened since UT1 and now apply to 100% of AT2, AT3 and AT4. Clause 2.2.2(b) of the 2010 Undertaking states that take or pay for access agreements that were executed or renewed during the term of the 2001 Undertaking (UT1) or the 2005 Undertaking (UT2) will be based on the relevant terms set out in Schedule F of each undertaking.

Under clause 2.2.4 of Part B, Schedule F, if actual volumes for a system exceed the system forecast for that year (adjusted for Aurizon Network cause), take or pay will not be payable for that year. A capping mechanism also applies to post UT1 agreements after taking into account the total actual revenue that Aurizon Network receives in the year for AT2 to 4 (including any amounts it is entitled to earn under take or pay).

10.6.2 Issues

There are a number of issues that Aurizon Network has identified in relation to the effectiveness and equity of take or pay.

10.6.2.1 Implications of system volume forecasts

Aurizon Network remains concerned regarding the extent to which the current take or pay arrangements make individual users sufficiently accountable for the utilisation of their capacity entitlements. One of the main ways that this accountability is diluted is via the application of the system test. Under the system test, if an individual user under-rails in a year relative to contract, it will not be required to pay take or pay unless the system test is triggered. This trigger occurs if total system GTKs are less than the system

forecast for that year. In effect, other users that are railing to (or above) contract are therefore cross-subsidising that user because they may be preventing the system test from being triggered.

The extent of this cost transfer between railing and non-railing customers is highly dependent on the relativity of the system forecast, as shown in the following analysis.

The lower the system forecast, the higher the access charge. Users who will rail to contract are better off the closer the system forecast is to contract volumes, as this will lower the dollar per net tonne access charge. The incremental increase in tariffs for lower system volume forecasts (reflecting lower expected railings) can therefore be seen as an additional cost to those users who will fully utilise their access rights.

The table below shows the relativity of the take or pay amounts under different system volume forecasts (resulting in different access charges). Key base assumptions are:

- System Allowable Revenue: \$250 million
- Contract volumes: 80 million net tonnes.

Table 16 Indicative access charge and capped take or pay amounts at various volume forecasts and actual volume outcomes

System Forecast (% of contract)	70%	75%	80%	85%	90%	95%
Access Charge (\$/nt)	4.46	4.17	3.91	3.68	3.47	3.29
Actual Volume (% of contract)	59.3%	68.3%	76.2%	83.2%	89.5%	94.7%
Access Revenue (\$m)	211.96	227.67	238.21	244.76	248.48	249.33
Take or Pay Total ¹ (\$m)	38.04	22.33	11.79	5.24	1.52	0.68
Take or Pay \$/nt	1.17	0.88	0.62	0.39	0.18	0.16

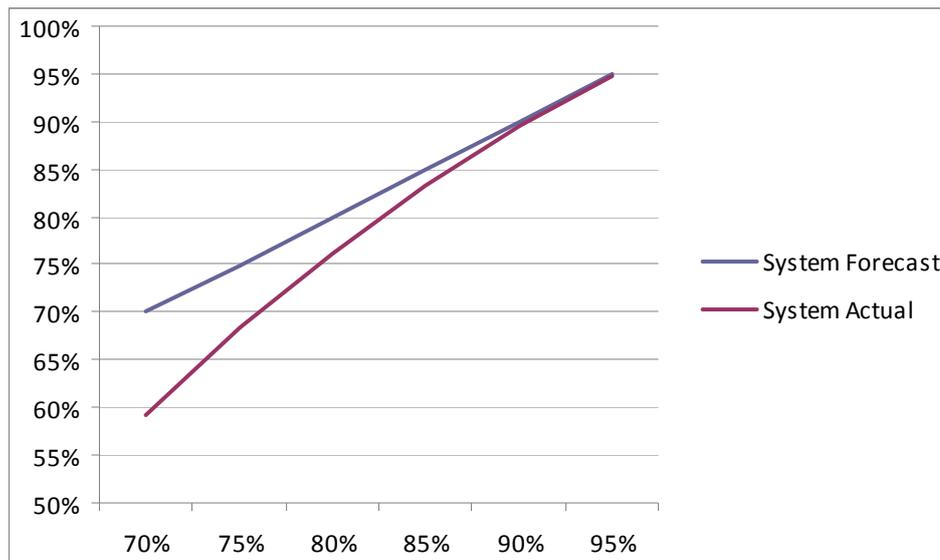
¹UT1 Take or Pay not considered for illustrative purposes.

The actual system volumes in the table are set at the level of utilisation which equates the take or pay charge paid by under-railing users with the additional cost to access holders who fully utilise their access rights. For example, assuming system forecast volumes of approximately 80% of contract yields an access charge difference of \$0.62 per net tonne compared to setting those volumes at 95%¹⁸⁹ of contract (that is, \$3.91 less \$3.29). The system therefore needs to perform at approximately 76% of contract in order for the take or pay amounts to equate to the additional costs imposed on access holders who utilise their access rights (that is, \$0.62 per net tonne).

The analysis is also shown graphically below. Above the red line (actual volumes), a user who rails to contract faces a higher additional access charge (relative to the charge that would apply if volumes were set closer contract) compared to what a user who is under-railing would pay in take or pay (per unused train path). Below the red line the take or pay amounts exceed the additional cost borne by users of the network who rail to contract.

¹⁸⁹ The assumption of 95% has been chosen to allow for Aurizon Network cause.

Figure 24 System Forecasts and System Volumes which equilibrate Take or Pay with Access Charge Uplift (as a % of contract volumes)



10.6.2.2 Impact on rebate adjustments

As previously discussed, the adjustment of TAR for rebates (and not SAR) can have implications for take or pay. Further, these only apply to UT3 access agreements. As described above, this has been addressed through the adjustment to SAR after the calculation of take or pay.

10.6.2.3 Application of the capping provisions

The capping provisions are also inequitable and lead to a material cost and risk differential between UT1 and post-UT1 access agreements ('post-UT1' being agreements executed or renewed on or after 30 June 2006).

The capping provisions are contained in clause 2.2.6 of Part B, Schedule F in the 2010 Undertaking. This caps the amount of take or pay that can be collected from access agreements executed or renewed on or after 30 June 2006 based on the difference between TAR for AT2-4, less the amount of take or pay that Aurizon Network is entitled to earn under these agreements, and SAR for AT2-4.

In contrast, the calculation of take or pay under UT1 access agreements is uncapped. Aurizon Network has previously argued that capping should extend to UT1 access agreements. The reasons advanced for not including UT1 access rights in the system capping is that post-UT1 access agreements have a higher take or pay threshold of 100% of AT2-4, despite the benefit that accrues to post-UT1 access holders because of the impact of uncapped UT1 take or pay on revenue cap adjustments.

The following table extends the indicative example in the table below by including two system forecasts (80% and 90% of contract) and varying degrees of utilisation around that forecast, where UT1 contracts are 50% of the total contracted access rights. It is assumed that under-utilisation of access rights relative to contract is equal between UT1 and post-UT1 contracts.

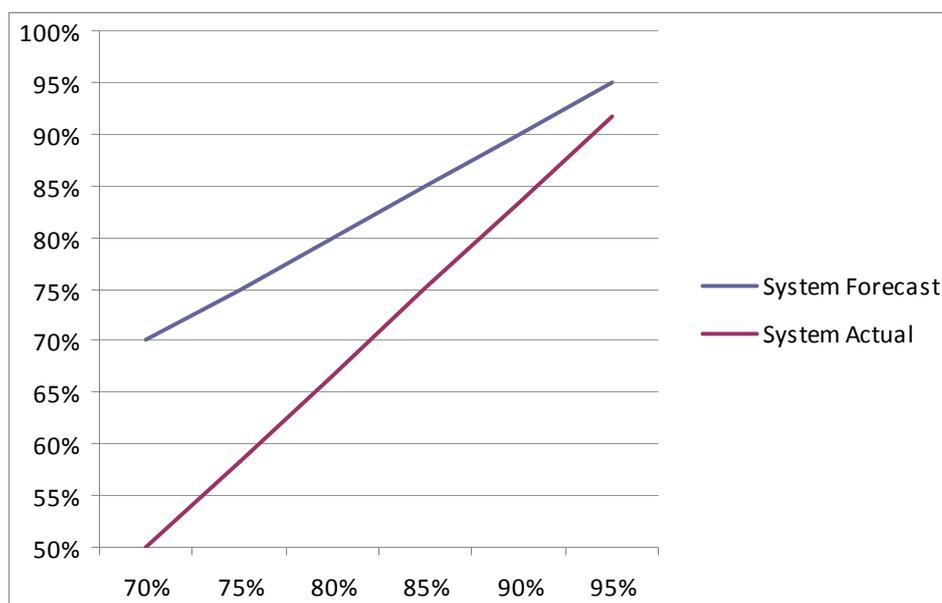
Table 17 Indicative Take or Pay and Revenue Cap Scenarios with Uncapped UT1 Take or Pay

System Forecast (% of contract)	80%	80%	80%	80%	80%	80%
Access Charge (\$)	3.91	3.91	3.91	3.91	3.91	3.91
Actual Volume (% of contract)	70.0%	72.5%	75.0%	77.5%	80.0%	82.5%
Access Revenue (\$m)	218.75	226.56	234.38	242.19	250.00	257.81
UT1 ToP (\$m)	18.75	17.19	15.63	14.06	12.50	-
Post-UT1 ToP (\$m)	12.50	6.25	-	-	-	-
Revenue Cap Adjustment (\$m)	12.50	6.25	-	-6.25	-12.50	-7.81
UT1 ToP \$/nt	1.56	1.56	1.56	1.56	1.56	-
Post-UT1 ToP \$/nt	1.04	0.57	-	-	-	-
System Forecast (% of contract)	90%	90%	90%	90%	90%	90%
Access Charge (\$)	3.47	3.47	3.47	3.47	3.47	3.47
Actual Volume (% of contract)	80%	83%	85%	88%	90%	93%
Access Revenue (\$m)	222.22	229.17	236.11	243.06	250.00	256.94
UT1 ToP (\$m)	11.11	9.72	8.33	6.94	5.56	-
Post-UT1 ToP (\$m)	16.67	11.11	5.56	-	-	-
Revenue Cap Adjustment (\$m)	16.67	11.11	5.56	-	-5.56	-6.94
UT1 ToP \$/nt	1.39	1.39	1.39	1.39	1.39	-
Post-UT1 ToP \$/nt	2.08	1.59	0.93	-	-	-

Note: References to 'post-UT1' means access agreements entered into or renewed on or after 30 June 2006.

The table shows that only where volumes are set at 90% of contract and the system actually operates at less than 85% of contract does take or pay on post-UT1 contracts actually exceed UT1 take or pay. The analysis can be shown graphically to indicate the actual system volumes required to equate UT1 and post-UT1 take or pay amounts on a dollar per net tonne basis, assuming equal under-utilisation between UT1 and post-UT1 contracts.

Figure 25 System Forecast and Actual Volumes Required to Equilibrate UT1 and Post-UT1 Take or Pay (as a % of contract volumes)



Above the red line (actual system volumes) UT1 take or pay exceeds post-UT1 take or pay per unused train path. Below the red line post-UT1 take or pay amounts exceed UT1 take or pay amounts.

Assuming that system forecasts are informed by current market conditions (that is, the likelihood that users will under-rail relative to contract), on the balance of probabilities take or pay liability is disproportionately allocated to UT1 access agreements. For example, if the system forecast was set on the expectation that volumes in that year were going to rail at 90% of contract, the probability of the system subsequently railing at less than the 83% that is necessary for UT1 and post-UT1 take or pay to align is negligible without a material exogenous shock. This take or pay differential materially increases the lower the system forecast relative to contract volumes.

To compound the disproportionate allocation of risk, UT1 access agreements operating to DBCT were negotiated when the terminal operated as a stockpile terminal. Subsequent expansions, which also necessitated a change in the terminal operating mode given the reduced stockpile capacity, transferred a greater proportion of the volume-dependent take or pay risk from access rights associated with the expansion tonnes to UT1 access holders.

10.6.2.4 Gladstone Area take or pay

In light of the potential closure of the Barney Point coal terminal, Aurizon Network discontinued the practice of contracting for new or renewed access rights for the Gladstone Area. This is because continuation of this practice would result in contracted Train Service Entitlements for the Gladstone Area exceeding the capacity of the RG Tanna coal terminal once Barney Point is closed.

However, this does create a different take or pay outcome as between access holders whose access agreement specifies the destination as 'the Gladstone Area' and those whose access agreement specifies the destination as an individual coal terminal. This in turn has consequences for revenue cap adjustments. Accordingly, Aurizon Network considers that it is reasonable to take measures to redress this different outcome between access holders where end users have fundamentally the same port entitlements.

Aurizon Network considers that a reasonable commercial solution to the problem is to allow access holders whose TSEs are specified as a single origin in the Gladstone Area (either Barney Point or RG Tanna) to offset or credit services that were operated to the other terminal for the purpose of take or pay. This would put these access holders on the same footing as other access holders whose access agreements specify a Gladstone Area TSE, where both sets of access holders have fundamentally the same port entitlements.

This issue is discussed in more detail in section 5.5 of Volume 3, including the implications for revenue cap adjustments.

10.6.3 Implications for UT4

10.6.3.1 Capping methodology

At this stage, Aurizon Network has not proposed amendments to UT4 to address this substantive and material imbalance between take or pay risk. However, stakeholder views are sought on the following options, or whether other options may achieve the same objective:

1. Cap UT1 take or pay to the same amount paid by post-UT1 access holders.

2. Cap UT1 to the extent necessary to achieve SAR, noting that this still exposes a UT1 access holder to more risk than a post-UT1 access holder, as capping would only occur where take or pay is not payable under a post-UT1 access agreement.
3. Do not cap UT1 and return UT1 take or pay amounts in excess of the difference between TAR and SAR to UT1 access holders (with an adjustment to SAR to reduce the Revenue Cap Adjustment by the same amount).
4. Do not cap UT1 and return UT1 take or pay amounts in excess of the difference between TAR and SAR to UT1 access holders via a system discount, noting this may involve substantial tariff complexity.

It is feasible for the revenue cap framework to address all four options. However, the first two options would require amendments to UT1 and UT2 access agreements.

The definition of Total Revenue in Schedule 3 of access agreements executed or renewed after 30 June 2006, states that it is equal to:

“...the Total Actual Revenue for AT₂₋₄ for the Individual Coal System Infrastructure to which this agreement relates for the relevant Year less the aggregate amount of take or pay for the relevant Year that QR would be entitled to earn from all Access Agreements in relation to that Individual Coal System Infrastructure executed or renewed on or after the commencing date.”

The definition would only recognise legitimate amendments to take or pay in access agreements executed after the commencing date. The definition of TAR in the 2008 Undertaking states:

“...for AT₂₋₄ in relation to an Individual Coal System Infrastructure, the total revenue from AT₂₋₄ (including the amount of any Take or Pay amounts, Relinquishment Fees and transfer fees under Subclause 7.4.4 of the Undertaking which QR Network is entitled to be paid...)”

provided that in calculating the Take or Pay amounts:

“...QR Network is deemed to have contracted on the terms of the relevant Standard Access Agreement (as defined under the Undertaking, the 2005 Undertaking, or the 2001 Undertaking, as applicable) that applied on the date of execution or renewal of an Access Agreement except for ...

those Access Agreements which have been altered from that form in accordance with the terms of the Undertaking, the 2005 Undertaking, or the 2001 Undertaking (as applicable) which applied on that date, for which QR Network’s entitlement will be calculated to reflect the terms of such Access Agreements.”

As the definition does not provide for the variation or amendment of a Standard Access Agreement, it is unlikely that the 2013 Undertaking could retrospectively amend the term of a Standard Access Agreement relevant to the 2001 Undertaking. Nor is it likely that an amendment to the 2013 Undertaking could change the definition of TAR to be used in access agreements executed after 30 June 2006.

Accordingly, with options one and two unlikely to be feasible and option four inherently complex, the third option of refunding the excess amounts of UT1 take or pay with an adjustment to SAR after take or pay calculations (with a consequential reduction in the Revenue Cap Adjustment amount) would appear to represent the most effective means of addressing this issue.

10.6.3.2 Setting of system forecasts

Aurizon Network has also considered the implications of removing the system test trigger for take or pay in order to ensure that individual users are made fully accountable in the event that they under-rail over the course of a year. However, some form of capping would still be needed to limit Aurizon Network's recovery of take or pay where TAR exceeds SAR. This in turn would mean that it would not be possible to eliminate the sharing of take or pay risk between users.

Alternatively, a more workable solution is that the capping continues to apply at the system level but system forecasts are set closer to contract levels. This would not eliminate the sharing of risks between users but the take or pay risk should provide a much stronger incentive not to over-contract. The forecasts would be set at a fixed proportion of contracted volumes (for example, 90%), which would allow for Aurizon Network cause (which includes force majeure events).

The most significant impediment to implementing such a change is the different take or pay risk profiles inherent in the different generations of contracts established since UT1, as discussed above. Parties entered into the relevant above and below rail contracts based on their assessment of the perceived risks they would bear in the environment prevailing at that time. A change in the basis for setting system volume forecasts that materially altered the take or pay risk profile could expose these parties to liabilities that have not been anticipated. One way this could be addressed is to exclude or 'immunise' the access agreements that are most likely to be adversely affected by such a change (being UT1).

There is a substantial degree of regulatory complexity associated with setting tariffs on a fixed contract percentage and immunising UT1 access agreements from the system test for take or pay inclusive of post-UT1 access agreements. It is therefore preferable to defer the implementation of any contract-based pricing until expiry of UT1 access agreements (most of these agreements will expire during the term of UT4). The different risk profiles will gradually be eliminated through time given the same take or pay provisions apply to contracts entered into from UT3 onwards. Deferring any change also provides access holders who may have over-contracted (on the basis that their take or pay is substantially ameliorated by the system capping) to manage their exposure by transferring or relinquishing access rights as appropriate.

The most significant implication for Aurizon Network of setting reference tariffs based on a fixed percentage of contract levels is the working capital and cash flow timing implications if volumes are substantially less than those levels. This also increases the counterparty risk of default if the take or pay amounts are paid at year end. These issues can be readily addressed by implementing quarterly take or pay with an annual reconciliation. However, unless access holders with pre-UT3 agreements were willing to amend their contracts to allow for this, these arrangements could only be included in access agreements entered into from UT3 onwards.

For UT4, Aurizon Network therefore proposes to retain the current approach of setting system forecasts based on expected railings with the exception of train services associated with the GAPE and WICET projects. Due to the materiality of the capital investment and the preference of stakeholders to not assume incremental costs or risks for expansions, GAPE and WICET forecasts have been determined with respect to 90% of the contract volumes in the relevant year. As the Blackwater annual system forecast would be established on the basis of expected railings to RG Tanna and Barney Point and contractual entitlements for WICET, this will result in the triggering of take or pay in that system as expected utilisation will be lower than the forecast. In order to address the uncapped take or pay exposure for UT1 access holders it is necessary to exclude the WICET volumes from the take or pay trigger in those agreements.

Aurizon Network considers that change is eventually needed to promote individual capacity consumption accountability to strengthen the incentive for individual users to contract accurately. This in turn will maximise efficient utilisation of the existing network and hence promote the Objects Clause.

10.6.3.3 Operator capping

Pricing based on contract levels will also necessitate some improvement in the ability of an access holder to manage the take or pay liabilities. Train Service Entitlements can be distinguished between:

- the rights and obligations with respect to train scheduling; and
- responsibility and accountability for the opportunity costs associated with securing long term capacity commitments through take or pay.

The proposed amendments to the Network Management Principles explained in Chapter 11 provide a framework for the operator to manage temporal variations between the Train Service Entitlement and actual train services for individual origin to destination combinations.

Aurizon Network considers that variations can also be made to the take or pay framework to allow commercial alignment of the operator's management of those access rights (where those access rights are either contracted directly through a Standard Operator Access Agreement or through allocated access rights under a Train Operations Agreement). This will take the form of modifying the take or pay capping arrangements to apply capping in the following sequential order:

- mine capping (across multiple operators);
- operator capping; and
- system capping (discussed above).

Mine capping was introduced in UT3 (clause 2.2.5 of Part B, Schedule F in the 2010 Undertaking) with the objective of placing a coal producer who contracts directly with more than one railway operator under a Standard Operator Access Agreement in the same position as a coal producer who contracted directly with Aurizon Network under an End User Access Agreement (and allocated haulage rights to more than one operator via nominations to Train Operations Agreements). Aurizon Network considers the regulatory framework should not remove incentives for parties to contract under the Standard Operator Access Agreement, which in its view is more efficient and has lower transaction costs.

The primary purpose of open access regulation is to promote competition in the relevant downstream market. The benefits of competition in this market will be maximised by providing participants in the rail haulage market with sufficient flexibility to innovate, not just in terms of the productive efficiency of an individual train service, but also in terms of how the operator is able to maximise total resource efficiency and implement risk management strategies that maximise overall value to the operator and its customers. Dynamic efficiency and innovation, which is the creation of competitive markets that access regulation seeks to facilitate or replicate, is not fostered through standardisation.

These efficiency benefits could be realised by providing operators with a greater degree of discretion in terms of how they transfer or manage take or pay risk on behalf of their customers. The framework should, in the first instance, constrain the operator's take or pay liability to their own performance and how those performance levels have been negotiated or agreed with their customers, recognising that customers may want different performance levels depending on their own value drivers. This would also provide a greater degree of regulatory certainty for an operator to negotiate commercial terms and

conditions, particularly in relation to take or pay, where the operator can reasonably predict its own take or pay liabilities independent of the performance of other operators and their customers.

Aurizon Network recognises that operator capping must work effectively within a diverse contracting framework where a coal producer wishes to procure long term capacity rights independently of an operator (even though that longer term capacity commitment is replicated through renewals rights and customer-initiated transfers). In order for operator capping to work effectively it is necessary for take or pay to be calculated prior to capping, with an offset applied as follows:

- where the operator has notified Aurizon Network of the Train Service Entitlements it wishes to aggregate and socialise within the same pool of rights, then the revenue recovered from services which operate in excess of the Train Service Entitlement will be deducted from the take or pay amounts invoiced to the operator; or, alternatively
- where the operator has not nominated Train Service Entitlements it wishes to pool then the revenue recovered from services that operate in excess of the Train Service Entitlements will be proportionally allocated across all unpooled access rights for that operator as a reduction in the take or pay liability.

Rather than calculate take or pay on pooled entitlements, this approach avoids the complexity of how the utilised train paths in excess of an origin to destination Train Service Entitlement should be allocated across other origin to destination combinations with different take or pay liabilities. By considering the excess revenue this ensures the capping does not adversely impact the calculation of take or pay under another access holder's access agreements.

Importantly, it recognises that operators will distribute the revenue recovered from train services in excess of Train Service Entitlements commensurate with the commercial arrangements reflected in the haulage agreements. The operator may also nominate multiple groupings, which would allow it to provide a broader diversification benefit to coal producers with more than one mine or where the operator's customers are able to collectively agree how such diversification benefits should be allocated.

Aurizon Network proposes to implement operator capping in UT4. Stakeholders should also consider the contractual limitations associated with access agreements executed prior to 1 October 2010 in relation to the calculation of take or pay. As the Access Undertaking lacks the statutory power to amend the term of an existing contract, these provisions will only be available to access agreements executed or renewed after 1 October 2010 ('Eligible Access Rights'). That is, operator capping and grouping can only apply where the access agreement is consistent with the UT4 Standard Access Agreement. An access holder retains the ability to transfer its existing access entitlements into a UT3 or UT4 access agreement.

10.6.4 UT4 proposal

The take or pay provisions now reside in clause 2.4 of Schedule F in the 2013 Undertaking. Where possible, the drafting has been simplified to improve clarity and ease of interpretation. Headings have also been applied to the provisions relating to the system test or cap ('Take or Pay trigger'), mine capping and operator capping. The key changes from the 2010 Undertaking are described below.

10.6.4.1 Nominal payloads

As described in section 9.6, it is proposed to calculate reference tariffs for each system based on published nominal payloads for that system. Take or pay for access agreements executed after 1 October 2010 will also be calculated on that basis. Clause 2.4(e) of Schedule F of the 2013 Undertaking

(previously clause 2.2.3(b) of the 2010 Undertaking), has therefore been amended to provide that, for the purpose of calculating take or pay charges, Aurizon Network will convert train paths to nt and ntk on the basis of nominal train payloads. A new clause, 2.4(f) has also been included to address the calculation of take or pay based on nominal train payloads.

10.6.4.2 Gladstone Area Train Service Entitlements

An amendment has been made to make it clear that the RG Tanna and Barney Point terminals are interchangeable for the purpose of take or pay (clause 2.4(f)(ii)). For example, if a Train Service Entitlement from a particular origin that was originally intended to go to Barney Point is used to go from that same origin to RG Tanna, the original Train Service Entitlement will be assumed to have been consumed (and hence no take or pay liability will arise).

10.6.4.3 Mine capping

The existing provision addressing this is considered unclear (clause 2.2.5 of Part B, Schedule F of the 2010 Undertaking). Aurizon Network has sought to amend this provision to aid interpretation without altering its assumed intent (clause 2.4(i) of the 2013 Undertaking).

10.6.4.4 Operator capping

Clauses 2.4(j) to (k) contain the provisions in relation to operator capping.

The key new provision is clause 2.4(k). This allows an Operator or Access Holder that has a relevant agreement executed or renewed after 1 October 2010 (Eligible Access Agreement) to manage its take or pay liabilities (under those Eligible Access Agreements) as follows.

Sub-clause (iv)(A) provides that where:

- a Train Service Entitlement (TSE) under any Eligible Access Agreement is part of a Take or Pay Grouping for Eligible Operator (as defined in the clause); and
- the Train Services for that TSE exceed that TSE for the relevant year,

the aggregate take or pay liability for that Take or Pay Grouping in that year will be reduced by the additional AT2-4 revenue that relates to that excess.

Alternatively, under sub-clause (iv)(B), where:

- a TSE under any Eligible Access Agreement is not part of a Take or Pay Grouping for the Eligible Operator (Ungrouped Train Service Entitlement); and
- the Train Services for that Ungrouped TSE exceed the Ungrouped TSE for that year,

then the aggregate take or pay liability for all of the Ungrouped TSEs for that Eligible Access Holder for the year will be reduced by the additional AT2-4 revenue that relates to that excess. That reduction will be pro rated, based on the take or pay liability in relation to each TSE comprised in the Ungrouped TSEs.

Reflecting how operator capping is intended to apply under the AFoA structure, subclause (v) further provides that, where the AFoA structure applies, the reduction in take or pay will be allocated to the end user, rather than the operator, recognising that access charges and take or pay liabilities are addressed under the EUAA.

A Take or Pay Grouping is defined as:

“The Train Service Entitlements for a relevant Eligible Operator (as defined in clause 2.4(k) of schedule F) that the Eligible Operator has nominated to Aurizon Network in writing prior to the end of May in a Year (in accordance with that Eligible Operator’s Eligible Access Agreement, as defined in clause 2.4(k) of schedule F) as grouped together for the purpose of Take or Pay adjustments under clause 2.4(k) of schedule F in respect of that Year.”

The above reductions can only be applied in the year in which the additional revenue arose.

Clause 2.4(j) makes it clear that the above provisions only apply after the provision in relation to mine capping (clause 4.2(i)), if applicable. It can also not be applied in a manner inconsistent with clause 4.2(i).

Clauses 2.4(m) and (n) retain the capping arrangements applying to the different generations of access agreements, which is currently contained in clause 2.2.6 of Part B, Schedule F in the 2010 Undertaking. In addition to improving the drafting, the key changes made here are to reflect that:

- the transfer provisions are contained in the Standard Access Agreement; and
- all agreements entered into prior to the 2001 Undertaking have expired (the references to these agreements have therefore been removed).

It is also clarified that clauses 2.4(m) and (n) only apply after clauses 2.4(i) and (k) (as applicable).

10.7 Cost pass throughs

10.7.1 Background

Under clause 2.2 of Part B, Schedule A of the 2010 Undertaking, Aurizon Network can submit a proposed variation to reference tariffs:

- where Aurizon Network considers that the variation will promote efficient investment by it or another person in the coal transport supply chain; or
- upon occurrence of an Endorsed Variation Event or Review Event.

The Endorsed Variation Events and Review Events (as defined in Part 12 of the 2010 Undertaking) are as follows.

Endorsed Variation Events

- (a) a change in law or relevant taxes, to the extent that this would cause a change in costs that would result in a change in Reference tariffs by more than 2.5%;
- (b) a change in the prices charged for access to electricity distribution or transmission network infrastructure, to the extent that this would cause a change in costs that would result in a change in AT5 by more than 2.5%;
- (c) a change in the prices charged by electricity retail businesses, to the extent that this would cause a change in costs that would result in a change in the EC tariff by more than 2.5%; and
- (d) a change in the QCA levy.

Review Events

- (a) an increase in QR Network’s maintenance costs (relative to the approved allowance), but only where:
 - i. those additional costs have been prudently and efficiently incurred; and

- ii. this would cause a change in costs that would result in a change in Reference tariffs by more than 2.5%;
- (b) a change in QR Network's maintenance practices in response to a reasonable request by a customer, to the extent that this would cause a change in costs that would result in a change in Reference tariffs by more than 2.5%, excluding the impact of:
 - i. any change in maintenance practices that have previously resulted in a variation of the Reference tariff since the commencement of that regulatory period; and
 - ii. any adjustment to the Reference tariff to reflect changes in the MCI;
- (c) a Force Majeure event that has or would result in QR Network incurring additional costs greater than \$1 million, where that event was due to:
 - i. an act of God; or
 - ii. fire, flood, earthquake, washaway, landslide, explosion or other catastrophe, epidemic and quarantine restriction;
- (d) the implementation of a self-insurance function by QR Network by 31 December 2010;
- (e) an increase in the number of contracted coal carrying Train Services using the network between Burngrove and Minerva;
- (f) where QR Network has committed to developing a Significant Investment; and
- (g) any other material change in circumstances that QR Network can reasonably demonstrate may give rise to a need to vary the relevant Reference tariff.

Aurizon Network has reviewed the scope of the cost changes covered. It also considers that the structure and drafting of the provisions could be improved for clarity and ease of interpretation. Each of these is discussed below.

10.7.2 Issues with the framework

10.7.2.1 Scope of the provisions

Endorsed Variation Event: EC changes

The EC tariff is levied on users of electric network infrastructure and is a pass through of electric energy costs based on the priced levied by retail electricity providers. This is currently done as an Endorsed Variation Event where the consequential impact on Reference tariffs is greater than 2.5% (sub-clause (iii)).

As outlined in section 9.11, Aurizon Network now intends to review and publish the EC rate on its website annually. This will be done on or about the 31st of May in the year prior to the relevant year (clause 2.2(a) of Schedule F of the 2013 Undertaking). This will be a simpler and cleaner process that provides certainty to users as to the EC charge they will be paying each year.

Further, the 2.5% materiality threshold on adjustments under the 2010 Undertaking means that Aurizon Network is exposed to volume risk in relation to EC, although this risk is not significant. As discussed previously, Aurizon Network no longer considers it appropriate that it be made to bear volume risk under a revenue cap form of regulation, noting that the level of the EC charge is completely beyond its control.

It is therefore proposed to remove the EC adjustment from the Endorsed Variation Events.

Review Event: Change in maintenance practices requested by an access holder or customer

Sub-clause (b) of the Review Event Definition in the 2010 Undertaking refers to changes in maintenance practices requested by an Access Holder or Customer, which results in a change in Aurizon Network's cost of delivering maintenance (beyond a threshold of 2.5%, based on the costs reflected in the AT3, AT4 and/or AT5 tariff components).

Aurizon Network is concerned that in assessing the consequential cost impacts of the requested change, this could (albeit inadvertently) also capture cost savings that it may be achieving during the relevant period through other initiatives (including impacting whether or not the 2.5% threshold is triggered). The current wording does exclude "any changes in maintenance practices that have previously resulted in a variation to the Reference Tariff since the Approval Date". However, this only relates to any previous changes in practices triggered under this sub-clause.

Aurizon Network wants to ensure that a variation in reference tariffs triggered by this clause does not result in it having to transfer any efficiency gains that it may have implemented that are unrelated to the proposed change and which may have reduced its actual maintenance costs relative to forecast (or could do so at a later date). A key objective of incentive regulation is to provide the business with an incentive to implement efficiency gains relative to the approved forecast allowance, which it should at least be able to retain for the regulatory period (and longer if the benefits will not accrue for some time).

It is therefore proposed to amend this provision to make it clear that any revision to maintenance costs (feeding into a reference tariff review) that is triggered by a user-initiated change in maintenance practices is isolated to the net cost impact of that change. That is, any revised assessment of costs should not be able to capture any efficiency gains implemented during the period, just as Aurizon Network would not seek to use this mechanism to clawback unrelated increases in maintenance costs above forecast.

Review Event: Market testing of maintenance activities

Aurizon Network's maintenance cost forecast for the regulatory period is based on certain assumptions regarding the amount of work that will be delivered through its internal service delivery model, and the amount of work that might require outsourcing (or at least the use of contract labour).

Implicit in the firm's decision to deliver maintenance services internally, including investing in new plant that will be used to provide those services, is an assumption that it will be compensated for the commercial and regulatory risks of providing them. If this is not the case and the business decides not to make that investment, Aurizon Network will have to outsource this work to an external provider to ensure that its maintenance program can still be delivered. Alternatively, Aurizon Network's maintenance delivery services can compete in the tender process and recover the costs of service delivery through an appropriate arms-length service agreement. In either case, a rate of return on invested assets is implicit in the cost of maintenance.

Depending on the rate of return required by that external service provider, Aurizon Network's actual maintenance costs may increase above the regulated allowance. Provided they are efficient costs, Aurizon Network should not have to absorb these costs as the decision to source services internally or externally is a commercial decision that it should be reasonably allowed to make. Recognising the inherent challenges in forecasting maintenance costs over a four year period, this should not preclude Aurizon Network from subsequently outsourcing certain activities, noting that the QCA would still be required to review and approve the consequent change to reference tariffs under the Review Event provisions.

This situation is arguably captured under sub-clause (a) of the Review Event Definition in the 2010 Undertaking, which is:

“...where Aurizon Network’s maintenance costs have been prudently and efficiently incurred, but are greater than its maintenance cost allowance, which has caused, or will cause, a change in the costs reflected in the AT3, AT4 and/or AT5 components of a Reference tariff of greater than 2.5%...”

However, Aurizon Network considers it important to make this explicit.

It is therefore proposed to include an additional Review Event in the 2013 Undertaking to allow Aurizon Network to vary the reference tariff where its actual costs will exceed the approved maintenance cost allowance because of a decision to market test one or more of its maintenance activities. It will be clear that the consequent impact on reference tariffs will only be to the extent of the difference between the assumed cost of delivery reflected in the approved forecast and the revised external cost of delivery. The 2.5% materiality threshold will also be imposed, consistent with the other provisions.

Review Event: Use of contributed assets that were subsequently sole user and become multi-user

As described in section 9.8, it is proposed to replace rebates for contributed capital on mine specific infrastructure with the application of a discount. As noted in that section, this change is designed to accommodate (the most common case of) single user spurs. However, if that spur is subsequently used by an additional user, Aurizon Network will need to recommence the payment of rebates on those particular assets and adjust the discount to access charges.

It will therefore be necessary to include an additional Review Event to address the situation where a spur that was previously used by a single user who was paying a discounted reference tariff subsequently becomes multi-user.

Review Event: Significant Investments

Sub-clause (f) of the Review Event Definition in the 2010 Undertaking allows for a Review Event where Aurizon Network has committed to developing a Significant Investment. As outlined in section 7.6, the concept of a “Significant Investment” is no longer proposed to be applied in the 2013 Undertaking.

Review Event: acceptance of a Reference tariff Variation

As described in section 9.7, to the extent that Aurizon Network considers it appropriate for the costs of an expansion to be shared between new and existing users, it may seek approval of that cost allocation methodology under the Interested Participant voting provisions in Schedule A. If the cost allocation methodology is endorsed, it will result in the variation of an existing reference tariff. This variation will be implemented via the Review Event provisions.

Review Event: implementation of a self-insurance function

Sub-clause (d) of the Review Event definition in the 2010 Undertaking addressed “the implementation of a self-insurance function by QR Network by 31 December 2010”. The business decided not to implement this. Accordingly, this provision can be removed.

Review Event: material changes in contract volumes

Sub-clause (g) of the 2010 Undertaking allows for a Review Event for:

“...any other material change in circumstances that QR Network can reasonably demonstrate may give rise to the need to vary the relevant Reference Tariff.”

One of the most likely circumstances under which such a variation could be required is where there is a material change in contracted volumes, as major expansions (such as WIRP) are commissioned during the course of the regulatory period. This is also consistent with the sub-clause that recognised Significant Investments, as noted above.

Aurizon Network therefore considers it appropriate to explicitly recognise a material change in contracted volumes as a Review Event, while still retaining the more general provision cited above. The reference point for this material change will be the assumed forecast contracted volumes underpinning the approved Capital Indicator.

10.7.2.2 Drafting

In the 2010 Undertaking, the definitions for Review Events and Endorsed Variation Events are included in the Definitions in Part 12. The process for the submission, review and approval of a reference tariff variation is contained in clause 2.2 of Part A, Schedule F.

Processes for the submission, review and approval of a reference tariff variation are currently set out separately for each situation that has prompted the variation (that is, whether it is part of the annual review, for the purpose of improving supply chain efficiency, an Endorsed Variation Event or a Review Event). The processes applied in each case, and the principles underpinning approval, should be the same. Accordingly, this repetition is considered unnecessary and makes the provisions more difficult to read and interpret.

There are also some inconsistencies between provisions in the 2010 Undertaking. In particular, allowance is made for the QCA to publish details of a proposed variation to a reference tariff and to invite comments from stakeholders. If the variation is submitted:

- in response to a written notice being given to Aurizon Network by the QCA under clause 2.2.2, which may be being given because: (1) the QCA has not approved a variation to a reference tariff; or (2) Aurizon Network has failed to submit a reference tariff where the QCA has determined that an Endorsed Variation Event has occurred; or
- for the purpose of the annual review;

Aurizon Network is provided with an opportunity to respond to any stakeholder submissions made to the QCA. However, in other circumstances, such as where the QCA publishes a proposal from Aurizon Network relating to an Endorsed Variation Event or a Review Event, Aurizon Network does not have an opportunity to respond to any of the comments provided to the QCA. There is no clear reason for this inconsistency. It is considered reasonable that Aurizon Network would be given the opportunity to respond to comments made on its proposal before the QCA makes a decision.

10.7.3 UT4 proposal

Clause 5 of Schedule F in the 2013 Undertaking addresses reference tariff variations. This sets out the circumstances under which Aurizon Network could be required to submit a reference tariff variation (clause 5.1).

The lists of Endorsed Variation Events and Review Events have been moved from the Definitions into clause 5. The amendments to the list of events are as follows.

10.7.3.1 Amendments to Endorsed Variation Events

The Endorsed Variation Events are located in clause 5.2. The only change to the list of events is that sub-clause (c) in the 2010 Undertaking, which relates to changes in EC, has been removed.

10.7.3.2 Amendments to Review Events

The new Review Events included in clause 5.3 of the 2013 Undertaking are:

- “(c) where Aurizon Network through a competitive process, has engaged or otherwise appointed a Third Party, or an Aurizon Party (on arms-length terms), to perform any maintenance activities and the cost to Aurizon Network of performing those maintenance activities through that Third Party or Aurizon Party (as applicable) exceeds, or will exceed, the maintenance costs allowance for those activities included in the AT3, AT4 and/or AT5 inputs of the relevant Reference Tariff by more than 2.5%;
- (d) where:
 - (i) part of the Rail Infrastructure is used solely to connect an Access Holder or Customer’s single loading facility to a Coal System;
 - (ii) a discount applies to the relevant Reference Tariff in respect of that Access Holder’s or Customer’s use of that part of the Rail Infrastructure to offset a rebate that would otherwise be payable by Aurizon Network to that Access Holder or Customer; and
 - (iii) another Customer connects a loading facility to that part of the Rail Infrastructure;
- (g) the acceptance by Interested Participants through a vote under clause 8.11, or the QCA, of the cost allocation principles that Aurizon Network will apply to a variation of a Reference Tariff;
- (h) where a material change occurs in the assumed forecast contracted volumes relevant to an existing Capital Indicator”.

Clause 5.3 (b) (formerly sub-clause (b) under the Review Event definition in the 2010 Undertaking) has also been amended to refer to a change in maintenance practices which has caused, or will cause, a net change in costs.

The following sub-clauses from the Review Event definition in the 2010 Undertaking have been removed:

- the implementation of a self-insurance function (sub-clause (d) in the 2010 Undertaking);
- the development of a Significant Investment (sub-clause (f) in the 2010 Undertaking).

10.7.3.3 Structural changes

The provisions in relation to the submission, review and approval process have been consolidated so that the same key requirements apply regardless of the reason for the variation. This ensures consistency in the assessment of proposed variations, eliminates unnecessary repetition and improves the clarity of the review and approval process.

The balance of clause 5 has been structured as follows:

- clause 5.4 addresses the information that Aurizon Network must submit to the QCA as part of the proposed reference tariff variation;
- clause 5.5 describes the approval process;
- clause 5.6 allows for extensions to timeframes.

In consolidating the provisions regarding the QCA's review and approval of a proposed reference tariff variation (clause 5.5), Aurizon Network has also addressed inconsistencies between the processes in the 2010 Undertaking. In particular, if the QCA publishes a proposed reference tariff variation for stakeholder comment, Aurizon Network must be given the opportunity to respond to these comments regardless of the source of the proposed reference tariff variation (clause 5.5(b)). The QCA must consider Aurizon Network's response.

The factors that the QCA will consider in reviewing a proposed reference tariff variation are included in clause 5.5(c). In addition to the factors that were included in the 2010 Undertaking (such as the extent to which the proposed reference tariff variation is consistent with the relevant change in cost arising from the event), an additional sub-clause has been included (5.5(c)(i)), which says:

“whether the proposed variation is consistent with:

- (A) this Undertaking;
- (B) the pricing principles in section 168A of the Act;
- (C) Aurizon Network's legitimate business interests; and
- (D) the interests of Access Holders, Access Seekers and, if applicable, Customers...”

Clause 5.5(d)-(e) address what happens if the QCA approves the reference tariff variation, as well as if the QCA proposes to reject the proposed variation, which is consistent with the treatment in the 2010 Undertaking.

10.8 Maintenance of the RAB

10.8.1 Background

The provisions regarding maintenance of the RAB are contained in Schedule E of the 2013 Undertaking (previously Schedule A of the 2010 Undertaking). This addresses the ongoing maintenance and updating of the RAB, including the circumstances under which the value of the RAB can be reduced. Most of the Schedule deals with the assessment and approval of Aurizon Network's capital expenditure. It also addresses the maintenance of the Capital Expenditure Carryover Account. It includes a clause that was introduced in UT3, which is an obligation on Aurizon Network to undertake a condition based assessment of the network, which will be referenced by the QCA in its determination of the opening RAB value at the start of the regulatory period.

10.8.2 Issues

In addition to streamlining and improving the drafting of the Schedule where appropriate, the following issues have been identified:

- the treatment of asset disposals and transfers;
- adjusting the value of assets in the RAB;
- equity raising costs;
- the capital expenditure report;
- acceptance of capital expenditure; and
- the condition based assessment.

Certain reporting provisions in Part 9 that relate to the maintenance of the RAB, being the capital expenditure report (clause 9.3.1 of the 2010 Undertaking) and the RAB roll-forward report (clauses 9.3.2 and 9.3.3 of the 2010 Undertaking), are also considered to better reside in Schedule E.

Each of these issues is discussed below.

10.8.2.1 Treatment of asset disposals and transfers

As part of the maintenance of the RAB, any assets that have been transferred or disposed of will be removed from the RAB. Clause 1.2(c) of Schedule A in the 2010 Undertaking states that “the value of asset disposals and transfers” will be deducted from the RAB. It is silent on what this value is assumed to represent.

Given the majority of below rail network assets have limited if any alternative uses, if Aurizon Network disposes of an asset the most likely scenario is that any proceeds it receives on the sale of that asset will be less than the residual RAB value of those assets (having regard to any costs of dismantling and removing that asset from service).

The pricing principles in the QCA Act provide for Aurizon Network to recover its efficient cost of investment, including a rate of return (that does not include compensation for asset stranding risk). Accordingly, where the proceeds on sale are less than the RAB value, the ‘value’ of the disposed asset should be set equal to the net proceeds received from the sale (presuming that the sale has been done on arms length terms), with the residual RAB value remaining in the RAB.

To the extent that this protects Aurizon Network from financial loss where the sale proceeds are below the residual RAB value, it is appropriate to provide an incentive to maximise the sale proceeds. This could be done by allowing Aurizon Network to retain some of the benefits in the (less likely) case that it is able to dispose of an asset for an amount that exceeds the RAB value. The balance of the gains should accrue to users, given they have contributed towards the cost of the assets via reference tariffs. A reasonable share is 50/50. It is therefore proposed that where the proceeds on the sale of an asset exceeds the RAB value, the value of the disposed asset that is removed from the RAB would be equal to the RAB value plus 50% of the net proceeds from the disposal.

10.8.2.2 Adjusting the value of assets in the RAB

Clause 1.4 of Schedule A in the 2010 Undertaking provides that the QCA will not optimise (reduce) the value of the RAB unless:

1. expenditure was accepted based on false or misleading information (and Aurizon Network knew, or should have known, that the information it provided was false or misleading);
2. demand deteriorates materially, so that maintaining prices would further reduce demand;
3. there is a possibility of actual (not hypothetical) bypass;
4. network condition deteriorates more than would have been the case had the asset been prudently and effectively maintained (including asset replacement).

Aurizon Network accepts accountability for the information it provides. However, the wording should include a qualification to make it clear that false or misleading information must have had a direct and material bearing on the outcome. This amendment is included at clause 1.2(c) of Schedule E of the 2013 Undertaking.

Aurizon Network considers that the second and third limbs of the above provision should be removed. Either of these circumstances can and should be addressed through pricing. For example, if a material deterioration in demand occurred and was expected to be permanent and sustainable, Aurizon Network would have to review prices. In the first instance, this would become evident as part of the review of system volume forecasts that is done as part of the annual review of reference tariffs, noting that the QCA is able to publish Aurizon Network's proposal and seek comments from stakeholders. If there were to be a possibility of actual bypass, a similar approach would be taken. Either event could also constitute a material change in circumstances under the Review Event provisions.

There are formalised processes for either of the above mechanisms in the 2013 Undertaking (via the annual review of reference tariffs and the Review Event provisions), enabling a proper review process which gives all stakeholders – including Aurizon Network – an opportunity to submit their views. However, there is no process underpinning a potential adjustment under clause 1.4. This exposes Aurizon Network to material regulatory risk.

Aurizon Network also proposes to remove clause 1.4(d), the network condition-based assessment obligation, for a number of reasons that are discussed in detail below. Accordingly, clause 1.4(d), which allows for optimisation of the RAB for a deterioration in network condition is not considered sustainable. This exposes Aurizon Network to an unacceptable level of regulatory risk.

There is also no process around what will happen if Aurizon Network seeks to increase the value of the RAB under the circumstances currently specified in clause 1.3 of Schedule A of the 2010 Undertaking. Aurizon Network considers it appropriate for the QCA to respond on these matters in a timely manner and provide it with reasons if it proposes to reject the proposal.

10.8.2.3 Capital expenditure report

It is considered more appropriate that this report reside in the Regulatory Asset Base Schedule rather than Part 9 as it is prepared for the purpose of maintaining the RAB. In the 2010 Undertaking there is no process around the provision of required information, including additional requests for information by the QCA. Aurizon Network also considers it important to ensure that there are timeframes placed around requests for additional information, to ensure timely decision making for the final approval of its annual capital expenditure.

In addition, the information that must be provided in that report should be more clearly linked to the information required in order to satisfy the QCA's prudency assessment (as now set out in Schedule E), including clarifying the implications of acceptance by Interested Participants of one or more aspects of a capital expenditure project. This includes the provision of an audit certificate to demonstrate that in undertaking a vote, Aurizon Network has complied with the process for seeking acceptance by Interested Participants.

10.8.2.4 Equity raising costs

An allowance for incremental equity raising costs is provided by other Australian regulators, including the Australian Energy Regulator (AER), in recognition that the efficient benchmark firm may incur additional transaction costs if it needs to raise new equity to fund projects. These costs are not reflected in the rate of return.

Compensation has been provided for the initial costs of raising equity to fund the opening RAB (or the existing assets), which has only been applied when a business is first subject to economic regulation. On an ongoing basis, compensation has been provided for the costs of raising equity to fund new capital

expenditure (also referred to as 'incremental' equity raising costs). It is important to note that given the compensation model under incentive regulation is based on the 'efficient benchmark firm', the approach that is applied is based on determining whether that efficient benchmark firm would have reasonably been required to raise equity given the regulated cashflows (approved revenues and costs) and the benchmark gearing level approved as part of the Weighted Average Cost of Capital (WACC).

The QCA has previously acknowledged the appropriateness of including equity raising costs that are incurred as part of arranging funding for a new asset or project. For example, it approved an allowance for initial equity raising costs in the determination of the initial DORC value for DBCT at the start of its first undertaking period.¹⁹⁰

QR Network sought the inclusion of initial and incremental equity raising costs in its RAB at the start of the second undertaking period (UT2). The QCA rejected the proposal. In relation to the claim for initial equity raising costs, one of its key reasons was because it would require it to re-open the RAB value determined at the start of UT1 (in other words, these costs may have been approved if this application had been made at the start of UT1).

The QCA also rejected the claim for incremental equity raising costs, which related to funding for new capital investments during the UT2 period. The main reason it rejected this claim is that it considered that QR Network had not demonstrated that it was necessary to raise external equity, applying the efficient benchmark principle. This was based on the advice of its consultant, ACG, whose own analysis concluded that QR Network would be able to fund these projects from internal cash flows. This reflected the application of the traditional 'pecking order' model in finance theory, which provides that firms will fund projects firstly from internal reserves, then via external debt, and finally from external equity raisings. In rejecting this proposal, the QCA concluded that:

“At the same time, the Authority agrees with QR that an allowance for incremental equity raising costs may be required in the future, depending on the circumstances at the time.”¹⁹¹

Aurizon Network included an allowance for equity raising costs in the reference tariffs submitted for GAPE in September 2012. Cashflow modelling was undertaken to confirm the need to raise external equity based on the benchmark gearing assumption of 55%. The costs of raising that equity were estimated based on the allowances applied by the AER (see below).

Consistent with the application for GAPE, Aurizon Network considers it important to include a process in Schedule A to allow for the inclusion of equity raising costs in the value of new capital expenditure approved by the QCA that is subsequently rolled into the RAB. The two main things that Aurizon Network would need to demonstrate are that:

1. it is appropriate to assume that the business would have needed to raise additional equity to fund the expenditure;
2. the allowance for equity raising costs is efficient.

The need to raise equity can be demonstrated by cash flow analysis, applying the pecking order theory (where internal reserves and debt funding assumed at the benchmark gearing level are insufficient to meet the capital requirements). This is consistent with the approach applied by the AER. It is also

¹⁹⁰ Queensland Competition Authority (2005a). Final Decision – Dalrymple Bay Coal Terminal Draft Access Undertaking, April p.135.

¹⁹¹ Queensland Competition Authority (2005b). QR's 2005 Draft Access Undertaking, December, p.52.

proposed to base the quantum of the equity raising costs on the assumptions used by the AER, which assumes that new equity is raised via two methods, being:

- dividend reinvestment plans (costs are 1% of the amount of dividends reinvested);
- seasoned equity offerings (costs are 3% of total external equity raised).¹⁹²

The AER bases its cost estimates on the assumption that 30% of new equity will be raised through dividend reinvestment plans.

Provided that Aurizon Network can clearly demonstrate that it has calculated a claim for equity raising costs on this basis, these costs should be included in the RAB in addition to the relevant project capital expenditure. There will be no claim if the need for new equity cannot be demonstrated.

10.8.2.5 Acceptance of capital expenditure

As described in detail in section 7.7, Aurizon Network has sought to expand and improve on the voting process contained in Schedule A. It has also been included in the new Part 8 (Expansions).

Additional amendments have been made in relation to the acceptance of capital expenditure into the RAB by the QCA to clarify the implications of an approval under the voting process for the acceptance of Aurizon Network's capital expenditure. In particular, it should be clear that if the scope and/or standard of a project has been accepted as prudent by Interested Participants, the QCA will accept that scope and/or standard as prudent, noting that Aurizon Network will also provide an audit certificate to the QCA demonstrating that it has complied with the process in clause 8.10 of Part 8.

10.8.2.6 Condition based assessment

Background

In UT3 the QCA included a new obligation for Aurizon Network to undertake a condition based assessment of the network (clause 5 of Schedule A). The purpose of the condition based assessment is to determine whether the network infrastructure "has deteriorated by more than would have been the case had good operating practice and prudent and effective maintenance and asset replacement policies and practices been pursued". If such deterioration occurs, the QCA may reduce the value of the RAB under clause 1.2(e) of Schedule A of the 2010 Undertaking, as described above. This would be done via an adjustment (reduction) to the opening value of the RAB at the beginning of the next regulatory period.

The QCA rationalised this in the context of its decision to deduct \$107 million from the RAB for ballast fouling. It was also seen as responding to concerns expressed by industry that a privately owned below rail infrastructure provider will be incentivised to under-maintain the network. As this decision was only included in the QCA's Final Decision (it was not flagged in the Draft Decision), Aurizon Network had no opportunity to respond to this amendment in UT3.

Issues

There are a number of significant issues that have been identified with the current obligation. The first is its practical implementation. The second is the absence of constraints on the QCA's ability to optimise the RAB under these provisions, having regard to a number of other processes and obligations under the access undertaking that this interacts with. The third is a fundamental question of necessity, given the

¹⁹² Australian Energy Regulator (2012). Final Decision, Powerlink – Transmission Determination, 2012-13 to 2016-17, p.108.

other incentives and obligations on Aurizon Network to maintain the network in an appropriate condition. The fourth is that it is a unique obligation in access regulation. Each of these issues is discussed below.

Practical implementation

In undertaking the first condition based assessment it became clear that there are significant issues in being able to clearly interpret the requirement of the provision in terms of the scope of this obligation and how it is to be satisfied.

The first issue is interpretation. The concept of 'condition' is very difficult to clearly define in engineering practice, noting that the ability to be able to clearly define what is meant to condition is imperative in this case because it could lead to a negative adjustment being made to the value of Aurizon Network's RAB. Clause 1.4(d) of Schedule A in the 2010 Undertaking links condition to three key terms which are not defined, being:

- good operating practice;
- prudent and effective maintenance; and
- prudent and effective replacement policies and practices.

Considerable subjective judgment must be applied in interpreting the above. For example, the standard internationally recognised tool for assessing asset management practices is PAS 55. This is the British Standards Institution's publicly available specification for the optimised management of physical assets. This standard does not have any regard to the above terms.

The second issue is measurement. Even if the three concepts listed above could be clearly defined, the assessment then requires an ability to isolate the impacts of these practices on network condition. This can be very difficult to do given the multitude of different factors (and interrelationships) that can affect the asset through time. Some of these factors are reasonably within the control of Aurizon Network, others, such as weather, are not.

Measurement would also need to be standardised in some form to allow for statistically robust inferences to be made in relation to the change in condition between two assessments. The other practical difficulty is that the engineering consultant undertaking each assessment has to accept the findings of the previous review as reliable and accurate given the purpose of the review is to identify and assess any incremental change in condition from the prior review. If the consultant had not undertaken the previous review, it is possible that the consultant may not agree with the starting point (in other words, it may have formed a different view had it undertaken the previous assessment). This is not unlikely given the subjectivity underpinning this process, outlined above. This could have implications for that consultant's advice.

The practical difficulties in translating the 2010 Undertaking requirements into a clear scope of work has become clearly evident in the current process. This was initially evident in the varying responses received from engineering consultants to the terms of reference based on different interpretations of the requirements. It has continued to be a significant issue throughout the process.

In Aurizon Network's view, there is no clearly acceptable way of resolving this issue in the drafting of the current provisions. This is because of the inherent subjectivity in interpreting and assessing 'network condition', and importantly, what might have caused changes in that condition through time.

Constraints

In considering this obligation, regard also needs to be given to other relevant features of the regulatory regime, including the QCA's role in approving and monitoring Aurizon Network's maintenance allowance and renewals expenditure. Currently, the QCA:

- reviews and approves Aurizon Network's proposed maintenance expenditure at the start of the regulatory period, following a very detailed assessment of Aurizon Network's proposed maintenance program and budget;
- reviews any proposed changes to the maintenance budget sought during the period under the Review Event provisions (including in response to a change in maintenance practices requested by a user/s);
- receives an annual report comparing actual maintenance activity and costs relative to the approved forecast during the course of the regulatory period; and
- reviews and approves forecast capital expenditure for inclusion in the Capital Indicator at the start of the regulatory period. It then undertakes a detailed prudency assessment of the scope, standard and cost of expenditure at the end of each year. In this context, the most relevant expenditure is renewals.

The requirements of Aurizon Network's maintenance and renewals program are couched in the requirements of its Safety Management System. These requirements are written in the form of Standards that are approved by the Rail Safety Regulator. The Rail Safety Regulator reviews these Standards from an engineering perspective through the life cycle of the asset (that is, design, construct, operate, maintain and decommission). These Standards have been developed over 149 years and are being managed by a dedicated team of engineering professionals. In addition the Standards have been collaboratively developed with other Rail Managers throughout Australia. These Standards are audited and validated on an ongoing basis by internal and external parties as part of Aurizon Network's accreditation program.

The QCA ultimately determines Aurizon Network's maintenance and capital expenditure and it may be less than the amount sought by Aurizon Network. It is only this approved expenditure that can be recovered via reference tariffs. Aurizon Network has no incentive to spend in excess of this approved amount and indeed to do so will have a negative impact on firm profitability given the additional amounts cannot be recovered via reference tariffs. However, this approved budget may be less than what Aurizon Network considers is necessary to adequately maintain the network. This could ultimately have an impact on network condition. Under the current provisions in Schedule A, this could also expose Aurizon Network to the risk of RAB optimisation.

In conclusion, the level of involvement that the QCA has in approving and monitoring Aurizon Network's capital and maintenance expenditure – which assesses the need for the expenditure as well as the cost – raises a fundamental question as to why it is necessary to then overlay the condition based assessment obligation. Further, the amount of expenditure approved by the QCA will directly influence Aurizon Network's actual expenditure during the period. This could have implications for network condition and Aurizon Network's exposure to the risk of RAB optimisation under Schedule A. Aurizon Network should not be exposed to any risk of a RAB adjustment to the extent that its activities and expenditure are consistent with the QCA's approved expenditure.

Necessity

As noted above, one of the concerns expressed by industry that resulted in the introduction of this obligation in UT3 was the pending privatisation of (the then) QR National and the perceived incentives that this was seen to create in relation to the maintenance of network condition.

In response to these concerns, the requirement for a full network condition assessment was considered by the State Government prior to the sale of QR National. It was finally accepted that this was unnecessary based on the following 'four pillars', being key commercial and legal imperatives for Aurizon Network to maintain the network to an appropriate standard:

1. *Contracts*: Aurizon Network has to maintain the network to a 'fit for purpose' standard in order to be able to deliver its obligations under its contracts, including below rail transit times. This imposes a strong commercial incentive on Aurizon Network not to under-maintain the network as this could lead to a breach of its contractual obligations.
2. *Safety*: As outlined above, Aurizon Network has to ensure that the safety of the network is not compromised, which could occur if the condition of the network was allowed to deteriorate. Compliance with the standards are overseen by the Safety Regulator. 'Zero Harm' is also Aurizon Holdings Limited's core value. Apart from the unacceptable consequences of harm, Aurizon Network is exposed to significant commercial and reputational risks if it does not align its entire business strategy to achieving this.
3. *Immediacy of impacts*: In non-heavy haul networks that are subject to lower utilisation, the impacts of under-investing in maintenance and renewals on network condition may take some time to materialise. In a heavy haul coal network that is operating at close to full capacity, these impacts will be more immediate and Aurizon Network will be made accountable for them under its contracts. As a publicly listed company with a long term lease with the State, any under-investment in maintenance of the assets would be incompatible with the long term interests of shareholders.
4. *Vertical integration*: failing to maintain the network to a standard that maximises throughput will only harm Aurizon Holdings Limited's above rail coal business, and reduce the value of the Group. The benefits of this incentive is shared by all users of the infrastructure.

Precedent

Aurizon Network is not aware of any other regulated businesses that are either: (1) required to undertake a periodic condition based assessment; or (2) exposed to the risk of RAB optimisation for a deterioration in the condition of the infrastructure.

Conclusion

The imposition of the condition based assessment obligation in UT3 exposes Aurizon Network to an unacceptable level of regulatory risk. The key concerns that have been identified are as follows:

1. It is extremely difficult to interpret and apply in practice, requiring the application of considerable subjective judgment. The application of this judgment could have material adverse consequences for Aurizon Network if it results in the optimisation of its RAB, precluding it from recovering a return on and of capital for the amount of that adjustment.

2. The QCA already undertakes a detail review of Aurizon Network’s proposed maintenance expenditure and actual renewals expenditure. The QCA ultimately determines the amount of this expenditure, noting that this could be less than what Aurizon Network considers is necessary to maintain the network to an appropriate standard.
3. Aurizon Network considers that there are far more effective and compelling commercial and legal imperatives for it to maintain the network in an appropriate condition, including its contractual obligations, safety, the immediacy of the impacts of any decisions to under-maintain the network, and its vertical integration.
4. There is no precedent for the obligation elsewhere.

Aurizon Network therefore considers that this obligation should be removed.

10.8.3 UT4 proposal

10.8.3.1 Treatment of asset disposals and transfers

The adjustment to the RAB for asset disposals and transfers, which now resides in clause 1.1(a)(iii) in Schedule E of the 2013 Undertaking, has been amended to clarify what the “value” that is deducted will be. It states:

“subject to clause 1.1(b), where assets are disposed of during the Year the following amount will be subtracted from the Regulatory Asset Base, where the net proceeds on disposing of the assets after deducting all costs and expenses incurred by Aurizon Network in connection with that disposal are:

- (A) less than, or equal to, the value in the Regulatory Asset Base for the disposed assets, the net proceeds of the disposal; or
- (B) greater than the value in the Regulatory Asset Base of the disposed assets, the sum of:
 - (i) the value in the Regulatory Asset Base of the disposed assets; and
 - (ii) 50% of the difference between the net proceeds of the disposal of those assets and the value in the Regulatory Asset Base of the disposed assets...”

A new clause, 1.1(b), has been added to clarify that:

“The subtraction of an amount referred to in clause 1.1(a)(iii)(B)(2) from the Regulatory Asset Base will be as determined by Aurizon Network and accepted by the QCA.”

10.8.3.2 Adjusting the value of assets in the RAB

A new clause has been included, 1.2(b), allowing Aurizon Network to increase the value of the RAB for the value of equity raising costs calculated in accordance with clause 1.5 (described below).

The provision addressing the circumstances under which the QCA can optimise the RAB now reads as follows (clause 1.2(c)):

“The QCA will not require the value of assets contained in the Regulatory Asset Base to be reduced unless:

- (i) the QCA made its decision to accept the relevant capital expenditure into the Regulatory Asset Base on the basis of information provided by Aurizon Network that Aurizon Network knew, or should have known, was false or misleading at the time it provided the information; and

- (ii) the provision of this false or misleading information resulted in a materially different outcome from that which would have occurred if the QCA had been provided with information that was not false or misleading.”

Further, a new clause (1.2(d)) has been added, to clarify that:

“Where the QCA requires the value of the assets in the Regulatory Asset Base to be reduced, it must identify those specific assets including the class and location of those assets.”

Aurizon Network has also included additional clauses addressing what will happen if Aurizon Network seeks an increase in the value of the RAB for the circumstances now specified in clause 1.2 (which retains the UT3 provisions and adds in equity raising costs). The proposed clauses are:

- “(e) If the QCA has not notified Aurizon Network of whether it accepts any asset value increase under clauses 1.2(a) or (b) (as applicable) within 40 Business Days after receiving a request from Aurizon Network under clauses 1.2(a) or (b) (as applicable), then the QCA is taken to have made a determination to accept Aurizon Network’s request.
- (f) Subject to clause 1.2(e), if the QCA refuses to accept Aurizon Network’s request, then the QCA must notify Aurizon Network of the reasons why that request was not accepted.”

These inclusions have been proposed in the interests of timeliness and transparency of the process.

10.8.3.3 Capital expenditure and RAB roll-forward reports

As both of these reports are prepared specifically for the purpose of allowing the QCA to assess matters relevant to the maintenance of the RAB, they have been moved from Part 9 to Schedule E (clauses 1.3 and 1.4). Clauses have been included to state that the information provided:

- “(i) will be accompanied by a statement signed by Aurizon Network’s Executive Officer confirming that information is, in all material respects, correct;
- (ii) must be kept confidential and not published by the QCA except to the extent that Aurizon Network agrees otherwise.”

In addition, the RAB roll-forward report must be consistent with the RAB roll-forward principles contained in clause 1.1.

The information to be provided in the capital expenditure report has also been expanded to provide clearer linkages between the relevant projects, the prudency tests, and acceptance by Interested Participants (if sought and obtained). Clause 1.3(a)(iv) states that the information to be provided will be:

- “(A) where applicable, to support the QCA’s assessment of the prudency of the capital expenditure under clauses 2 to 5 (except to the extent that the QCA has already accepted that capital expenditure as prudent in scope, standard or cost); and
- (B) to the extent that the capital expenditure is taken to be prudent in scope or standard because of acceptance by Interested Participants under clause 8.10 of this Undertaking:
 - (1) evidence that a vote under clause 8.10 of this Undertaking has occurred and the result for that vote; and
 - (2) an audit certificate in respect of whether the vote conducted under clause 8.10 of this Undertaking is in all material respects compliant with clause 8.10 of this Undertaking.”

Relevant audit provisions in Part 10 will also apply to the audit undertaken here.

To improve the timeliness of review processes, additional provisions have also been included as part of “Assessing the Prudency of Capital Expenditure” (clause 2.3 in the 2013 Undertaking) to place timeframes around requests for information by the QCA and the provision of that information by Aurizon Network. The new provisions are:

- “(b) the QCA may request additional information from Aurizon Network that is reasonably required to make any determination under clauses 3, 4 or 5 (as applicable) within 45 Business Days after receiving the request from Aurizon Network to make such a determination under clauses 3, 4 or 5 (as applicable);
- (c) Aurizon Network must respond to a request by the QCA under clause 2.3(b) within 30 Business Days after receiving that request; and
- (d) if the QCA has not notified Aurizon Network of any determination that it is required to make under clauses 3, 4 or 5 (as applicable) within 45 Business Days after:
 - (i) where the QCA has not made a request under clause 2.3(b), receiving a request from Aurizon Network under clauses 3, 4 or 5 (as applicable) to make such a determination; or
 - (ii) where the QCA has made a request under clause 2.3(b), receiving additional information from Aurizon Network reasonably required to make any determination under clauses 3, 4 or 5 (as applicable) as requested by the QCA,then the QCA is taken to have made a determination to accept Aurizon Network’s request.”

Clauses 3, 4 and 5 refer to the assessment of the prudency of scope, standard and cost.

The same principles have been applied if Aurizon Network has submitted an Asset Management Plan (clause 2.4(e)) or Procurement Strategy (clause 6.1(f)). The same timeframes have been included for the Asset Management Plan however shorter timeframes (twenty business days) have been included for the Procurement Strategy, on the assumption that this is likely to be a shorter and/or less complex document.

10.8.3.4 Equity raising costs

Aurizon Network has included a new clause (1.5) in Schedule E setting out the process that will be applied to estimate incremental equity raising costs in relation to the funding of new capital expenditure. It is proposed that if Aurizon Network calculates such an allowance consistent with this process, and the relevant capital expenditure is accepted as prudent by the QCA, it should be able to include these costs in the amount that is rolled into the RAB. Clause 1.5 states:

- “(a) After the end of the Term, Aurizon Network will calculate an amount for equity raising costs in relation to capital expenditure projects occurring during the Term where the capital expenditure for that project has been accepted as prudent by the QCA, having regard to:
 - (i) the aggregate of the Adjusted System Allowable Revenue determined over the Term under clause 4.3 (b) of schedule F, excluding any Revenue Adjustment Amounts, over the Term;
 - (ii) the Approved Capital Expenditure amounts over the Term;
 - (iii) the tax depreciation that should have applied for the Approved Capital Expenditure (which must be the same as that used in clause 7(c)(iii) to calculate the tax depreciation component for the Capital Expenditure Carryover Account);
 - (iv) the tax payable based on the tax depreciation that should have applied for the Approved Capital Expenditure excluding imputation; and
 - (v) the following parameters :

- (A) dividend reinvestment of 30%;
- (B) dividend reinvestment plan cost of 1% of the total dividends reinvested;
- (C) dividend imputation payout ratio of 70%; and
- (D) seasoned equity raising cost of 3% of total external equity requirements,

to the extent that Aurizon Network can demonstrate that the need to raise new equity was reasonably required having regard to maintaining the debt percentage of the Regulatory Asset Base over the Term that has been assumed in the Approved WACC.

- (b) The amount calculated in clause 1.5(a) will be allocated amongst the Coal Systems on a pro rated basis by reference to the Approved Capital Expenditure over the Term that will, subject to the QCA's acceptance, be applied in determining the Reference tariff for that Coal System for the next regulatory period.”

10.8.3.5 Acceptance of capital expenditure

The general process for acceptance of capital expenditure is contained in clause 2 of Schedule E. The provisions have been redrafted to improve clarity and ease of understanding. This includes making it clear that the same prudence tests apply whether Aurizon Network is seeking ex post approval of a completed project, or pre-approval. It also retains the provisions allowing for the approval of an Asset Management Plan (which can feed into the assessment of prudence of scope) and Procurement Strategy (which relates to the assessment of prudence of cost). The audit provisions in relation to the latter are linked to the audit provisions in Part 10, on the basis that the same process should apply. This also materially simplifies the drafting.

An overview of the operation of these provisions is provided in clause 2.1, which states:

- “(a) This clause 2 refers to various determinations that the QCA may be requested to make in order for capital expenditure to be included in the Regulatory Asset Base.
- (b) These determinations may be made:
 - (i) in response to a report provided to it under clause 1.3; or
 - (ii) in some instances, in advance of the capital expenditure being incurred – for example, regarding the prudence of scope of a capital expenditure project.
- (c) Aurizon Network may seek the QCA's acceptance of prudence of scope (clause 3) and prudence of standard of works (clause 4). Alternatively, Aurizon Network may seek acceptance of either or both of these matters through a vote of Interested Participants under clause 8.10 of this Undertaking. If such a vote is successful, then the QCA must accept the outcome of that vote. If such a vote is unsuccessful, Aurizon Network is not prevented from seeking the QCA's acceptance of that matter or a future vote.
- (d) However, certain decisions may only be made by the QCA including:
 - (i) acceptance of the prudence of cost of a capital expenditure project (clause 5); and
 - (ii) acceptance of an Asset Management Plan (clause 2.4) or a procurement strategy (clause 6.1).”

Clause 2.2(b) also makes it clear that the acceptance of a cost allocation methodology by Interested Participants as part of the development of a proposed Reference Tariff Variation “is not a vote in relation to the prudence of scope, standard of works or cost for the relevant capital expenditure project”.

Otherwise, the intent of the principles underpinning the assessment of the prudence of scope, standard and cost is largely consistent with the 2010 Undertaking.

10.8.3.6 Condition Based Assessment

Aurizon Network has not included clause 5 of Schedule A in the 2010 Undertaking in the 2013 Undertaking.

11 Operating trains on the network

Summary:

The safe and efficient operation of trains on the network is a critical objective for Aurizon Network. This includes two main considerations:

- the management of interface risks – that is, safety interdependencies, environmental impacts and the physical interface requirements between trains and the track; and
- the operational management of the network – how train services are scheduled and operated, and how traffic is managed on the network.

The processes for operating trains on the network have been developed over the last 12 years and operate successfully – as a result, the way in which these issues will be managed remains substantially unchanged.

The key issues for the 2013 Undertaking are:

- the safety and environmental risk assessment processes have been combined into a single interface risk management process;
- to reduce duplication, the interface risk management process has been moved to the standard access agreements, with the 2013 Undertaking providing for this process to be used prior to finalisation of the agreement, where required;
- to clarify that the Network Management Principles establish the framework for management of train services, with the purpose of the System Rules being to provide further explanation about the application of this framework for an individual system; and
- providing increased clarity and transparency around elements of the scheduling process, in particular the Contested Train Path Decision Principles, which now includes greater detail in the criteria for how paths will be allocated between operators when all scheduled requests cannot be met, as well as a regular TSE reconciliation report to enhance transparency in actual usage vs contracted usage.

Interface risk considerations are covered in Part 4 and in the SAA. Network management is covered in Part 7 of the 2013 Undertaking and in Schedule H. Connecting infrastructure provisions have been moved to Part 9 (Connecting Private Infrastructure).

11.1 Introduction

The strong interdependence between rail infrastructure and above rail services in terms of safety, technical, operational and environmental standards means that there a number of non-price parameters that must be agreed before trains may operate on the network. Over the last 12 years, Aurizon Network has developed a range of rail safety, rolling stock, environmental and operational interface requirements under which access to the rail infrastructure will be offered, in order to maintain the integrity of the rail infrastructure and to meet Aurizon Network's statutory obligations.

Two main considerations for the operation of trains on the network are:

- *The management of interface risks*, which relates to safety interdependencies, the management of potential environmental impacts of running trains, the potential physical impacts of trains operating on the rail infrastructure and matters related to infrastructure that connects to the network; and
- *The operational management of the network*, which includes the processes and decision making rules for scheduling train services on the network, and for the provision of train control in the day of operations environment.

Increasing rail system interconnection, ongoing demand growth and vigorous competition in the above-rail market, have increased the operational complexity of the CQCN. This, in turn, has heightened the need to manage interface risks and ensure appropriate network controls, including with respect to scheduling, planning and day-to-day train control across the network.

11.2 Aurizon Network's approach

The 2013 Undertaking substantively maintains the 2010 Undertaking's obligations relating to the operation of trains in the CQCN.

Interface standards and network management form part of the non-price terms and conditions of access. As a vertically integrated access provider, Aurizon Network is required to ensure that the interface requirements effectively enable Aurizon Network to manage the risks associated with trains operating on its network (and in doing so comply with its statutory safety and environmental obligations, as noted below), while not hindering access to the below-rail service or unfairly differentiating between access seekers. In this respect, the basic elements of the interface risk management requirements were established during the development of the 2001 Undertaking. The framework created at that time has been retained over the subsequent access undertakings with relatively few amendments and has proven effective.

The framework for managing operators' use of the network, as set out in the Network Management Principles, has also proven to be effective with only minor modifications through prior undertakings. Over the last 12 years, the primary adjustment to this framework has been the development of System Rules, which are designed to provide greater detail around how the Network Management Principles will be applied in individual systems.

The modifications proposed in the 2013 Undertaking are to enhance transparency, improve efficiency and resolve some uncertainties about the application of the framework.

In addition to meeting the requirements of Part 5 the QCA Act, the 2013 Undertaking must also meet the requirements of the *Environmental Protection Act 1994*, the *Transport (Rail Safety) Act 2010* (Transport Act), and various safety-related and other standards imposed by the Queensland safety regulator.¹⁹³

It is also important to note that the Rail Safety National Law and the National Rail Safety Regulator are expected to commence in Queensland later in 2013. It is not currently anticipated that the 2013 Undertaking will need to be amended to reflect the new rail safety laws.

¹⁹³ Department of Transport and Main Roads: Legislation and Standards website, accessed 28 February 2013 at: <http://www.tmr.qld.gov.au/Safety/Rail-safety/Legislation-and-standards.aspx>

11.3 Interface risk considerations

Aurizon Network and an access holder are each responsible for the joint management of the interface risks associated with the operation of trains on the network. This includes the management of safety-related issues, environmental impacts, and the physical impact of trains operating on the rail infrastructure. It also encompasses interface issues that arise in relation to interconnecting infrastructure.

The 2013 Undertaking continues to provide that interface risk management parameters must be agreed between an access provider and an access seeker as part of an access agreement. The major provisions around interface risk management include that an operator must conduct an interface risk assessment jointly with Aurizon Network and agree appropriate controls and measures to manage all interface risks. These measures are recorded in Interface Risk Management Plan (IRMP). The safety and environment risk management plans of each party must then reflect the IRMP. As part of this, rollingstock must be certified to comply with the agreed rollingstock interface standards.

11.3.1 UT4 Proposal

No material changes have been proposed to the interface risk framework in the 2013 Undertaking. However, in the interests of simplifying the access undertaking and removing duplication, Aurizon Network has proposed minor changes to the way the provisions are presented. The most significant changes are those related to access to information, where Aurizon Network has committed to improve access to information, and consolidation of the interface and environmental risk assessments into a single process.

11.3.1.1 Integrated risk assessment and EMP

Under the 2010 Undertaking, separate risk assessment processes are required for interface risks and environmental risks. This reflects that the legal responsibilities of Aurizon Network and the access seeker vary slightly under the *Environmental Protection Act 1994* and the *Transport (Rail Safety) Act 2010* in relation to the performance of the risk assessments and identification of controls.

However, in practice, interface and environmental risks have both been considered as part of a single risk assessment. Consistent with this, the 2013 Undertaking requires only a single risk assessment, including an assessment of both interface and environmental hazards and risks, be undertaken prior to the development of a IRMP. This eliminates the need for a separate environmental investigation and risk management report (EIRMR) formerly provided for in Schedule H of the 2010 Undertaking. The IRMP will include an environmental management plan (EMP).

This aligns the regulatory regime with current practice in Queensland and other jurisdictions and goes some way to reducing compliance costs.

11.3.1.2 Removal of Interface Considerations from undertaking

Duplication between the 2013 Undertaking and the standard access agreement has been reduced by removing most of the detailed substance of the interface risk management section from the access undertaking (previously set out in Part 8 of the 2010 Undertaking) and including this in the Standard Access Agreement. As discussed in section 6.5.2, new clauses 4.9.2(b)-(c) have now been included in the 2013 Undertaking to address the situation where the parties wish to commence the interface risk assessment process prior to execution of an access agreement.

Consistent with Aurizon Network's focus on facilitating negotiated solutions, the interface risk management arrangements may either be either wholly or partially negotiated during the negotiation for

access or after an access agreement has been executed. This provides flexibility for access seekers that may wish to secure access in advance of the date that it is required. For example, where an access agreement is negotiated years before the access rights are intended to be used, there is little point in developing an IRMP, as the risks will likely change prior to the commencement of operations. In this case, it is more sensible that the process be undertaken as a requirement under the access agreement, rather than as a precondition to the execution of an access agreement. To the extent that some certainty on risk management is required prior to the execution of an access agreement, increased flexibility during the negotiation for access allows for relevant risk positions to be identified at various stages of the negotiation process. For example, clarification around rollingstock requirements allows an assessment of the likely cost impacts of meeting relevant safety and risk parameters prior to an access agreement being concluded.

Disputes arising in relation to interface risk during the negotiation of an access agreement remain covered by Part 10 of the 2013 Undertaking, while disputes under an access agreement are dealt with under that agreement. These modifications are consistent with Aurizon Networks objective to simplify the undertaking while maintaining interface risk management as a negotiable part of an access agreement.¹⁹⁴

11.3.1.3 Improved access to standards, protocols and procedures

As discussed in section 6.4.5, the 2013 Undertaking provides greater transparency around the process by which an operator gains access to information required to operate on the network, including the safety standards, protocols and procedures with which operators must comply. In particular, Aurizon Network commits to:

- make the Rollingstock Interface Standards available at no charge on its website, replacing the requirement for a request to be lodged with a payment of a \$1,000 fee; and
- ensure that certain “Preliminary Information” previously outlined in Schedule C of the 2010 Undertaking and now included at Schedule A of the 2013 Undertaking, will also be available on the website rather than on request.

“Additional Information” and “Capacity Information” are available upon request to an access seeker once negotiation for access has commenced. Some of this information will be provided subject to an access seeker signing a confidentiality agreement.

In addition, the SAA will more clearly identify the relevant document controller for the various standards that an operator is required to comply with, so that where organisational changes occur during the term of the access agreement, accountability for the processes can be maintained.

11.4 Network Management

Network management encompasses the operational decisions that Aurizon Network must take to enable it to make contracted train paths available for use by operators. As outlined in Chapter 8, the supply chain has become increasingly complex with network interconnection, the development of new mines, multiple port operating modes and the commencement of third party above rail operators.

It is expected that, during the UT4 period, there will be increased incidence of capacity transfers between different mine – port combinations. In addition, with the introduction of the Standard Access Agreement (Alternate Form), end users will have the ability to nominate alternate operators during the term of an

¹⁹⁴ It should be noted that *Transport (Rail Safety) Act 2010* and various environmental legislation, as well as the relevant accreditation processes underpin the requirements that must be addressed prior to trains being able to operate on the Network.

access agreement. This has contributed to increased demand for better coordination over the supply chain, further emphasising the need for network management processes which can be clearly understood by relevant stakeholders. To address this, Aurizon Network has proposed changes to the NMP to provide greater transparency and improved administration relating to the scheduling of train service entitlements to the benefit of both Aurizon Network and access holders.

In the 2010 Undertaking, Aurizon Network introduced System Rules to “transparently document the train planning, scheduling and control parameters that underpin the efficient operation of train services in each system”¹⁹⁵ At that time, System Rules had not yet been developed and their interface with the Network Management Principles was conceptual. Since then, Aurizon Network, following considerable consultation with stakeholders, developed System Rules for both the Goonyella System and the Capricornia System, which were then lodged with the QCA for approval. The QCA released its draft decision on the Capricornia System Rules in April 2013.

This process has highlighted some uncertainty about the respective roles of the NMP and the System Rules. As a result, Aurizon Network, whilst substantively maintaining the obligations in the 2010 Undertaking, has made some amendments to the NMP to clarify that the NMP establishes the overarching obligations with regard to planning and scheduling of services, whilst retaining the transparency and flexibility provided by the System Rules in providing greater detail around the planning and scheduling mechanisms to address system specific operating characteristics.

11.4.1 UT4 Proposal

The NMP describe the Master Train Plan (MTP) principles, the Intermediate Train Plan (ITP) principles and the Daily Train Plan (DTP) principles which guide the process of scheduling trains to ensure that Aurizon Network meets its contracted train service entitlement (TSE) obligations. The implementation of these principles is explained in greater detail in the relevant system rules, which are separate documents developed in consultation with stakeholders, that address the issues relevant to each specific rail system.

The NMP also sets out the Contested Train Path Principles at Clause 7.3 of Schedule H which guide the allocation methodology for mutually exclusive requests by two or more parties for a train path during the planning and development of the ITP. The Train Control Principles set out how Aurizon Network will manage the network to facilitate the safe running of train services and network possessions in delivering the DTP as scheduled. Within the day of operations environment, the Traffic Management Decision Making Matrix sets out the rules that guide the decisions of a train controller in resolving conflicts in the day to day management of trains, to maximise system throughput.

The NMP is provided for in Part 7.6 of the 2013 Undertaking, which also includes an obligation for compliance with the System Rules. The NMP itself is contained in Schedule H, while the individual System Rules related to the relevant coal systems are separate documents, which are maintained outside the access undertaking. Clause 7.6.4 of the 2013 Undertaking sets out how Aurizon Network may amend the System Rules, subject to appropriate consultation with affected stakeholders. Dispute resolution in the event that a dispute related to an amendment to the system rules arises, is available through firstly a submission to Aurizon Network, supported by a provision for referral to the QCA should a resolution not be reached. This is addressed in clauses 7.6.4 (b), (c) and (d) of the 2013 Undertaking.

¹⁹⁵ QR Network, QR Network’s 2009 Access Undertaking, Submission to the QCA, Volume 1 Attachment B QR Network’s Principles Papers on Capacity Management and Network Management Principles, page 3

The 2013 Undertaking retains the existing obligations in the NMP while also clarifying the objectives and application, particularly in relation to the contested train path process. An effort has also been made to improve transparency, through, for example, a new requirement for Aurizon Network to provide a weekly Train Service Entitlement (TSE) reconciliation report which will enhance transparency and, hence, accountability, around the consumption of TSEs.

Importantly, Aurizon Network is seeking feedback from operators and end users on the effectiveness of these modified procedures in achieving the two key objectives:

- to provide an effective and transparent process in accordance with which Aurizon Network will schedule train services consistent with an access holder's TSE, particularly in the face of variability in use; and
- to provide improved clarity around how the NMP apply.

11.4.2 Master Train Plan Principles

The MTP is the tool used by Aurizon Network to identify how capacity entitlements, as established in access agreements, can be provided as scheduled train paths. In other words, the MTP reflects the translation of train service entitlements, as specified in individual access agreements, into a consolidated format that can be readily used for scheduling purposes.

In developing the MTP, Aurizon Network, in compliance with the obligations under the access agreements, includes the impact of temporary closures of the network for the purposes of maintenance, construction or other activities that may affect the safety of any person or property. The consultation obligations included in the NMP in relation to changes to the MTP are of considerable importance to Access Holders and have been retained in the 2013 Undertaking – with changes to simplify the drafting and make clearer Aurizon Network's obligations in relation to that consultation.

Under the 2013 Undertaking, the MTP will be updated in line with the obligations in the NMP and in any event no less than once per year.

11.4.3 Intermediate Train Plan Principles

The planning process for the CQCR systems includes a sequence of scheduling steps to translate the cyclic train service entitlement into the train schedule for a particular day. Critical within this is the development of an intermediate train plan (ITP). The provisions related to the development of the ITP have not been materially changed from those included in the 2010 Undertaking.

In order to clarify the planning period for which the ITP applies, Aurizon Network has introduced the concept of the "Relevant Period". The default period is identified as the seven days from Monday to Sunday, but the definition of Relevant Period allows for the System Rules to override this default period and determine the appropriate intermediate planning period (for which the ITP is then developed) for the specific system (or combination of systems).

11.4.4 Daily Train Plan Principles

The Daily Train Plan (DTP) is produced for each day, drawn from the ITP and incorporating scheduling adjustments as required. Like the MTP, the consultation provisions in relation to scheduling the DTP in variation to the ITP is of considerable importance to access holders. These provisions have not been materially changed from those included in the 2010 Undertaking other than to simplify the drafting to allow stakeholders to more easily understand the obligations.

Clarification has been included in the DTP principles in relation to how actual performance will be monitored. The intent of the NMP has always been that the DTP will be used as base information for performance monitoring.¹⁹⁶ However, on the face of it, the drafting of the 2010 Undertaking did not make this intent clear. Aurizon Network has included a new clause 5.5 in the NMP in relation to the application of a DTP to performance targets. This amendment clarifies that the DTP will be used as base information for performance monitoring, including for the purposes of the annual operational data report under clause 10.1.5.

11.4.5 Train Control Principles

The Train Control Principles have remained substantially unchanged since the 2001 Access Undertaking and provide guidance about how Aurizon Network will manage trains in the day of operations environment. They apply along with the Traffic Management Decision Making Matrix at clause 8, which are provided to assist train controllers to resolve train conflicts in a manner that is consistent with the Train Control Principles.

An area that has not specifically been addressed the Traffic Management Decision Making Matrix is how train controllers manage train services following incidents on the rail infrastructure, and where the objective is to return to the DTP as soon as practicable.¹⁹⁷ Where an incident has occurred, it reduces the number of paths available on the network and has consequential delays on other services scheduled in the DTP. With increased above rail competition, greater certainty is required for both Aurizon Network and access holders as to how these conflicts will be addressed.

In line with the obligations in access agreements, Aurizon Network is responsible for the overall coordination and management of incident responses and may, subject to using reasonable efforts to consult with the access holder, take any action it considers reasonably necessary to recommence services as soon as possible. Reflecting this, a new principle has been included in relation to train control. This principle, at clause 7.4 of schedule H, clarifies that, provided Aurizon Network complies with the general Train Control Principles and uses reasonable endeavours to return to normal Train Control procedures for resolving conflicts as soon as reasonably practicable, it may depart from the Traffic Management Decision Making Matrix:

“following a Network Incident or Force Majeure Event which materially affects Aurizon Network’s ability to achieve the DTP.”

Importantly this departure from the resolution of conflicts via the Traffic Management Decision Making Matrix is only for the purpose of maximising the throughput of trains and restoring normal operations.

11.4.6 System Rules

The system rules form part of the NMP and provide relevant system specific information that builds on the NMP and other provisions in the 2013 Undertaking. Specifically, the system rules specify in greater detail the way in which Aurizon Network will plan, schedule and control the operation of train services in the coal system, or combination of coal systems, to which the relevant system rules pertain. The system rules do not change Aurizon Network’s obligations in relation to capacity management, but rather seek to make explicit how the NMP will be applied to a particular coal system.

¹⁹⁶ QCA, 1999 DAU Final Decision, July 2001, p.176

¹⁹⁷ QCA, 1999 DAU Final Decision, July 2001, p.176 *“The daily train plan will be the principal reference document from which train controllers will carry out their normal duties of train routing and dispatch, as well as incident management where trains run differently from their expected paths”*

Aurizon Network's obligations in relation to developing, maintaining and amending the system rules are substantially the same as was included in the 2010 Undertaking, but have been moved to Part 7.6 of 2013 Undertaking, including obligations regarding stakeholder consultation. System rules applicable to an individual coal system sit outside the 2013 Undertaking, but as part of the NMP, compliance with the obligations contained in the system rules is mandated through the system wide requirements contained in the relevant access agreement.

11.4.7 Contested Train Path decision-making process

11.4.7.1 Principles for allocating contested train paths

The contested train path decision making process was included in the 2001 Undertaking, to provide transparency on the way in which train services would be allocated between access holders where more than one access holder is vying for the same path in the ITP. Aurizon Network's obligation is to deliver to access holders the contracted train service entitlement and likewise access holders rely on this contracted entitlement to meet their own contractual obligations with their customers. Increased competition on the CQCN, greater connectivity between systems and the capacity constrained nature of the CQCN in recent years has led to greater use and reliance on the contested train path decision making process when scheduling train paths. With the development of the Standard Access Agreement (Alternate Form) which gives end users the ability to nominate alternate operators within the intermediate scheduling environment, the efficient recording and administration of TSEs will be of significant importance in the management of entitlements. In order to deliver this increased transparency, Aurizon Network has introduced a weekly report that will be provided to access holders.

The increased reliance on the contested train path decision making process in recent years has also highlighted that there are a significant number of permutations presented to schedulers which would promote the efficient use of the rail infrastructure and are consistent with the obligations in the access agreements, but which are not addressed in the current decision making matrix.

In giving consideration to how to address this within the NMP and System Rules framework, Aurizon Network has proposed to include:

1. a statement of objectives in the contested train path decision making matrix to guide decisions; and
2. to capture hierarchical principles in the NMP, with the System Rules then being able to be amended to provide the appropriate level of prescription in applying these principles recognising the specific circumstance and system characteristics.

In addition, the development of the System Rules have highlighted that the contested train path matrix, as drafted in the 2010 Undertaking, results in some uncertainty with regard to when, for the purposes of an access agreement, a train path will be 'consumed' or considered 'used'. To address this uncertainty, the contested train path matrix now includes some fundamental rules regarding the consumption of TSEs. Of importance to both Aurizon Network and access holders, these rules continue to allow for the different levels of scheduling flexibility in each system as described in the System Rules.

Cross system traffic path allocation is not specifically dealt with in the CTPP. However the general principles apply when allocating contested train paths across systems and the relevant System Rules will deal with any system specific issues. Aurizon Network considers there may be scope for further stakeholder input in dealing with cross system traffic during the development of the relevant System Rules.

The specific amendments are discussed further in the sections following.

11.4.7.2 Purpose

The drafting in the 2013 Undertaking has been clarified to make clear that the application of the CTPP refers to the scheduling of trains in the ITP and is not the framework by which decisions are made in the day of operations environment.

In addition a purpose clause 7.1 has been added to clarify that the set of principles by which Aurizon Network allocates priority for a Contested Train Path during the development of the ITP aims to ensure that:

- Aurizon Network meets its contractual obligations to access holders; and
- access holders are not unfairly differentiated between, in the use of their TSEs.

11.4.7.3 Contested Train Path Principles order of priority

The Contested Train Path Principles at clause 8.3 of Schedule H set out, in order of priority, the way that Aurizon Network will determine which operator is allocated a contested train path. As previously noted, these principles apply as a scheduling tool during the development of the ITP and do not apply in the day of operation environment.

The access agreement defines what is the access holder's access rights. In simple terms, it outlines the extent to which, and the circumstances in which that, the access holder is able to operate on the rail infrastructure. It also includes the obligations of Aurizon Network in providing the 'below rail services' for the access holder to use their contracted train service entitlement.

The MTP is the tool used by Aurizon Network that sets out how it will deliver the contracted access rights. If the access holder considers that the MTP does not accurately reflect their access rights, they are able to seek dispute resolution under the access agreement. For the purposes of planning and scheduling the MTP reflects the contracted entitlement and establishes the basis upon which that contracted entitlement is converted into a schedule in the ITP. For this reason, the contested train path principles have clarified that it is the MTP that will be used for the purpose of assessing whether a request for a train path is in line with the access agreement.

In deciding priorities for allocating a contested train path, the priorities set out in the 2010 Undertaking have been clarified and augmented by additional criteria designed to maintain the non-discriminatory treatment of access holders, and to align with Aurizon Network's contractual obligation to access holders.

In particular, priority will be given in order of precedence as set out in the following list:

1. Priority will first be given to the operator whose request for the contested train path is within the scope of the access holder's TSE as set out in the MTP.
2. If this is the case for more than one operator, priority will then be given to reflect an agreement (if any) between the competing access holders about how the path should be allocated.
3. Failing that, priority will be given to the access holder whose request for the contested train path is within the scope of the access holder's TSE, as adjusted for Aurizon Network cause. It is only appropriate that, to the extent that an access holder has not received its contracted TSE due to

the fault of Aurizon Network, that this be rectified as soon as possible through the scheduling of an alternate path.

The assessment of whether an access holder is behind as a result of an Aurizon Network cause has been elevated in the priority order as compared to the 2010 Undertaking. However, the nature of the assessment has also changed to be a 'screening test' rather than an 'absolute allocation rule'. That is, where more than one access holder is behind due to an Aurizon Network cause, the contested path cannot be allocated on the basis of this principle and the schedule must then be allocated based on an assessment against the next principle. As such, this provision now effectively 'screens out' those access seekers that are ahead of their TSE entitlement from application of the remaining criteria.

A worked example of the operation of the allocation criteria is provided in the table below. Based on this principle, Access Holder 3 is not behind and would not be given priority, however as the contested train path would be within the scope of the TSE adjusted for Aurizon Network Cause for both Access Holder 1 and 2 the allocation of the contested path between these two access seekers must then assess against the next principle.

Table 18 Example of contested train path allocation – adjustment for Aurizon Network Cause

	<u>Access Holder 1</u>	<u>Access Holder 2</u>	<u>Access Holder 3</u>
Aurizon Network Cause Year to date less	2	3	0
the greater of zero	0	0	0
and Train Service Entitlement used for the Year to date less	41	39	41
Train Service Entitlement set out in the MTP Year to date	40	40	40
	1	-1	1
Train Service Entitlement Adjusted for Aurizon Network Cause	1	3	-1

4. If still contested, the train path will then be assessed based on criterion similar to the offsetting of over-railed and under-railed services included in clause (c)(ii) of Appendix 2, Schedule G of the 2010 Undertaking. Under this principle in the 2013 Undertaking, the train path will be allocated to the access holder whose request for the contested train path is within the scope of its TSE for that system (as reflected in the MTP) for that access seeker's 'pool' of mainline paths. Note that 'mainline' refers to the sections from:

- for the Goonyella system - Coppabella to Jilalan;
- for the Blackwater system - Burngrove to Parana;
- for the Newlands system - North Goonyella to Pring; and
- for the Moura system - Byelle junction and Boundary Hill junction.

The consideration of an access holder's 'pool' of TSEs assists Aurizon Network to meet its contractual TSE obligations for the mainline, and reflects that providing there is existing capacity on the branchline, the efficient use of the system is facilitated by the access holder managing the scheduling variability in accordance with their rail haulage agreements.

5. If the contested path is still not allocated, a further new criterion has been added such that the contested train path will be allocated to the access holder whose request will have the least capacity impact on the system. An example is where there are competing requests that are outside the scope of the TSE due to a change of origin. If both requests would be within the pool

of mainline paths, the request where the new origin is on the same branch line would have priority over a similar request for a change in origin where the new origin is on a different branch line. Another example would be where there are two competing requests that are in addition to an access seeker's pooled TSEs – this rule may be used to give priority to the requested path that can be accommodated with no material impact on other services.

6. If the contested path cannot be allocated on the basis of 'least capacity impact', a new criterion has been included providing that Aurizon Network will allocate the train path to an access holder whose TSE may be impacted by future capacity constraints, including for major maintenance or planned possessions as reflected in the MTP. This criterion facilitates the alignment between participants in the supply chain in relation to planning for major outages of the supply chain;

The two principles following on from the 'future capacity constraints' principle for the allocation of a contested train path are based on the current clause (a)(iv) of Appendix 2, Schedule H of the 2010 Undertaking, which provides for an access holder being 'most behind' against their contracted entitlement.

7. Principle 7 gives priority to an access holder who is most behind in relation to their contractual entitlements for the access provision period; and
8. Principle 8 then assesses 'most behind' against the annual entitlement.

It is anticipated that the System Rules will include the formulae that will be used to assess these principles and will be based on the worked example provided in the following table. As shown in the example, Access Holder 1 would be allocated the contested train path on the basis as being most behind for the relevant Year.

Table 19 Example of contested train path principles - calculations for ‘most behind’

		Access Holder 1	Access Holder 2	Access Holder 3
Assumptions				
Number of weeks in year		52	52	52
TSE per week		10	20	6
Year to date use and remaining balance				
The Train Paths set out in the MTP at the commencement of that Year for that origin to destination pair or as amended from time to time		520	1040	312
<i>less</i>	Year to date use	9	20	11
	The number of Train Services used in accordance with the train service entitlement for that origin to destination pair in the Year to date (as recorded in the previous TSE Reconciliation Reports for the preceding Relevant Periods in that Year) - which at the start of the Year is zero	0	0	0
<i>plus</i>	The higher of operated or scheduled in the Relevant Period	9	20	11
	Operated; or Scheduled	9	9	9
		8	20	11
	The number of Train Paths finally scheduled in accordance with the Train Service Entitlement (as per clause 8.2(c)(i)) for the Relevant Period for that origin to destination pair.	10	22	12
<i>less</i>	The number of scheduled Train Paths for that origin to destination pair scheduled for that Year (in accordance with the Train Service Entitlement) but for which Train Services did not operate due to Aurizon Network Cause	2	2	1
Remaining balance of Train Service Entitlement for the Year as per clause 8.2(a)(ii)(B)		511	1020	301
Access Holder most behind for year to date				
Access Holder forecast Train Service Entitlement for that Year		519	1040	317
<i>plus</i>	Train Service Entitlement for the relevant origin to destination pair used in the Year to date	9	20	11
	Remaining balance of the Train Service Entitlement for that origin to destination as set out in the MTP	510	1020	306
<i>compared to</i>	The Train Paths set out in the MTP at the commencement of that Year for that origin to destination pair or as amended from time to time	520	1040	312
	Percentage	99.81%	100.00%	101.60%

9. Finally, where none of these criterion results in Aurizon Network being able to allocate priority, Aurizon Network will unilaterally determine which train service is scheduled, and will keep a record of that decision and the reasoning behind that decision. As with the 2010 Undertaking, Aurizon Network will seek to ensure that, over time, no access holder is favoured over another and, where possible, if one access holder is favoured this time, taking into account the TSEs held by an access holder, next time they are not favoured.

11.4.7.4 Used or consumed TSEs

“Used” TSEs for the purposes of allocating a contested train path will be the greater of:

- the train services operated; or
- the train paths scheduled.

Train services operated will reflect actual trains run. Train services scheduled will be defined by the relevant system rules for the particular system, which set out the scheduling processes and the relevant scheduling 'lock down' period, after which the trains in the plan are treated as scheduled.¹⁹⁸

Whilst it is generally accepted that there are efficiency benefits for a rail system in having greater discipline in planning over longer periods, the operating characteristics of the supply chain, are a key determinant of the extent of flexibility provided. For example, in the Goonyella system, rail operations typically provide the 'flex' in the supply chain and, as such, train orders are not 'locked down' until 48 hours before operation. Importantly, this scheduling flexibility must apply to both parties. That is, an access holder does not have to commit to a train order until it is 'locked down' or finalised in the 48 hour environment. Equally, Aurizon Network may vary the scheduled operation of services, for example to reflect varied train orders or as a result of an urgent possession, up until that same 'locked down' 48 hour period.

The contested train path matrix in the 2013 Undertaking, has maintained the concept included in the 2010 Undertaking of offsetting "over-railings" against "under-railings". Specifically 8.2(c)(iii) provides that:

"if:

- (A) an Access Holder submits Train Orders for less than its Train Service Entitlement for a particular origin to destination pair as set out in the MTP for a Relevant Period ("First Entitlement"); and
- (B) that Access Holder also submits Train Orders for a different Train Service Entitlement for a particular origin to destination pair for a Relevant Period in excess of its Train Service Entitlement for that origin destination pair as set out in the MTP ("Additional Path based on Pooled Entitlement"),

and the train path is allocated to the Additional Path based on Pooled Entitlement, that path will be deemed to be scheduled and operated against the First Entitlement."

The 2013 Undertaking has clarified that in determining the higher of operated services or scheduled paths when determining whether a TSE has been 'used', that the number of Train Paths scheduled will be reduced for any Train Paths not provided due to Aurizon Network Cause. In addition the 2013 Undertaking provides that where a scheduled train path is varied in accordance with the NMP, the originally scheduled path and the varied path will not be counted as two scheduled paths.

11.4.7.5 TSE reconciliation report

Transparency around the consumption of TSEs for the purposes of allocating a contested train path, has been boosted through the introduction of a reconciliation report of TSE consumption. It is intended that this report will be provided to aid the intermediate train plan scheduling process. Flexibility has been provided in the frequency of the report to allow for the differences between systems in the timeframe that may apply to the ITP, by referencing the defined term "Relevant Period". As discussed in relation to the development of the ITP above, the Relevant Period by default is the week from Monday to Sunday or as defined in the System Rules.

¹⁹⁸ Note that different systems operate with different levels of flexibility depending on the requirements of the unloading facility. For example, the Goonyella system currently operates on a 48 hour 'lock down' period which provides scheduling flexibility until 48 hours prior to the Daily Train Plan commencing. The Blackwater system operates on a seven day 'lock down' in which trains are considered scheduled seven days prior to the Daily Train Plan commencing.

A new concept of “Access Provision Period” has also been introduced. The Access Provision Period has been included to provide transparency around Aurizon Network’s obligation to provide TSEs, which is generally defined as a month.

The report will then show TSEs that have been ‘used’ (or consumed) and the remaining balances for the Relevant Period, the Access Provision Period and the year (which is defined as the financial year to align with the concept of an annual train service entitlement).

It is important to note that the weekly TSE reconciliation report will be used only for the purposes of developing the ITP (that is in scheduling trains) and will not affect the annual take or pay obligations.¹⁹⁹

¹⁹⁹ Note that take or pay provisions are included in the individual access agreements and generally involve a ‘system trigger’ where actual railings fail to meet a specified level against forecast. To the extent that system throughput is maximised, the system is less likely to ‘trigger’ for the purposes of take or Pay. However, the TSE reconciliation report will not impact the consumption of TSEs for the purposes of take or pay.

12 Maintaining accountability

Summary:

The accountability and compliance framework in the access undertaking provides all stakeholders with confidence that the regulatory regime is effective and that participants are accountable for their performance under the access framework. In developing this framework, Aurizon Network's objective is to ensure that the costs of regulation do not outweigh the benefits and, as a result, has established criteria for the most appropriate accountability mechanisms for the circumstances:

- Concerns by access seekers on individual issues are most efficiently addressed through the dispute resolution and complaints handling mechanisms;
- Reporting is aimed at promoting transparency about Aurizon Network's compliance with its access obligations and providing relevant information to access seekers/holders and the QCA;
- Auditing is appropriate where an issue relates to Aurizon Network's systematic performance of a set of access obligations – recognising that this may be triggered by a specific issue that has not been able to be resolved through dispute resolution or the complaints handling mechanism.

These criteria have been implemented in the 2013 Undertaking, with the key changes from the 2010 Undertaking including:

- Accountability to individual users:
 - the dispute resolution process has been enhanced, with a new stage of mediation included;
 - a broader scope of complaint investigation is provided in relation to ringfencing obligations;
- Reporting framework:
 - the timing of the operational performance report has been adjusted to reflect Aurizon Network's continuous disclosure requirements;
 - information verification measures have been amended in recognition of the greater scrutiny provided by public-listing;
- Audits:
 - Aurizon Network's financial statements will be certified as accurate by its executive officer;
 - ongoing obligations for annual audits have been removed, however the QCA retains the ability to request an audit when it has reasonable grounds;
 - the requirement for QCA approval of the auditor has been removed in light of greater scrutiny on corporate governance of a publicly listed company and the professional standards of independence required of auditors.

The requirements for the QCA in making decisions have been retained from the 2010 Undertaking.

These accountability arrangements are reflected in Parts 10 (Reporting) and 11 (Dispute Resolution and Decision Making) of the 2013 Undertaking.

12.1 Introduction

Accountability for performance and compliance monitoring are fundamental aspects of a regulatory regime. The objective is to provide all stakeholders with confidence that the regulatory regime is effective, and that participants are accountable for their own performance under an open access framework. Aurizon Network accepts that information transparency, together with user confidence in its compliance, are each important pre-conditions to genuine commercial negotiation, and has thus proposed the retention of a comprehensive suite of accountability mechanisms in the 2013 Undertaking.

That noted, cost-effectiveness (on a cost-benefit basis) remains the overriding objective of the 2013 Undertaking. In some cases, the costs associated with 2010 Undertaking measures outweigh their benefits, or there are more cost-effective ways to achieve the same outcome. Aurizon Network therefore considers that the focus for the 2013 Undertaking should be on identifying more cost-effective ways to resolve compliance issues and access disputes. The benefit of such an approach is a cost-reduction to industry, that ultimately bears most compliance-related costs (whether incurred by Aurizon Network or by the QCA itself).

There are two broad areas covered by the chapter:

- Aurizon Network's accountability, in terms of negotiating and providing access, and in terms of complying with other obligations under the access undertaking. This includes:
 - its accountability to individual access seekers and holders regarding issues specific to that access seeker/holder;
 - performance reporting and reporting of compliance with the access undertaking; and
 - auditing of compliance with the access undertaking.
- The QCA's accountability, in terms of the administrative obligations it bears for decisions made under the access undertaking.

12.2 Aurizon Network's approach to maintaining accountability

12.2.1 The need to balance competing priorities

Developing an appropriate accountability framework for Aurizon Network requires the regulator to judiciously weigh a number of competing factors. In developing its 2013 Undertaking proposal, Aurizon Network has sought to meet the regulator's expectations by identifying a reasonable balance as between the following considerations:

- First, any compliance mechanism must be effective. Compliance mechanisms provide the recourse and scrutiny necessary for stakeholders to have confidence that Aurizon Network is fulfilling its obligations under the access undertaking, recognising the information asymmetry that exists between the regulated firm and access seekers.
- Second, a compliance mechanism must be both clear and cost-effective. Duplicative or unclear accountability mechanisms increase the costs incurred by the regulated business in complying with the regime (costs which are ultimately born by access seekers) without necessarily resulting in any greater level of user confidence. Moreover, complexity can itself diminish the ability to detect compliance issues if the mechanism becomes cumbersome or poorly understood.

Accordingly, in addition to being properly targeted and proportional to the problem, the compliance framework in the access undertaking needs to strike the right balance between costs (and complexity) and benefits.

- Third, any administrative compliance mechanism must take its lead from the statutory framework in which it must operate. In the case of Aurizon Network, this includes not only the QCA Act – which contains an extensive regime of QCA information gathering powers, dispute resolution, and sanction – but also the larger corporate governance framework that applies to the Aurizon Group. For example, Aurizon Network’s financial affairs and audit practises, together with its corporate governance framework, must be in conformity with the Aurizon Group’s obligations to the stock exchange and corporate regulator. This is the first occasion following the privatisation that the QCA must consider this aspect of the regulatory framework.

12.2.2 Key components of the accountability framework

Taking the above into account, the key accountability mechanisms to ensure Aurizon Network’s compliance are:

- accountability to its access seekers and access holders when concerns or grievances are raised – mechanisms include dispute resolution, access agreements and complaints handling;
- public reporting of operational performance and financial data; and
- auditing.

Consistent with the negotiate/arbitrate model on which the access regime is based, the primary compliance mechanism in the 2013 Undertaking will remain those mechanisms that are designed to address issues raised by individual access seekers. Specifically, the opportunity to readily use cost effective and binding dispute resolution will remain the primary recourse of an access seeker in the event the legality of Aurizon Network’s conduct is questioned.

In this respect, the dispute resolution provisions in the 2013 Undertaking remain broad in scope, applying to any dispute arising between an access seeker and Aurizon Network in relation to the operation of the access undertaking, anything required to be done by Aurizon Network under the access undertaking, or the negotiation of access. These provisions are complemented by the mechanisms in the access agreements, which, once executed, should properly be the only instrument for specifying the rights, obligations and remedies of parties to them.

Further, Aurizon Network has proposed to retain a complementary accountability mechanism which provides for a complaint handling process when an access seeker believes that Aurizon Network has breached any of its obligations under Part 3. Aurizon Network believes that most ringfencing-related complaints can be most speedily and cost-effectively addressed to the satisfaction of an aggrieved party through its internal audit processes.

Accountability mechanisms which monitor Aurizon Network’s behaviour across all access seekers are complementary to individual dispute resolution or complaints investigation. While Aurizon Network considers that the best approach to compliance monitoring and resolution remains a reliance on bilateral dispute resolution between commercially-minded parties, it understands that reporting and auditing mechanisms provide added confidence to industry that it is complying with its legal obligations. In this respect, Aurizon Network considers that:

- compliance auditing is a more appropriate instrument for assessing systematic compliance with access obligations than it is for an individual complaint or issue; and
- reporting facilitates transparency and ensures that the necessary information is available to inform the regulatory process, while also playing a role in providing incentives to improve performance. It is however, not directly part of the dispute resolution process, where information exchange is covered by alternate procedures.

The approach taken in the 2013 Undertaking is therefore to provide for reporting and auditing mechanisms that are targeted at Aurizon Network's general compliance with access undertaking obligations, but are not intended to displace the process for individual grievances.

12.2.3 Cost-effectiveness

To ensure that the compliance regime is both effective and efficient, it is important that the appropriate mechanism is used for the particular circumstances and that the various accountability mechanisms are complementary and not duplicative. A key consideration in determining the appropriate accountability mechanism is the incentives created. Dispute resolution, by its nature, imposes obligations on both parties which create a natural incentive such that parties will only use it where it is a material issue in dispute. The parties also have the incentive to resolve issues as expeditiously as possible.

However, in the case of audits or reporting, costs are incurred primarily by Aurizon Network and the QCA. As such, there is an incentive for access seekers/holders to utilise this mechanism as a way to address matters that should rather be resolved through the negotiation process or complaint handling, as these costs are socialised across all users. The QCA needs to be alive to this incentive, and be mindful that the audit and reporting framework is not used by parties seeking to push their own costs to other users. Given this, in administering the accountability framework, the QCA should place emphasis on lower cost mechanisms such as complaints handling and graduated dispute resolution.

In this respect, the accountability and compliance framework in the 2013 Undertaking is structured to:

- permit dispute resolution, access agreements and complaints handling (in relation to ringfencing obligations) to apply as the primary means of resolving disputes or other concerns about compliance in individual access negotiations or relating to individual access seekers/holders;
- focus on independent audits to be used for the purpose of confirming Aurizon Network's systematic approach to compliance with the access undertaking in relation to high risk issues, but not to take the place of dispute resolution or handling of individual complaints; and
- recognise the role and effectiveness of public reporting in providing an incentive for performance improvement, whilst having regard to the net benefits of reporting arrangements, as well as ensuring that the reporting structure is consistent with the Aurizon Group's market disclosure practices.

Noting all the above, Aurizon Network considers that in most instances, the framework in the 2010 Undertaking already substantially meets the points set out above. In that respect, while changes have been proposed in the 2013 Undertaking that have the intent of addressing some of the issues outlined above, they do not materially alter the purpose or scope of the existing framework. These changes are described in more detail below.

Which mechanism is most appropriate will depend on the particular issue being addressed. The selection of the appropriate accountability mechanism in the 2013 Undertaking and its key characteristics has been based on the guidelines discussed below.

Table 20 Guidelines for choice of accountability mechanism

	Accountability to individual users	Reporting and information gathering framework	Independent third party verification of compliance
Objective	To provide for the effective and timely resolution of disputes and compliance concerns between Aurizon Network and an individual user.	To provide for the cost-effective gathering and dissemination of information necessary for stakeholders, including the QCA, to: <ul style="list-style-type: none"> ▪ be satisfied as to Aurizon Network’s compliance; and ▪ enable the QCA to perform its regulatory assessment processes. 	To provide for the regular and independent verification of Aurizon Network’s systematic compliance.
Proposed mechanisms	Dispute resolution under Access Undertaking. Dispute resolution under Access Agreement. Complaint handling.	Public reporting of information. Reporting of information to QCA where confidential. Reporting to QCA of known breaches of Undertaking.	Audit of systematic compliance with certain obligations, at request of QCA, by an independent auditor.
Key obligations of Aurizon Network	As set out in relevant provisions of the Access Undertaking (Part 10), Standard Access Agreement and Part 3 of the Access Undertaking.	Publish on website, annually: <ul style="list-style-type: none"> - financial statements; - compliance report; - maintenance cost report; - operational data report; - RAB roll forward report; Report to QCA, annually: <ul style="list-style-type: none"> - maintenance cost report; - supplementary operational data report; - capital expenditure report; - RAB roll forward report; - breach reports, as required. 	Conduct of audit of compliance with reporting obligations (Part 9), as required by QCA. Conduct of audit of compliance in relation to any specific conduct or decisions by Aurizon Network, as required by QCA (for example, a ringfencing issue raised by an access seeker). When conducting an audit, Aurizon Network must comply with audit process in Access Undertaking (Part 10).

12.3 Aurizon Network’s accountability to individual users

12.3.1 When dispute resolution is engaged

The negotiate/arbitrate model in the QCA Act provides the model on which the dispute resolution process in the 2013 Undertaking should be based. Under the QCA Act, the primary emphasis is on commercial resolution of disputes. However, the regime provides a fall back in that, in the event the parties cannot reach agreement, there is recourse to binding and independent dispute resolution. This was recognised by the QCA in its assessment of the first access undertaking, when it stated that the QCA Act makes it clear that commercial negotiation is to play a central role in the securing of third party access by an access seeker, particularly for rail infrastructure. The QCA noted that this requires that an effective

negotiation framework be established, one key feature of which is effective dispute resolution procedures, including fair and timely resolution of disputes.²⁰⁰

The dispute resolution process in the 2013 Undertaking is premised on the understanding that, given mandated open access, an access provider and access seeker will be motivated to reach agreement on most issues, and only resort to regulation where a particular matter is material. If a matter is referred for resolution, there is also an incentive for both parties to seek to resolve it as expeditiously as possible, given the costs (including the opportunity costs) associated with resolving commercial disputes through a third party are born by the parties to the dispute.

Consistent with these principles, by providing for a staged resolution process, the dispute resolution process in the 2013 Undertaking is designed to maximise the likelihood that Aurizon Network and an access seeker will resolve the issue between themselves without escalating disputes to the regulator. The majority of disputes should be readily resolvable by escalation within the internal management of Aurizon Network and an access seeker, without recourse to the regulator. In turn, this maximises the opportunity for a negotiated outcome to be reached, which is more likely to be mutually beneficial for the parties than an externally imposed determination.

Further, the 2013 Undertaking clarifies that, once an agreement is negotiated and executed between Aurizon Network and an access seeker, it is the contract (rather than the access undertaking) that provides the primary accountability mechanism for an individual access holder. It is therefore open for an access seeker to obtain dispute resolution processes that suit their individual circumstances by negotiating them directly with Aurizon Network (with the terms of the dispute resolution provisions of the SAA applying as a fallback).

Because a ringfencing complaint does not clearly fall within the scope of a dispute on a matter that might otherwise be commercially negotiated, a specific complaints handling process has been provided in relation to Part 3 of the access undertaking that is able to be invoked by an access seeker at any time. This is discussed below.

12.3.2 Characteristics of dispute resolution under the 2013 Undertaking

For the dispute resolution mechanism to be effective and efficient it should be readily accessible, cost effective, independent and binding. In particular, key features of an effective and efficient dispute resolution process include that it provides for:

- escalation through several stages to maximise the opportunity for resolution prior to formal arbitration;
- a transparent and fair process, including timeframes applying to each step; and
- provides guidance on allocation of costs of the dispute.

The existing dispute resolution framework in the 2010 Undertaking, which was developed consistent with the process in the QCA Act, has been in substance preserved by Aurizon Network's 2013 Undertaking proposal.

The 2013 Undertaking provides for the resolution of disputes arising:

- between an access seeker and Aurizon Network in relation to the negotiation or grant of access;

²⁰⁰ QCA (1999). Request for Comments, Queensland Rail Draft Undertaking, April, p. 18

- between a train operator and Aurizon Network in relation to negotiation of a train operations agreement; and
- in respect of any matters expressly required by the undertaking to be resolved in accordance with the process in Part 11.

This dispute resolution mechanism is comprehensive in terms of the issues it may resolve, noting that complaints arising under an access agreement are dealt with under the agreement. For clarity, all disputes in relation to the negotiation of access, including disputes regarding the Standard Studies Funding agreements (SFFA), SUFA and the SRCA, are subject to the dispute resolution provisions in the access undertaking.

Drafting amendments have also been made to the dispute resolution framework (clause 11.1) to address the option of an AFoA contracting structure. In particular, this clarifies that the dispute resolution framework applies to disputes between a train operator and Aurizon Network in relation to the negotiation of a train operations agreement and it further clarifies dispute process requirements in this case.

One change that has been made is to remove references to the ability to refer a matter to dispute resolution that were previously found throughout the 2010 Undertaking. This change has been made because it is both unnecessary to state this and, in fact, creates confusion in relation to matters where the ability to refer to dispute resolution is not specifically mentioned. Instead, it is clear from the drafting of clause 11.1 of the 2013 Undertaking that the dispute resolution mechanism is comprehensive in scope.

Similar to the 2010 Undertaking, the dispute resolution process in the 2013 Undertaking has the following characteristics:

- it provides for escalation of the dispute through several stages (e.g. Chief Executive resolution, mediation, expert determination and arbitration by the QCA) to maximise the opportunity for resolving the dispute prior to the arbitration stage (which may be costly and time consuming);
- it sets the parameters for a fair and efficient process (e.g. ensuring that the arbitrator is not conflicted and providing for an even-handed and just process);
- it ensures that any expert engaged through the process has suitable qualifications, and includes a requirement for safety-related matters to be referred to the Safety Regulator for definitive resolution;
- it sets out how the costs of a dispute are shared; and
- it sets out time limits for each stage of the process to ensure timely resolution of matters.

The key amendment proposed in the 2013 Undertaking is adding the option of mediation after the chief executive resolution stage. This step is by agreement between the disputing parties. The inclusion of this option will increase the scope for commercial resolution of the dispute prior to its escalation to other stages, in particular, to the more costly and time consuming arbitration stage. This change is therefore consistent with the intent of the legislation in terms of promoting commercial resolution as far as possible.

In addition, the 2013 Undertaking provides that certain disputes (i.e. in relation to expansions) are referred immediately to expert resolution. Clause 11.1.2(c) of the dispute resolution framework acknowledges this.

Further, as discussed above, the 2013 Undertaking now provides for an additional option of mediation. As the QCA Act also includes a process for mediation of access disputes, additional drafting has been included to clarify that the process that applies for a mediation is the one that is set out in the access undertaking (clause 11.1.3 and clause 11.1.6). This process is largely consistent with the relevant provisions in the QCA Act.

12.3.3 Disputes under access agreements

The 2013 Undertaking clarifies that disputes arising under an access agreement will be addressed in accordance with the access agreement. While the parties are free to agree to the terms of the agreement, the terms of the SAA apply as a fallback. This approach is similar to that in the 2010 Undertaking.

In this respect, the SAA dispute resolution mechanism is similar to that in the 2013 Undertaking. The characteristics of dispute resolution in the SAA are as follows:

- the provisions apply to disputes arising under the relevant access agreement;
- a 'tiered' dispute resolution process, similar to that in the access undertaking, which provides options for dispute resolution and escalation to maximise scope for resolution; and
- timeframes apply to each stage.

12.3.4 Ringfencing complaint handling

As noted above, a complaints handling mechanism for disputes related to the ringfencing provisions in Part 3 of the 2013 Undertaking has been included. This provides for Aurizon Network to investigate issues in the first instance, with the ability for the complainant to apply to the QCA to request an audit of the relevant subject of the complaint if it is not satisfied with Aurizon Network's response. Aurizon Network considers that it is appropriate for the complaints handling mechanism to provide for an internal investigation in the first instance,²⁰¹ allowing the opportunity to resolve the issue in the most cost effective and expeditious way.

Aurizon Network considers that its willingness to thoroughly investigate complaints is an important part of its commitment to genuine resolution of issues between it and stakeholders without regulatory intervention. That said, there is nothing in the access undertaking to prevent ringfencing issues being dealt with under the QCA Act (for example, an alleged breach of legislative obligations to comply with an approved access undertaking or to not engage in conduct for the purpose of preventing and hindering access), rather than under the Aurizon Network process. Moreover, were Aurizon Network not to satisfy an access seeker during the internal complaint process, the interests of the complainant are protected by its ability to escalate the matter to the QCA. The access undertaking also provides that the QCA will be advised of any complaint and the outcome, and can of course, act independently under the legislation at any time, for example, to investigate any alleged breaches using s 150AA of the QCA Act.

Further, to facilitate the timely resolution of issues between commercial parties, the complaint handling provision in Part 3 (clause 3.22) is now drafted more broadly than was the case under the 2010 Undertaking. Whereas under the 2010 Undertaking the complaints handling process applied only to the management of confidential information and Aurizon Network's decision making, the drafting now applies to capture the entirety of Part 3, providing a recourse mechanism for a broader range of ringfencing

²⁰¹ It is the practice of the Aurizon Group, as with most large corporations, for the Chief Internal Auditor and/or the Chief General Counsel to independently investigate alleged breaches of legal or regulatory obligations.

issues. It is hoped that the broader drafting will encourage parties to utilise an internal, informal and timely process to resolve issues prior to engaging the regulator.

12.4 Reporting framework

Reporting refers to the regular release, either publicly or to the regulator, of information on Aurizon Network. The purpose of reporting is to promote transparency and scrutiny in relation to the access provider's compliance with its obligations and create incentives to improve performance. Reporting also helps access seekers by providing relevant information that will inform access negotiations, making genuine and effective commercial negotiation more likely. Reporting of certain information to the QCA also enables the QCA to perform its regulatory assessments by helping to address the information asymmetry that unavoidably exists between the regulated firm and the regulator.

12.4.1 When the mechanism is engaged

Reporting should be used in circumstances where there is a benefit to competition in making certain information transparent *and* where performance is able to be readily and objectively measured and reported. This may be to, for example, provide transparency about the extent of compliance with access obligations under the Access Undertaking, to provide information that enables the regulator to perform its functions (e.g. information relating to revenue/price determination, such as the RAB and its roll forward or maintenance expenditure) and information relating to service quality (such as operational data). Reporting of information for these purposes promotes confidence in the access regime.

Recognising that it is not costless to prepare and report this information, it is important to ensure that reporting obligations are targeted to achieving the above purposes and that the costs do not exceed the benefits of reporting. This requires that information reported must be targeted, be readily measurable and reported so that it provides accurate and usable information. This in turn will help ensure that the reporting regime creates sufficiently strong incentives for performance improvement.

In addition, now that Aurizon Network is a listed entity, it has certain disclosure requirements that it must adhere to as part of ASX corporate governance requirements. Any information that is published can and will be relied upon by investors and market analysts in assessing firm value and making investment recommendations. This provides a strong incentive for Aurizon Network to improve its performance and also for any reports to be accurate, but also has implications for the timing of the release of information. In this respect, Aurizon Network has proposed that the release of performance information be coordinated with its market reporting policies.

12.4.2 Matters the subject of 2013 Undertaking reports

Aurizon Network has not changed substantially its reporting obligations for the 2013 Undertaking. The structure and coverage of the reporting remains, broadly, equivalent to that which applied in the 2010 Undertaking. Specifically, the 2013 Undertaking continues to provide for public reporting, on an annual basis, of the following:

- financial statements (clause 10.1.1);
- a compliance report (covering compliance with the access undertaking and information on the outcome of access negotiations) (clause 10.1.2);
- a maintenance cost report (including both a public report and one to the QCA) (clauses 10.1.3 and 10.1.4);

- an operational data report (clause 10.1.5); and
- a RAB roll forward report (clause 10.1.6).

There are also a number of reports provided annually to the QCA: supplementary operational data (providing information in the public report categorised for each rail operator, clause 10.1.5(g)); maintenance costs (showing actual compared to forecast, clause 10.1.4); capital expenditure (Schedule E, clause 1.3); and RAB roll forward (Schedule E, clause 1.4). Similar to the 2010 Undertaking, Aurizon Network will also provide breach reports to the QCA, as required (clause 10.2).

For the annual compliance report (clause 10.1.2), the information reported will be reported separately for train operations agreements, end user access agreements and other access agreements.

Aurizon Network has proposed to change the timing of operational performance reports to an annual release rather than a quarterly report. The operational performance report is to be released only following the release of Aurizon Network's annual financial results.

This proposed change to the timing of the operational performance report is required to conform to the Aurizon Group's market disclosure practices and obligations. The operational data report contains information on network activity, which can have a direct and indirect financial impact on Aurizon Group businesses. This can lead to investors attempting to use the operational performance reports as an indicator of the Aurizon Group's financial performance (including the performance of the above-rail business) prior to the release of financial information to the ASX. The operational data report is not, however, prepared nor intended for such a use, which may lead to inaccurate conclusions being drawn by market participants. Given that this may, in turn, have a share price impact, the Aurizon Group considers it essential that all information on network performance be timed to coincide with the release of Aurizon Group financial results, such as to ensure the market is fully informed on how the operational data impacts on financial performance.

Aurizon Network considers that annual reporting of this information will still provide the relevant information to stakeholders in a sufficiently timely way for the objectives of performance reporting to be achieved, while at the same time better addressing Aurizon Network's legitimate business interests. The annual performance report will be published on the website. It will also be supplemented by a non-public report to the QCA which presents the same information by class of access holder, distinguishing between related operators and third parties. The undertaking provides that the published report will include a comparative presentation against the four quarters of the preceding year, hence ensuring that the report – while annual – will still contain the same level of granularity as under the 2010 Undertaking (clause 10.1.5(e)).

Aurizon Network has also proposed a minor amendment to its maintenance cost reporting requirement (clause 10.1.3). This is not a material amendment as it merely seeks to align the reporting obligation with current practice by specifying in more detail the actual maintenance activities that are reported (i.e. ballast undercutting, rail grinding for mainline, rail grinding for turnouts, resurfacing for mainline and ultrasonic track testing).

12.4.3 Confirmation of accuracy of reports

The 2010 Undertaking provided that certain reports (the maintenance cost report to the QCA; operational data report to the QCA, capital expenditure report to the QCA; RAB roll forward report to QCA) must be accompanied by a "responsibility statement" signed by Aurizon Network's chief executive officer (CEO)

and one independent director as confirmation of the accuracy of the reports. This requirement was included prior to Aurizon's listing as a public company.

Aurizon Network considers that a vaguely-described "responsibility statement" is neither a necessary nor appropriate requirement for its regulatory reporting. An undefined and unclear invocation of personal responsibility for company officers and directors is not appropriate where those persons are already under very comprehensive and specific obligations, including in relation to the accuracy of information provided to the market. Both Aurizon Network's executive officer and its independent directors are subject to *Corporations Act* duties to which personal liability attaches, and therefore cannot be reasonably expected to make vague, public statements about their "responsibility" for matters.

More generally, under the public reporting standards for a publicly-listed company, Aurizon Network is subject to a significant level of scrutiny and, as a result, it will be held accountable by the market for the reliability and accuracy of the information it releases.

It is unclear what, if anything, the personal responsibility statement sought to achieve. In this respect, the accuracy of Aurizon Network's reporting is already verified by an independent regulatory auditor. Indeed, all the matters on which Aurizon Network is required to report must also be audited (whether directly or indirectly) as part of the reporting of Aurizon Network's financial results, the accuracy of which is audited and certified in accordance with ASX listing rules and *Corporation Act 2001* (*Corporation Act*) requirements. Given these elements of the audit framework, the personal responsibility statement has no practical function.

It is therefore proposed that the following verification practises will be adopted:

- the financial statements will continue to be certified as accurate by the CEO, as contemplated under the 2010 Undertaking;
- the maintenance cost report to the QCA, as a form of financial account, will also be certified as accurate by the CEO as accurate;
- no verification of operational data reports will be provided, as Aurizon Network does not believe such a commitment (either a certification of accuracy or a personal responsibility statement) is consistent with the 'reasonable endeavours' basis of operational performance obligations which has been retained from the 2010 Undertaking. As noted earlier, the operational data report is not intended – nor should it be used as – a basis for extrapolating the financial performance of Aurizon Group businesses.

Further, additional provisions have been introduced which mirror the *Corporations Act* in making clear that the executive officer can rely on others in providing certification of accounts. Clause 10.5 provides for a 'rebuttable assumption'; whereby the executive officer is assumed to have acted reasonably when relying on information from competent and appropriately qualified advisers or experts and otherwise complies with the requirements of clause 10.5 when providing a certification. The matters to be satisfied in order to have the benefit of the assumption are set out in clause 10.5 and include, among other things, relying on advice from an employee the executive officer believes on reasonable grounds to be reliable and competent in relation to the matter concerned and that the advice was given by another director or officer of Aurizon Network in an area of their authority.

These measures will provide adequate verification of Aurizon Network's reporting obligations which, as noted, are also subject to independent audit.

12.5 Auditing

Auditing provides a means of independently verifying compliance, thereby promoting confidence in the regime. The 2010 Undertaking provided for auditing of regular reports, as well as the ability to conduct ad hoc audits as required. The 2013 Undertaking continues to use auditing as a mechanism to assess compliance with Aurizon Network's access obligations.

12.5.1 When the audit mechanism should be engaged

Auditing is an appropriate mechanism where the issue in question relates to systematic performance of a particular set of access obligations. It seeks to address overall compliance with obligations and, as such, should not be the first port of call to deal with concerns of individual access seekers/holders on a specific issue (which may be addressed by either dispute resolution, under access agreements or a complaint handling mechanism).

Further, ensuring that the remedy is proportional to the problem is an important consideration in determining when and what type of auditing is appropriate. For example, an audit conducted on an 'exceptions' basis which is triggered once a certain threshold is met (for example, sustained concerns regarding material non-compliance) would help ensure audits are used for the purpose of addressing concerns about systemic issues. In this case, a threshold is needed to ensure ad hoc audits are not relied on to address issues better addressed through other accountability mechanisms and to ensure that the costs of this accountability mechanism do not exceed the benefits. The decision of when to conduct an audit should reflect an assessment of the risks associated with a breach and will help ensure that the costs of auditing do not exceed the benefits.

Underlying this view is the fact that regulatory audits are costly and that these costs are paid for by industry. While there is an allowance in the regulated revenues for the cost of audits, additional costs beyond this amount are borne by Aurizon Network without regulatory intervention. As a result, other parties do not have an incentive to minimise audit costs. Aurizon Network's audit costs have therefore been significant through the 2010 Undertaking period. To that end, Aurizon Network is seeking an adjustment charge during UT4 to compensate it for these costs. This is addressed in detail in section 5.3 of Volume 3.

It is worth noting that the AER has adopted a risk assessment approach as part of its compliance and enforcement framework to determine the level and type of monitoring that is appropriate for each obligation under national energy regulatory framework. Compliance risk is determined based on two criteria: (1) the impact on participants, end users and other stakeholders of a breach; and (2) the probability that a breach would occur. Particular attention is paid to provisions which have a significant impact on the national electricity and gas regulation objectives, and which are relatively likely to be breached. The risk assessment helps the AER determine the intensity and type of monitoring appropriate for each provision.²⁰²

12.5.2 Matters subject to audit

The 2013 Undertaking continues to use auditing as a mechanism to confirm and test Aurizon Network's systematic approach to compliance with access undertaking obligations. The following matters are (or may be) subject to auditing in the 2013 Undertaking:

²⁰² AER (2010). Compliance and Enforcement Statement of Approach, 2010, p. 9-10

- the annual compliance report (clause 10.1.2) – this reports on Aurizon Network’s compliance with the access undertaking and on the outcomes of negotiations with access seekers;
- Aurizon Network’s compliance with its reporting obligations in Part 10 of the access undertaking (if required by the QCA) (clause 10.6);
- Aurizon Network’s compliance with the access undertaking in relation to any specific conduct or decisions (if requested by the QCA) (clause 10.7). This includes the ability of a complainant under Part 3 to apply to the QCA seeking an audit in relation to the complaint in question; and
- Aurizon Network’s compliance with the voting process for the acceptance of capital expenditure projects by interested participants (clause 8.11.7(c)).

The obligation to automatically audit annual special-purpose financial statements for Aurizon Network has been removed. It is considered that the combination of executive officer certification, together with the processes for the audit of Aurizon Network’s general-purpose financial statements, are sufficient controls on the accuracy of Aurizon Network’s reporting. This, in conjunction with the ability for the QCA to request an audit in particular cases where it considers this is justified, should provide stakeholders with sufficient confidence in the accuracy of the information reported, and reflects a more reasonable balance in the interests of access seekers and Aurizon Network given the costs involved in auditing.

It is also proposed to change from an annual audit of Aurizon Network’s compliance with its reporting obligations under Part 9 to being on an ‘exceptions’ basis (i.e. at the QCA’s request) and with the proviso that such an audit can be requested no more than once per year. This proposal reflects the view that audits should not be overly relied upon given the costs involved, and without some requisite level of concern that reporting is inaccurate, an audit should not be necessary.

The annual audit of Aurizon Network’s compliance with its ringfencing obligations (clause 3.7 of the 2010 Undertaking) has also been removed in the 2013 Undertaking. Instead, the provision which enables the QCA to request that a compliance audit be conducted in relation to any specific conduct or decision under the access undertaking (clause 10.7) is the mechanism by which an audit of compliance with ringfencing obligations will occur. In practice, this change will have little effect as the QCA will continue to have the ability to conduct an audit when it has reasonable grounds to believe it is necessary. Aurizon Network believes this approach is more consistent with an audit approach based on a reasonable risk assessment and therefore one which is more likely to achieve an appropriate balance in the costs and benefits of regulation.

For a compliance audit requested by the QCA and conducted under clause 10.7 of the 2013 Undertaking, costs will be incorporated in the adjusted system allowable revenue in accordance with clause 4.3 of Schedule F. As ad hoc audits of this nature cannot reasonably be predicted and accounted for in advance, Aurizon Network bears the cost of any such audits. Aurizon Network considers that, for audits of this nature, a more prudent and reasonable approach is for the costs to be reflected in an adjustment to allowable revenue.

12.5.3 Process for conduct of audits

Some minor modifications have been made to the process for conducting audits in the 2013 Undertaking to remove unnecessary complexity. The audit process is largely similar to that in the 2010 Undertaking, with some minor modifications to clarify the process. In summary, the audit process in the 2013 Undertaking provides that:

- the auditor appointed by Aurizon Network must be genuinely independent, have no conflict of interest, and be subject to appropriate professional ethical standards;
- an audit plan is developed and approved by the QCA;
- Aurizon Network must provide information to the auditor as required in a timely way; confidential information is protected by the auditor entering into a confidentiality deed, if required; and
- requirements for the provision of the audit report to Aurizon Network and the QCA are addressed.

Further, to streamline the access undertaking and to improve consistency, the audit process provisions previously throughout the access undertaking have now been consolidated into a single audit process provision in Part 10 of the 2013 Undertaking.

A change from the 2010 Undertaking is to allow Aurizon Network to appoint an auditor to conduct any audits required under the access undertaking without obtaining prior approval from the QCA. Aurizon Network considers that it is not appropriate for the QCA to select its auditor providers on its behalf, given the need for Aurizon Network to select auditors on the basis of the need to minimise cost and duplication as between regulatory auditors and those appointed as part of the compliance practises of the Aurizon Group. The power of the QCA to select an auditor is unnecessarily intrusive, noting that neither ASIC nor the ASX (whose public interest role in audit arguably exceeds that of the QCA) have such a role. Aurizon Network questions what additional purpose is achieved in this regulatory regime, as prudential and governance regulatory regimes, by bureaucratic control of its choice of auditor.

Aurizon Network considers that any concerns over the independence or appropriateness of its auditor are misplaced. Aurizon Network is already audited and subject to governance controls that are consistent with its status as a subsidiary company in a listed corporate group. Moreover, its audit practises are controlled by an independent Board, including separate audit and risk subcommittees, which are themselves acting in conformity with the *Corporations Act*.

That said, to reassure both the regulator and stakeholders as to the appropriateness of Aurizon Network's choice of auditor, a number of controls on Aurizon Network's choice of auditor have been included in the 2013 Undertaking. In particular:

- the auditor cannot be an employee of Aurizon Network or another Aurizon Group company;
- the auditor must be appropriately qualified and experienced;
- the access undertaking requires that the auditor has a duty of care to the QCA and, in the event of a conflict, the duty of care to the QCA takes precedence;
- the auditor is must be selected in accordance with the governance practises of Aurizon Network which is managed by an independent board with duties imposed by the *Corporations Act*; and
- most importantly, the auditor must be subject to professional standards of ethics and independence. In practise, this means that the audit will be conducted in accordance with the ethical standards set out in *APES 110 Code of Ethics for Professional Accountants*. In this respect, it is notable that other regulators accept that the assessment of an auditor by an independent board as being in conformity with this standard is sufficient to discharge prudential and governance standards. For example, Prudential Standard APS 510 on governance has been approved by APRA on this basis, without any need for APRA to have oversight of the auditor.

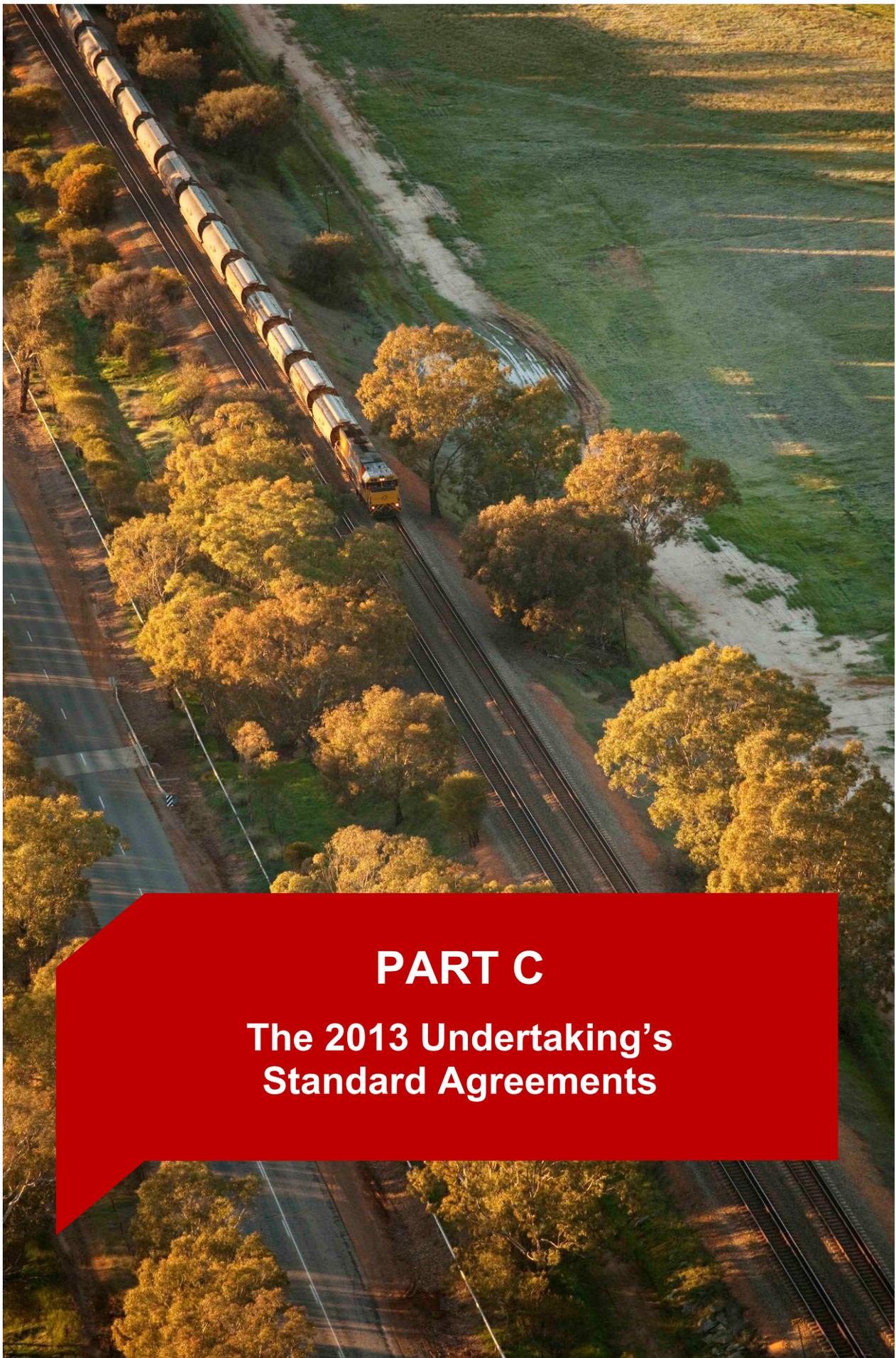
Aurizon Network considers that the above provides an appropriate degree of confidence in the qualifications and independence of the auditor, such that prior QCA approval of the appointment of an auditor is not necessary. It is noted that requirement for the QCA to appoint an auditor was introduced in the 2001 Undertaking in response to concerns about perceptions of independence. Aurizon Network considers that, with a decade of experience in the operation of the regime, and the intervening imposition of ASX and governance standards consistent with a public-listing, there is now a sufficient track record of the robustness and integrity of the audit regime which should be sufficient to allay any concerns on this issue. Further, to the extent any concerns remain, this can be addressed through procedural controls included in the audit plan, which must be approved by the QCA.²⁰³

For reference, the auditors engaged by Aurizon Network during the 2010 Undertaking were BDO Kendalls and PWC.

12.6 Confidence in QCA decision making

The QCA has a number of functions to perform under the access undertaking, including a number of decision-making roles. The 2010 Undertaking contained a number of duties on the QCA in relation to the handling of information, the exercise of its discretion, and natural justice requirements. It is important that it is beyond doubt that the QCA's decision-making under the undertaking is subject to equivalent administrative law treatment as is the case under the QCA Act. This provides for standards of reasonableness and due process in the exercise of the QCA's powers and thereby enhances certainty and confidence in the regime. Consequently, the QCA's decision-making requirements have been retained in the 2013 Undertaking (clause 11.2). They will continue to have the effect of assuring stakeholders that the QCA will be both reasonable and bound by the dictates of procedural fairness in its decision-making under the access undertaking.

²⁰³ In this regard, we note that the 2007 Undertakings to the ACCC given for the purpose of Section 87B by Asciano Ltd (and accepted by the ACCC) do not require this as part of the compliance audit arrangements.



PART C

The 2013 Undertaking's Standard Agreements

13 Standard Access Agreements

13.1 Overview

Aurizon Network's access undertaking includes a suite of standard access agreements for coal carrying train services. The Standard Access Agreement (SAA) provide a basis for access negotiations between Aurizon Network and a person seeking access, with there being no constraint on negotiating alternatives. Aurizon Network and the access seeker may agree to terms and conditions that differ from that of the standard access agreement. However, in the event of a dispute, or on failure to reach agreement on alternate terms, the relevant terms of the standard access agreement will apply.

13.2 The contracting model

13.2.1 The contracting options available to access seekers

UT1 required the development of two separate access agreements for coal carrying train services in recognition of the potential for separate contracting scenarios. First, the access holder being the operator of a train service. Second, an end user (e.g. mine) as the access holder who then sub-contracts the above rail train services to an accredited railway operator. Accordingly, Aurizon Network prepared the following two forms of SAA for coal carrying train services:

- The 'Operator Agreement' – where the operator of a train contracts directly with Aurizon Network to acquire access rights;
- The 'Access Holder Agreement' – where the end user (i.e. coal mine) contracts directly with Aurizon Network to acquire access rights and then sub-contracts with a train operator to haul its coal.

For UT2 and UT3, updates to these Standard Access Agreements were incorporated.

Prior to Aurizon Network submitting the 2010 Undertaking, producers indicated a preference for the existing 'access holder' and 'operator' SAAs to be supplemented by a further form of agreement that would allow mines to control their underlying access rights, while not being responsible for train operational matters. Specifically, this alternate form would improve a mine's long term certainty over access rights by allowing:

- a mine to become a holder of capacity without incurring obligations associated with operation of train services; and
- train operators to operate on the rail infrastructure using the capacity provided under the above agreement, but for all operational aspects of their services to be managed under an agreement directly between the train operators and Aurizon Network.

The 2010 Undertaking therefore included a requirement for Aurizon Network to submit an Alternative Form of Access (AFoA) for coal carrying services within 6 months of the approval of the 2010 Undertaking containing:²⁰⁴

- (a) a proposed end user access agreement (EUAA) – which allows users of rail haulage services to contract directly with Aurizon Network for access rights without bearing liability and obligations for

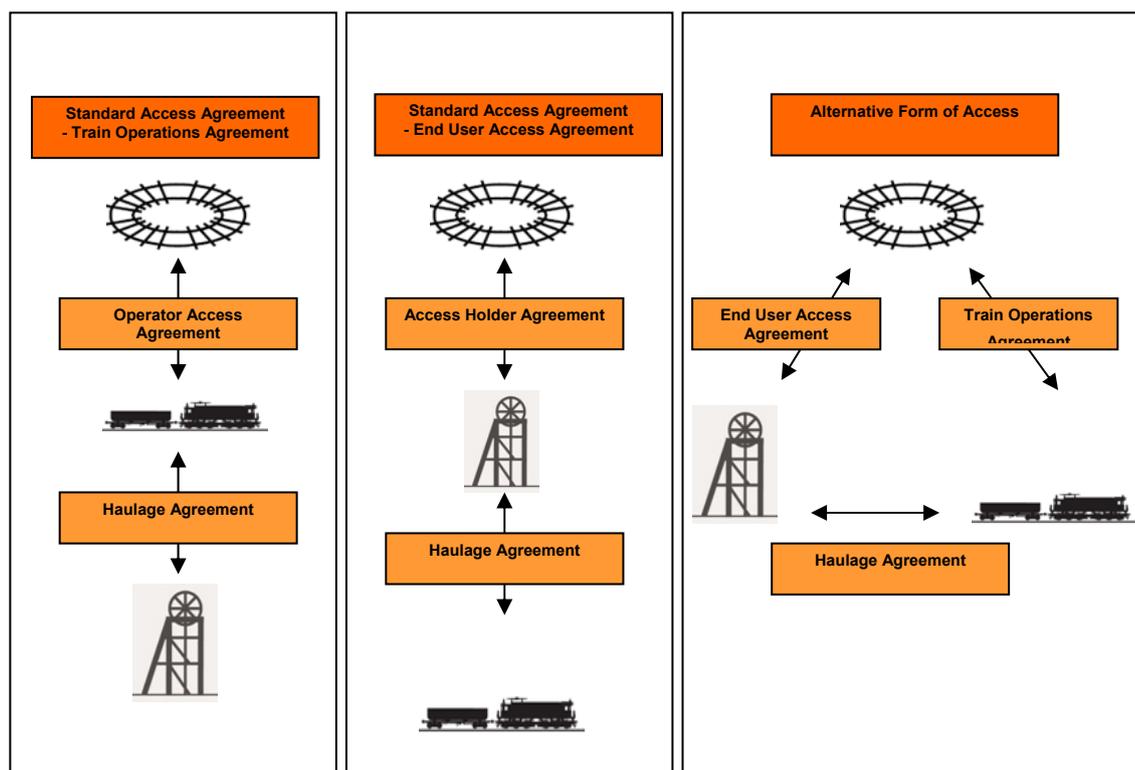
²⁰⁴ 2010 Undertaking, clause 5.2(n)

above-rail operation issues, so long as one or more railway operator(s) nominated by the user has entered into an operator agreement with Aurizon Network;

- (b) a proposed train operator agreement (TOA) – which allows one or more railway operator(s), nominated by the end user to assume liability and obligations in relation to above rail operational issues associated with some or all of the users' access rights; and
- (c) if necessary, any consequential amendments to the undertaking to give effect to the new form of the SAA.

Once the AFoA SAA is approved, there will be three forms of Standard Access Agreement included in the Access Undertaking, as shown below

Figure 26 Allocation of functions and responsibilities in current SAAs



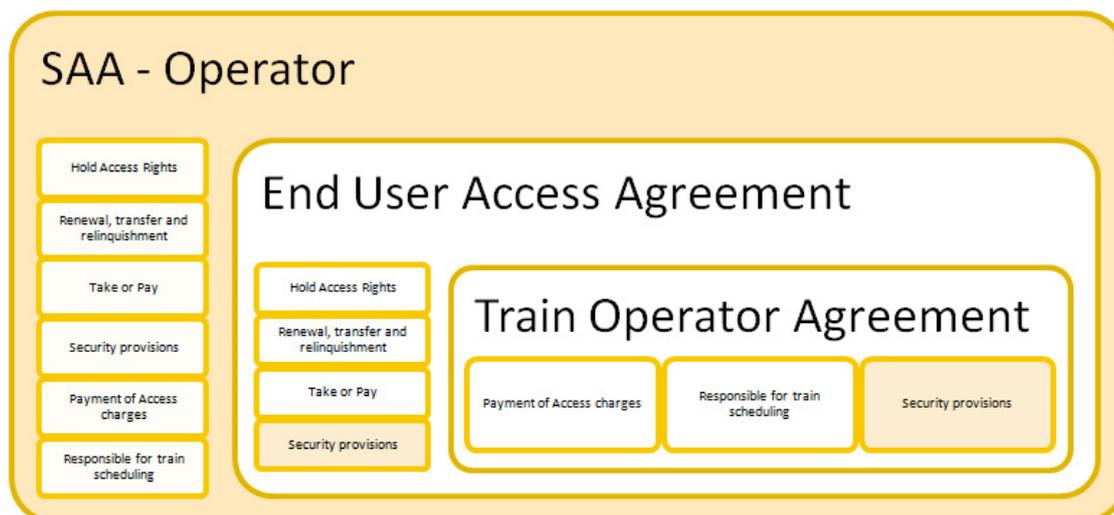
13.2.2 Status of the alternative form of access

Aurizon Network consulted widely with stakeholders in developing the AFoA. In 2009, Aurizon Network circulated for comment a draft model which split access rights between the end user and train operator. Aurizon Network released a discussion paper in December 2010 which sought stakeholder comments on the key objectives and issues which should be addressed in the allocation of functions and responsibilities in the AFoA. Aurizon Network also undertook a number of stakeholder engagement sessions with the Queensland Resources Council, train operators and end users.

Following this consultation process, the AFoA that was developed included two separate but linked new agreements – the End User Access Agreement (EUAA) and the Train Operations Agreement (TOA). Under this model, the EUAA includes the capacity management functions (i.e. rights to capacity, transfer and relinquishment of contracted capacity) of the current access holder agreement, with the capacity only

utilised through a related TOA. This in turn includes the operational obligations (e.g. train control functions, incident management, interface risk assessment) from the current operator access agreement. The proposed allocation of functions and responsibilities from the current SAA is shown below.

Figure 27 Allocation of functions and responsibilities from current SAAs



On 29 April 2011, in accordance with the 2010 Undertaking (clause 5.2(n)), Aurizon Network submitted to the QCA for approval its proposed AFoA for coal carrying train services, comprising an EUAA and a TOA. Aurizon Network also proposed consequential amendments to the 2010 Undertaking necessary to give effect to the AFoA. On 18 May 2011, Aurizon Network submitted explanatory notes in support of the proposal.

On 27 July 2012, the QCA issued its draft decision proposing not to approve Aurizon Network's proposed AFoA. The QCA received 8 submissions in response to its draft decision. The QCA published its final decision not to approve Aurizon Network's proposal on 24 April 2013.

13.2.3 The 2013 Undertaking proposal

Against this background, Aurizon Network's 2013 Undertaking includes the following Standard Access Agreements:

- Standard Operator Access Agreement;
- Standard Access Holder Agreement; and
- Alternate Form of Access, comprising:
 - Standard End User Access Agreement; and
 - Standard Train Operations Agreement.

Given the limited time between the publication of the QCA's final decision and the lodgement of the 2013 Undertaking, the AFoA standard agreements included in this proposal may require further refinement, to, where appropriate, address concerns identified by the QCA in its final decision, and to ensure obligations (which have been updated to reflect the UT4 SOAA) are appropriately split as between the end user and train operator.

13.3 Terms for Standard Access Agreements

The SAAs have been reviewed and updated for the 2013 Undertaking. An overview of the proposed changes is given in Appendix B, which includes the following summary tables:

- SOAA table – summarises key changes between UT3 and UT4 SOAA;
- AFoA table – compares the UT4 SOAA with the EUAA and TOA; and
- AHAA table – compares the UT4 SOAA with the AHAA.

14 Standard User Funding Agreement

14.1 Overview

The concept of the Standard User Funding Agreement (SUFA) arose out of consideration of the issue of the funding of expansions in the 2010 Undertaking. Under the QCA Act, the QCA cannot make an access determination that requires the access provider to pay some or all of the costs of extending the facility (section 119(2)(c)). In this context, the aim of the SUFA is to provide detailed terms and conditions under which parties other than Aurizon Network can fund network expansions/extensions, in the event Aurizon Network chooses not to. The SUFA framework and underlying principles are discussed in detail in Chapter 6 of part 2 of the submission.

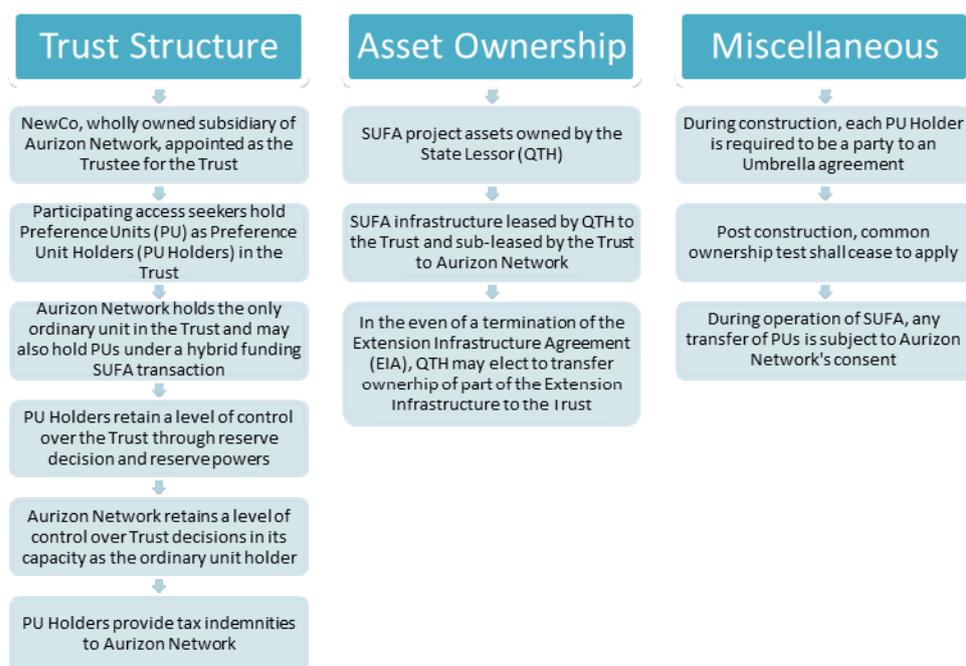
The 2010 Undertaking (clause 7.6(a)) required Aurizon Network to develop and submit to the QCA, in consultation with stakeholders, a proposed SUFA and a DAAU incorporating amendments to the 2010 Undertaking necessary to fully implement the principles in Schedule J (Investment Framework Amendments).

Aurizon Network submitted a DAAU and proposed SUFA in December 2010. However, this was subsequently withdrawn. Following further industry consultation, a revised SUFA DAAU was submitted in December 2012.

14.1.1 SUFA model

The SUFA model is based around a unit trust (the Trust), where SUFA project assets to be incorporated into the relevant railway system are owned by the State and leased to the Trust, which sub-leases them to Aurizon Network (Expansion Infrastructure). The key features of the SUFA framework are shown in the figure below.

Figure 28 Standard User Funding Agreement – Key Features



The SUFA framework comprises a template package of nine interconnected legal agreements - a brief summary on the respective documents, parties and purpose is provided below.

Table 21 SUFA Documents, Parties and Purpose

Document	Parties	Purpose
CORE SUFA DOCUMENTS		
Trust Deed (TD)	<ul style="list-style-type: none"> Aurizon Network as ordinary unit holder NewCo (a wholly owned Aurizon Network subsidiary), as Trustee 	<ul style="list-style-type: none"> Establishes the Trust
Subscription and Unit Holders Deed (SUHD)	<ul style="list-style-type: none"> Aurizon Network NewCo as Trustee Each PU Holder 	<ul style="list-style-type: none"> Addresses PU Holder subscriptions under the Trust Sets out operational rules for the Trust In the event of conflict between the SUHD and the TD, the SUHD prevails
Project Management Agreement (PMA)	<ul style="list-style-type: none"> Aurizon Network as PM NewCo as Trustee 	<ul style="list-style-type: none"> NewCo engages Aurizon Network to perform substantially all aspects of the project delivery process Subject to the governance requirements of the PMA
Rail Corridor Agreement (RCA)	<ul style="list-style-type: none"> Aurizon Network as Landholder NewCo as Trustee Licensee 	<ul style="list-style-type: none"> Aurizon Network licences NewCo so Trust can use Aurizon Network land and modify infrastructure
Umbrella Agreement (UA)(for each PU Holder	<ul style="list-style-type: none"> Aurizon Network as access provider PU Holder New Co as Trustee 	<ul style="list-style-type: none"> Aurizon Network undertakes to provide each PU Holder with an access agreement Each PU Holder identifies Aurizon Network and NewCo in respect of tax risks
Extension Infrastructure Lease (EIL)	<ul style="list-style-type: none"> Aurizon Network as lessee/sublease NewCo (Trustee) as lessor/sublessor 	<ul style="list-style-type: none"> Newco leases all Extension Infrastructure and subleases all Extension Infrastructure, to NewCo Aurizon Network agrees to pay lease/sublease rentals on all SUFA infrastructure to NewCo
STATE DOCUMENTS		
Extension Infrastructure Agreement (EIA)	<ul style="list-style-type: none"> Aurizon Network as sublessee QTH as lessor NewCo (Trustee) as lessee 	<ul style="list-style-type: none"> QTH leases all Extension Infrastructure to NewCo NewCo assumes some lease obligations Aurizon Network assumes other lease obligations
Integrated Network Deed (IND)	<ul style="list-style-type: none"> Aurizon Network QTH NewCo as Trustee 	<ul style="list-style-type: none"> Governs the circumstances in which, and the process by which, QTH may dispose of EIA assets following the EIA's termination, and, if such a disposal occurs, governs the disposition of the disposal proceeds
Deed Poll Guarantee (DPG)	<ul style="list-style-type: none"> Aurizon Holdings as guarantor 	<ul style="list-style-type: none"> Guarantees to QTH the due and punctual performance by Aurizon Network and the Trustee of their respective obligations under the EIA and IND Indemnifies QTH against any losses it may incur due to a default or delay in the due and punctual performance of those obligations

Aurizon Network considers that the SUFA framework prepared in the December 2012 DAAU represents an appropriate balance between Aurizon Network's interests and the interests of users and therefore is a suitable 'base case' for future SUFA transactions. Aurizon Network accepts that issues will arise with individual projects that require adjustments to the framework. Such issues will be most efficiently

addressed on a project-by-project basis through agreed variations to the standard documentation.²⁰⁵ The SUFA documentation has been developed with the necessary flexibility to allow these transaction-specific adjustments to be made without substantially altering the framework.

14.2 Terms of Standard User Funding Agreements

On 20 December 2012 Aurizon Network resubmitted the 2012 SUFA DAAU, representing the result of an extensive consultative process which, while not resulting in a fully agreed position, reflects compromises on both sides as well as mutually acceptable improvements on key issues.²⁰⁶ Some of the key issues on which the consultation process focused includes tax effectiveness, hybrid funding arrangements, the trust funding mechanism, the credit standing of PU holders under the Trust, and the direction to pay arrangements.

In February 2013, the QCA released for comment an Issues Paper on the 2012 SUFA DAAU.

The 2013 Undertaking includes the draft SUFA that was submitted to the QCA in the December 2012. Aurizon Network refers interested parties to the explanatory material that was submitted to the QCA in conjunction with the December 2012 SUFA DAAU for explanation of its approach to SUFA.

²⁰⁵ In the event that these issues are not able to be resolved between Aurizon Network and users for any particular project, dispute resolution procedures will be enacted.

²⁰⁶ The SUFA was first submitted to the QCA in December 2010. This initial proposal involved a very simple framework for user-funded extensions, however consultation with users in the months following the lodgement of the model identified several concerns with the framework, most significantly tax issues. This model was subsequently withdrawn by Aurizon Network and a revised model developed, however this model was also found not to represent a workable framework for user-funded agreements. Aurizon Network resubmitted a revised SUFA DAAU in December 2012.

15 Standard Studies Funding Agreement

15.1 Background

Where potential users agree to fund a pre-feasibility study or feasibility study, they will enter into a Studies Funding Agreement with Aurizon Network. To facilitate this process, Aurizon Network has developed Standard Studies Funding Agreement. Reflecting the different needs of the pre-feasibility and feasibility stages of project assessment, two forms of Standard Studies Funding Agreement have been developed – one tailored for the pre-feasibility stage and a second designed for the feasibility stage. The issues around the progress of studies and their funding are discussed in Chapter 7 of this submission.

As with other standard agreements, the Standard Studies Funding Agreements provide a basis for negotiations between Aurizon Network and users, as opposed to being an obligatory standard form agreement. Aurizon Network and users may agree to terms and conditions that differ from that of the standard agreements. However, in the event of a dispute, the relevant terms of the standard agreements apply.

15.2 Terms of Standard Studies Funding Agreements

The Standard Study Funding Agreement – Prefeasibility Study and Standard Study Funding Agreement – Feasibility Study address, among other things, the obligations on the parties regarding the following key matters:

- conditions precedent;
- customer's obligations to loan funds;
- Aurizon Network's obligation to repay the loaned amount;
- commitment variation requests;
- obligation to conduct rail study;
- study costs;
- bank guarantee; and
- project management fee and liability of Aurizon.

An overview of the key provisions of both the Standard Study Funding Agreement – Prefeasibility Study and Standard Study Funding Agreement – Feasibility Study is given in Appendix C.

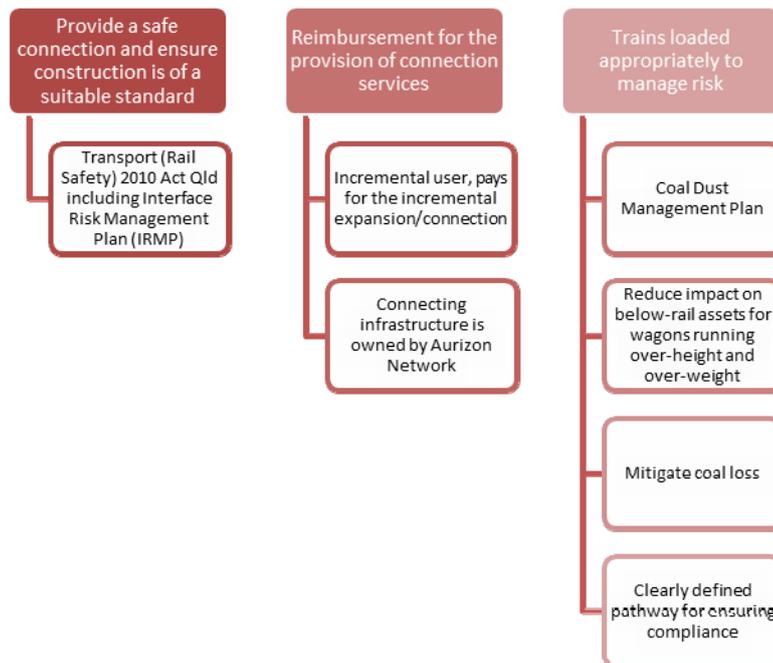
16 Standard Rail Connection Agreement

16.1 Overview

In recognition of the increased likelihood of users wishing to connect private infrastructure to Aurizon Network's existing rail infrastructure, the 2010 Undertaking required Aurizon Network to develop, in consultation with stakeholders and the QCA, a Standard Rail Connection Agreement (SRCA) (clause 8.4). This agreement establishes a standard set of terms and conditions for the respective parties to facilitate negotiations and to ensure that no party is disadvantaged with regard to the requirements for interconnection of rail infrastructure when electing to construct and own its own infrastructure. The objectives of the SRCA are summarised in the Figure below.

The SRCA covers the connection of private rail infrastructure to the CQCN for the purpose of entering loaded coal trains into the relevant individual coal system.²⁰⁷ It also includes appropriate provisions and obligations on the party seeking connection in relation to coal loss management.²⁰⁸

Figure 29 Standard Rail Connection Agreement – Objectives



The SRCA does not cover an agreement between the parties for:

- access by Aurizon Network or any third party to operate rollingstock on the customer specific branch line;
- access by the owner of any third party to operate rollingstock on the network or the connecting infrastructure;

²⁰⁷ The SRCA does not cover the connection of major new rail expansions, as these connections may require varied terms and conditions.

²⁰⁸ The coal loss provisions ensure that Aurizon Network has the ability to meet its obligations to comply with the Coal Dust Management Plan that has been put in place by the Department of Environment and Heritage Protection.

- land tenure; or
- services on the customer specific branch line (e.g. rail manager services).

Arrangements for access to operate rollingstock on a customer specific branch line, the network and/or the connecting infrastructure are the subject of a separate agreement or agreements between relevant parties.

Connection to the rail network for services other than coal services where the connection is also to a loading or unloading facility are subject to contractual terms negotiated between Aurizon Network and the other party. This is in line with the proposed amendments that Aurizon Network lodged with the QCA as part of the 2010 DAAU in December 2010.

16.2 Terms of Standard Rail Connection Agreement

Clause 8.4(a) of the 2010 Undertaking included a process for the development of the SRCA. This process culminated in April 2013, with the QCA issuing its final approval of the SRCA for inclusion in the 2010 Undertaking on 24 April 2013.

In making this decision, the QCA accepted that the SRCA should include an obligation that the owner of Private Infrastructure comply with reasonable Coal Loss Mitigation Provisions (CLMPs), as this will:

- ensure trains running on the network have been appropriately loaded to minimise coal loss;
- will result in a consistent approach to coal loss mitigation across all load-outs, whether they are located on the network or on private infrastructure ; and
- minimise coal fouling, and its adverse impacts, on the network.

The QCA also noted that coal loss mitigation strategies and obligations may vary over time and expressed concern that fixing the parties' obligations by reference to a prescriptive schedule (which would require the parties' agreement to amend), could result in a disconnect between the SRCA and Aurizon Network's coal loss mitigation obligations or strategies over time. As a result, the QCA required that the SRCA refer to CLMPs incorporated in Aurizon Network's Access Undertaking (AU) and accordingly the definition of CLMP in the endorsed SRCA refers to the provisions established in the access undertaking. The QCA considered that any change in coal loss mitigation requirements or strategies could then be dealt with by a change to the Undertaking, which would (following the QCA's approval of a change to the Undertaking) flow through to relevant SRCAs. This would allow the SRCA to become a living document in this respect.

Aurizon Network has considered the Authority's final SRCA decision in respect of the inclusion of CLMPs in the 2013 Undertaking. However, Aurizon Network considers that, consistent with its approach to UT4, it is more appropriate that matters of technical detail, such as the CLMPs, are dealt with by agreement between the parties (backed up by the 'safe harbour' of a standard form agreement), rather than in the Undertaking itself. For this reason, Aurizon Network has included the CLMPs in a schedule to the SRCA itself, and does not propose to include them in the 2013 Undertaking. To address the Authority's concern about the ability of the CLMPs in the SRCA to adapt to address changes in coal loss mitigation strategies or obligations over time, the relevant schedule of the SRCA has been drafted in such a way as to ensure it has the flexibility to deal with such changes over time (see clauses 1.3 and 1.4 of Schedule 7 in particular). Aurizon Network considers that this is a more flexible and appropriate mechanism for dealing with such changes over the life of the agreement.

As a result, the SRCA included in the 2013 Undertaking is identical to that approved by the QCA in April 2013, with the following exceptions:

- references to the access undertaking have been updated to be consistent with the 2013 Undertaking; and
- Aurizon Network has included a schedule relating to coal loss mitigation in the SRCA, rather than in the 2013 Undertaking.



Appendix A UT3 to UT4 Comparison

This appendix includes a set of tables which compares the terms of UT4 with UT3. The purpose of this ‘traceability matrix’ for each part of UT3 is to assist stakeholders in understanding the nature and extent of changes that have been made and to be able readily refer to any related discussion of the changes in the policy submission.

In summary, the tables provide a high level overview of changes, including:

- a clause by clause reference to where particular UT3 provisions can be located in UT4;
- a high level description of the nature of the change (if any), for example, whether it reflects a new approach to a particular issue or more simply reflects modified drafting;
- a reference to where the issue is discussed in the policy submission. Note that there will be some amendments that are minor in nature that are captured by the tables, but which are not discussed in the policy submission. The intention is that the tables in this appendix provide a comprehensive summary of changes from UT3; and
- reference to any new provisions that were not in UT3 but which have been included in UT4.

Part 1: Preamble

UT3 Reference	Description	UT4 Changes	UT4 Reference
Part 1	Preamble	Modified drafting, but with no resulting change to obligations in Access Undertaking.	Part 1

Part 2: Scope and Intent of Undertaking

UT3 Reference	Description	UT4 Changes	UT4 Reference
Clause 2.1	Duration of undertaking	No change.	Clause 2.1
Clause 2.2	Non-discriminatory treatment	Non discriminatory obligations consolidated in Part 3 Refer section 5.3 of Volume 2.	Clause 3.2
Clause 2.3	Intent	Minor drafting changes.	Clause 2.2
Clause 2.4	Scope of undertaking		
2.4(a)-(d), (f)	Scope of service	Minor drafting changes.	Clause 2.3
2.4(e)	Electricity supply	Simplified statement of voluntary commitment to supply electricity Refer section 6.3.3 of Volume 2.	Clause 2.4
Clause 2.5	Ultimate holding company support deed	Change in information included in the Deed – proforma set out in Schedule D Refer section 5.3 of Volume 2.	Clause 3.3 Schedule D

Clause 2.6	Draft incentive mechanism	Deleted – process complete	-
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Part 3: Ringfencing

UT3 Reference	Description	UT4 Changes	UT4 Reference
Clause 3.1	Organisational Structure		
3.1 (a), (b) and (c)	Core functions	Minor modifications to core functions, but substantively similar. Additional obligations on Aurizon Network to perform core functions. Refer section 5.4 of Volume 2.	Clause 3.4 Clause 3.5(d) Clause 3.5 Clause 1.2
3.1(a)(vi)	Electric infrastructure	Deleted, unnecessary Electric supply obligation modified. Refer section 5.4 of Volume 2.	Clause 2.4
3.1(d)	Organisational restructure	Obligation modified. Refer section 5.6 of Volume 2.	Clause 3.17
3.1.1 3.1.2	Management independence	Additional commitments and clarification. Refer section 5.5 of Volume 2.	Clause 3.8 Clause 3.9 Clause 3.10
3.1(e)	Yard control	Deleted as Aurizon Network has no plans for further reviews of yard control services during the term of the 2013 Undertaking.	-
Clause 3.2	General principles of non-discrimination		
3.2(a), (b) and (c)	General principles	Minor drafting changes. Refer section 5.3 of Volume 2.	Clause 3.2
Clause 3.3	Accounting separation		
3.3.1	Preparation of financial statement	Minor modification. Refer section 5.4 of Volume 2.	Clause 3.7
3.3.2	Audit of financial statements	Modified approach. Refer section 12.4 of Volume 2.	Clause 10.1
Clause 3.4	Management of confidential information		
3.4(a) and (b)	Definition of confidential information and scope of control framework	Minor changes to definition. New waiver and exclusion provisions. Refer section 5.6.4.1 and section 5.7.3 of Volume 1.	Clause 3.11 Clause 3.12 Clause 3.23 Clause 3.13
3.4(c)	Confidentiality Deed	Deleted. Refer section 5.6.2 of Volume 2.	-
3.4(d)	General commitment to	Modified drafting.	Clause 3.14

UT3 Reference	Description	UT4 Changes	UT4 Reference
	information security	Additional commitment to not disclose to marketing function.	Clause 3.15
		Refer section 5.6.4.1 and section 5.6.4.3 of Volume 2.	
3.4(d)(i)-(ii)	Allowable disclosures	Changed approach.	Clause 3.16
		Refer section 5.6.4.4 of Volume 2.	
3.4.1(a)-(e)	External flows of confidential information	Changed approach.	Clause 3.16(b)(xiii) Clause 3.18
		Refer section 5.6.4.4 of Volume 2.	
3.4.2(a)-(i)	Flows of confidential information within QR corporate Group	Changed approach.	Clause 3.16
		Refer section 5.6.4.4 of Volume 2.	
3.4.2(j)	Ringfencing register	Protected Information Register.	Clause 3.19 Clause 3.17(d)
		Refer section 5.6.4.4 and 5.6.5 of Volume 2.	
Clause 3.4.3	Transfer of QR Network employees within QR corporate group		
3.4.3(a)	Staff training and awareness	Same.	Clause 3.20(a)
		Refer section 5.6.5 of Volume 2.	
3.4.3(b)	Debrief on exit	Same.	Clause 3.20(b)
		Refer section 5.6.5 of Volume 2.	
3.4.3(c) and (d)	Staff transfers/conflicts of interest	Modified approach and new provisions on staffing of Aurizon Network.	Clause 3.6
		Refer section 5.4.3 of Volume 2.	
Clause 3.5	Decision making		
3.5(a) and (b)	Decision making	Deleted.	-
		Refer section 5.3.2 of Volume 2.	
Clause 3.6	Complaint handling		
3.6(a)-(d)	Complaint process	Slightly modified drafting, broader in scope.	Clause 3.22
		Refer section 5.7 of Volume 2.	
Clause 3.7	Audits		
3.7(a) – (c)	Annual audit of compliance with ringfencing obligations	Deleted (reliance on general provision to request audit, cl. 10.7).	-
		Refer section 12.5.2 of Volume 2.	
Clause 3.8	Responsibility for rail infrastructure		
3.8.1(a)-(b)	Publication and update of line diagrams	Commitment to publish as part of Preliminary Information.	Schedule A, Clause 1(h)
		Refer section 5.8 of Volume 2.	
3.8.1(c),(d),(e) and (f)	Limitation on transfers and process to change assignment	Deleted.	-
		Refer section 5.8 of Volume 2.	

UT3 Reference	Description	UT4 Changes	UT4 Reference
3.8.2	Process for transfer from QR Party	Deleted. Refer section 5.8 of Volume 2.	-
New provisions			
-	Preamble	Purpose of ringfencing arrangements. Refer section 5.3.4 of Volume 2.	Clause 3.1
-	Secure premises	Security of Aurizon Network premises. Refer section 5.6.5 of Volume 2.	Clause 3.21
-	Waiver by QCA	Ability for Aurizon Network to apply to QCA for waiver. Refer section 5.7.3 of Volume 2.	Clause 3.22

Part 4: Negotiation Framework

UT3 Reference	Description	UT4 Changes	UT4 Reference
Part 4		Overview section added	Clause 4.1
Clause 4.1	Access Application		Clause 4.3
4.1(a)	Access application	No change	Clause 4.3 (a)
4.1(b)	Initial discussions	Minor drafting changes	Clause 4.2(a)
4.1(c)	Preliminary information on website	Obligation modified Refer section 6.4.5.2 of Volume 2	Clause 4.2(b), 4.1(b)(i)
4.1(d)	Request for additional information from Aurizon Network	Timeframe expressed in business days,	Clause 4.2(c)
4.1(e)	Preliminary information to be kept current	No change	Clause 4.2(d)
4.1(f)-(g)	Notices to customers and advice on position in queue	Deleted Refer section 6.7.4.1 of Volume 2	-
	Access undertaking binds access seeker	Submission of an access application binds the access seeker to relevant parts of the access undertaking Refer section 6.4.2.1 of Volume 2	Clause 4.3(b)
Clause 4.2	Acknowledgement of access application		
4.2(a)-(d)	Completion of access application and acknowledgement	Obligation modified to require access seeker to provide properly completed application Refer section 6.4.6.2 of Volume 2	Clause 4.3(c), (d)
	Access applications more than three years before commencement	Access applications made more than three years before commencement of services may be rejected	Clause 4.4(e)
4.2(e)	Applications which require an extension including obligation to make a request for proposals.	Obligation modified in line with modification of Aurizon Network's obligation in relation to expansions	Clause 4.4(c)-(d), Part 8

UT3 Reference	Description	UT4 Changes	UT4 Reference
4.2(f)	Date of application	Obligation modified to date of Aurizon Network issuing acknowledgement of properly completed access application Refer section 6.4.6.2 of Volume 2	Clause 4.4(b)
4.2(g)-(h)	Change to access application prior to IAP	Deleted Refer section 6.4.7.2 of Volume 2	-
Clause 4.3	Indicative access proposal		Clause 4.5
4.3(a)-(b)	Timeframe for IAP	Minor drafting changes Timeframes expressed in business days	Clause 4.5(d)
4.3(c)-(d)	Content and expiry of IAP	Minor drafting changes Timeframes expressed in business days	Clause 4.5(b), (c), (e)
4.3(e), (h)	Referral to dispute resolution	Deleted as ability to refer to dispute resolution is consolidated in Part 11. Refer section 12.3.2 of Volume 2	-
4.3(f)-(g)	IAP not compliant with undertaking	Minor drafting changes Timeframes expressed in business days	Clause 4.5(f), (g)
4.3(i)	Non discriminatory treatment of access seekers	Deleted as non discrimination obligations are consolidated in Clause 3.2. Refer section 5.3 of Volume 2	-
Clause 4.4	Notification of intent		Clause 4.6
4.4(a)	Notification	Minor drafting changes	Clause 4.6(a)
4.4(b)-(c)	Notification after expiry of IAP	Deleted Refer section 6.4.8.2 of Volume 2	-
	Train operators	New clause added to address negotiations for TOA under alternate form of access agreement Refer section 6.4.2.2 of Volume 2	Clause 4.8
Clause 4.5.1	Negotiation period		Clause 4.9.1
4.5.1(a)	Commencement of negotiations	Minor drafting changes	Clause 4.9.1(a), (b)
4.5.1(b)-(d), (g)	Negotiations in accordance with queue	Deleted, as queuing framework has been replaced Refer section 6.7.4 of Volume 2	-
4.5.1(e)	End of negotiations	Minor drafting changes	Clause 4.9.1(c)
4.5.1(f)	Reduction in available capacity	Obligation modified to provide for access seeker and Aurizon Network to explore alternative means of providing access Refer section 6.4.3.2 of Volume 2	Clause 4.9.1(d)
Clause 4.5.2	Issues to be addressed during negotiation		Clause 4.9.2
4.5.2(a)	Negotiation issues	Minor drafting changes with inclusion of provision for TOA as applicable Refer section 6.4.2.2 of Volume 2	Clause 4.9.2(a)
4.5.2(a)(iii)-(iv)		Treatment of safety and environmental assessments during negotiations has been	Clause 4.9.2(b)-(c)

UT3 Reference	Description	UT4 Changes	UT4 Reference
		modified	
		Refer section 6.5.2.2 of Volume 2	
4.5.2(b)-(d)	Progress of negotiations	Drafting changes with inclusion of provision for TOA as applicable	Clause 4.9.2(d)-(g)
		Refer section 6.4.2.2 of Volume 2	
4.5.2(e)	Design of infrastructure enhancements	Obligation modified, but Aurizon Network retains responsibility for design of enhancements, which will be progressed under the expansion process	Clause 8.2.1(e)
		Refer section 7.3.2.4 of Volume 2	
	Negotiation of EUAA and TOA	New clause to address negotiations for alternate form of agreement	Clause 4.10
		Refer section 6.4.2.2 of Volume 2	
Clause 4.6	Negotiation conditions	Cessation of Negotiations	Clause 4.11
4.6(a)-(b)	Triggers to cease negotiations	Minor drafting changes including reference to TOA. Trigger relating to protected information has been moved to Part 3.	Clause 4.11(a), (b) Clause 3.18(b)
4.6(c)	Factors indicating no reasonable likelihood of using access rights	Modification of factors indicating no reasonable likelihood of using access rights.	Clause 4.11(c)
		Refer section 6.7.2.2 of Volume 2	
4.6(d)	Rights of access seeker in queue	Deleted	-
		Refer section 6.7.4.1 of Volume 2	
4.6(e)	Outcome of dispute	Minor drafting changes	Clause 4.11(d)
4.6(f)	Recovery of costs	Obligation has been modified to clarify the costs that Aurizon Network may recover under this Clause. Rather than giving Aurizon Network a right to seek acknowledgement of the Access Seekers' liability for these costs during the negotiation, the Clause now requires that an Access Seeker acknowledge this liability when it submits an Access Application.	Clause 4.11(e)
Clause 4.7	Capacity notification register	Deleted, as queuing framework has been removed	-
		Refer section 6.7.4.4 of Volume 2	

Part 5: Access Agreements

UT3 Reference	Description	UT4 Changes	UT4 Reference
Clause 5.1	Development of access agreements.		
5.1(a), (b)	Requirement for access agreement and parties to agreement	Minor drafting changes.	Clause 5.1(a), (b)
5.1(c)	Rail operator to be accredited	Deleted as obligation is included in standard access agreement.	Standard Access Agreement

UT3 Reference	Description	UT4 Changes	UT4 Reference
		Refer section 6.5.2.2 of Volume 2.	
5.1(d), (e)	Terms of access agreement	Drafting modified to reflect flexibility of negotiation, supported by dispute resolution process	Clause 5.1(c) (d)
		Refer section 6.5.1 of Volume 2.	
5.1(f), (g)	Execution of access agreement	No change.	Clause 5.1 (e) (f)
5.1(h)	Lead time for agreement	Simplified drafting	Clause 5.1(g)
	Additional access rights	New clause to clarify that additional access rights may not be granted on the same terms as an existing access agreement.	Clause 5.1(h)
	Access charges under access agreement	New clause to clarify that in an access agreement, access charges may be separately calculated for different train service types	Clause 5.2
Clause 5.2	Development of new standard access agreements	Deleted. Refer section 6.5.3 of Volume 2.	-
Clause 5.3	Access agreements for related operator	Deleted. Non discrimination obligations have been consolidated in Part 3. Refer section 5.3 of Volume 2.	-
Clause 5.4	Disclosure of agreements	Obligation modified. Refer section 6.6 of Volume 2.	Clause 10.3.1

Part 6: Pricing Principles

UT3 Reference	Description	UT4 Changes	UT4 Reference
Clause 6.1.1	Application of pricing principles	Minor drafting changes	Clause 6.1
Clause 6.1.2	Limits on price differentiation		
6.1.2(a)	Obligation to not differentiate, except as permitted	Obligation redrafted from a 'negative' to a 'positive' obligation, and modified to be consistent with drafting of the QCA Act, which allows price differentiation in a way that is not unfair and which does not materially adversely affect competition.	Clause 6.2.1
6.1.2(b)(i)	Permission to differ from reference tariff to reflect differences in cost/risk	Clarification of circumstances where Aurizon Network can differ from reference tariff. Refer section 9.5 of Volume 2.	Clause 6.2.2
6.1.2(b)(ii)	Permission to differ from reference tariff for north Blackwater services	Deleted This was originally included in response to concerns that north Blackwater customers could divert tonnages from Gladstone to DBCT, resulting in asset stranding risk. It is not longer considered necessary to retain this. If such risks did eventuate, they can be addressed under the pricing framework (and would require QCA approval).	-

UT3 Reference	Description	UT4 Changes	UT4 Reference
6.1.2(c)	Permission to differentiate where no reference tariff	Minor drafting changes. Reference to transport service payments removed as they are no longer paid to Aurizon Network.	Clause 6.2.3
6.1.2(d)-(e)	Rate review	A similar provision is included in clause 6.2.7 of the 2013 Undertaking but the constraint limiting this right to access agreements in excess of five years has been removed. Clause 6.2.7 also confirms that "the Standard Access Agreement will already contain rate review provisions in compliance with this clause." The 'most favoured nation' provision contained in clause 6.1.2(e) is now also addressed in the Standard Access Agreement and therefore is not included in the 2013 Undertaking.	Clause 6.2.7
Clause 6.1.3	Access charges for related operators	This is explicitly addressed under the general principles of non-discrimination in the 2013 Undertaking (clause 3.2(a)(iii)). Refer section 5.3 of Volume 2.	-
Clause 6.2.1	Application of pricing limits	Minor drafting changes	Clause 6.3.1
Clause 6.2.2	Price limits for individual train services		
6.2.2(a)	Description of price limits	Minor drafting changes. Inclusion of Transport Service Payments in assessing compliance with incremental cost limit has been deleted, as Aurizon Network is no longer managing assets subject to a Transport Services Contract.	Clause 6.3.2
6.2.2(b)	Assessment against price limits	Minor drafting changes	Clause 6.3.3(a)
Clause 6.2.3	Price limits on train service combinations		
6.2.3(a)	Description of price limits	Minor drafting changes. 'Expected access revenue' is now a specifically defined term (refer section 9.5.2 of Volume 2). Inclusion of Transport Service Payments in assessing compliance with incremental cost limit has been deleted, as Aurizon Network is no longer managing assets subject to a Transport Services Contract.	Clause 6.3.2(a)
6.2.3(b)	Assessment against price limits	Minor drafting changes	Clause 6.3.3(a) - (b)
6.2.3(c)	Expected access revenue	Moved to defined terms.	Definitions
6.2.3(d)	Circumstances under which non-compliance with the pricing limits is not a breach.	Minor drafting changes	Clause 6.3.2(b)
Clause 6.2.4	Definition of Maximum		

UT3 Reference	Description	UT4 Changes	UT4 Reference
	Allowable Revenue		
6.2.4(a)-(b)	Calculation of MAR	Minor drafting changes Reference to Transport Services Payments has been deleted, as Aurizon Network is no longer managing assets subject to a Transport Services Contract. A definition of Expected Access Revenue has been included, which is discussed in section 9.4 of the submission. The definition of return on assets has been revised to align with clause 168(A)(a) of the QCA Act.	Clause 6.3.3(b)-(d)
6.2.4(c)	Valuation of assets	Aurizon Network has amended this provision, maintaining the link between the aggregate value of the assets for all coal systems in aggregate (which sets the MAR limit) and in all other circumstances, basing this value on DORC. Refer section 9.3 of Volume 2.	Clause 6.3.3(e)
Clause 6.3.1	Rail infrastructure utilisation	Minor drafting changes A provision has been included to make it clear that this treatment does not apply in respect to setting an access charge for a train service where a reference tariff applies.	Clause 6.4.1
Clause 6.3.2	Revenue adequacy	Minor drafting changes. Reference to Transport Services Payments has been deleted, as Aurizon Network is no longer managing assets subject to a Transport Services Contract.	Clause 6.4.2
Clause 6.4.1	Application of reference tariffs	Drafting changes, but no material change in obligations. The elements comprising the access charge for coal carrying train services to which a reference tariff applies have been included in this clause.	Clause 6.5.1
Clause 6.4.2	Establishment of new reference tariffs		
6.4.2(a)-(c)	Circumstances where new reference tariff must be submitted to QCA	Deleted. It is considered unnecessary to specify these circumstances given Aurizon Network would voluntarily develop a reference tariff if there was sufficient demand. Refer section 9.8 of Volume 2.	-
6.4.2(e)	QCA may develop reference tariff	Deleted (consistent with the reasons for the removal of clause 6.4.2(a)-(c)). Refer section 9.8 of Volume 2.	-
6.4.2(d) and (f)-(m)	Process for assessing reference tariff	Obligations modified to improve approval process. Refer section 9.8 of Volume 2.	Clause 6.2.6
Clause 6.4.3	Review of reference tariffs	Unchanged A new clause has also been included (6.5.3) making it clear that where any amendments	Clause 6.5.2

UT3 Reference	Description	UT4 Changes	UT4 Reference
		are made to the system-specific reference tariff details (clauses 7 to 11 in Schedule F of the 2013 Undertaking), then Aurizon Network must publish a new version of the relevant clauses that have been amended.	
Clause 6.4.4	Review of MCI	This clause has not been included in the 2013 Undertaking. It was specific to UT3 as part of the introduction of the MCI. Aurizon Network expects that the composition of the MCI will be subject to scrutiny at the start of the regulatory period as part of the approval process.	-
Clause 6.5.1	Structure of access charges		
6.5.1(a)	Where reference tariff applies	Clause has been expanded to include the elements comprising the access charge for coal carrying train services to which a reference tariff applies.	Clause 6.5.1(c)
6.5.1(b)	Where no reference tariff applies	Minor drafting changes, including wording making it clear that there is no limitation on the ability of Aurizon Network and an access seeker to agree the structure of its access charges.	Clause 6.6
6.5.1(c)	QCA levy	Unchanged	Clause 6.7
Clause 6.5.2	Access Conditions	This has been substantially redrafted based on a proposed fundamental change to these obligations. Refer section 7.6 of Volume 2.	Clause 6.9

Part 7: Capacity Management

UT3 Reference	Description	UT4 Changes	UT4 Reference
Clause 7.1			
7.1(a)	Network management principles	Minor drafting changes and obligation to comply with NMP included in SAA.	Clause 7.6 .1 SAA
7.1(b)-(d)	Development of draft system rules	Minor drafting changes and simplification of QCA approval process Refer section 11.4.6 of Volume 2	Clause 7.6.3
7.1(e)	Submission of draft system rules	Deleted as system rules have been submitted	-
Clause 7.2	Service specification and train scheduling	Deleted as obligations are included in standard access agreement Refer section 6.5.2 of Volume 2	Standard Access Agreements
Clause 7.3.1	Allocation of available capacity	Deleted, as subsumed in overall capacity allocation arrangements given restructure of this section Refer section 6.8 of Volume 2	-
Clause 7.3.2	Competing applications	Obligation modified to clarify treatment of customer and operator applications for the same access.	Clause 4.7

UT3 Reference	Description	UT4 Changes	UT4 Reference
		Refer section 6.4.4.2 of Volume 2	
Clause 7.3.3	Mutually exclusive access applications	Queuing framework is replaced with a set of ranked allocation criteria	Clause 7.5.1 and 7.5.2
		Refer section 6.7.4 of Volume 2	
Clause 7.3.4	Formation of a queue	Deleted	-
		Refer section 6.7.4 of Volume 2	
Clause 7.3.5	Capacity resumption	Deleted as obligations are included in standard access agreement	Standard Access Agreements
		Refer section 6.8 of Submission	
Clause 7.3.6	Capacity relinquishment and transfer	Obligation modified	Clause 7.4
		Most elements of this clause are deleted as obligations are included in standard access agreement	Standard Access Agreements
		Access undertaking clause now limited to, in instances of capacity transfer, creating an obligation on Aurizon Network to negotiate with the access holders' transferee in relation to the access rights.	
		Refer section 6.8.2.4 of Submission	
Clause 7.3.7	Customer initiated capacity transfer	Deleted as obligations are included in standard access agreement	Standard Access Agreements
		Refer section 6.8 of Volume 2	
Clause 7.4	Committed capacity		
7.4(a)-(c)	Notifications about committed capacity and requirement to maintain committed capacity register	Deleted as registers were to support queuing framework	-
		Refer section 6.7.4.4 of Volume 2	
7.4(d)	Renewals	Obligation modified but first right of existing users to negotiate for renewed agreements remains.	Clause 7.3
		Refer sections 6.7.3 and 7.6.4.4 of Volume 2	
Clause 7.5	Network investment		Part 8
Clause 7.5.1	General extension principles	Aurizon Network remains obliged to expand the network, but obligations have been modified to more closely align with QCA Act	Clause 8.2.1
		Refer section 7.3.2 of Volume 2	
Clause 7.5.2	Extension process	Provisions relating to identification of demand and progress of studies have been expanded and modified	Clause 8.2.3, 8.3, 8.4 and 8.5
		Refer sections 7.4-7.5 of Volume 2	
Clause 7.5.3	Customer specific branch lines	Extension process does not apply to customer specific branch lines. Connections of private branch lines will be governed by Part 9.	Clause 8.2.1(c)-(d)

UT3 Reference	Description	UT4 Changes	UT4 Reference
		Refer section 7.3.2 of Volume 2	
Clause 7.5.4	Incremental investments	Obligation to fund investments has been modified to more closely align with QCA Act	Clause 8.2.1(b)
		Refer section 7.3.2 of Volume 2	
Clause 7.5.5	User funded infrastructure	Option for user funding of expansion retained, with modified obligations	Clause 8.6 Schedule I - SUFA
		Refer section 7.6 of Volume 2	
Clause 7.6	Investment framework amendments and standard user funding agreement	Deleted as SUFA is complete and expansion process included in 2013 Undertaking	Schedule I - SUFA
Clause 7.7	Investment contrary to undertaking	Obligations have been modified and incorporated into consolidated statement of terms that Aurizon Network cannot impose	Clause 6.9
		Refer section 7.6.5 of Volume 2	

Part 8: Interface Management

UT3 Reference	Description	UT4 Changes	UT4 Reference
Clause 8.1	Interface risk management process	Deleted as obligations are included in standard access agreement	Standard Access Agreements
		Section 6.4.5.2 of Volume 2	
Clause 8.2	Environmental risk management process	Deleted as obligations are included in standard access agreement	Standard Access Agreements
		Section 6.4.5.2 of Volume 2	
Clause 8.3	Connecting Infrastructure	Connecting Private Infrastructure	Part 9
8.3(a)	Circumstances where access seeker can require connecting infrastructure	Minor drafting changes	Clause 9.1(a)(ii)-(vi)
8.3(b)	Obligations on Aurizon Network re connecting infrastructure	Deleted as obligations are included in standard rail connection agreement	Standard Rail Connection Agreement Clause 6.1 and Clause 12
8.3(c)	Aurizon Network to design and construct connecting infrastructure	Minor drafting changes	Clause 9.1(a)(i) Standard Rail Connection Agreement Clause 6.4(b)(i)
8.3(d)	Liability for delays	Deleted as obligations are included in standard rail connection agreement	Standard Rail Connection Agreement Clause 6.4(a)
8.3(e)	Referral of disputes to dispute resolution	Deleted as this will be covered in connection agreement	Standard Rail Connection Agreement
		Section 12.3.2 of Volume 2	

UT3 Reference	Description	UT4 Changes	UT4 Reference
8.3(f)	Inclusion of costs in Reference Tariffs	Minor drafting changes	Clause 9.1(b)

Part 9: Reporting

UT3 Reference	Description	UT4 Changes	UT4 Reference
Clause 9.1	Quarterly Network Performance Reports	Change to reporting frequency Refer section 12.4 of Volume 2	Clause 10.1.5
Clause 9.2.1	Annual Financial Report	Modified approach Refer sections 12.4 and 12.5 of Volume 2	Clause 10.1.1
Clause 9.2.2	Annual Performance Report	No change Refer sections 12.4 and 12.5 of Volume 2	Clause 10.1.2
Clause 9.2.3(a)	Maintenance Cost Report – template	Deleted, no longer applicable	-
Clause 9.2.3(b)-(e)	Maintenance Cost Report	Minor changes (clause 9.2.3(c)(ii)(C) and Clause 9.2.3(d)(ii) deleted). Refer section 12.4 of Volume 2	Clause 10.1.3
Clause 9.2.4(a)	Maintenance Cost Report to QCA – template	Deleted, no longer applicable	-
Clause 9.2.4(b)-(e)	Maintenance Cost Report to QCA	Minor modifications Refer section 12.4 of Volume 2	Clause 10.1.4
Clause 9.2.5	Operational Data Report to QCA	Deleted, unnecessary duplication.	Clause 10.1.5(v)
Clause 9.3.1	Capital Expenditure Report to the QCA	Modified drafting Refer section 12.4 of Volume 2	Schedule E, clause 1.3
Clause 9.3.2	Regulatory Asset Base Roll-forward Report to the QCA	Minor modification (clause 9.3.2(h) deleted) Refer section 12.4 of Volume 2	Schedule E, clause 1.4
Clause 9.3.3	Public Regulatory Asset Base roll-forward Report	Minor modification (clause 9.3.3(c)(ii) deleted) Refer section 12.4 of Volume 2	Clause 10.1.6
Clause 9.4	Breach Reports to QCA	No change Refer section 12.4 of Volume 2	Clause 10.2
Clause 9.5	Information Requested by the QCA	Minor modification	Clause 10.3
Clause 9.6	Compliance	Minor modification (clause 9.6(a)(ii) and (iii) modified, clause 9.6(b) and clause 9.6(c) deleted)	Clause 10.4
Clause 9.7	Report Auditing	Minor modification Refer section 12.5 of Volume 2	Clause 10.6
Clause 9.8	Audit Requested by QCA	Minor modification	Clause 10.7

UT3 Reference	Description	UT4 Changes	UT4 Reference
		Refer section 12.5 of Volume 2	
New provisions			
	Certifications required from Executive Officer	Inclusion of rebuttal assumption Refer section 12.4.3 of Volume 2	Clause 10.5

Part 10: Dispute Resolution and Amendment Processes

UT3 Reference	Description	UT4 Changes	UT4 Reference
Clause 10.1.1	Disputes	Minor drafting change, for clarification Refer section 12.3 of Volume 2	Clause 11.1.1
Clause 10.1.2	Chief Executive Resolution	Modified approach Refer section 12.3 of Volume 2	Clause 11.1.2
Clause 10.1.3	Expert Determination	Minor drafting changes Refer section 12.3 of Volume 2	Clause 11.1.4
Clause 10.1.4	Determination by the QCA	Some changes to reflect modified approach in other Parts Refer section 12.3 of Volume 2	Clause 11.1.5
Clause 10.2	QCA Decision Making	No change Refer section 12.6 of Volume 2	Clause 11.2
Clause 10.3	Audit Process	Modified approach Refer section 12.5.3 of Volume 2	Clause 10.8
New provisions			
	Mediation	Additional step of mediation included Refer section 12.3 of Volume 2	Clause 11.1.3
	Procedure	Modified drafting Refer section 12.3 of Volume 2	Clause 11.1.6

Part 11: Coordination and Planning

UT3 Reference	Description	UT4 Changes	UT4 Reference
Clause 11.1.1	Whole of Supply Chain Coordination	No change Refer section 8.4 of Volume 2	Clause 8.8.1
Clause 11.1.2	Participation in development of Supply Chain Master Plan	Moved Refer section 8.4 of Volume 2	Clause 8.8.1
Clause 11.1.3	Supply chain operating assumptions		

UT3 Reference	Description	UT4 Changes	UT4 Reference
11.1.3(a) and (b)	Developing supply chain operating assumptions	Deleted, unnecessary Refer section 8.5 of Volume 2	-
11.1.3(c)	Review of supply chain operating assumptions	Modified approach Refer section 8.5 of Volume 2	Clause 8.8.2
11.1.3(d)	Referral of dispute about supply chain operating assumptions	Deleted, modified approach Refer section 8.5 of Volume 2	-
Clause 11.1.4	Review of capacity		
11.1.4 (a) – (d)	Regular review of capacity	Modified approach Refer section 8.5 of Volume 2	Clause 8.8.3 Clause 8.8.2
11.1.4 (e)	Capacity shortfalls	Modified approach Refer section 8.5 and section 7.8 of Volume 2	Clause 8.8.3 Clause 8.7.2
11.1.4(f)	Liaison with supply chain participants on timing of maintenance	Deleted, unnecessary duplication Refer section 8.4 of Volume 2	Clause 8.8.1
Clause 11.1.5	Review of Undertaking following LTS Outcome	Deleted Refer section 8.4 of Volume 2	-
Clause 11.2	Coal Rail Infrastructure Master Plan	Deleted, new approach Refer section 7.2 of Volume 2	Clause 8.9
Clause 11.3	Contracting for capacity		
11.3(a)	Contractual alignment	Additional obligations Refer section 8.6 of Volume 2	Clause 4.11(c), Standard Access Agreement
11.3(b)(c), (d), (e) and (f)	Capacity review and shortfalls following expansion	Modified approach Refer section 7.8 of Volume 2	Clause 8.7.2
Clause 11.4	No fetter	Moved	Clause 8.7.2(e)

Schedule A: Maintenance of Regulatory Asset Base

UT3 Reference	Description	UT4 Changes	UT4 Reference
Clause 1	Maintenance of Regulatory Asset Base		Schedule E
Clause 1.1	Obligation to maintain RAB	Minor drafting changes.	Clause 6.8 of Undertaking
Clause 1.2	Principles for RAB roll forward	Modified obligations in relation to the recognised value of asset disposals and transfers. Otherwise, minor drafting changes. Refer section 10.8 of Volume 2.	Clause 1.1
Clause 1.3	Increase in RAB values	Additional clause relating to equity raising costs. Otherwise, minor drafting changes. Refer section 10.8 of Volume 2.	Clause 1.2(a)-(b)
Clause 1.4	Reduction in RAB values		

UT3 Reference	Description	UT4 Changes	UT4 Reference
1.4(a)	False or misleading information	Modified drafting, but no substantive change to obligation. Refer section 10.8 of Volume 2.	Clause 1.2(c)-(d)
1.4(b)	Deterioration in demand	Deleted. Refer section 10.8 of Volume 2.	-
1.4(c)	Possibility of bypass	Deleted. Refer section 10.8 of Volume 2.	-
1.4(d)	Condition based assessment	Deleted. Refer section 10.8 of Volume 2.	-
Clause 1.5	Rail Infrastructure to be fit for purpose	Deleted. Refer section 10.8 of Volume 2.	-
Clause 2	Acceptance of capital expenditure into RAB		
Clause 2.1-2.2	QCA to accept prudent capital expenditure in RAB	Modified drafting, with treatment of expansion studies expenditure (previously under Clause 7.4.2(e) and Schedule A, Clause 2.5 now included) but no substantive change to obligations.	Clause 2.2(a)
Clause 2.3	Capital indicator does not indicate acceptance	Modified drafting, but no substantive change to obligations.	Clause 2.2(i)
Clause 2.4	Strategic asset management plan	Obligation redrafted to clarify role and status of Asset Management Plan, as well as process for amendment of the Asset Management Plan.	Clause 2.4
Clause 2.5 and clause 2.6	Expenditure eligible for inclusion	Criteria that projects must be commissioned or formally discontinued is moved. Minor drafting changes to the process and required notifications regarding the QCA's assessment of capital expenditure.	Clause 2.2(a) Clause 2.2(d)-(f)
Clause 3	Assessment of capital expenditure		
Clause 3.1	Aurizon Network may seek pre-approval of scope/standard/procurement strategy	Included within an expanded overview of the QCA's acceptance of capital expenditure into the RAB	Clause 2.1
Clause 3.1.1	Pre-approval of scope: circumstances where QCA will accept scope as prudent	There are no separate provisions addressing the circumstances under which regulatory pre-approval of scope can be obtained. Refer section 10.8.2.5 of Volume 2.	General provisions for assessing prudence of scope are in Schedule E, Clause 3.2
Clause 3.1.2	Pre-approval of standard: circumstances where QCA will accept standard as prudent.	There are no separate provisions addressing the circumstances under which regulatory pre-approval of standard can be obtained. Refer section 10.8.2.5 of Volume 2.	General provisions for assessing prudence of standard are in Schedule E, Clause 4.
Clause 3.1.3	Pre-approval of procurement strategy	Simplification of clauses 3.1.3(a) to (f) including deletion of clause 3.1.3 (g) (acceptance of contract variations or	Clause 6

UT3 Reference	Description	UT4 Changes	UT4 Reference
		escalations post award)	
		Clauses 3.1.3 (h) (audit of compliance with procurement strategy) has been deleted. This is because all audit processes be dealt with in the one section (Part 10).	
Clause 3.2	Customer Group Acceptance of Projects	This has been moved into Part 8 (clause 8.10). 'Customer Group' replaced with the term 'Interested Participants'. Refer section 7.7 of Volume 2.	Clause 8.10
Clause 3.2.1	Identification of customer groups	Clarification has been made to the identification of Interested Participants, and calculation of voting rights now based on entitlement to train paths. Refer section 7.7 of Volume 2.	Clause 8.10.3-8.10.4
Clause 3.2.2	Customer group voting process	Amendments have been made to the voting process, including specification of information that Aurizon Network must provide, and requirement for participants to provide reasons for a 'no' vote. Accountability for compliance with voting process now confirmed by independent audit. Refer section 7.7 of Volume 2.	8.10.5 - 8.10.7
Clause 3.3	Prudency of capital expenditure		
Clause 3.3.1	Assessment of prudency of capital expenditure	Provisions have been modified to: <ul style="list-style-type: none"> Strengthen the implications of a customer vote, from being something that the QCA will take into account, to provide that the QCA will accept the endorsed aspect of the project as prudent. Include new provisions regarding requests for additional information; Include a new provision deeming acceptance of Aurizon Network's request by the QCA if it has not notified Aurizon Network within 45 business days. Refer section 7.7 of Volume 2.	Clause 2.3
Clause 3.3.2	Prudency of scope of works	General provisions on acceptance addressed in separate clause. Provisions included to address the situation where expenditure has been incurred, as well as where pre-approval is sought. The provisions in relation to the appropriateness of Aurizon Network's evaluation processes, and adherence with these processes, have been removed as this is considered unnecessarily intrusive. Provisions in relation to Excluded Capital Expenditure (3.3.2(e)) have been modified to include circumstances where this clause	Clause 2.2, 3.2(a) – (c) Clause 3.2(d) Clause 3.3

UT3 Reference	Description	UT4 Changes	UT4 Reference
		cannot apply.	
Clause 3.3.3	Prudency of standard	General provisions on acceptance addressed in separate clause. Provisions included to address the situation where expenditure has been incurred, as well as where pre-approval is sought. Implications of an approved Asset Management Plan now addressed in this section. Minor edits to the factors that the QCA will consider in assessing standard.	Clause 2.2, 4.1, 4.3(a) & (b) Clause 4.2 Clause 4.3(c)
Clause 3.3.4	Prudency of costs	Provisions included to address the situation where expenditure has been incurred, as well as where pre-approval is sought. Implications of an approved procurement strategy have been clarified. Included an additional matter the QCA must have regard to, being “the allocation of costs attributable to Rail Infrastructure on an optimised Stand Alone Cost basis”.	Clause 5 Clause 5
Clause 4	Capital Expenditure Carryover Account	Minor amendments to streamline drafting and provides for separate recording of Aurizon Network and user funded assets.	Clause 7
Clause 5	Condition Based Assessments	Removed. Refer section 10.8 of Volume 2.	-

Schedule B: Confidentiality Deed

UT3 Reference	Description	UT4 Changes	UT4 Reference
Schedule B	Confidentiality Deeds	Deleted. Refer section 5.6.2 of Volume 2.	-

Schedule C: Summary of Information Requirements as part of Access Application

UT3 Reference	Description	UT4 Changes	UT4 Reference
Schedule C	Summary of information requirements as part of an access application		Schedule B
Clause 1	Access seeker	Minor drafting changes	Clause 1
Clause 2	Coal and freight train services	Minor changes to information required including proposed commencement date, sectional run times, dwell, stowage and operating information	Clause 4

Clause 3	Passenger train services	Minor changes to information required including proposed commencement date, sectional run times, dwell, stowage and operating information	Clause 5
	Ability to use access rights	A new clause requiring information about the access seeker's ability to use the access rights sought	Clause 2
	Form of access agreement	A new clause requiring nomination of the form of access agreement sought	Clause 3

Schedule D: Preliminary and Additional Information

UT3 Reference	Description	UT4 Changes	UT4 Reference
Schedule D	Preliminary and additional information		Schedule A
Part A	Preliminary Information		
Clause 1	Information Pack	Substantially similar information to be provided with exception of working plan and section drawings. System definitions limited to CQCR systems. Refer section 6.4.5 of Volume 2.	Clause 1(a)-(k)
Clause 2	QR Network Rollingstock Interface Standards	Removed \$1000 fee for provision Refer section 6.4.5 of Volume 2.	Clause 1(l)
Clause 3	Commercial Information		
	Reference Tariffs	Applicable reference tariffs rather than all system reference tariffs	Clause 1(m)
	Standard access agreements	No change.	Clause 1(m)
	Worked example of Relinquishment fee	Obligation to provide worked example of Relinquishment Fee removed, as the calculation of Relinquishment Fee is specified in the SAA.	-
	Sample IRMP	No change.	Clause 1(m)
	Capacity Information	No change.	Clause 3
Part B	Additional Information		
Clause 1	Capacity Information	No change.	Clause 3
Clause 2	Access to rail corridor	No change.	Clause 2
Clause 3	Information for EIRMR	Removed – as included as part of IRMP	-
Clause 4	Information for Interface Risk Assessment	Drafting changes, but obligation for IRMP remains unchanged. Now included in SAA	Clause 2 - Compliance Information and SAA
Clause 5	Other information	No change.	Clause 2

Schedule E: Principles for Inclusion in Standard Access Agreement

UT3 Reference	Description	UT4 Changes	UT4 Reference
Schedule E	Principles for inclusion in Standard Access Agreement	Deleted. Refer section 6.5 of Volume 2	-

Schedule F: Reference Tariff Schedules

UT3 Reference	Description	UT4 Changes	UT4 Reference
Introduction	Introduces purpose of Schedule F Schedule F is split into 2 parts (A and B)	Schedule F is no longer in two parts. Minor drafting changes have been made, reflecting the main purpose of Schedule F. It no longer addresses the methodology used to determine a new reference tariff as this is now addressed in Part 6.	Clause 1.1

PART A

Clause 1	Reference Train Service description	This has been reviewed and updated. The conditions of access in relation to below rail transit times (clause 1.4.2) is addressed in the Standard Access Agreement and for each system, in clauses 7.1(c), 8.1(c), 9.1(c), 10.1(c) and 11.1(c). Refer section 9.4 and 9.5.2 of Volume 2.	Clause 1.3 Clauses 7 – 11
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Clause 2 Access charge

Clause 2.1	Reference Tariff	Not retained in its current form. There are more explicit clauses dealing with the application of reference tariffs that have been included in Part 6 and Schedule F.	Clause 6.5.1 Clause 1.2 (Schedule F)
Clause 2.2	Variation of Reference Tariffs		
Clause 2.2.1	When variations submitted	Unchanged	Clause 5.1(a)
Clause 2.2.2	QCA provides notice requiring variation	Notice limited to where QCA becomes aware of Endorsed Variation Event.	Clause 5.1(b)
Clause 2.2.3	Extensions of time	Unchanged	Clause 5.6
Clause 2.2.4	QCA development of a varied reference tariff	Unchanged	Clause 5.1(c)
Clause 2.2.5	Information and process requirements - general	Aurizon Network has consolidated the provisions governing the submission, review and approval of a proposed reference tariff variation (regardless of the source of that variation) into the one process. This also ensures consistent treatment of matters such as Aurizon Network's ability to respond to any submissions made by stakeholders. Aurizon Network has also added additional	Clause 5.4(a) Clause 5.5

UT3 Reference	Description	UT4 Changes	UT4 Reference
		matters the QCA must take into account in deciding whether to approve the proposed reference tariff variation, such as the pricing principles in the QCA Act.	
		Refer section 10.7 of Volume 2.	
Clause 2.2.6	Information and process requirements – Endorsed Variation Event	See 2.2.5	
Clause 2.2.7	Information and process requirements – Review Event	See 2.2.5	
Clause 2.2.8	Information and process requirements – annual review	See 2.2.5	
Clause 2.2.9	QCA approves variation	Unchanged	Clause 5.5(d)
Clause 2.2.10	QCA refuses to approve variation	Unchanged	Clause 5.5(e)
Clause 2.2.11	Aurizon Network to comply with notice under 2.2.10.	Unchanged	Clause 5.5(f)
Clause 2.2.12	QCA approval of resubmitted tariff	Minor drafting changes (including referring back to the new provision re factors QCA must take into account, as described above).	Clause 5.5(6)
Clause 2.2.13	Variation must include amendments to SAR and system forecasts	Unchanged	Clause 5.5(h)
Clause 2.3	Adjustment Charges		
Clause 2.3.1	Entitlement to apply adjustment charges	Minor drafting changes An amendment has also been made to allow Aurizon Network to set off any such adjustment charge. To the extent that the access holder has not paid the original access charge to which an adjustment amount relates, Aurizon Network is able to set off the adjustment against the amount payable by the access holder. The right of set off is a standard commercial and legal principle.	Clause 6.1(a)
Clause 2.3.2	Calculation of interest on adjustment charges	Additional wording included to state that where Aurizon Network is required to reimburse an access charge, interest will not be calculated to the extent that the access holder has not paid the original access charge to which that adjustment charge relates. It is considered reasonable not to be required to compensate access holders for foregone interest on amounts that they have not actually paid.	Clause 6.1(b)
Clause 2.3.3	Where variation sought under clause 2.2 is to apply prior to the date of approval	Unchanged	Clause 6.2(a)
Clause 2.3.4	Information and process requirements	Unchanged	Clause 6.2(b)
Clause 2.3.5	Aurizon Network to	Unchanged	Clause 6.2(c)

UT3 Reference	Description	UT4 Changes	UT4 Reference
	apply with QCA approval of adjustment charges in calculating access charges		
Clause 2.3.6	QCA refuses to approve adjustment charge	Unchanged	Clause 6.2(d)
Clause 2.3.7	Aurizon Network to comply with notice given under 2.3.6	Unchanged	Clause 6.2(e)
Clause 2.3.8	Approval of resubmitted proposal	Unchanged	Clause 6.2(f)
Clause 2.3.9	Circumstances under which adjustment charges can be applied to an access holder that did not run the train services to which the charge relates	Minor drafting changes	Clauses 6.3(a) and (b)
Clause 2.3.10	Calculation of access charges under an access agreement must be reviewed and varied to provide for payment of adjustment charges approved by the QCA	Minor drafting changes	Clause 6.3(c)
Clause 3 Variations to Reference Train Service			
Clause 3.1	Circumstances under which a varied access charge might apply	Not included, as considered unnecessary.	-
Clause 3.2	Capacity multiplier formula	As this is fundamental to price differentiation this has been moved to Part 6. Aurizon Network is also proposing to introduce a performance multiplier to adjust for differences between expected and actual performance differentials (as between the proposed train service and the reference train), which will be applied to certain constrained sections from 1 July 2015. Provision is also made for an alternative methodology to calculate the capacity multiplier, if agreed between Aurizon Network and the QCA. Refer section 9.5.4 of Volume 2.	Part 6, 6.2.2(d)
Clause 3.3	Aurizon Network not precluded from seeking Access Conditions	This provision is now in clause 6.9(a) of Part 6. 'Access Conditions' are now referred to as 'Commercial Terms'. Refer 7.6 of Volume 2.	Part 6, 6.9(a)
PART B			
Clause 1	Reference Train Service Characteristics	Required dwell periods moved to system-specific reference train service criteria. Train examination limit has been removed. Refer section 9.4 of Volume 2.	Clauses 7.1(f), 8.1(f), 9.1(f), 10.1(f), 11.1(f)

UT3 Reference	Description	UT4 Changes	UT4 Reference
		The specification of TSEs has been changed to account for factors that affect actual usage of the supply chain. It has also been moved to the general reference train service characteristics. Refer section 8.6 of Volume 2.	Clause 1.3(e)
Clause 2	Access Charge		
Clause 2.1	Reference Tariff		
Clause 2.1.1	Composition of Reference Tariff	Minor drafting (clarification) changes. EC will now be published by Aurizon Network by 31 May of the year prior to the relevant year (instead of via an Endorsed Variation Event). Refer section 9.11 of Volume 2. It also allows for the recovery of any applicable Environmental Compliance Charge. This charge is equal to any fine, penalty, cost, impost or other amount imposed on Aurizon Network by an authority under any environmental law in relation to any non-compliance with the Coal Dust Management Plan, which is due to the act or omission of an access holder, or where the access holder fails to do (or not do) something requested by Aurizon Network that could have reduced or avoided the impost.	Clause 2.2
Clause 2.1.2	Amounts GST exclusive	The sentence saying that the amount for GST will be added to the access charge when the access holder is invoiced has not been included. It is considered unnecessary to have this statement in the access undertaking as it will be addressed under the access agreement.	Clause 2.2(b)
Clause 2.1.3	Train service is one way	Unchanged	Clause 2.2(c)
Clause 2.1.4	Parameters assessed over relevant billing period	Not included, as considered unnecessary.	-
Clause 2.2	Take or pay		
Clause 2.2.1	Entitlement to take or pay	This has been replaced with a statement that the reference tariff includes a take or pay charge and describes the purpose of that charge`.	Clause 2.4(a)
Clause 2.2.2	Applicability of different undertakings	This has been redrafted to improve clarity. The definitions of new and old access agreements (which arise from transfers of access rights) have been moved from Part 7 to the Definitions. An amendment has also been made to provide that for UT1 access agreements, any volumes that are destined for WICET will be excluded from the volumes applied in the calculation of take or pay. Refer section 10.6 of Volume 2.	Clause 2.4(b)
Clause 2.2.3	Calculating the take or pay amount	Minor drafting changes to make provision clearer, as well as ensure the correct the application of each reference tariff component to the relevant parameters.	Clause 2.4(c)

UT3 Reference	Description	UT4 Changes	UT4 Reference
Clause 2.2.4	System test	Minor drafting changes. An additional clause has been included to make it clear that the provisions in relation to capping only apply where take or pay is payable after the application of the system test.	Clause 2.4(f) and (g)
Clause 2.2.5	Pooling of TSEs for same origin and destination	This has been redrafted as the operation of the current provision is unclear. Refer section 10.6 of Volume 2.	Clause 2.4(h)
Clause 2.2.6	Capping of take or pay	New provisions have been included in relation to the capping of operator take or pay exposures (refer section 10.6 of Volume 2). Otherwise, minor drafting changes have been made to the existing provision addressing the capping provisions that apply to the different generations of access agreements (refer section 10.6 of Volume 2).	Clauses 2.4(i) to (k) Clauses 2.4(l) and (m)
Clause 2.2.7	Adjustment for Aurizon Network Cause	Additional wording added to clarify that where an access holder has more than one agreement for the same origin and destination, any unutilised paths due to an Aurizon Network Cause will first be allocated to a UT1 access agreement (given this is the only generation of access agreements with uncapped take or pay liability). It is also noted in calculating nt and ntk for the purpose of this assessment, reference will be made to nominal payloads.	Clause 2.4(d)
Clause 2.2.8	Access holder to be provided with information on calculation of take or pay	This clause has been removed.	-
Clause 3 Annual review of Reference Tariffs			
Clause 3.1	Requirement for annual review of Reference Tariffs		
Clause 3.1.1	Reference Tariffs to be adjusted for SAR changes prior to the start of each year	Minor drafting changes.	Clause 4.1(a)
Clause 3.1.2	Submission and approval of annual review	The following new provisions have been included: <ul style="list-style-type: none"> Adjustment for the difference between actual and forecast maintenance GTKs and the short run variable maintenance cost rate, which gives effect to the proposal to bring non-volume sensitive AT1 costs within the scope of the revenue cap. Refer section 10.4 of Volume 2. Requiring the QCA to advise Aurizon Network if an error has been made, which Aurizon Network must then respond to. Refer section 10.5 of Volume 2. Deems a submission as approved if the QCA does not respond by 4 July. Refer section 10.5 of Volume 2. 	Clauses 4.1(b) to (f)

UT3 Reference	Description	UT4 Changes	UT4 Reference
Clause 3.1.3	Adjustment for finalisation of the Capital Expenditure Carryover Account at the end of the prior regulatory period	Minor drafting changes to improve readability. It also includes: <ul style="list-style-type: none"> reference to equity raising costs (refer section 10.8 of Volume 2); clarification that if the finalisation of the Capital Expenditure Carryover Account balance does not occur within 12 months of the approval date, any adjustments will only occur in respect of those years in the regulatory period that are yet to commence. 	Clause 3
Clause 3.2	Calculation of Revenue Adjustment Amounts		
Clause 3.2.1	Aurizon Network to calculate Revenue Adjustment Amounts and Increments each year	Minor drafting changes.	Clause 4.3(a)
Clause 3.2.2	Calculating adjusted SAR	There have been some inclusions/deletions to the components included in the annual review. Refer section 10.5 of Volume 2. The adjustment for rebates is also included here (instead of adjusting Total Actual Revenue). Refer section 9.9 of Volume 2.	Clause 4.3(b)
Clause 3.2.3	Calculating TAR for AT2-4	Minor drafting changes. Reference to 'Equivalent Amount' replaced with 'Transfer Fee' to make it clearer as to what this relates to. Removes references to access agreements entered into prior to UT1 (as all have expired). Removes adjustment for rebates, as this is now done via System Allowable Revenue. Refer section 9.9 of Volume 2.	Clause 4.3(c)
Clause 3.2.4	Reduction of relinquishment fee if will materially impact the Revenue Adjustment amount	Minor drafting change to replace reference to 'Equivalent Amount' with 'Transfer Fee' to make it clearer as to what this relates to. Split into two sub-clauses to improve readability.	Clauses 4.3 (d) & (e)
Clause 3.2.5	Calculating TAR for AT5	Minor drafting change to replace reference to "Central Queensland Coal Region" with "the relevant Coal System". Removes adjustment for rebates, as this is now done via System Allowable Revenue. Refer section 9.9 of Volume 2.	Clause 4.3(f)
Clause 3.2.6	Submission and approval of Revenue Adjustment Amounts and Increments	Minor drafting change to align part of the provision with its assumed intent, which is to address the situation where the QCA has not yet approved the Adjustment Charges relating to the relevant year. This involves replacing the circumstances: <ul style="list-style-type: none"> being where: "the QCA approves Adjustment Charges relating to the relevant year; or the process for obtaining that approval is underway 	Clause 4.3(g)

UT3 Reference	Description	UT4 Changes	UT4 Reference
		<ul style="list-style-type: none"> but has not been concluded”, with: “Adjustment Charges have not yet been approved relating to the relevant year”. 	
Clause 3.2.7	QCA may give Aurizon Network notice to submit Revenue Adjustment Amounts and Increments	Unchanged	Clause 4.3(h)
Clause 3.2.8	Extension of time for submission	Minor drafting change, excluding the words “which includes reasons why QR Network requires the extension of time”. This is considered unnecessary because it is reasonable to expect that valid reasons would need to be provided by Aurizon Network in order for a request for any such extension to be approved by the QCA.	Clause 4.3(i)
Clause 3.2.9	Circumstances under which the QCA may determine Revenue Adjustment Amounts and Increments	Minor drafting changes, including removing the words, being “for it to submit, or resubmit, the Revenue Adjustment Amounts and Increments” (as this describes the provisions already referred to in this clause).	Clause 4.3(j)
Clause 3.2.10	QCA may publish submission and invite consultation	Minor drafting change to replace the words “stakeholders” with “Access Holders and Access Seekers” as it is not considered necessary, or appropriate, to give parties other than Access Seekers or Holders an opportunity to comment on a submission made by Aurizon Network on Revenue Adjustment Amounts or Increments.	Clause 4.3(k)
Clause 3.2.11	QCA approval of Revenue Adjustment Amounts and Increments	Minor drafting change, involving the merger of two separate sub-clauses (one for Revenue Adjustment Amounts and one for Increments) into the one clause.	Clause 4.3(l)
Clause 3.2.12	QCA approval/refusal to approve	Very minor drafting change, replacing the words “in the way the QCA considers is appropriate” with “in that way”, given the way that the QCA considers is appropriate is meant to be specified as per first sub-clause.	Clause 4.3(m)
Clause 3.2.13	Aurizon Network to comply with a notice given under 3.2.12	Unchanged	Clause 4.3(n)
Clause 3.2.14	QCA approval of resubmitted Revenue Adjustment Amounts	Drafting change to make provision more specific, being replacement of the words “have been amended or developed in accordance with the QCA’s decision” with “if a notice has been issued under clause 4.3(m)(ii), have been amended or developed in accordance with that notice.” This is because the relevant reference to “the QCA’s decision” is the notice provided in clause 4.3(m)(ii) (which sets out the way that the Revenue Adjustment Amounts and Increments should be amended).	Clause 4.3(o)
Clause 3.2.15	Implications of Adjustment Charges	Minor drafting changes, removing the words: <ul style="list-style-type: none"> “in accordance with this Undertaking and the QCA’s approval of the Adjustment Charges”. This wording is considered unnecessary because Aurizon Network would only be entitled or obliged to recover or 	Clause 4.3(p)

UT3 Reference	Description	UT4 Changes	UT4 Reference
		<p>reimburse the amounts in accordance with the Undertaking and as approved by the QCA;</p> <ul style="list-style-type: none"> “in accordance with the allocation approved by the QCA under subparagraph 2.3.4(c)(iv) of Part A” as this is considered unnecessary for the same reason. 	
Clause 3.3	Calculation of Increment		
Clause 3.3.1	Entitlement to Increment	<p>Incorporates amendment relevant to the Draft Incentive Mechanism, which limits operation to where number of services operated exceeds the number entitled to be operated under an access agreement.</p> <p>Otherwise, minor drafting changes including the removal of sub-clause (b), which states that “QR Network is required by Subclause 3.4.3 to submit a variation of relevant Reference Tariffs to the QCA.” This clause is considered unnecessary because such a variation would be submitted as a consequence of an Increment or Revenue Adjustment Amount.</p> <p>Clause 3.2.3, which imposes a 2% cap in the Increment, has also been merged with this clause.</p>	<p>Clause 4.4 (a)</p> <p>Clause 4.4(b)</p>
Clause 3.3.2	Increment limited to 2% of SAR	Merged with the above clause.	Clause 4.4(c)
Clause 3.4	Revenue Adjustment		
Clause 3.4.1	Adjustments to SAR for approved Revenue Adjustment Amount	Removed the words “less the approved X-factors” because Aurizon Network proposes this be zero.	Clause 4.5(a)
Clause 3.4.2	Adjustment to 2 nd year SAR	Unchanged	Clause 4.5(b)
Clause 3.4.3	Variation to Reference Tariffs	Minor drafting change, replacing the words “shall submit a variation of the relevant Reference Tariffs to the QCA” with “will vary the relevant Reference Tariffs”, because such a variation is already being submitted to the QCA as part of the annual review of Reference Tariffs referred to in this clause.	Clause 4.5(c)
Clause 4	Coal carrying train services for which Reference Tariffs do not apply		
Clause 4.1	Reference Tariffs for new Coal Carrying Train Services	This section has been subject to more substantive change, and has been moved to Part 6.	
Clause 4.1.1	Requirement to make minimum contribution to common costs	This has been redrafted, reflecting the application of the Distance Discount and Minimum Revenue Contribution. Refer section 9.6 of Volume 2.	Part 6, clause 6.2.5
Clause 4.1.2	Basis for determining the Reference Tariff for a new coal carrying train service	As per 4.1.1	Part 6, clause 6.2.5
Clause 4.1.3	Relevant components of Reference Tariff for a	There is no separate similar provision addressing the pricing of a new cross-system	Part 6, clause 6.2.5 Clause 2.3

UT3 Reference	Description	UT4 Changes	UT4 Reference
	new coal carrying train service that is a cross system service	service. Instead, the clause that addresses the pricing of new services refers to the 'relevant' Reference Tariff. For cross-system services, determination of that relevant Reference Tariff is addressed in clause 2.3.	
Clause 4.1.4	Basis for determining the Reference Tariff for a new coal carrying train service that is a cross system service	As per 4.1.1 and 4.1.3	Part 6, clause 6.2.5 Clause 2.3
Clause 4.1.5	Treatment of a new coal carrying train service (i.e. incorporation of loading point, system premiums, new Reference Tariff)	As per 4.1.1 and 4.1.3	Part 6, clause 6.2.5
Clause 4.1.6	Access charge to be reviewed if agreement commences prior to the approval of the applicable Reference Tariff	Replaced with a new clause providing for access charge review provisions in the access agreement. This would include the situation where a Reference Tariff had not yet been authorised when the agreement was entered into.	Part 6, clause 6.2.7
Clause 4.2	Determination of the access charge for a cross system service	<p>Aurizon Network has reviewed the methodology to ensure that cross system services are not unreasonably disadvantaged by the increase in AT2. Refer section 9.10 of Volume 2.</p> <p>The opening words to this clause have been amended to state that "the Reference Train Service description for each relevant Coal System will be applied to the extent that the Train Service is using that Coal System". The applicable Reference Train Service description is not addressed in the current wording – this is considered important given it underpins the pricing approach.</p> <p>The provisions dealing with the calculation of System Allowable Revenue for a cross system service (sub-clause (g)) have been moved to the other provisions dealing with System Allowable Revenue.</p> <p>The nominated capacity constrained corridors (sub-clause (h)) have been reviewed and updated.</p>	Clause 2.3
Clause 4.3	Access charges where Reference Tariffs do not apply	This has been varied to reflect that the structure of the access charge will be subject to negotiation (and this is most likely to be for non-coal services). The components that may be included have been simplified, including an upfront component, a fixed component and a variable component.	Part 6, clause 6.6
Clause 5	Blackwater system		
Clause 5.1	Term	Removed. Considered unnecessary because clause 1.2(a) addresses the term of application of all Reference Tariffs in the Schedule F.	-
Clause 5.2	Reference Train	In addition to minor drafting changes, this has	Clause 7.1

UT3 Reference	Description	UT4 Changes	UT4 Reference
	Service description	<p>been amended as follows:</p> <ul style="list-style-type: none"> in relation to specified maximum axle loads, includes the words “with loading in excess of this maximum axle load dealt with in accordance with the relevant Load Variation Table”; will use electric traction, not either electric or diesel, with the (continued) exception of Rolleston or Minerva where it will only use diesel (refer section 9.4 of Volume 2); achieves a transit time over the Nominated Constrained Section of no greater than 20 minutes. The Nominated Constrained Section is also defined (refer section 9.5 of Volume 2); includes the Wiggins Island unloading facility in unloading times. 	
Clause 5.3	System forecasts and SAR	Amends monthly system forecasts to only be for UT1, and excluding WICET, as these are the only agreements that rely on the monthly forecast.	Clause 7.3
Clause 5.4	Reference Tariff	<p>Removes Rolleston from the nominated loading facilities eligible for a system premium/discount.</p> <p>Includes specific AT3 and AT4 inputs for Rolleston. Refer section 9.7 of Volume 2.</p> <p>Includes the Nominal Train Payload for the system. Refer section 9.6 of Volume 2.</p>	Clause 7.2
Clause 6 Goonyella system			
Clause 6.1	Term	Removed. Considered unnecessary because clause 1.2(a) addresses the term of application of all Reference Tariffs in the Schedule F.	-
Clause 6.2	Reference Train Service description	<p>In addition to minor drafting changes, this has been amended as follows:</p> <ul style="list-style-type: none"> in relation to specified maximum axle loads, includes the words “with loading in excess of this maximum axle load dealt with in accordance with the relevant Load Variation Table”; will use electric traction, not either electric or diesel (refer section 9.4 of Volume 2); achieves a transit time over the Nominated Constrained Section of no greater than 20 minutes. The Nominated Constrained Section is also defined (refer section 9.5 of Volume 2); includes the Middlemount loading facility in loading times. 	Clause 8.1
Clause 6.3	System forecasts and SAR	Amends monthly system forecasts to only be for UT1, as these are the only agreements that rely on the monthly forecast.	Clause 8.3
Clause 6.4	Reference Tariff	Includes Millennium and Moorvale in the system premium/discounts.	Clause 8.2

UT3 Reference	Description	UT4 Changes	UT4 Reference
		Includes specific AT3 and AT4 inputs for Middlemount, Hail Creek, Isaac Plains and Carborough Downs developed in accordance with section 9.7 of Volume 2.	
		Includes the Nominal Train Payload for the system. Refer section 9.6 of Volume 2.	
Clause 7	Moura system		
Clause 7.1	Term	Removed. Considered unnecessary because clause 1.2(a) addresses the term of application of all Reference Tariffs in the Schedule F.	-
Clause 7.2	Reference Train Service description	In addition to minor drafting changes, this has been amended as follows: in relation to specified maximum axle loads, includes the words “with loading in excess of this maximum axle load dealt with in accordance with the relevant Load Variation Table”.	Clause 9.1
Clause 7.3	System forecasts and SAR	Amends monthly system forecasts to only be for UT1, as these are the only agreements that rely on the monthly forecast.	Clause 9.3
Clause 7.4	Reference Tariff	Includes the Nominal Train Payload for the system. Refer section 9.6 of Volume 2.	Clause 9.2
Clause 8	Newlands system		
Clause 8.1	Term	Removed. Considered unnecessary because clause 1.2(a) addresses the term of application of all Reference Tariffs in the Schedule F.	
Clause 8.2	Reference Train Service description	In addition to minor drafting changes, this has been amended as follows: <ul style="list-style-type: none"> in relation to specified maximum axle loads, includes the words “with loading in excess of this maximum axle load dealt with in accordance with the relevant Load Variation Table”; for the purpose of determining below rail transit times, the factor that is added to nominated section run times has been changed from 24% to 60%. This change has been agreed with affected access holders in the context of the GAPE project. 	Clause 10.1
Clause 8.3	System forecasts and SAR	Amends monthly system forecasts to only be for UT1, as these are the only agreements that rely on the monthly forecast.	Clause 10.3
Clause 8.4	Reference Tariff	Includes the Nominal Train Payload for the system. Refer section 9.6 of Volume 2.	Clause 10.2
-	Goonyella to Abbot Point System	Reference Train Service criteria, Reference Tariff inputs, System forecasts and System Allowable Revenue included.	Clause 11

Schedule G: Network Management Principles

UT3 Reference	Description	UT4 Changes	UT4 Reference
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Schedule G	Network Management Principles		Schedule H
		New clause clarifies the application of the NMP under the alternate form of SAA	Clause 1
Clause 1	Train Service Entitlements	Minor drafting changes.	Clause 2
Clause 2	Master Train Plan (MTP) Principles		
(a)	Form of MTP	Drafting amendments to clarify the purpose and form of the MTP. Refer Section 11.4.2 of Volume 2	Clause 3.1
		New clause providing MTP will be updated as necessary and no less than annually. Refer Section 11.4.2 of Volume 2	Clause 3.2
(b)-(g)	Modification of MTP	Drafting and structural changes, but the obligations remain unchanged	Clause 3.3
(h)	Effect on other access agreement obligations	Consolidated with similar provision for DTP.	Clause 6
(i)	Form of DTP	Minor drafting changes	Clause 3.1
Clause 3	Intermediate Train Plan Principles	Minor drafting and structure changes. Refer Section 11.4.3 of Volume 2	Clause 4
Clause 4	Daily Train Plan Principles		Clause 5
(a)-(j), (l)-(m)		Minor drafting and structure changes. Refer Section 11.4.4 of Volume 2	Clause 5.1-5.4
4(k)	Effect on other access agreement obligations	Consolidated with similar provision for MTP.	Clause 6
4(l)	Expected train performance target	Application of a DTP to performance targets. Refer Section 11.4.4 of Volume 2	Clause 5.6
Part B	Train Control Principles		
(a)-(f)	Train control principles	Minor drafting changes and renumbering.	Clause 7.1-7.3, 7.4
	Application following incidents	New provision added to allow Aurizon Network to depart from Traffic management decision matrix following an incident or Force Majeure event for the purpose of maximising system throughput and restoring normal operations. Refer Section 11.4.5 of Volume 2	Clause 7.4
Appendix 1	System Rules		Part 7.6 of Undertaking
(a)	Content of System Rules	Minor drafting changes and included as a defined term	Part 12 definitions
(b)	Obligation to develop System Rules	Consolidated with provisions for development and approval of System Rules in Part 7	Clause 7.6.3 of Undertaking
(c)	Obligation to comply with System Rules	System Rules are included in definition of Network Management Principles, and SAA includes obligation to comply with NMP	Clause 7.6.1(a) of Undertaking
(d)-(h)	Amendment to System	Minor redrafting. Inclusion of new provision to	Clause 7.6.4 of the

	Rules	require that amendments do not conflict with Network Management Principles or 2013 Undertaking.	Undertaking
		Refer to Section 11.4.1 of Volume 2	
Appendix 2	Contested Train Path Decision-making Process	Obligations have been clarified and expanded Refer Section 11.4.7 of Volume 2	Clause 8
Appendix 3	Traffic Management Decision Making Matrix	“Notes for the application of Traffic Management Decision Making Matrix” have been removed in order to reduce duplication.	Clause 9

Schedule H: Issues for EIRMR

UT3 Reference	Description	UT4 Changes	UT4 Reference
Schedule H	Issues for EIRMR	Deleted – EIRMR process is now dealt with in Standard Access Agreements Refer section 6.5.2 of Volume 2	Standard Access Agreements

Schedule I: Operating Plan

UT3 Reference	Description	UT4 Changes	UT4 Reference
Schedule I	Operating Plan	The information to be included in an Operating Plan has been expanded to reflect best practice arrangements for providing a detailed description of how the train service will operate.	Schedule C

Schedule J: Investment Framework Principles

UT3 Reference	Description	UT4 Changes	UT4 Reference
Schedule J	Investment framework principles	Deleted – investment framework has been incorporated into the Access Undertaking Refer Chapter 7 of Volume 2	Part 8

Appendix B Summaries of changes to standard access agreements

B.1 Standard Operator Access Agreement - Coal

The table below has been prepared in relation to the draft *Standard Operator Access Agreement – Coal* between Aurizon Network Pty Ltd (**Aurizon Network**) and an Operator (**UT4 SOAA**). The purpose of this high level summary is to identify the key changes to Aurizon Network’s current *Standard Operator Access Agreement – Coal* (**UT3 SOAA**) and explain the rationale for such changes. This summary should not be read in substitution for reading the entire UT4 SOAA. Unless otherwise indicated, clause references are to clauses in the UT4 SOAA or the UT3 SOAA (as applicable) and capitalised terms not otherwise defined in this summary have the meanings given in the UT4 SOAA or the UT3 SOAA (as applicable).

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
1	General	General	The UT4 SOAA is based on the UT3 SOAA and provisions within the agreement have been amended to clarify and update the drafting of those provisions.
2	General	General	<p>The UT4 SOAA includes a new concept of “Train Service Type”. Each Train Service Type is essentially a different haul, with a separate Train Service Description (e.g. Origin, Destination and Nominated Monthly Train Services), for a Customer. Many provisions of the UT4 SOAA have been redrafted to address the inclusion of the concept of Train Service Type.</p> <p>The change reflects the way the Operator Access Agreement is currently administered in practice. The consequences of these changes are dealt with throughout the UT4 SOAA and are further discussed in the items below.</p>
3	2 (Term)	Instrument of Agreement – 4	The UT4 SOAA seeks to include the Access Undertaking requirement that an Operator may only request a Renewal of the Access Rights no earlier than 36 months before the Expiry Date, unless otherwise agreed between the parties. This change has aligned the management of Renewals with the negotiation process timeframes in the Access Undertaking and provides additional flexibility for the Operator and Aurizon Network to Renew earlier than 36 months prior to the Expiry Date (if required). The Renewal provision has been drafted to be Train Service Type specific.
4	3 (Access Rights)	Instrument of Agreement – 1 and 2	<p>Minor drafting changes and the inclusion of a provision which makes it clear that Ad Hoc Train Services are subject to the UT4 SOAA and Aurizon Network does not have a reasonable endeavours obligation to reschedule an Adhoc train service and will not be liable for any failure to do so or make the Infrastructure available.</p> <p>This distinguishes Adhoc Train Services from contracted Train Services where Aurizon Network must make the Infrastructure available and use reasonable endeavours to reschedule the contracted Train Service where it is</p>

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
			cancelled. This drafting seeks to clarify the treatment of Adhoc Train Services.
5	4 (Ancillary Services) and Schedule 12	Instrument of Agreement – 3.5 (Ancillary Services)	Minor drafting changes. The Access Rights has been drafted to be Train Service Type specific.
6	5 (Billing and payments)	2.1 (Access Charges) 2.2 (Invoicing)	Minor drafting changes including an amendment which allows Aurizon Network to deduct any amounts which are due and payable by the Operator to Aurizon Network from any amounts which are due and payable by Aurizon Network to the Operator.
7	6 (Security)	2.4 (Obligation to Provide Security) 2.5 (Exercise of Security) 2.6 (Return of Security)	In order to address credit risk during the Term, the UT4 SOAA has been amended to include a right for Aurizon Network to require the Operator to provide Security during the Term. The UT4 SOAA retains a right for Aurizon Network to request Security before commencement of Train Services. Aurizon Network may increase the Security Amount where an additional Train Service Type is included in the Access Agreement or the Train Service Description for an existing Train Service Type is varied. If required, an Operator could seek to negotiate to provide security in an alternate form.
8	7.1 (Operation of Train Services) 7.2 (Commencement of Train Services) 7.3 (Commencement of Train Services for Train Service Type)	3.1 (Train Services)	The UT4 SOAA retains general conditions which must be satisfied by the Operator before it operates any Train Services. In addition, the UT4 SOAA includes Train Service Type specific conditions which must be satisfied by the Operator if an additional Train Service Type is included in the Access Agreement, or the Train Service Description for any existing Train Service Type is varied, during the Term. If the Operator does not comply with the Train Service Type specific conditions by the Train Service Commitment Date, then Aurizon Network may reduce the Access Rights for that Train Service Type.
9	7.4 (Commencement of Train Services –	Instrument of Agreement – 3	The Access Interface Deed will apply to all Train Services Types for that Customer. The UT4 SOAA has been amended to provide that where an Operator has already procured from the relevant Customer and each other AID Party (if any) an Access Interface Deed, for a previous Train Service Type, the Customer will not be required to

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
	Access Interface Deed) Schedule 13		provide an additional Access Interface Deed for a new Train Service Type added during the Term. If the Customer and each other AID Party (if any) does not execute an Access Interface Deed within the specified timeframe, Aurizon Network may reduce the Access Rights by the Train Services for that Train Service Type and those Access Rights will be taken to be relinquished. The Operator must pay a Relinquishment Fee in respect of such relinquishment.
10	7.5 (Supply Chain Rights)	5.11 (Private Facilities)	The UT4 SOAA has been amended to include a requirement that the Operator hold, or have the benefit of, “Supply Chain Rights” for all Train Services at all times during the Term. The Supply Chain Rights are rights to access or use Private Facilities, rights which allow Through-Running Train Services to enter or exit the Nominated Network and rights to access and use the relevant Unloading Facility in accordance with the Access Agreement. Before the commencement of Train Services and at any time during the Term, the Operator must be able to demonstrate, to Aurizon Network’s reasonable satisfaction, that it holds the Supply Chain Rights and will continue to hold the Supply Chain Rights for at least the Term. Failure to hold such rights may result in suspension or termination. This change will promote alignment across the supply chain and encourage operators to secure sufficient rights to access private facilities, below-rail networks and terminals for the Term of their Access Agreement. This right is consistent with Aurizon Network’s rights under the Undertaking to cease access negotiations where an Access Seeker cannot demonstrate Supply Chain Rights.
11	8 (Resumption of Access Rights)	3.2 (Reduction of Access Rights)	Under the UT4 SOAA, Aurizon Network may propose to resume the Access Rights for a Train Service Type if it considers an “Underutilisation Event” has occurred. An “Underutilisation Event” is any event which will or will likely have a sustained or permanent impact on the Operator’s ability to utilise the Access Rights for that Train Service Type (other than the failure by Aurizon Network to make the Access Rights available). If the Operator fails to demonstrate that it has the ability and need to utilise the Underutilised Access Rights for a Train Service Type and Aurizon Network has a reasonable expectation of sustained alternative demand or receiving a sufficiently material commercial benefit, then Aurizon Network may resume the Access Rights. However, the Operator may dispute a decision by Aurizon Network to resume the Access Rights for a Train Service Type. This provision has been included in the UT4 SOAA to promote efficient use of Access Rights. It also allows Aurizon Network to better manage and allocate capacity on the network.
12	N/A	3.5 (Forecasts)	The UT4 SOAA has been amended to remove the Operator’s obligation to provide Aurizon Network with a six year forecast of its future service requirements and Aurizon Network’s obligation to provide the Operator with a six year forecast of planned major Enhancements. This provision has been removed as is it not being used in its current form. Aurizon Network’s obligation to provide forecasts to the Operator in relation to planned major Enhancements will be addressed by the involvement

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
			of operators in the relevant corridor development strategy.
13	9 (Reduction of Conditional Access Rights due to Capacity Shortfall)	3.6 (Reduction of Conditional Access Rights where Capacity Shortfall)	Consistent with the UT3 SOAA, the UT4 SOAA provides for the reduction of Access Rights, which are conditional upon an Expansion being completed and commissioned, where there is a shortfall in the capacity created by the Expansion. The UT4 SOAA provision has been amended to align the Access Undertaking.
14	10 (Reduction of Nominated Monthly Train Services if Maximum Payload exceeded)	N/A	<p>The UT4 SOAA includes a new provision which allows Aurizon Network to reduce the Nominated Monthly Train Services for a Train Service Type and to revise the Nominal Payload and Maximum Payload for that Train Service Type by giving the Operator a “Reduction Notice” if the Average Annual Payload for a Train Service Type exceeds the Maximum Payload for that Train Service Type.</p> <p>The Operator may dispute a Reduction Notice given to the Operator by Aurizon Network and, if not resolved by the Parties, that dispute may be referred to an Expert for resolution.</p> <p>This provision has been included in the UT4 SOAA to reflect the fact that an Operator’s Nominated Monthly Train Service Entitlements are based on an agreed payload at a point in time. During the term of an agreement, Operators will increase that payload, changing the Nominated Monthly Train Services required to achieve the required tonnage.</p> <p>This provision allows Aurizon Network to allocate capacity more effectively and may help Operators mitigate Take or Pay where they no longer need the same number of Nominated Monthly Train Services to deliver the same tonnage under their Rail Haulage Agreement and a transfer of Access Rights is not available.</p>
15	11 (Reduction of Nominated Monthly Train Services if Nominal Payload increased)	N/A	<p>The UT4 SOAA includes a new provision which allows Aurizon Network to increase the Nominal Payload and Maximum Payload of a Train Service Type and to reduce the Nominated Monthly Train Services for that Train Service Type by giving the Operator a “Notice of Intention to Increase Nominal Payload”.</p> <p>The Operator may dispute a Notice of Intention to Increase Nominal Payload given by Aurizon Network to the Operator and that dispute may be referred to an Expert for dispute resolution.</p> <p>Aurizon Network may be liable to compensate the Operator for the Net Financial Effect of the variations specified in a Notice of Intention to Increase Nominal Payload.</p> <p>Depending on the outcome of the Net Financial Effect process, Aurizon Network may withdraw the Notice of Intention to Increase Nominal Payload. This withdrawal must be made in a timely manner to ensure the Operator does not undertake unnecessary expenditure.</p> <p>The current draft does not yet incorporate a mechanism to compensate Customers, but Aurizon Network recognises such a mechanism is appropriate. Aurizon Network would like to engage with Customers to determine the process to apply to allow for Customers to negotiate with Aurizon Network any potential Net Financial Effect for</p>

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
			<p>the Customers from a proposed change in payload for the Train Service.</p> <p>The Operator also has an ability to approach Aurizon Network to commence the process of reducing Access Rights where they plan to increase the payload of its train services.</p> <p>This provision has been included in the UT4 SOAA to allow Aurizon Network to create additional capacity through operational changes as a trade off to the installation of infrastructure enhancements.</p>
16	<p>12 (Relinquishment of Access Rights)</p> <p>13 (Transfer of Access Rights by Operator)</p> <p>14 (Transfer of Access Rights by Customer)</p> <p>15.2 (Replacement Access Agreement)</p>	3.3 (Relinquishment and Transfer of Access Rights)	<p>The UT4 SOAA, like the UT3 SOAA, provides Transfer Fee relief for short term Transfers of Access Rights for periods of less than two years. However, the UT4 SOAA also provides that if the period of a Transfer of Access Rights, plus the periods of all previous Transfers of Access Rights for Train Services for Train Service Types with the same Origin within the three year period ending on the last day of the Transfer Period, is two years or more, then the Transfer Fee relief is not available and a Transfer Fee will be payable on the Transfer.</p> <p>The Transfer provisions also include a concept of Ancillary Access Rights (as defined in the Access Undertaking), where an access holder requests a transfer of access rights which will require ancillary access rights to enable the transfer to take place, the access seeker will gain priority over those Ancillary Access Rights provided there is no other access seeker which we are actively negotiating with who also needs the same access rights. Where the ancillary access rights are mutually exclusive with another access seeker's proposed access rights, these will be managed in accordance with the provisions in the Access Undertaking. This provision is consistent with the Access Undertaking position.</p> <p>Clarification provided in regards to circumstances where Aurizon Network needs to make assumptions about future events/reference tariffs in order to be able to calculate the Relinquishment/Transfer Fee.</p>
17	15 (Reduction Factor)	1.1 (Definitions "Reduction Factor")	<p>Minor drafting changes to provide greater clarity.</p> <p>Clarification provided in regards to circumstances where Aurizon Network needs to make assumptions about future events/reference tariffs in order to be able to calculate the Reduction Factor.</p>
18	<p>16.1 (Termination where no Access Rights Remain)</p> <p>16.2 (Effect on entitlement to operate and Access Charge Rates)</p> <p>16.3 (No compensation or liability)</p>	<p>3.4 (Termination where all Access Rights reduced, relinquished or transferred)</p> <p>3.2(f) (Reduction of Access Rights)</p> <p>3.2(g)</p>	<p>The UT4 SOAA clarifies that the Operator's entitlement to operate Train Services, and the obligation to pay Access Charges, will be reduced in accordance with the resumption, reduction, relinquishment or transfer of Access Rights.</p> <p>The UT4 SOAA also clarifies that Aurizon Network will not be liable for any loss or damage suffered or incurred by the Operator in connection with any resumption, reduction, relinquishment or transfer of Access Rights.</p>

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
		(Reduction of Access Rights)	
19	17 (Day to day Train Movements)	4 (Day to day Train Movements)	Minor drafting changes to provide greater clarity.
20	18 (Compliance)	5.1 (Compliance) 5.6(e) (Performance Levels) 5.7 (Interface Coordination Plan)	<p>In addition to the existing general requirements, the Operator must comply with the Operating Plan (see comments below in relation to clause 21) and, where applicable, the relevant Noise Code requirements.</p> <p>Clause 5.6(e) of the UT3 SOAA has been moved to clause 18.2 of the UT4 SOAA. This provision allows Aurizon Network to vary the Train Service Description and the Access Agreement (including the Access Charge Rates) if the Operator does not comply in any material respect with the Train Service Description and fails to demonstrate that it will consistently comply with the Train Service Description for the remainder of the Term.</p> <p>The UT4 SOAA includes a new clause which provides that Aurizon Network will not be in breach of the UT4 SOAA with respect to any act or omission which is required in order for Aurizon Network to comply with its Accreditation or to ensure that its Accreditation is not at risk of amendment, suspension, cancellation or revocation. In addition, the Operator must not do anything which would likely result in the amendment, suspension, cancellation or revocation of Aurizon Network's Accreditation.</p>
21	19 (Operator's Operating Plan)	N/A	<p>The UT4 SOAA includes a new requirement that before the commencement of any Train Services, the Operator must develop and submit to Aurizon Network for approval an Operating Plan. The inclusion of this specific requirement clarifies what is current practice for new Train Services Types which are included within an Access Agreement. This also allows Aurizon Network to fully assess the ability to provide for the new Train Service Type, including capacity requirements, and consider appropriate Access Charges for the service.</p> <p>If an additional Train Service Type is included, the Train Service Description for an existing Train Service Type is varied or the Operator gives an Authorisation Request Notice to Aurizon Network, then the Operator may be required to amend the Operating Plan. In any event, the Operator is required to amend the Operating Plan if it becomes inconsistent with the UT4 SOAA. Amendments to the Operating Plan are subject to Aurizon Network's approval.</p>
22	20 (Train operations)	5.2 (Compliance with Scheduled Time) 5.3 (Alterations to Train Services)	<p>The UT4 SOAA includes more detailed provisions which clarify the process for rescheduling and cancellation of Train Services by the Operator and Aurizon Network.</p> <p>It aims to clarify the timeframes and processes by which cancelled train services are required to be rescheduled where they are cancelled by the Operator in the 48 hour planning cycle.</p>

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
		5.4 (Notification) 5.5 (Operator to Supply Information) 5.8 (Operations of Trains and Rollingstock)	
23	21 (Authorisation of Rollingstock and Rollingstock Configurations)	5.9 (Authorisation of Rollingstock and Rollingstock Configurations)	<p>Under the UT4 SOAA, the Rollingstock Interface Standards will be contained in a publicly available document published by Aurizon Network, rather than being agreed between the Parties as part of the Interface Risk Assessment process. This reflects the current practice.</p> <p>During the Interface Risk Assessment process, the Parties may identify that certain Rollingstock or Rollingstock Configurations do not comply with standards specified in the Rollingstock Interface Standards. The relevant non-compliance with the Rollingstock Interface Standards and the measures for managing those non-compliances may be included in the IRMP. Where such non-compliances and the relevant management measures are included in the IRMP, they are referred to as "Approved Derogations".</p> <p>The UT4 SOAA clarifies the process for the authorisation of Rollingstock and Rollingstock Configurations.</p> <p>After the Rollingstock Configurations for a Train Service Type become Authorised Rollingstock Configurations for the Train Service Type, Aurizon Network will give the Operator a Train Route Acceptance or Authority to Travel (as applicable) authorising the Operator to operate Train Services for that Train Service Type. The Authorised Rollingstock Configuration must only be comprised of Authorised Rollingstock.</p> <p>These changes have been made to clarify and streamline exiting processes.</p>
24	22 (Amendments to System Wide Requirements)	5.10 (Amendments to System Wide Requirements)	Minor drafting changes to provide greater clarity.
25	23 (Weighbridges and Overload Detectors)	2.7 (Weighbridges and Overload Detectors)	Minor drafting changes to provide greater clarity.
26	24 (Performance)	5.6 (Performance)	Minor drafting changes to provide greater clarity.

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
	Levels) Schedule 6 (Performance Levels)	Levels) Schedule 6 (Performance Levels)	Clause 5.6(e) of the UT3 SOAA has been moved to clause 15 of the UT4 SOAA (see comments in item 20 above). Schedule 6 of the UT4 SOAA includes an Aurizon Network Performance Level, being the “Average Below Rail Transit Time Threshold”. This has been renamed and relocated from item 1.4 of Schedule 1 of the UT3 SOAA.
27	25 (Infrastructure management)	6.1 (Management and Control of the Nominated Network) 6.2 (Maintenance of the Nominated Network)	Minor drafting changes to provide greater clarity. The limitation of liability in clause 6.2(c) of the UT3 SOAA has been addressed in clauses 30.5 and 30.6 of the UT4 SOAA (see item 35 below).
28	26 (Incident management)	7 (Incident management)	If an additional Train Service Type is included in the Access Agreement or the Train Service Description for an existing Train Service Type is varied then the Operator may not commence or continue to operate the relevant Train Service until the Emergency Response Plan has been amended or the Operator has notified Aurizon Network that no amendments are required to the Emergency Response Plan. Under the UT4 SOAA, the Operator must use ensure that a Customer does not cause any Obstruction or permit any Obstruction caused by a Customer to continue. The Operator must also ensure that a Customer notifies the Train Controller of any Obstruction or breach/suspected breach of Safeworking Procedures, anything which might cause or contribute to the occurrence of an Incident or Obstruction or any environmental harm. The UT4 SOAA also clarifies that the Operator is responsible for effecting the Recovery and Retrieval of Rollingstock in response to an Incident.
29	27 (Accreditation)	9 (Accreditation)	If an additional Train Service Type is included in the Access Agreement or the Train Service Description for an existing Train Service Type is varied, then the Operator may not commence or continue to operate the relevant Train Service until its Accreditation has been amended or the Operator has notified Aurizon Network that no amendments are required to the Accreditation.
30	28 (Operator’s staff)	10 (Operator’s staff)	Minor drafting amendments.
31	29 (Interface and environmental risk management)	8 (Environmental management)	The Interface Risk Assessment process has been consolidated to include an assessment of both Interface Risks and Environmental Risks. Accordingly, the IRMP also deals with both Interface Risks and Environmental Risks.

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
		and protection) 11 (Interface risk management)	<p>The Environmental Risks identified in the IRMP and the controls and measures in respect of those Environmental Risks will be specified in an “Environmental Management Plan” rather than an “Environmental Interface and Risk Management Report”.</p> <p>The rationale for these changes is to clarify and streamline existing processes.</p> <p>The dispute resolution process in relation to the IRMP has been modified. If the Parties are unable to agree to the IRMP within a specified period after the Interface Risk Assessment, Aurizon Network must determine the IRMP (or the relevant amendment to the IRMP). If the Operator considers that the IRMP or any amendment as determined by Aurizon Network is Unreasonable, the Operator may refer the Dispute to an Expert to determine whether the Disputed Aspect of the IRMP is Unreasonable. The Expert will specify the amendments to the IRMP which it considers would result in the Disputed Aspect ceasing to be Unreasonable. Aurizon Network may then, within a specified timeframe, determine the relevant amendments to the IRMP having regard to the Expert’s determination, or the IRMP will be taken to be amended as specified by the Expert.</p> <p>Aurizon Network may vary the Access Charge Rates to compensate Aurizon Network for any increased cost or risk to Aurizon Network, or any increased utilisation of Capacity, when compared to a Reference Train Service, as a result of any amendments to the IRMP.</p>
32	30 (Inspection and audit rights)	6.3 (Inspection by Operator) 12 (Inspection and audit rights)	Minor drafting changes to consolidate inspection provisions and to provide greater clarity.
33	31 (Insurance by Operator)	13 (Insurance by Operator)	Minor drafting amendments including a right for Aurizon Network to pay excesses/deductibles which the Operator fails to pay and then recover such amount from the Operator as a debt due to Aurizon Network.
34	32 (Indemnities)	14.1 (Indemnity by Operator) 14.2 (Indemnity by QR Network) 14.3 (Liability to Third Parties)	<p>The indemnity provisions in the UT4 SOAA have been amended to clarify the interaction between the indemnities and the interaction of the indemnities with the limitations of liability.</p> <p>The UT4 SOAA maintains the indemnity given by the Operator to Aurizon Network against Claims suffered or incurred by Aurizon Network due to any breach by the Operator or in respect of personal injury, death and property damage caused or contributed to by the Operator. However, unlike the UT3 SOAA, the indemnity does not extend to:</p> <ul style="list-style-type: none"> deliberate acts or omissions of the Operator (unless they breach the UT4 SOAA) on the basis that the Operator should not be liable for acts or omissions which are not prohibited (for an act) or required (for an omission) under the Access Agreement; and relevant acts or omissions of the Operator’s Customer on the basis that the Customer will have liability to

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
			<p>Aurizon Network under the Access Interface Deed between Aurizon Network and the Customer.</p> <p>Similarly, the UT4 SOAA maintains the indemnity given by Aurizon Network to the Operator against Claims suffered or incurred by the Operator due to breach by Aurizon Network or in respect of personal injury, death and property damage caused or contributed to by Aurizon Network. However, unlike the UT3 SOAA, the indemnity does not extend to deliberate acts or omissions of Aurizon Network (unless they are breaches of the UT4 SOAA) on the basis that Aurizon Network should not be liable for acts or omissions which are not prohibited (for an act) or required (for an omission) under the Access Agreement.</p> <p>The UT4 SOAA also maintains the indemnity give by the Operator in favour of Aurizon Network against Claims suffered or incurred by Aurizon Network in respect personal injury, death and property damage where such person or property is being transported on a Train Service. For clarity, the UT4 SOAA expressly provides that that indemnity extends to Consequential Loss suffered by Aurizon Network and that the exclusion of liability for Consequential Loss does not apply to this indemnity.</p> <p>The UT4 SOAA clarifies that the indemnities given by the Operator and Aurizon Network in respect of personal injury and property damage are subject to the limitations of liability in clause 30.</p> <p>Unlike the UT3 SOAA, under the UT4 SOAA, a Party with the benefit of an indemnity is under an express obligation to use reasonable endeavours to mitigate its losses.</p>
35	<p>Definition of “Consequential Loss”</p> <p>33 (Limitations and exclusions of liability)</p> <p>34 (Determination of liability and loss adjustment)</p>	<p>Definition of “Consequential Loss”</p> <p>14 (Indemnities and Liabilities)</p> <p>15 (Limitation on liability)</p> <p>6.2(c) (Maintenance of Nominated Network)</p>	<p>The UT4 SOAA maintains:</p> <ul style="list-style-type: none"> • the reciprocal exclusion of Consequential Loss; • the limitation on time limits for making Claims (although the limitation has been amended so that the time period commences once the Party becomes aware of the Claim); • the limitation of the minimum amount of Claims; and • the obligation on the Operator to extend the benefit exclusions and limitations in its conditions of carriage with its Customers for the benefit of Aurizon Network. <p>The limitation of Aurizon Network’s liability in relation to the standard of the Infrastructure no longer extends to Aurizon Network’s liability to a Customer on the basis that Aurizon Network’s liability to the Customer will be addressed under the Access Interface Deed between Aurizon Network and the Customer.</p> <p>The UT4 SOAA maintains the limitation on Aurizon Network’s liability in relation to the non-provision of access and the reciprocal limitation on the Party’s liability for delays in Train Movements.</p> <p>Minor drafting amendments have been made including:</p> <ul style="list-style-type: none"> • the circumstances where a Party is not liable for the non-provision of access or for delays to Train Movements have been extended to include circumstances where the non-provision or delay was caused

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
			<p>by a customer of another Railway Operator;</p> <ul style="list-style-type: none"> where a Party incurs costs as a result of assisting the other Party to defend a Claim, the Party who requested the assistance must reimburse the assisting Party for those costs; the provisions in relation to determination of liability no longer refer to a Claim by or against the Operator's Customer; and additional details have been included in relation to the process of appointing the Loss Adjuster. the definition of "Consequential Loss" has been amended to include in paragraph (c) an express reference to demurrage. This is to clarify, rather than to change, the effect of the definition. Liability for demurrage was always excluded under paragraphs (a) and (d) of the definition.
36	35 (Material Change)	16 (Material Change)	Minor drafting changes to provide greater clarity.
37	36 (Disputes)	17 (Disputes)	Additional details have been included to provide greater clarity on the dispute process.
38	37 (Force Majeure)	18 (Force Majeure)	Minor drafting changes to provide greater clarity.
39	38 (Suspension) and 39 (Termination) Schedule 9 (Suspension Events and Termination Events)	19 (Suspension) and 20 (Termination)	<p>The Suspension Events and Termination Events are now specified in schedule 9 of the UT4 SOAA and are categorised as Train Service Type-specific events or general events. For clarity, where a Train Service Type-specific Termination Event occurs, Aurizon Network may reduce the Access Rights by the Train Services for the relevant Train Service Type.</p> <p>The circumstances in which Aurizon Network may suspend the right of the Operator to operate Train Services using certain Rollingstock or Rollingstock Configurations have been clarified.</p> <p>The UT4 SOAA includes a new right of suspension where, if applicable, the Customer's rights under a Customer Agreement (for example, a Rail Connection Agreement or a Transfer Facilities License) are suspended for any reason. This provision has been negotiated into a number of access agreements previously.</p>
40	40 (Assignment)	21 (Assignment)	Minor drafting changes to provide greater clarity.
41	41 (GST)	2.3 (GST)	Minor drafting changes to provide greater clarity.
42	42 (Confidentiality)	22.2 (Confidentiality)	The confidentiality provisions have been moved (with some drafting changes) from the Confidentiality Deed in schedule 12 of the UT3 SOAA to the body of the UT4 SOAA.

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
		Schedule 12	
43	43 (Intellectual Property)	22.3 (Intellectual Property)	<p>The UT4 SOAA includes a new provision under which the Operator grants Aurizon Network a licence to use, modify and reproduce the intellectual property rights in any material supplied by the Operator to Aurizon Network in connection with the Access Agreement for the purposes of administering the Access Agreement, undertaking capacity assessments, infrastructure planning or to enable it to comply with the Access Undertaking.</p> <p>The purpose of this provision is to enable Aurizon Network to use material provided by Operators for internal purposes, including broadly train control, undertaking capacity assessments, infrastructure planning and any other tasks required under the Access Agreement and Undertaking.</p>
44	44 (Notices)	22.9 (Notices)	The Notice provisions have been amended to allow agreed Notices to be given by email.
45	45.2 (Amendment)	22.1 (Variation/Amendment) 22.20 (Schedules)	Minor drafting changes to provide greater clarity.
46	45.3 (Entire agreement)	22.4 (Entire Agreement)	Minor drafting changes to provide greater clarity.
47	45.4 (Non-merger)	22.5 (Non-merger)	No change.
48	45.5 (Authority to enter into agreement)	22.6 (Authority to enter into Agreement)	Minor drafting changes to provide greater clarity.
49	45.6 (Consents and approvals) 42.15 (Approvals and consents)	22.17 (Approvals and consents)	Minor drafting changes to provide greater clarity.
50	45.7 (Relationship)	22.8 (Relationship)	Minor drafting changes to provide greater clarity.

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
51	45.8 (Certificate)	22.10 (Certificate)	No change.
52	45.9 (Costs)	22.11 (Costs)	No change.
53	45.10 (Duty)	22.12 (Stamp Duty)	Minor drafting changes to provide greater clarity.
54	45.11 (Waiver and exercise of rights)	22.13 (Waiver and Exercise of Rights)	Minor drafting changes to provide greater clarity.
55	45.12 (Computation of time)	22.14 (Computation of Time)	No change.
56	45.13 (Severance of invalid or illegal terms)	22.15 (Severance of invalid or illegal terms)	Minor drafting changes to provide greater clarity.
57	45.14 (Rights cumulative)	22.16 (Rights Cumulative)	No change.
58	45.16 (Third Party Land)	22.18 (Ownership of Land)	Minor drafting changes to provide greater clarity.
59	45.17 (Implementation of agreement)	22.19 (Implementation of Agreement)	Minor drafting changes to provide greater clarity.
60	45.18 (Governing law and jurisdiction)	22.21 (Governing Law and Jurisdiction)	Minor drafting changes to provide greater clarity.

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
61	45.19 (PPS Act)		<p>The UT4 SOAA has been amended to include a provision in relation to the <i>Personal Property Securities Act 2009</i> (Cth) (PPS Act). Broadly, if a Party reasonably determines that the UT4 SOAA contains a “Security Interest” (as defined in the PPS Act), the other Party must do anything reasonably requested by the first Party for the purposes of ensuring that the Security Interest is enforceable, perfected and otherwise effective.</p> <p>In addition, certain provisions of the PPS Act are excluded from applying to the UT4 SOAA (e.g. the obligation of a “Secured Party” (as defined in the PPS Act) to show amounts paid to other Secured Parties in a statement of account).</p>
62	46 (Most favoured nation status)	22.22 (Most Favoured Nation Status)	Minor drafting changes to provide greater clarity.
63	Schedule 1 (Reference Schedule)	Schedule 1 (Train Service Entitlements)	Reference schedule has been updated to provide that where security is required to be provided, the amount of security is now the greater of 12 months of Take or Pay Charges (previously 12 weeks of Access Charges) determined as if the operator used all the access rights and (consistent with the UT3 SOAA) the sum of the maximum insurance deductible for each policy. Rationale to increase the security from 12 weeks Access Charges to 12 months Take or Pay is to align the amount held as security to the annual timeframe for take or pay purposes.
64	Schedule 2 (Train Service Descriptions)	Schedule 1 (Train Service Entitlements)	Schedule 2 of the UT4 SOAA have been amended to address Train Service Type-specific details. Minor drafting changes have been made to provide greater clarity.
65	Schedule 3 (Nominated Network)	Schedule 2 (Nominated Network)	Minor drafting changes to provide greater clarity.
66	Schedule 4 (Access Charges)	Schedule 3 (Calculation of Access and Other Charges)	<p>Minor drafting changes to improve clarity.</p> <p>The methodology for the calculation of Take or Pay charges has been updated to reflect UT4, in particular the new mine and operator capping provisions.</p> <p>The definition of “Aurizon Network Cause” impacts on the calculation of Take or Pay charges. In the UT4 SOAA, the inability of Aurizon Network to make the Infrastructure available for the operation of Network Train Services will not constitute an “Aurizon Network Cause” if that inability is attributable in any way:</p> <ul style="list-style-type: none"> • to a Railway Operator or a Railway Operator’s customer (including a Customer); • to Aurizon Network complying with its Passenger Priority Obligations; • to the unavailability of a Loading Facility or an Unloading Facility;

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
			<ul style="list-style-type: none"> to the failure to load a Train at the Loading Facility within the Maximum Time at Loading Facility, or unload a Train at the Unloading Facility within the Maximum Time at Unloading Facility; or in respect of each Train Service which is a Through-Running Train Service, to the unavailability of, or cancellation of train services on, an Adjoining Network. <p>The amendments to the definition of Aurizon Network Cause clarifies that to the extent a Train Service is unable to operate due to the factors listed above, Aurizon Network should not be held liable for that failure.</p>
67	Schedule 5 (Rollingstock and Rollingstock Configurations)	Schedule 4 (Authorised Rollingstock and Rollingstock Configurations)	The process for authorisation of Rollingstock is now included in clause 21 of the UT4 SOAA (see item 23). This schedule now includes a table which sets out the Maximum Allowable Gross Tonnage, Maximum Desirable Gross Tonnage and Tare Weight of Wagons, Trains and Other Rollingstock.
68	Schedule 6 (Performance Levels)	Schedule 5 (Performance Levels)	Minor drafting changes to provide greater clarity and a new item which sets out the calculation of the Average Below Rail Transit Time Factor for each Train Service Type.
69	Schedule 7 (Safeworking Procedures and related matters)	Schedule 6 (Safeworking Procedures etc)	Minor drafting changes to provide greater clarity and reflect current practices. Parts of the schedule are now contained within the body of the agreement.
70	Schedule 8 (Insurance)	Schedule 7 (Insurance)	Minor drafting changes to provide greater clarity.
71	Schedule 9 (Suspension Events and Termination Events)	N/A	See item 39.
72	Schedule 10 (Interface Coordination Arrangements)	Schedule 10 (Interface Coordination Plan)	Minor drafting changes to provide greater clarity and reflect current practices.
73	Schedule 11 (Ancillary Services)	Schedule 11 (Ancillary	Minor drafting changes to include a definition of “Wayside Equipment”.

Item	Clause of UT4 SOAA	Clause of UT3 SOAA	Comments
	and Ancillary Services Charges)	Services and Other Charges)	
74	Schedule 13 (Access Interface Deed)	Schedule 13 (Access Interface Deed)	<p>The UT4 SOAA now provides that an Access Interface Deed must be entered into by the Customer and each “AID Party”, which is any person other than the Customer that is necessary to enable that Customer to validly give the following warranties set out in clause 3.1 of the Access Interface Deed.</p> <p>The indemnities given by the Customer and the Railway Manager under the Access Interface Deed have been broadened to include loss, damage or destruction of real property, and personal injury or death to any person, caused by or contributed to by any breach of the Access Agreement by the Customer or the Railway Manager (as applicable).</p>

B.2 Standard Access Agreement (Alternate Form) – Coal

The table below has been prepared in relation to the draft *End User Access Agreement – Coal* between Aurizon Network Pty Ltd (**Aurizon**) and an End User (**EUAA**) and the draft *Train Operations Agreement – Coal* between Aurizon and an Operator (**TOA**). The purpose of this high level summary is to identify the key changes between the EUAA, the TOA and:

- the draft *Standard Operator Access Agreement – Coal* (**SOAA**) proposed for UT4; and
- the Alternative Form of Access Agreements used in UT3 (**AFOA UT3**). (Note: The EUAA and TOA have been drafted to reflect the provisions of the UT4 SOAA (except where otherwise indicated below). As a result, where there is a change between the approach in the AFOA UT3 and the proposed UT4 EUAA and TOA which results from a variation between the UT3 and UT4 SOAA, that change is not flagged in this summary. Readers wishing to get an overview of the key differences between the UT3 SOAA and the UT4 SOAA should refer to the summary table provided in respect of the UT4 SOAA at Appendix B.1.

This summary should not be read in substitution for reading the entire EUAA and TOA. Unless otherwise indicated, clause references are to clauses in the SOAA, EUAA or the TOA (as applicable) and capitalised terms not otherwise defined in this summary have the meanings given in the SOAA, EUAA or the TOA (as applicable).

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
1	General	General	General	To the extent possible, we have allocated various provisions of the SOAA between the EUAA and the TOA on the basis of the split adopted in the UT3 EUAA and UT3 TOA. However, we have made a judgement as to the appropriate home for the new provisions in the SOAA which were not included in the UT3 SOAA and these	No material change

²⁰⁹ The EUAA and TOA have been drafted to reflect the provisions of the UT 4 SOAA (except where otherwise indicated in this table), split as appropriate between the EUAA and the TOA on the basis of the split adopted in the UT3 EUAA and TOA. As a result, where there is a change between the approach in the UT3 EUAA and TOA and the proposed UT4 EUAA and TOA, which results from variations between the UT3 and UT4 SOAA we have not flagged that change in this summary. Readers wishing to get an overview of the key differences between the UT3 SOAA and the UT4 SOAA should refer to the summary table provided in respect of the UT4 SOAA at Appendix B.1.

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				<p>allocations are set out in this table.</p> <p>Under the EUAA, the End User has a right to elect whether the End User will pay all Access Charges, or just TOP Charges with the remaining components of Access Charges being charged to each Operator. Accordingly, the EUAA contains a number of provisions which include alternative drafting to be selected based on the election made by the End User.</p>	
2	1 (Definitions and interpretation)	1 (Definitions and interpretation)	1 (Definitions and interpretation)	(EUAA and TOA) The definitions in the SOAA have been amended to align with the provisions of the EUAA and TOA.	“Access Holder” has been amended to remove “Train Operator”. This is on the basis that the Train Operator is only afforded “Operational Rights” rather than “Access Rights” the Access Rights sit with the EUAA, who assumes the TOP liability.
3	2 (Term)	2 (Term)	2 (Term)	(EUAA) This provision of the EUAA is substantially the same as the equivalent provision of the SOAA. However, this provision of the EUAA clarifies that the Operator has no right to renew, transfer, vary or relinquish to Aurizon any part of the Access Rights allocated to the Operator by the End User.	No material change
				(TOA) The Operator has no right of renewal under the TOA (see item 8).	No material change
4	3 (Access Rights)	3 (Operational Rights)	3 (Access Rights)	<p>(EUAA) The EUAA clarifies that the grant of Access Rights to the End User does not entitle the End User to operate Train Services on the Nominated Network.</p> <p>The EUAA sets out a process by which the End User may nominate an Operator or vary any nomination previously given to Aurizon. The clause also contains the mechanics to</p>	Timeframes for requesting reallocation of Access Rights has been aligned with timing for developing the Intermediate Train Plan (7 days) rather than 2 business days. This is to ensure that variations can be best accommodated within the schedule, and it can be optimised to create the maximum throughput.

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				<p>effect a reduction in the rights of Operators under TOAs where there has been a reduction, relinquishment or transfer of Access Rights in accordance with the EUAA.</p> <p>Like the SOAA, the EUAA provides the End User with the ability to request the operation of Ad Hoc Train Services.</p>	
				<p>(TOA) This provision of the TOA is substantially the same as the equivalent provision of the SOAA. However, under the TOA, the Operator is granted “Operational Rights” (i.e., the right to operate Train Services on the Nominated Network) rather than “Access Rights”.</p> <p>The TOA provides for the operation of Ad Hoc Train Services by the Operator where requested by the End User (in the case of Train Services which are not Train Service Types) and agreed by Aurizon.</p>	The ability to request Ad Hoc Train Services is provided to both the End User and the Operator under the EUAA and TOA. The difference being that the End User may request Ad Hoc Train Services for Train Service Types under the EUAA. The Operator may only request Ad Hoc Train Services above its Operational Rights for a Train Service Type.
5	N/A	4 (Ancillary Services) and Schedule 11	4 (Ancillary Services) and Schedule 11	<p>(EUAA) The EUAA does not include a clause in relation to the provision of Ancillary Services.</p>	No change
				<p>(TOA) This provision of the TOA is the same as the equivalent provision of the SOAA.</p>	No material change
6	N/A	5 (Nomination of Operator)	N/A	<p>(EUAA) There is no equivalent clause in the EUAA.</p>	No change
				<p>(TOA) This provision of the TOA applies where, at any time after the Commencement Date, the End User nominates the Operator in respect of all or part of the End User’s Access Rights.</p> <p>Aurizon will provide the Operator with</p>	No material change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				replacement schedules to the TOA reflecting the End User's nomination of the Operator and the TOA will be varied in accordance with those replacement schedules.	
7	N/A	6 (Variation of nomination of the Operator)	N/A	(EUAA) There is no equivalent clause in the EUAA.	No change
				(TOA) This provision of the TOA applies where the End User notifies Aurizon of a variation to (or is deemed to have notified Aurizon of a variation to) or withdraws the nomination of an Operator in respect of part or all of its Access Rights under the EUAA. Aurizon will provide the Operator with replacement schedules to the TOA reflecting the End User's notification and the TOA will be varied in accordance with those replacement schedules.	No material change
8	N/A	7 (Interaction of rights)	N/A	(EUAA) There is no equivalent clause in the EUAA.	No change
				(TOA) This provision of the TOA clarifies the relationship between the Operator's Operational Rights and the End User's Access Rights. Unless the End User is also an Operator, the End User will have no direct above rail responsibilities in relation to the End User's Train Services. The Operator will have above rail operational obligations in relation to the End User's Train Services to the extent that those Train Services will be operated by that Operator.	No material change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				This provision also states that the Operator has no right to renew, transfer, vary or relinquish any part of the Operational Rights.	
9	4 (Billing and payments)	8 (Billing and payments)	5 (Billing and payments)	(EUAA) This provision is substantially similar to the equivalent provisions of the SOAA. This provision of the EUAA includes alternative drafting to be selected based on the election made by the End User in terms of whether the End User will pay all Access Charges or TOP Charges only.	No material change
				(TOA) This provision is substantially similar to the equivalent provision of the SOAA. However, the references to TOP Charges (which will always be paid by the End User) have been removed from the TOA. This provision of the TOA includes alternative drafting to be selected based on the election made by the End User in terms of whether the End User will pay all Access Charges or TOP Charges only.	No material change
10	5 (Security)	9 (Security)	6 (Security)	(EUAA) This provision is substantially similar to the equivalent provision of the SOAA. However, the EUAA includes a provision which allows the End User to provide Security on behalf of an Operator.	No material change
				(TOA) This provision is substantially similar to the equivalent provision of the SOAA. However, the TOA includes an additional provision which acknowledges that where the End User provides Security on behalf of the Operator, the Operator's obligation under the TOA to provide Security will be taken to have been satisfied.	No material change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				Under the TOA, the quantum of the Security Amount will depend on the election made by the End User in terms of whether the End User will pay all Access Charges or TOP Charges only.	
11	N/A	10 (Operation of Train Services)	7 (Operation of Train Services)	<p>(EUAA) There is no equivalent provision under the EUAA.</p> <p>(TOA) This provision of the TOA is substantially similar to the equivalent provision of the SOAA. However, the TOA includes an additional provision which requires the Operator, prior to operating a Train Service, to notify Aurizon of the End User for whom the Operator is operating the Train Service.</p> <p>In addition, the conditions precedent to the Operator's commencement of Train Services have been broadened to include an obligation to have first made all necessary amendments to the EUAA in respect of changes to the Access Charges or Access Charge Rates (where applicable) as a result of changes to the Authorised Rollingstock or to the IRMP in connection with the new Train Services.</p> <p>The TOA refers to the process for the reduction of the End User's Access Rights where the Operator has not satisfied the relevant conditions for the commencement of the operation of Train Services for a Train Service Type within the specified timeframe. Under the EUAA the End User has the right to nominate an alternate operator if the initial Operator has failed to satisfy the conditions for the commencement of the operation of a Train</p>	<p>No change</p> <p>No material change</p>

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				<p>Service for a Train Service Type under the TOA.</p> <p>The Operator's obligation under the SOAA to procure the Customer and each AID Party to enter into an Access Interface Deed has not been included in the TOA.</p>	
12	6 (Resumption of Access Rights)	N/A	8 (Resumption of Access Rights)	<p>(EUAA) The process set out in the EUAA for the resumption of Access Rights is substantially the same as the equivalent process under the SOAA.</p>	No material change
				<p>(TOA) There is no equivalent resumption provision under the TOA. However, the Operator's rights will be varied in accordance with clause 6 of the TOA to reflect the notice (or deemed notice) given by the End User under the EUAA as to how the reduction in the Access Rights should apply to the Operator or be allocated amongst multiple Operators (see item 7).</p>	No change
13	7 (Reduction of Conditional Access Rights due to Capacity Shortfall)	N/A	9 (Reduction of Conditional Access Rights due to Capacity Shortfall)	<p>(EUAA) The process in the EUAA for the reduction of Conditional Access Rights due to a Capacity Shortfall is substantially similar to the equivalent process under the SOAA.</p>	No material change
				<p>(TOA) There is no equivalent provision under the TOA. However, the Operator's rights will be varied in accordance with clause 6 of the TOA to reflect the notice (or deemed notice) given by the End User under the EUAA as to how the reduction in the Access Rights should apply to the Operator or be allocated amongst multiple Operators (see item 7).</p>	No change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
14	8 (Reduction of Nominated Monthly Train Services if Maximum Payload exceeded)	11 (Reduction of Nominated Monthly Train Services if Maximum Payload exceeded)	10 (Reduction of Nominated Monthly Train Services if Maximum Payload exceeded)	<p>(EUAA) The process set out in the EUAA for the reduction of Nominated Monthly Train Services where the Average Annual Payload is exceeded is substantially the same as the equivalent process under the SOAA.</p> <p>The EUAA includes an additional provision which clarifies the process whereby the number of services that the Operator (or Operators, where applicable) may operate for the relevant Train Service Type are reduced where the Train Service Description for that Train Service Type is varied under the equivalent provision of the EUAA.</p>	<p>An ability to reduce Nominated Monthly Train Services where the Average Annual Payload is exceeded is a new provision not included in the AFOA UT3.</p> <p>This provision mirrors the provision included in SOAA UT4.</p>
				<p>(TOA) The TOA contains an acknowledgement from the Operator that the Nominated Monthly Train Services may be reduced by Aurizon under the EUAA. The TOA includes a provision which clarifies the process whereby the number of Nominated Monthly Operational Rights that each Railway Operator has the right to operate are reduced where the number of Nominated Monthly Train Services are reduced under the equivalent provision of the EUAA.</p>	<p>An ability to reduce Nominated Monthly Train Services where the Average Annual Payload is exceeded is a new provision not included in the TOA UT3.</p> <p>This provision substantially mirrors the provision included in SOAA UT4.</p>
15	9 (Reduction of Nominated Monthly Train Services if Nominal Payload increased)	12 (Reduction of Nominated Monthly Train Services if Nominal Payload increased)	11 (Reduction of Nominated Monthly Train Services if Nominal Payload increased)	<p>(EUAA) Under this provision of the EUAA, the End User acknowledges that under a TOA Aurizon has the right to increase the Nominal Payload for a Train Service Type. Aurizon will notify the End User if the Nominal Payload for a Train Service Type is increased under the TOA and corresponding amendments to the Nominal Payload, Maximum Payload and Nominated Monthly Operational Rights will be deemed to have been made to the Train Service Description for the relevant Train</p>	<p>An ability to increase the Nominal Payload for a Train Service Type and reduce the Nominated Monthly Train Services is a new provision not included in the AFOA UT3.</p> <p>This provision has been modified from the SOAA UT4, as the increase to Nominal Payload will be effected under the TOA but with the reduction in Nominated Monthly Train Services under the EUAA UT4.</p>

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				Service Type under the TOA.	
				(TOA) Subject to consequential changes, this provision is the same as the equivalent provision of the SOAA.	An ability to increase the Nominal Payload for a Train Service Type and reduce the Nominated Monthly Train Services is a new provision not included in the TOA UT3. This provision substantially mirrors the provision in SOAA UT4.
16	10 (Relinquishment of Access Rights)	N/A	12 (Relinquishment of Access Rights)	(EUAA) The process in the EUAA for the relinquishment of Access Rights is the same as the equivalent process in the SOAA.	No material change
				(TOA) There is no equivalent provision in the TOA. However, the Operator's rights will be varied in accordance with clause 6 of the TOA to reflect the notice (or deemed notice) given by the End User under the EUAA as to how the reduction in the Access Rights should apply to the Operator or be allocated amongst multiple Operators (see item 7).	No change
17	11 (Transfer of Access Rights by End User)	N/A	13 (Transfer of Access Rights by Operator)	(EUAA) The process in the EUAA for the transfer of Access Rights by the End User is substantially same as the equivalent process in the SOAA.	No material change
				(TOA) There is no equivalent provision in the TOA. However, the Operator's rights will be varied in accordance with clause 6 of the TOA to reflect the notice (or deemed notice) given by the End User under the EUAA as to how the reduction in the Access Rights should apply to the Operator or be allocated amongst multiple Operators (see item 7).	No change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
18	N/A	N/A	14 (Transfer of Access Rights by Customer)	(EUAA) There is no equivalent provision in the EUAA.	No change
				(TOA) There is no equivalent provision in the TOA.	No change
19	12 (Reduction of Access Rights due to failure of Operator to satisfy conditions)	N/A	N/A	((EUAA) The EUAA acknowledges that if the Operator fails to satisfy the conditions for the commencement of a Train Service Type under a TOA, Aurizon may terminate the Operational Rights under the TOA and the End User may nominate a new or existing Operator to utilise those Operational Rights or may reduce the Access Rights for that Train Service Type under the EUAA. .	No change
				(TOA) The equivalent provision in the TOA is described in item 11.	No material change
20	13 (Reduction Factor)	N/A	15 (Reduction Factor)	(EUAA) Subject to consequential changes, this provision is the same as the equivalent provision of the SOAA.	No material change
				(TOA) There is no equivalent provision in the TOA.	No change
21	14 (Resumptions, reductions, relinquishments and transfers – General)	N/A	16 (Resumptions, reductions, relinquishments and transfers – General)	(EUAA) Subject to consequential changes, this provision is the same as the equivalent provision of the SOAA.	No material change (clause broadened to cover all resumptions, reductions, relinquishments and transfers)
				(TOA) There is no equivalent provision in the TOA. However, the Operator's rights will be varied in accordance with clause 6 of the TOA to reflect the notice (or deemed notice) given by the End User under the EUAA as to how the reduction in the Access Rights should apply to the Operator or be allocated amongst multiple Operators (see item 7).	No change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
22	N/A	13 (Day to day Train Movements)	17 (Day to day Train Movements)	(EUAA) There is no equivalent provision under the EUAA.	No change
				(TOA) This provision of the TOA is the same as the equivalent provision of the SOAA.	No material change
23	15 (Compliance)	14 (Compliance)	18 (Compliance)	<p>(EUAA) The End User's obligations under this provision are less extensive than the Operator's obligations under the equivalent provision of the SOAA. The End User must comply with applicable Laws and the lawful requirements of all relevant Authorities and the Access Undertaking (to the extent applicable to the End User). The End User must also comply with the IRMP to the extent it imposes obligations on the End User.</p> <p>This provision also sets out the process which applies where Train Services for a Train Service Type operated by an Operator do not comply, in any material respect, with the Train Service Description for that Train Service Type and the Operator fails to demonstrate that those Train Services will consistently comply with the Train Service Description for the remainder of the Term.</p> <p>Before Aurizon exercises its right to vary the relevant Train Service Description and Access Charge Rates, Aurizon will provide the End User with at least 30 days from the commencement of consultation to rectify the relevant non-compliance by the Operator. Aurizon retains the right to suspend the Train Service Type in accordance with the terms of the TOA.</p>	No material change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				(TOA) This provision of the TOA is substantially similar to the equivalent provision of the SOAA, however, the TOA provides that where a variation to the TOA affects the Train Services Description or results in the amounts payable by the End User under the EUAA being varied, then commencement of those variations to the TOA are conditional on the corresponding variations being made to the EUAA and any nomination of the Operator by the End User being varied (if necessary).	No material change
24	N/A	15 (Operating Plan)	19 (Operator's Operating Plan)	(EUAA) There is no equivalent provision under the EUAA.	No change
				(TOA) This provision of the TOA is the same as the equivalent provision of the SOAA.	The requirement to submit and comply with an Operating Plan is a new provision not included in the AFOA UT3.
25	N/A	16 (Train operations)	20 (Train operations)	(EUAA) There is no equivalent provision under the EUAA.	No change
				(TOA) This provision is largely the same as under the SOAA. However, this provision clarifies that Aurizon is not obliged to provide an alternative Scheduled Time for a Train Service that the Operator decides not to or will be unable to operate where the End User has nominated another Railway Operator to operate the relevant Train Service.	More detailed provisions to clarify the timeframes and processes for alternations to train services have been included. This mirrors the provisions included in the UT4 SOAA.
26	N/A	17 (Authorisation of Rollingstock and Rollingstock Configurations)	21 (Authorisation of Rollingstock and Rollingstock Configurations)	(EUAA) There is no equivalent provision under the EUAA.	No change
				(TOA) This provision is largely the same as under the SOAA. However, the TOA has been amended to make the variation to the Access Charge Rates as a result of the authorisation of new Rollingstock and/or	No material change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				Rollingstock Configurations conditional on the corresponding amendments being made to the EUAA and any nomination of the Operator by the End User being varied (if necessary). Under clause 32.2 of the EUAA the End User is obliged to agree to amendments required to the EUAA as a result of any modified or additional Rollingstock or Rollingstock Configurations being authorised under a TOA.	
27	N/A	18 (Amendments to System Wide Requirements)	22 (Amendments to System Wide Requirements)	(EUAA) There is no equivalent provision under the EUAA.	No change
				(TOA) Provisions are substantially the same as those in the SOAA.	No material change
28	16 (Weighbridges and Overload Detectors)	19 (Weighbridges and Overload Detectors)	23 (Weighbridges and Overload Detectors)	(EUAA) This provision of the EUAA includes alternative drafting to be selected based on the election made by the End User in terms of whether the End User will pay all Access Charges or TOP Charges only. The EUAA does not include provisions in relation to the Operator's obligation not to exceed the Maximum Allowable Gross Tonnage and the requirements in relation to record keeping with respect to Weighbridges and Overload Detectors.	No material change
				(TOA) This provision is largely the same as under the SOAA. However, minor amendments have been made to the TOA to provide for circumstances both where the Operator pays the Access Charges under the TOA and where the End User pays the Access Charges under the EUAA.	No material change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
29	N/A	20 (Performance Levels) Schedule 6 (Performance Levels)	24 (Performance Levels) Schedule 6 (Performance Levels)	(EUAA) While there is no standalone performance regime in the EUAA, the financial effects of a failure by an Operator or Aurizon to comply with the performance levels under a TOA are flowed through to the EUAA (via clause 4.7) where the End User is paying all of the Access Charges..	The financial effects of a failure by an Operator or Aurizon to comply with the performance levels under a TOA are flowed through to the EUAA (via clause 4.7) where the End User is paying all of the Access Charges. This was not a feature of AFOA UT3.
				(TOA) This provision is largely the same as under the SOAA. However, the TOA has been amended to require the Operator and Aurizon to obtain the written consent of the End User prior to amending the Performance Levels.	No material change
30	17 (Infrastructure management)	21 (Infrastructure management)	25 (Infrastructure management)	(EUAA) This provision of the EUAA does not include the equivalent provisions of the SOAA with respect to Aurizon's obligations in relation to the management, control and maintenance of the Nominated Network. Under this clause, the End User to notify Aurizon of any damage to or disrepair in the operation or function of any part of the Nominated Network of which the End User becomes aware. This provision of the EUAA also requires the End User not to cause any Obstruction or permit any Obstruction caused by the End User to continue. The End User is obliged to notify Aurizon of any Obstruction or anything which may cause or contribute to the occurrence of an Incident or Obstruction. This provision is similar to the Operator's obligations under clauses 26.4 and 26.5 of the SOAA.	No material change
				(TOA) This provision of the TOA is	No material change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				substantially the same as the equivalent provision of the SOAA.	
31	N/A	22 (Incident management)	26 (Incident management)	(EUAA) There is no equivalent provision under the EUAA. However, obligations with respect to Obstructions are imposed on the End User under clause 17 of the EUAA, as noted in item 30.	No change
				(TOA) This provision is similar to the equivalent provision of the SOAA, however, the TOA has been amended to remove the Operator's obligations to ensure that the Customer does not cause any Obstruction and to ensure that the Customer notifies the Train Controller of any Obstruction, anything that may cause an Incident or Obstruction, or any harm to the Environment.	No material change
32	N/A	23 (Accreditation)	27 (Accreditation)	(EUAA) There is no equivalent provision under the EUAA.	No change.
				(TOA) This provision of the TOA is the same as the equivalent provision of the SOAA.	No material change
33	N/A	24 (Operator's staff)	28 (Operator's staff)	(EUAA) There is no equivalent provision under the EUAA.	No change
				(TOA) This provision of the TOA is the same as the equivalent provision of the SOAA.	No material change
34	N/A	25 (Interface and environmental risk management)	29 (Interface and environmental risk management)	(EUAA) There is no equivalent provision under the EUAA.	No change
				(TOA) This provision is substantially similar to the equivalent provision of the SOAA. However, clause 25.5 of the TOA has been amended to make the variation to the Access	No material change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				Charges as a result of amendments to the IRMP conditional on the corresponding amendments being made to the EUAA and any nomination of the Operator by the End User being varied (if necessary).	
35	N/A	26 (Inspection and audit rights)	30 (Inspection and audit rights)	(EUAA) There is no equivalent provision under the EUAA.	No change
				(TOA) This provision is largely the same as under the SOAA. However, the TOA includes a provision which states that Aurizon will not be liable to the Operator for any third party claims made against the Operator in respect of an inspection or audit where the third party is the End User and the End User has a direct contractual relationship with Aurizon in respect of the Access Rights to which the inspection or audit relates.	No material change
36	18 (Insurance by End User)	27 (Insurance by Operator)	31 (Insurance by Operator)	(EUAA) Subject to consequential changes, this provision of the EUAA is the same as the equivalent provision of the SOAA.	No material change
				(TOA) Subject to consequential changes, this provision of the TOA is the same as the equivalent provision of the SOAA.	No material change
37	19 (Indemnities)	28 (Indemnities)	32 (Indemnities)	(EUAA) The indemnity given by the End User under the EUAA in respect of Claims suffered or incurred by Aurizon, its directors or Aurizon's staff in respect of loss or damage or personal injury or death where such person or property is being transported in a Train Services applies where the loss, damage, personal injury or death is caused or contributed to by a negligent act or omission of the End User or the End User's Staff as the End User will not have control of the Train	No material change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				<p>Service.</p> <p>However, the equivalent indemnity in the SOAA applies except to the extent that such loss or damage or personal injury or death is caused or contributed to by any breach of the EUAA by Aurizon or any negligence act or omission of Aurizon's Staff.</p>	
				(TOA) Subject to consequential changes, provision of the TOA is the same as the equivalent provision of the SOAA.	No material change
38	20 (Limitations and exclusions of liability)	29 (Limitations and exclusions of liability)	33 (Limitations and exclusions of liability)	<p>(EUAA) This provision of the EUAA is substantially similar to the SOAA. However, the Operator's obligation under the SOAA to ensure that Aurizon has the benefit of any limitations or exclusions from liability under the conditions of carriage with the Customer has been removed.</p> <p>The EUAA includes an additional provision which excludes Aurizon's liability in certain circumstances including:</p> <ul style="list-style-type: none"> delays or cancellations of Train Services caused by or resulting from Operational Constraints; delays or cancellations of Train Services or claims suffered by the End User as a result of the Operator complying with a direction issued by Aurizon under clause 22.6(j) of the TOA in relation to an Incident; and Aurizon taking action in relation to an Incident under clause 22.6(f) of the TOA. 	Removal of liability for wrongful inspection and audit from the EUAA. Aurizon Network considers that this is an operational risk, and the risk is better allocated within the Train Operations Agreement. Additionally, this liability is already included in the TOA, creating a double-up of liability. As such, the clause has been removed from the EUAA and included in the TOA.

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				<p>(TOA) This provision of the TOA is substantially similar to the SOAA. However, the Operator's obligation under the SOAA to ensure that Aurizon has the benefit of any limitations or exclusions from liability under the conditions of carriage with the Customer has been removed. This is because Aurizon and the End User will enter into the EUAA and Aurizon will be able to expressly limit its liability to the End User under that document.</p> <p>The conditions that must be satisfied before Aurizon will be liable to the Operator for a failure to provide the Operational Rights have been amended to remove the circumstances relating to Conditional Access Rights. This amendment reflects that fact that the concept of Conditional Access Rights has been removed from the TOA (but preserved in the EUAA).</p>	No material change
39	21 (Determination of liability and loss adjustment)	30 (Determination of liability and loss adjustment)	34 (Determination of liability and loss adjustment)	(EUAA) Subject to consequential changes, this clause is substantially similar to the equivalent provision of the SOAA.	No material change
				(TOA) Subject to minor amendments, this clause is substantially similar to the equivalent provision of the SOAA.	No material change
40	22 (Material Change)	31 (Material Change)	35 (Material Change)	(EUAA) This provision of the EUAA is substantially similar to the equivalent provision of the SOAA, however, it includes alternative drafting to be selected based on the election made by the End User in terms of whether the End User will pay all Access Charges or TOP Charges only.	No material change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				(TOA) This provision is substantially similar to the equivalent provision under the SOAA. However, the TOA has been amended to also allow an adjustment to be made where a Material Change affects the financial position of Aurizon or Aurizon's ability to perform its obligations and exercise its rights under the EUAA. Notifications of a Material Change must also be given to the End User and any other contracted operator of the End User.	No material change
41	23 (Disputes)	32 (Disputes)	36 (Disputes)	(EUAA) Subject to minor amendments, this clause is substantially the same as the equivalent provision of the SOAA.	No material change
				(TOA) Subject to minor amendments, this clause is substantially the same as the equivalent provision of the SOAA.	No material change
42	24 (Force Majeure)	33 (Force Majeure)	37 (Force Majeure)	(EUAA) This provision is substantially the same as the equivalent provision of the SOAA, however, an additional clause has been included which requires Aurizon to provide the End User with a copy of any notices regarding a force majeure event under the TOA. Aurizon must also give the End User an opportunity to participate in any meeting between Aurizon and the Operator in respect of the force majeure event under the TOA.	No material change
				(TOA) This provision is substantially the same as the equivalent provision of the SOAA, however, minor amendments have been made to require notices regarding a Force Majeure Event to also be given to the End User.	No material change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
43	25 (Suspension) 26 (Liability for wrongful suspension)	34 (Suspension) Schedule 9 (Suspension Events and Termination Events)	38 (Suspension) Schedule 9 (Suspension Events and Termination Events)	<p>(EUAA) Under clause 25 of the EUAA, Aurizon may suspend the Access Rights of the End User for a limited number of Suspension Events (excluding operational matters) set out in schedule 6 which are based on those contained in the UT3 EUAA.</p> <p>The EUAA includes an acknowledgement that the suspension of an Operator's rights under a TOA does not affect or suspend any obligation of the End User.</p> <p>Under clause 26 of the EUAA, Aurizon is liable to the End User in respect of loss or damage (including damages for Consequential Loss) if Aurizon suspends some or all of the End User's Access Rights or an Operator's rights under a TOA only if:</p> <ul style="list-style-type: none"> • no reasonable person in Aurizon's position could have formed the view that the stated grounds for the suspension existed; and • where the suspension is of an Operator's rights under a TOA, the End User's loss or damage is not, and has not been included in a claim by the Operator; and • the End User has used all reasonable endeavours to mitigate the loss or damage arising from the suspension. 	Inclusion of an suspension event where the End User under a End User Agreement (for example, a Rail Connection Agreement or a Transfers Facilities Licence) are suspended for any reason. This provision has been negotiated into a number of access agreements previously. The provision in the EUAA UT4 mirrors the provision in UT4 SOAA.

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				<p>(TOA) This provision is substantially similar to the equivalent provision under the SOAA. However, Aurizon’s right to suspend the Operator’s right to operate a Train Service where the End User’s rights are suspended under the EUAA have been limited so that those rights only extend to the Train Services which relate to the suspended End User’s rights.</p> <p>Consistent with the SOAA, Aurizon is only liable to the Operator in respect of loss or damage if no reasonable person in Aurizon’s position could have formed the view that the stated grounds for the suspension existed provided that the Operator has used all reasonable endeavours to mitigate the loss or damage arising from the suspension.</p> <p>The TOA provides that Aurizon will not be liable to the Operator for any third party claims made against the Operator in relation to a suspension where the third party is the End User and the End User has a direct contractual relationship with Aurizon in respect of the Access Rights to which the suspension relates.</p> <p>In addition, minor amendments have been made to require Suspension Notices to also be given to the End User.</p>	<p>Suspension Events have been expanded in Schedule 9 (see item 62 below)</p> <p>Amended to reflect Train Service Type specific events and general events</p>
44	27 (Termination)	35 (Termination)	39 (Termination)	<p>(EUAA) Aurizon’s termination rights relate to a limited set of Termination Events set out in schedule 6 of the EUAA which are modelled on the UT3 EUAA and exclude operational defaults which are covered by the TOA.</p>	No material change
				<p>(TOA) Aurizon’s termination rights relate to a</p>	Termination Events have been expanded in

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				broad set of Termination Events set out in schedule 9 of the EUAA. Minor amendments have been made to require notices regarding a termination of Train Services or termination of the TOA to also be given to the End User.	Schedule 9 (see item 62 below) Amended to reflect Train Service Type specific events and general events
45	28 (Assignment)	36 (Assignment)	40 (Assignment)	(EUAA) Subject to consequential changes, this provision is the same as the equivalent provision of the SOAA.	No material change
				(TOA) This provision is substantially the same as the SOAA. However, the Operator's right to assign its rights and obligations under the TOA are conditional on Aurizon receiving written evidence of the End User's consent to such an assignment.	No material change
46	29 (GST)	37 (GST)	41 (GST)	(EUAA) Subject to consequential changes, this provision is the same as the equivalent provision of the SOAA.	No material change
				(TOA) Subject to consequential changes, this provision is the same as the equivalent provision of the SOAA.	No material change
47	30 (Confidentiality)	38 (Confidentiality)	42 (Confidentiality)	(EUAA) This provision is substantially similar to the equivalent provision in the SOAA. However, the circumstances in which the Operator has a right to disclose Confidential Information to the "Customer" have been deleted and instead describe the circumstances where disclosure may be made to the Operator. These circumstances are limited to circumstances where disclosure is required under the EUAA, is reasonably necessary for the performance of obligations or exercise of rights under the TOA or the EUAA, or is reasonably necessary in connection with the safe operation of the	No material change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				Nominated Network.	
				<p>(TOA) This provision is substantially similar to the equivalent provision in the SOAA. However, the circumstances in which the Operator has a right to disclose Confidential Information to the End User have been amended, and now only include circumstances where disclosure is required under the TOA, is reasonably necessary for the performance of obligations or exercise of rights under the TOA or the EUAA, or is reasonably necessary in connection with the safe operation of the Nominated Network.</p> <p>In addition, the Operator's right to disclose Confidential Information to another Railway Operator in connection with the Transfer of Access Rights has been removed. This right has been retained in the EUAA.</p>	No material change
48	31 (Intellectual property)	39 (Intellectual Property)	43 (Intellectual Property)	(EUAA) Subject to consequential changes, this provision is the same as the equivalent provision of the SOAA.	No material change
				(TOA) This provision of the TOA is the same as the equivalent provision of the SOAA.	No material change
49	32 (Relationship with Train Operations Agreement)	40 (Relationship with End User Access Agreements)	N/A	<p>(EUAA) A new provision has been included in the EUAA to allow the Operator to be joined as a party to a matter referred to an Adjudicator under clauses the EUAA.</p> <p>Where the End User is notified of a matter referred under the corresponding provision in the TOA, the End User must comply with the</p>	No material change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				<p>relevant provisions of the TOA, must provide the Adjudicator with a copy of the EUAA, agrees that the dispute resolution provisions under the EUAA do not apply to such a matter, and agrees to be bound by the Adjudicator's decision.</p> <p>Clause 32.2 of the EUAA contains the mechanics to effect changes to the EUAA as a result of certain specified events under the TOA including a change in Performance Levels, amendments to the IRMP or EMP and variation in the Train Service Description under a TOA. Broadly, the Parties must agree to vary the EUAA as reasonably necessary to reflect the change or variation to the TOA.</p>	
				<p>(TOA) A new provision has been included in the TOA to allow the End User to be joined as a party to a matter referred to an Adjudicator under the TOA.</p> <p>Where the Operator is notified of a matter referred under the corresponding provision in the EUAA, the Operator must comply with the relevant provisions of the EUAA, must provide the Adjudicator with a copy of the TOA, agrees that the dispute resolution provisions under the TOA do not apply to such a matter, and agrees to be bound by the Adjudicator's decision.</p>	No material change
50	33 (Notices)	41 (Notices)	44 (Notices)	<p>(EUAA) This provision of the EUAA is substantially the same as the equivalent provision of the SOAA except that it does not include the deeming provisions in relation to Train Control Directions or directions from the Incident Commander which are included in the SOAA.</p>	No material change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				(TOA) This provision of the TOA is the same as the equivalent provision of the SOAA.	No material change
51	34 (General)	42 (General)	45 (General)	(EUAA) This provision is the substantially the same as the equivalent provision of the SOAA. However, it also provides that the End User must provide each Operator with a copy of any written agreement to variations or amendments to the EUAA.	No material change
				(TOA) This provision is largely the same as under the SOAA. However, Aurizon and the Operator cannot agree to amend the TOA without the End User's consent unless the amendment solely relates to operational matters and does not have any consequential impacts on the End User's Access Rights. In addition, the TOA requires minor amendments to the provision relating to Third Party Land where the End User pays the Access Charges.	No material change
52	35 (Most favoured nation status)	43 (Most favoured nation status)	46 (Most favoured nation status)	(EUAA) Subject to consequential changes, this provision is the same as the equivalent provision of the SOAA.	No material change
				(TOA) This provision is largely the same as under the SOAA. However, the TOA requires this clause to be removed where the End User pays the Access Charges.	No material change
53	36 (JV Participants and liability)	N/A	N/A	(EUAA) This provision of the EUAA applies where the End User enters into the EUAA as agent for a joint venture. This clause provides that the percentage interest of the joint venture participants is specified in the relevant schedule and the liability of the joint venture participants is several in respect of Financial	No equivalent provision was included in the AFOA UT3

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
				<p>Obligations and joint and several in respect of non-Financial Obligations.</p> <p>If a joint venture participant is in default of a Financial Obligation and the End User has not given a notice to Aurizon identifying the defaulting joint venture participant, all joint venture participants will be jointly and severally liable for the performance of the Financial Obligation.</p>	
				(TOA) There is no equivalent provision under the EUAA.	No change
54	Schedule 1 (Reference Schedule)	Schedule 1 (Reference Schedule)	Schedule 1 (Reference Schedule)	<p>(EUAA) This schedule is substantially similar to the SOAA except that it does not refer to the Access Interface Deed and contains details of the joint venture participants where the End User is contracting as disclosed agent for and on behalf of a joint venture.</p>	No material change
				(TOA) This provision is largely the same as under the SOAA. However, the amount of security payable by the Operator varies depending on whether the Access Charges are paid by the Operator under the TOA or by the End User under the EUAA. It also identifies the End User.	No material change
55	Schedule 2 (Train Service Descriptions)	Schedule 2 (Train Service Descriptions)	Schedule 2 (Train Service Descriptions)	<p>(EUAA) This schedule is substantially similar to the SOAA except that it does not include details of the "Customer".</p>	No material change
				(TOA) This schedule of the TOA is substantially the same as the equivalent schedule of the SOAA.	Amended to state "Nominated Monthly Operational Rights" as opposed to "Nominated Monthly Train Services" to reflect the fact that the Operator is granted Operational Rights by the End User under the TOA.

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
56	Schedule 3 (Nominated Network)	Schedule 3 (Nominated Network)	Schedule 3 (Nominated Network)	(EUAA) This schedule of the EUAA is the same as the equivalent schedule of the EUAA.	No material change
				(TOA) This schedule of the TOA is the same as the equivalent schedule of the SOAA.	No material change
57	Schedule 4 (Access Charges)	Schedule 4 (Access Charges)	Schedule 4 (Access Charges)	(EUAA) Schedule 4 has been amended to reflect the options in the EUAA for the End User to pay only the Take or Pay component of the Access Charges, or to pay the full Access Charges. Minor amendments have been made to reflect that the EUAA allows for services to be operated under one or many TOAs.	Formula for calculating TOP Charges has been amended to reflect UT4 TOP arrangements.
				(TOA) Schedule 4 has been amended to reflect that the Operator or the End User may be responsible for the operational component of the Access Charges. Additionally, the EUAA will always pay Take or Pay Charges. As such, the Take or Pay components of the Access Charges have been removed.	Amendments made to reflect UT4 Operating Capping mechanism.
58	N/A	Schedule 5 (Rollingstock and Rollingstock Configurations)	Schedule 5 (Rollingstock and Rollingstock Configurations)	(EUAA) There is no equivalent schedule to the EUAA.	No change
				(TOA) This schedule of the TOA is the same as the equivalent schedule of the SOAA.	Format of the schedule has changed which now lists relevant Tonnages (e.g. Tare Weight) for Wagons, Rollingstock and Rollingstock Configurations.
59	N/A	Schedule 6 (Performance Levels)	Schedule 6 (Performance Levels)	(EUAA) There is no equivalent schedule to the EUAA.	No change
				(TOA) This schedule of the TOA is the same as the equivalent schedule of the SOAA.	Schedule contains Aurizon Network Performance Levels which assess Average Below Rail Transit Times.

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
60	N/A	Schedule 7 (Safeworking Procedures and related matters)	Schedule 7 (Safeworking Procedures and related matters)	(EUAA) There is no equivalent schedule to the EUAA.	No change
				(TOA) This schedule of the TOA is the same as the equivalent schedule of the SOAA.	No material change
61	Schedule 5 (Insurance)	Schedule 8 (Insurance)	Schedule 8 (Insurance)	(EUAA) Workers compensation insurance is the only type of insurance referred to in this schedule.	No material change
				(TOA) This schedule of the TOA is the same as the equivalent schedule of the SOAA.	No material change
62	Schedule 6 (Suspension Events and Termination Events)	Schedule 9 (Suspension Events and Termination Events)	Schedule 9 (Suspension Events and Termination Events)	(EUAA) This schedule of the EUAA does not include any of the Suspension Events or Termination Events applicable to specific Train Services Types. However this schedule does include a limited set of Suspension Events and Termination Events more generally which cover a failure to pay amounts payable under the EUAA, a failure to effect and maintain insurances or provide evidence of insurances, a failure to establish, maintain or replace Security, purported Assignment in breach of the Agreement and a failure to comply with any other obligations under the EUAA.	No material change
				(TOA) This schedule of the TOA is the same as the equivalent schedule of the SOAA.	Amended to reflect Train Service Type specific events and general events. Amendments to provide greater clarity to suspension and termination events and inclusion of a new suspension and termination event where an Operator fails to comply with a direction, notice or order of an Environmental Regulator.
63	N/A	Schedule 10 (Interface)	Schedule 10 (Interface)	(EUAA) There is no equivalent schedule to the EUAA.	No change

Item	Clause of EUAA	Clause of TOA	Clause of SOAA	Variation from SOAA	Variations from AFOA UT3 (excluding variations which result from variations between the UT3 and UT4 SOAA) ²⁰⁹
		Coordination Arrangements)	Coordination Arrangements)	(TOA) This schedule of the TOA is the same as the equivalent schedule of the SOAA.	Interface Coordination Arrangements no longer include the Network Management Principles
64	N/A	Schedule 11 (Ancillary Services and Ancillary Services Charges)	Schedule 11 (Ancillary Services and Ancillary Services Charges)	(EUAA) There is no equivalent schedule to the EUAA.	No change
				(TOA) This schedule of the TOA is the same as the equivalent schedule of the SOAA.	No material change
65	N/A	N/A	Schedule 13 (Access Interface Deed)	(EUAA) There is no Access Interface Deed included in the EUAA.	No change
				(TOA) There is no Access Interface Deed included in the TOA.	No change
66	Schedule 7 (Pro Forma Train Operations Agreement)	N/A	N/A	(EUAA) This schedule to the EUAA is the TOA.	TOA changed as set out in this document
				(TOA) Not applicable to the TOA.	No change

B.3 Standard Access Holder Access Agreement - Coal

The table below has been prepared in relation to the draft *Access Holder Access Agreement – Coal* between Aurizon Network Pty Ltd (**Aurizon**) and an End User (**AHAA**). The purpose of this high level summary is to identify the key differences between the draft AHAA and the draft *Standard Operator Access Agreement – Coal* (**SOAA**). This summary should not be read in substitution for reading the entire AHAA. Unless otherwise indicated, clause references are to clauses in the AHAA or SOAA (as applicable) and capitalised terms not otherwise defined in this summary have the meanings given in the AHAA or SOAA (as applicable).

Item	Clause of SOAA	Clause of AHAA	Comments
1	General	General	<p>The AHAA is based on the SOAA and has been developed in accordance with the positions adopted in the UT3 Access Holder Access Agreement (where applicable). The new provisions of the SOAA, which were not included in the UT3 Access Holder Access Agreement, have been adapted on the basis that the End User will hold Access Rights but will have no right to operate Train Services utilising those Access Rights.</p> <p>The AHAA generally differs from the SOAA in that the AHAA:</p> <ul style="list-style-type: none"> • requires the End User to cause the Operator to comply with operational obligations under the AHAA; • refers to the End User causing the Operator to operate Train Services and, where applicable, the End User ensuring that the Operator does not operate Train Services in certain circumstances; • uses the term “End User’s Staff” which includes employees, contractors, volunteers and agents of both the End User and the Operator rather than the term “Operator’s Staff” which is used in the SOAA and only includes employees, contractors, volunteers and agents of the Operator; and • contemplates that either the End User or the Operator may own the Rollingstock utilised in the Train Services. <p>These differences arise in various clauses throughout the AHAA.</p>
2	1 (Definitions and Interpretation)	1 (Definitions and Interpretation)	The definitions from the SOAA have been amended in the AHAA to align with the relevant provisions of the AHAA.
3	2 (Term)	2 (Term)	This provision of the AHAA is substantially similar to the equivalent clause of the SOAA (subject to consequential amendments and the replacement of “Operator” with “End User” where applicable). However, unlike the SOAA, the conditions precedent to negotiating a renewal of the AHAA do not include the continued nomination of the Operator by the End User.
4	3 (Access Rights)	3 (Access Rights)	This provision of the AHAA is similar to the equivalent provision of the SOAA (subject to consequential amendments and the replacement of “Operator” with “End User” where applicable).

Item	Clause of SOAA	Clause of AHAA	Comments
			The AHAA includes an additional provision which requires the End User to ensure that the Operator does not bring any Claim against Aurizon, its directors or its staff in respect of any failure by Aurizon to make the Infrastructure available to the Operator to operate an Ad Hoc Train Service.
5	4 (Ancillary Services) and Schedule 12	4 (Ancillary Services) and Schedule 11	This provision of the AHAA is the same as the equivalent provision of the SOAA (subject to the replacement of "Operator" with "End User" where applicable).
6	5 (Billing and payments)	5 (Billing and payments)	This provision of the AHAA is similar to the equivalent provision of the SOAA (subject to consequential amendments and the replacement of "Operator" with "End User" where applicable). Under the AHAA the End User is liable to pay Access Charges and Ancillary Services Charges to Aurizon.
7	6 (Security)	6 (Security)	This provision of the AHAA is similar to the equivalent provision of the SOAA (subject to consequential amendments and the replacement of "Operator" with "End User" where applicable). Under the AHAA the End User is required to provide Security to Aurizon in the same circumstances as the Operator is required to provide Security under the SOAA.
8	7 (Operation of Train Services)	7 (Operation of Train Services)	<p>This provision of the AHAA is similar to the equivalent provision of the SOAA (subject to consequential amendments and the replacement of "Operator" with "End User" where applicable).</p> <p>This provision also includes an acknowledgement by the End User that it is only entitled to exercise Access Rights under the AHAA through the Operator and that it is the Operator that will operate the Train Services under the AHAA.</p> <p>The conditions precedent to the Operator's commencement of Train Services include conditions which require the End User to cause the Operator to comply with certain obligations (such as the submission of an Emergency Response Plan, the development of the Operator's Safety Management System and the development of the Environmental Management Plan) and other conditions which the End User and/or the Operator must comply with.</p> <p>The Operator's obligation under the SOAA to procure the Customer and each AID Party to enter into an Access Interface Deed has not been included in the AHAA.</p> <p>With respect to Supply Chain Rights, the requirements under the AHAA are substantially similar to the requirements under the SOAA, however, it is the End User (rather than the Operator) that must hold or have the benefit of such rights.</p>
9	N/A	7.5 (Nomination of Operator for Train Service Type)	<p>This provision of the AHAA sets out the procedures for the nomination of an Operator (or an additional Operator) for a Train Service Type and the cessation of an Operator for a Train Service Type.</p> <p>If the End User wants to nominate an Operator (or an additional Operator) for a Train Service Type or the End User wishes for an Operator to cease to be an Operator for a Train Service Type, the End User must provide Aurizon with the name and contact details, applicable Train Service Type and any other information reasonably requested by Aurizon.</p>

Item	Clause of SOAA	Clause of AHAA	Comments
			If an additional Operator is nominated by the End User or the End User wishes for an Operator to cease to be an Operator for a Train Service Type and Aurizon notifies the End User that it considers that the AHAA should be amended to address matters arising from the nomination or removal, then Aurizon and the End User will negotiate in good faith to endeavour to agree any amendments to the AHAA necessary to address matters arising from the relevant nomination or removal. The relevant nomination or removal will not take effect unless and until Aurizon and the End User agree to such amendments to the AHAA.
10	N/A	7.6 (Relationship with Operator)	<p>The AHAA provides that the End User must ensure that the Operator does not operate any Train Services using the Access Rights until the Operator provides Aurizon with a written undertaking in favour of Aurizon under which the Operator agrees that:</p> <ul style="list-style-type: none"> • Aurizon will not be liable to the Operator and the Operator will not make any Claim against Aurizon under or in connection with the AHAA, the Access Rights or the Infrastructure for or in respect of Consequential Loss; • the liability of Aurizon, its directors and its staff to the Operator will be limited to the extent set out the paragraph below (i.e. to the extent that the Aurizon would have been liable to the End User); and • Aurizon Network, its directors and its staff will not be liable to the Operator in respect of a matter if the End User is required under the AHAA to ensure that the Operator does not bring a Claim against Aurizon, its directors and/or its staff in respect of that matter. <p>Aurizon is not liable to the Operator for any loss or damage suffered or incurred by the Operator except to the extent that Aurizon would have been liable to the End User had the loss or damage suffered or incurred by the Operator instead been suffered or incurred by the End User taking into account the exclusions and limitation of liability contained in the AHAA.</p> <p>The End User indemnifies Aurizon, its directors and its staff against any liability which Aurizon, its directors and its staff have to the Operator to the extent that the AHAA contemplates that Aurizon, its directors and its staff will not be liable to the Operator for such liability.</p> <p>The End User also indemnifies Aurizon, the relevant director or member of Aurizon's staff if the Operator brings a Claim against Aurizon, a director or a member of Aurizon's staff in respect of a matter that, under the AHAA, the End User was required to ensure that the Operator did not bring a Claim.</p>
11	8 (Resumption of Access Rights)	8 (Resumption of Access Rights)	<p>This provision is substantially similar to the equivalent provision of the SOAA (subject to consequential amendments and the replacement of "Operator" with "End User" where applicable). However, under the AHAA, the definition of "Underutilisation Event" (and therefore the definition of "Resumption Trigger Event") has been broadened to include any cause, event or circumstance which will have a sustained impact on the End User's or the Operator's (rather than just the Operator's) ability to utilise, or need to utilise, the Access Rights for that Train Service Type.</p> <p>In addition, the End User's obligation to notify Aurizon of an Underutilisation Event for a Train Service Type has been broadened to include circumstances where the End User should reasonably have become aware of</p>

Item	Clause of SOAA	Clause of AHAA	Comments
			that Underutilisation Event.
12	9 (Reduction of Conditional Access Rights due to Capacity Shortfall)	9 (Reduction of Conditional Access Rights due to Capacity Shortfall)	Subject to consequential changes, this provision of the AHAA is substantially similar to the equivalent provision of the SOAA.
13	10 (Reduction of Nominated Monthly Train Services if Maximum Payload exceeded)	10 (Reduction of Nominated Monthly Train Services if Maximum Payload exceeded)	Subject to consequential changes, this provision of the AHAA is substantially similar to the equivalent provision of the SOAA.
14	11 (Reduction of Nominated Monthly Train Services if Nominal Payload increased)	11 (Reduction of Nominated Monthly Train Services if Nominal Payload increased)	Under this provision of the AHAA, Aurizon is liable to compensate the Operator for the Net Financial Effect on the Operator of the variations to the Nominal Payload, Maximum Payload and Nominated Monthly Train Services. The End User will not be compensated by Aurizon for this variation.
15	12 (Relinquishment of Access Rights)	12 (Relinquishment of Access Rights)	This provision of the AHAA is substantially similar to the equivalent provision of the SOAA (subject to consequential amendments and the replacement of "Operator" with "End User" where applicable).
16	13 (Transfer of Access Rights by Operator)	13 (Transfer of Access Rights by End User)	This provision of the AHAA is substantially similar to the equivalent provision of the SOAA (subject to consequential amendments and the replacement of "Operator" with "End User" where applicable).
17	14 (Transfer of Access Rights by Customer)	N/A	The equivalent provision of the AHAA is clause 13 (Transfer of Rights by End User).
18	15 (Reduction Factor)	14 (Reduction Factor)	This provision of the AHAA is substantially similar to the equivalent provision of the SOAA (subject to consequential amendments and the replacement of "Operator" with "End User" where applicable).
19	16 (Resumptions,	15 (Resumptions, reductions,	This provision of the AHAA is similar to the equivalent provision of the SOAA (subject to consequential

Item	Clause of SOAA	Clause of AHAA	Comments
	reductions, relinquishments and transfers – General)	relinquishments and transfers – General)	amendments and the replacement of “Operator” with “End User” where applicable). The AHAA includes an additional provision which requires the End User to ensure that the Operator does not bring any Claim against Aurizon, its directors and/or Aurizon’s staff for loss or damage that the Operator may otherwise have in connection with any resumption, reduction, relinquishment or transfer of Access Rights under the relevant provisions.
20	17 (Day to day Train Movements)	16 (Day to day Train Movements)	This provision of the AHAA is substantially similar to the equivalent provision of the SOAA (subject to consequential amendments and the replacement of “Operator” with “End User” where applicable). With respect to Train Control rights and obligations, the End User must ensure that the Operator and the End User’s Staff comply with such obligations.
21	18 (Compliance)	17 (Compliance)	This provision of the AHAA is substantially similar to the equivalent provision of the SOAA (subject to consequential amendments and the replacement of “Operator” with “End User” where applicable). Under the AHAA, the End User must comply with, and must cause the Operator to comply with, the obligations under this provision.
22	19 (Operating Plan)	18 (Operating Plan)	This provision of the AHAA is substantially similar to the equivalent provision of the SOAA (subject to consequential amendments and the replacement of “Operator” with “End User” where applicable). The End User must cause the Operator to develop and amend the Operating Plan in the circumstances specified in clause 18.
23	20 (Train operations)	19 (Train operations)	This provision of the AHAA is substantially similar to the equivalent provision of the SOAA (subject to consequential amendments and the replacement of “Operator” with “End User” where applicable). This provision allows either the End User or the Operator to notify Aurizon that it will be unable to operate a Train Service scheduled in the Daily Train Plan. The notification obligations under this provision of the AHAA have been extended such that the End User must inform and must ensure that the Operator informs Aurizon of any failure by the End User or the Operator to comply with the general obligations in clause 17.1 (General requirements – End User) of the AHAA, Train Control Directions or the Authorised Rollingstock and Authorised Rollingstock Configurations for each Train Service Type. The End User must also ensure that the Operator provides the necessary software, hardware and associated communication links to establish an interface with Aurizon’s information systems and that the Operator provides information which is required to be provided to the Train Controller under schedule 10. Under the AHAA the End User is responsible for the safe operation of Rollingstock used in the operation of a Train Service.
24	21 (Authorisation of Rollingstock and Rollingstock Configurations)	20 (Authorisation of Rollingstock and Rollingstock)	This provision is substantially similar to the equivalent provision in the AHAA (subject to consequential amendments and the replacement of “Operator” with “End User” where applicable). However, the End User may procure the relevant certifications of the Rollingstock and Rollingstock Configurations itself or cause the Operator to procure the relevant certifications.

Item	Clause of SOAA	Clause of AHAA	Comments
		Configurations)	The AHAA also provides that the End User may elect to either receive the Train Route Acceptance or Authority to Travel itself or to request that Aurizon provide those documents to the Operator.
25	22 (Amendments to System Wide Requirements)	21 (Amendments to System Wide Requirements)	<p>This provision is substantially similar to the equivalent provision in the AHAA (subject to consequential amendments and the replacement of “Operator” with “End User” where applicable). An Amendment Notice must include sufficient details for both the End User and the Operator to assess the consequences of the proposed amendments.</p> <p>The End User must advise Aurizon of the Net Financial Effect of a Discretionary System Amendment on the End User or the Operator. If the Net Financial Effect on the End User or the Operator is equivalent to one percent or greater of the annual Access Charges then the End User must provide details of the Net Financial Effect and the Parties must negotiate to seek to agree appropriate financial arrangements with respect to the Net Financial Effect.</p> <p>The End User must use [and must ensure that the Operator uses] all reasonable endeavours to minimise the Net Financial Effect on the End User or the Operator of any proposed amendments to a System Wide Requirement.</p>
26	23 (Weighbridges and Overload Detectors)	22 (Weighbridges and Overload Detectors)	<p>This provision is substantially similar to the equivalent provision in the AHAA (subject to consequential amendments and the replacement of “Operator” with “End User” where applicable).</p> <p>However, the AHAA includes additional clauses which require the End User to ensure that the Operator does not bring certain Claims against Aurizon with respect to any loss suffered by the Operator as a result of Aurizon acting on the basis of any mass determined under the AHAA or where such Claim arises from any delay to or cancellation of Train Services as a result of the operation of clause 22.</p>
27	24 (Performance Levels) Schedule 6 (Performance Levels)	23 (Performance Levels) Schedule 6 (Performance Levels)	This provision of the AHAA differs from the SOAA in that the End User (rather than the Operator) is liable to pay Aurizon if the Operator does not comply with the Operator Performance Level.
28	25 (Infrastructure management)	24 (Infrastructure management)	This provision of the AHAA is substantially similar to the equivalent provision of the SOAA (subject to consequential amendments and the replacement of “Operator” with “End User” where applicable). However, the End User must and must also cause the Operator to notify Aurizon of any damage to, or disrepair or failure in operation or function of any part of the Infrastructure of which the End User or the Operator (as applicable) becomes aware.
29	26 (Incident management)	25 (Incident management)	<p>This provision of the AHAA is substantially similar to the equivalent provision of the SOAA (subject to consequential amendments and the replacement of “Operator” with “End User” where applicable).</p> <p>The End User must cause the Operator to develop, rectify and amend the Emergency Response Plan (as</p>

Item	Clause of SOAA	Clause of AHAA	Comments
			<p>applicable).</p> <p>The notification obligations have been extended such that the End User must, and must cause the Operator to, notify Aurizon of any Obstructions. The provisions in relation to the management of the response to an Incident, Investigations and Environmental Incident reporting have been extended to involve both the End User and the Operator.</p> <p>The End User must ensure that the Operator does not bring certain Claims against Aurizon with respect to damage to or loss of freight or Rollingstock and delays to or cancellations of Train Services.</p> <p>In addition to the End User's own obligations to notify Environmental Regulators of certain Environmental Incidents, the End User is also required to ensure that the Operator notifies all relevant Environmental Regulators of the occurrence of any Environmental Incident which is caused, or contributed to, by the End User or the Operator in accordance with the Operator's obligations under Environmental Laws.</p>
30	27 (Accreditation)	26 (Accreditation)	<p>This provision of the AHAA has been adapted to provide that the End User must ensure that the Operator has and maintains the Accreditation required to operate Train Services under the Agreement, and that the Operator notifies Aurizon as soon as possible of any notice of an Authority affecting or likely to affect the Operator's Accreditation.</p>
31	28 (Operator's staff)	27 (End User's staff)	<p>This provision is substantially the same as the equivalent provision of the SOAA except that "Operator's Staff" has been replaced with "End User's Staff". As noted in item 1, the term "End User's Staff" is broader than "Operator's Staff".</p> <p>In addition to the pre-existing indemnity, the End User is also required to ensure that the Operator indemnifies and releases Aurizon from any liability in relation to the End User's Staff except to the extent that such liability is caused by the wilful default or negligence of Aurizon or its staff.</p>
32	29 (Interface and environmental risk management)	28 (Interface and environmental risk management)	<p>This provision of the AHAA has been amended to provide that Aurizon, the End User and the Operator will be involved in the Interface Risk Assessment. In addition, if requested by the End User, the Operator's written agreement to the IRMP or amendments to the IRMP will be required.</p> <p>The End User must and must cause the Operator to advise Aurizon Network of any failure by the End User or the Operator to comply with the IRMP.</p> <p>The End User must cause the Operator to develop, implement and maintain a safety management system and an Environmental Management Plan.</p> <p>The obligations in respect of community liaison extend to both the End User and the Operator.</p>
33	30 (Inspection and audit rights)	29 (Inspection and audit rights)	<p>The inspection rights under the AHAA are broader than the rights under the SOAA in that the End User and/or the Operator may, before the initial commencement of Train Services for any Train Service Type, inspect the Infrastructure comprising the Nominated Network.</p>

Item	Clause of SOAA	Clause of AHAA	Comments
34	31 (Insurance by Operator)	30 (Insurance by End User)	This provision of the AHAA is substantially similar to the equivalent provision of the SOAA except that "Operator's Staff" has been replaced with "End User's Staff" and that the End User must procure the Operator to effect and maintain insurances. As noted in item 1, the term "End User's Staff" is broader than "Operator's Staff".
35	32 (Indemnities)	31 (Indemnities)	The indemnities in the AHAA are substantially similar to the equivalent indemnities in the SOAA except that the Operator has been replaced with the End User.
36	33 (Limitations and exclusions of liability)	32 (Limitations and exclusions of liability)	The limitations of liability have been amended to impose on an obligation on the End User to ensure that the Operator does not bring any Claim against Aurizon in respect of the standard of the Infrastructure, any failure by Aurizon to make the Infrastructure available and delays to Train Movements (subject to the conditions set out in clauses 32.3, 32.4 and 32.5 of the AHAA respectively). The Operator's obligation under the SOAA to ensure that Aurizon has the benefit of any limitations or exclusions from liability under the conditions of carriage with the Customer has been removed.
37	34 (Determination of liability and loss adjustment)	33 (Determination of liability and loss adjustment)	This provision of the AHAA applies in respect of an Incident involving the End User or the Operator (as opposed to an Incident involving the Operator).
38	35 (Material Change)	34 (Material Change)	This provision is substantially the same as the equivalent provision of the SOAA except that "Operator's Staff" has been replaced with "End User's Staff". As noted in item 1, the term "End User's Staff" is broader than "Operator's Staff".
39	36 (Disputes)	35 (Disputes)	This provision is substantially the same as the equivalent provision of the SOAA except that "Operator's Staff" has been replaced with "End User's Staff". As noted in item 1, the term "End User's Staff" is broader than "Operator's Staff".
40	37 (Force Majeure)	36 (Force Majeure)	This provision is substantially the same as the equivalent provision of the SOAA except that "Operator's Staff" has been replaced with "End User's Staff". As noted in item 1, the term "End User's Staff" is broader than "Operator's Staff". Both the Operator and the End User must use reasonable endeavours to remedy or overcome the effect of a Force Majeure Event.
41	38 (Suspension)	37 (Suspension)	This provision is substantially the same as the equivalent provision of the SOAA except that "Operator's Staff" has been replaced with "End User's Staff". As noted in item 1, the term "End User's Staff" is broader than "Operator's Staff". This provision contemplates that the End User or the Operator may rectify non-compliances.

Item	Clause of SOAA	Clause of AHAA	Comments
			Where Aurizon exercises a right of suspension, the End User must, and must ensure that the Operator and the relevant End User's Staff, immediately cease to operate the relevant Train Services or the Train Services using the relevant Rollingstock or Rollingstock Configurations.
42	39 (Termination)	38 (Termination)	This provision is substantially the same as the equivalent provision of the SOAA except that "Operator's Staff" has been replaced with "End User's Staff". As noted in item 1, the term "End User's Staff" is broader than "Operator's Staff". The End User must, or must cause the Operator to, remove the Rollingstock which is no longer required because the Operator will not be operating Train Services utilising the End User's Access Rights.
43	40 (Assignment)	39 (Assignment)	This provision is substantially the same as the equivalent provision of the SOAA except that "Operator's Staff" has been replaced with "End User's Staff". As noted in item 1, the term "End User's Staff" is broader than "Operator's Staff". Unlike the assignment provision of the SOAA, the End User's assignee need not be Accredited to operate Train Services.
44	41 (GST)	40 (GST)	This provision is the same as the equivalent provision of the SOAA.
45	42 (Confidentiality)	41 (Confidentiality)	This provision of the AHAA is substantially similar to the SOAA except that: <ul style="list-style-type: none"> Confidential Information may be disclosed to the Operator provided that the Confidential Information (including any Disclosed Information) does not relate to the Access Rights for any other Access Holder (other than the End User) or Railway Operator and the End User ensures the Operator keeps the Confidential Information (including any Disclosed Information) confidential and that the Operator does not bring any Claim against Aurizon, its directors and/or its staff in respect of any disclosure of Confidential Information (including any Disclosed Information); and where Aurizon is the Discloser, Confidential Information may be disclosed to a Railway Operator (other than the Operator) provided that the End User has requested the transfer of some or all of its Access Rights to the Railway Operator and the Confidential Information only relates to those Access Rights.
46	43 (Intellectual Property)	42 (Intellectual Property)	This provision is substantially the same as the equivalent provision of the SOAA except that the End User grants, and must ensure the Operator grants, the intellectual property licence to Aurizon.
47	44 (Notices)	43 (Notices)	This provision is substantially the same as the equivalent provision of the SOAA .
48	45 (General)	44 (General)	This provision is substantially the same as the equivalent provision of the SOAA except that "Operator's Staff" has been replaced with "End User's Staff". As noted in item 1, the term "End User's Staff" is broader than "Operator's Staff".

Item	Clause of SOAA	Clause of AHAA	Comments
49	46 (Most favoured nation status)	45 (Most Favoured Nation Status)	This provision is substantially the same as the equivalent provision of the SOAA except that "Operator's Staff" has been replaced with "End User's Staff". As noted in item 1, the term "End User's Staff" is broader than "Operator's Staff".
50	N/A	46 (JV Participants and liability)	This provision of the AHAA applies where the End User enters into the AHAA as agent for a joint venture. This clause provides that the percentage interest of the joint venture participants is specified in the relevant schedule and the liability of the joint venture participants is several in respect of Financial Obligations and joint and several in respect of non-Financial Obligations. If a joint venture participant is in default of a Financial Obligation and the End User has not given a notice to Aurizon identifying the defaulting joint venture participant, all joint venture participants will be jointly and severally liable for the performance of the Financial Obligation.
51	Schedule 1 (Reference Schedule)	Schedule 1 (Reference Schedule)	This schedule is substantially similar to the equivalent schedule of the SOAA except that it does not refer to the Access Interface Deed and contains details of the joint venture participants where the End User is contracting as disclosed agent for and on behalf of a joint venture.
52	Schedule 2 (Train Service Descriptions)	Schedule 2 (Train Service Descriptions)	This schedule is substantially the same as the equivalent schedule of the SOAA
53	Schedule 3 (Nominated Network)	Schedule 3 (Nominated Network)	This schedule is substantially the same as the equivalent schedule of the SOAA.
54	Schedule 4 (Access Charges)	Schedule 4 (Access Charges)	This schedule is substantially the same as the equivalent schedule of the SOAA.
55	Schedule 5 (Rollingstock and Rollingstock Configurations)	Schedule 5 (Rollingstock and Rollingstock Configurations)	This schedule is substantially the same as the equivalent schedule of the SOAA except that it includes an additional column identifying the owner of the relevant Rollingstock.
56	Schedule 6 (Performance Levels)	Schedule 6 (Performance Levels)	This schedule is substantially the same as the equivalent schedule of the SOAA except that it provides that the End User must ensure that the Operator complies with the reporting and assessment requirements.
57	Schedule 7 (Safeworking Procedures and	Schedule 7 (Safeworking Procedures and	This schedule is substantially the same as the equivalent schedule of the SOAA.

Item	Clause of SOAA	Clause of AHAA	Comments
	related matters)	related matters)	
58	Schedule 8 (Insurance)	Schedule 8 (Insurance)	This schedule is substantially the same as the equivalent schedule of the SOAA except that it refers to the End User effecting, or causing the Operator to effect, the relevant insurances.
59	Schedule 9 (Suspension Events and Termination Events)	Schedule 9 (Suspension Events and Termination Events)	This schedule is substantially the same as the equivalent provision of the SOAA (subject to consequential amendments and the replacement of "Operator" with "End User" where applicable) and that the application of certain Suspension Events and Termination Events is wider in that they apply to actions to both the End User and the Operator.
60	Schedule 10 (Interface Coordination Arrangements)	Schedule 10 (Interface Coordination Arrangements)	This schedule is substantially the same as the equivalent schedule of the SOAA (subject to consequential amendments and the replacement of "Operator" with "End User" where applicable).
61	Schedule 11 (Ancillary Services and Ancillary Services Charges)	Schedule 11 (Ancillary Services and Ancillary Services Charges)	This schedule is substantially the same as the equivalent schedule of the SOAA except that the definition of "Wayside Equipment" refers to the equipment being made available to and being used by the End User or the Operator (rather than just the Operator) to monitor the End User's or the Operator's Rollingstock.
62	Schedule 13 (Access Interface Deed)	N/A	The AHAA does not include an Access Interface Deed.

Appendix C Summaries of standard studies funding agreements

C.1 Standard Studies Funding Agreement – Feasibility Study

The table below has been prepared in relation to the draft Standard Studies Funding Agreement – Feasibility Study between Aurizon Network Pty Ltd (Aurizon) and the Customer (SSFA). The purpose of this high level summary is to identify the key provisions of the SSFA. This summary should not be read in substitution for reading the entire SFA. Unless otherwise indicated, clause references are to clauses in the SSFA and capitalised terms not otherwise defined in this summary have the meanings given in the SFA.

Term	
1.	The Studies Funding Agreement – Feasibility Study commences on the date of execution by Aurizon and, unless earlier terminated, continues until the Loaned Amount has been fully repaid (or is taken to have been fully repaid) to the Customer. See item 4 in relation to Aurizon’s liability to repay the Loaned Amount.
Conditions Precedent	
2.	<p>The SFA is subject to the following conditions which are for the benefit of Aurizon:</p> <ul style="list-style-type: none"> • Aurizon obtaining all necessary internal governance authorisations; • the Customer and each Other Customer delivering to Aurizon a bank guarantee for the specified amount; and • the Customer and each Other Customer paying to Aurizon their respective Customer’s Share of Prefeasibility Costs. <p>If the Conditions are not satisfied by the relevant Conditions Date, then the SFA will automatically terminate.</p>
Customer’s obligation to loan funds	
3.	<p>The Customer agrees to provide interest free loans to Aurizon for the Customer’s Share of the Prefeasibility Costs as well as Drawdown Amounts specified in Drawdown Notices issued by Aurizon from time to time. The maximum aggregate amount that the Customer is obliged to lend to Aurizon is the sum of the Customer’s Share of the Prefeasibility Costs and the Customer’s Study Commitment.</p> <p>After the end of each Month, Aurizon must give the Customer a Drawdown Notice specifying the Drawdown Amount for that Month, and the Customer must pay the Drawdown Amount to Aurizon within ten Business Days after receiving the Drawdown Notice.</p> <p>The SFA provides for customers to loan funds on the basis of their relative capacity on a Segment by Segment basis. This structure has been requested by potential customers in their consultations with Aurizon.</p>

Aurizon's obligation to repay the Loaned Amount

4. Aurizon must repay the Loaned Amount to the Customer if:
- Aurizon enters into Project Agreements which become unconditionally binding; and
 - either Aurizon is solely responsible for funding the Rail Study Works to be carried out under the Project Agreements or Aurizon is not solely responsible for such funding but is paid funds under the Project Agreements which it is permitted to apply in repaying (and which are sufficient to fully repay) loans made by the Customer under the SFA and by Other Customers under Other Funding Agreements other than for loans in relation to Land Acquisition Costs.
- If Aurizon does not become obliged to repay the Loaned Amount to the Customer within nine years and 11 months after the Commencement Date, then Aurizon must grant the Rail Study Licence to the Customer. Upon the grant of the Rail Study Licence to the Customer, the Loaned Amount will be taken to have been fully repaid and the Customer will have no Claim against Aurizon in respect of the Loaned Amount.

Commitment Variation Requests

5. If the Customer's Estimated Study Costs increase during the term of the SFA such that at the end of a Month they exceed the Customer's Study Commitment as at the end of that Month, then Aurizon must request (**Commitment Variation Request**) the Customer's consent to vary the Customer's Study Commitment so that the Customer will be committed to fund the Customer's Estimated Study Costs.
- If the Customer notifies Aurizon that it does not consent to a Commitment Variation Request, or consents to the Commitment Variation Request but does not provide an additional or replacement Bank Guarantee as requested in the Commitment Variation Request Notice, then the SFA automatically terminates. If the SFA is terminated in those circumstances, the Customer continues to be bound to pay Drawdown Amounts specified in Drawdown Notices up to the amount of the Customer's Study Commitment.
- If the Customer consents to the Commitment Variation Request and provides an additional or replacement Bank Guarantee but an Other Customer does not, then the Customer will loan a greater percentage of the Additional Segment Costs once the Terminated Other Segment Customer has loaned the full amount of their "Customer's Segment Commitment".

Obligation to conduct Rail Study

6. Aurizon must carry out the Rail Study in accordance with clause 7 of the SFA. Aurizon must ensure that the Study Costs for the Rail Study do not exceed the Target Study Cost, and that the Rail Study is completed by the Target Date.
- Aurizon must provide monthly reports to the Customer, providing reasonable details of the progress of the Rail Study. On completion of the Rail Study, Aurizon must also provide the Customer with a copy of the Rail Study Report, which sets out the outcomes of the Rail Study. Aurizon may delete from the copy of the Rail Study Report that it gives to the Customer any information which, if given to the Customer, would give rise to a breach of an obligation or duty of confidence by Aurizon.

Study Costs

7. Aurizon must maintain complete books of account and records in relation to the Study Costs and must preserve such accounts and records for at least five years after the expiration or termination of the SFA. Aurizon must appoint an Auditor to conduct an Audit in order to verify the amount of the Study Costs Incurred by Aurizon and the Drawdown Amounts specified in Drawdown Notices in accordance with the SFA.

Bank Guarantee

8. The Customer must provide a Bank Guarantee to Aurizon, and Aurizon may draw on the Bank Guarantee, in accordance with clause 11 of the SFA. If Aurizon gives the Customer a Commitment Variation Request Notice that includes a request for a further or replacement Bank Guarantee for the Increased Bank Guarantee Amount, the Customer must provide the further or replacement Bank Guarantee to Aurizon within ten Business Days after Aurizon gives the Customer the Commitment Variation Request Notice.

Project Management Fee and Liability of Aurizon

9. Aurizon is entitled to be paid a Project Management Fee for the management of the Rail Study. If Aurizon fails to ensure that the Study Costs for the Rail Study do not exceed the Target Study Cost, or that the Rail Study is completed by the Target Date, the amount of the Project Management Fee payable by the Customer will be reduced. Aurizon will have no other liability to the Customer in respect of such a failure.
- Except to the extent that Aurizon has committed fraud, Gross Negligence or Wilful Default, or as otherwise prohibited by law, Aurizon's liability to the Customer under the SFA is limited to the amount of \$1.00.
- The Customer must not make a Claim against Aurizon unless it first notifies Aurizon of the purported Claim and allows Aurizon a reasonable period to rectify the relevant default.

C.2 Standard Studies Funding Agreement – Pre-feasibility Study

The table below has been prepared in relation to the draft *Standard Studies Funding Agreement – Prefeasibility Study* between Aurizon Network Pty Ltd (**Aurizon**) and the Customer (**SSFA**). The purpose of this high level summary is to identify the key provisions of the SSFA. This summary should not be read in substitution for reading the entire SSFA. Unless otherwise indicated, clause references are to clauses in the SSFA and capitalised terms not otherwise defined in this summary have the meanings given in the SSFA.

Term	
1.	The Studies Funding Agreement – Prefeasibility Study commences on the date of execution by Aurizon and, unless earlier terminated, continues until the Loaned Amount has been fully repaid (or is taken to have been fully repaid) to the Customer. See item 4 in relation to Aurizon’s liability to repay the Loaned Amount.
Conditions precedent	
2.	<p>The SFA is subject to the following conditions which are for the benefit of Aurizon:</p> <ul style="list-style-type: none"> • Aurizon obtaining all necessary internal governance authorisations; • the Customer delivering to Aurizon a Bank Guarantee for 125% of the Customer’s Study Budget (the Customer’s Study Commitment); and • sufficient Other Customers delivering to Aurizon bank guarantees under their Other Funding Agreements so that the Customer’s initial share of the Target Study Cost does not exceed the Customer’s Study Commitment. <p>If the Conditions are not satisfied by the relevant Conditions Date, then the SFA will automatically terminate.</p> <p>The third condition has been structured so that the SFA does not necessarily terminate if an Other Customer fails to execute their Other Funding Agreement or fails to provide bank guarantees. This is because Aurizon considers that any such failure by an Other Customer is more likely to occur for a prefeasibility study than for a feasibility study.</p>
Customer’s obligation to loan funds	
3.	<p>The Customer agrees to provide interest free loans to Aurizon for the Drawdown Amounts specified in Drawdown Notices issued by Aurizon from time to time. The maximum aggregate amount that the Customer is obliged to lend to Aurizon is the Customer’s Study Commitment.</p> <p>After the end of each Month, Aurizon must give the Customer a Drawdown Notice specifying the Drawdown Amount for that Month, and the Customer must pay the Drawdown Amount to Aurizon within ten Business Days after receiving the Drawdown Notice.</p> <p>The SFA provides for customers to loan funds on the basis of their relative capacity on a whole of study basis. This is a simpler mechanism than provided for in the feasibility SFA.</p>

Aurizon’s obligation to repay the Loaned Amount

4. Aurizon must repay the Loaned Amount to the Customer if Aurizon:

- enters into Feasibility Study Agreements which become unconditionally binding; and
- is paid funds under the Feasibility Study Agreements which it is permitted to apply in repaying (and which are sufficient to fully repay) loans made by the Customer under the SFA and by Other Customers under Other Funding Agreements.

If Aurizon does not become obliged to repay the Loaned Amount to the Customer within nine years and 11 months after the Commencement Date, then Aurizon must grant the Rail Study Licence to the Customer. Upon the grant of the Rail Study Licence to the Customer, the Loaned Amount will be taken to have been fully repaid and the Customer will have no Claim against Aurizon in respect of the Loaned Amount.

Commitment Variation Requests

5. If the Customer’s Estimated Study Costs increase during the term of the SFA such that at the end of a Month they exceed the Customer’s Study Commitment as at the end of that Month, then Aurizon must request (**Commitment Variation Request**) the Customer’s consent to vary the Customer’s Study Commitment so that the Customer will be committed to fund the Customer’s Estimated Study Costs.

If the Customer notifies Aurizon that it does not consent to a Commitment Variation Request, or consents to the Commitment Variation Request but does not provide an additional or replacement Bank Guarantee as requested in the Commitment Variation Request Notice, then the SFA automatically terminates. If the SFA is terminated in those circumstances, the Customer continues to be bound to pay Drawdown Amounts specified in Drawdown Notices up to the amount of the Customer’s Study Commitment.

If the Customer consents to the Commitment Variation Request and provides an additional or replacement Bank Guarantee but an Other Customer does not, then the Customer will loan a greater percentage of the Additional Study Costs once the Terminated Other Customer has loaned the full amount of their “Customer’s Study Commitment”.

Obligation to conduct Rail Study

6. Aurizon must carry out the Rail Study in accordance with clause 7 of the SFA. Aurizon must ensure that the Study Costs for the Rail Study do not exceed the Target Study Cost, and that the Rail Study is completed by the Target Date.

Aurizon must provide monthly reports to the Customer, providing reasonable details of the progress of the Rail Study. On completion of the Rail Study, Aurizon must also provide the Customer with a copy of the Rail Study Report, which sets out the outcomes of the Rail Study. Aurizon may delete from the copy of the Rail Study Report that it gives to the Customer any information which, if given to the Customer, would give rise to a breach of an obligation or duty of confidence by Aurizon.

Study Costs

7. Aurizon must maintain complete books of account and records in relation to the Study Costs and must preserve such accounts and records for at least five years after the expiration or termination of the SFA. Aurizon must appoint an Auditor to conduct an Audit in order to verify the amount of the Study Costs Incurred by

	Aurizon and the Drawdown Amounts specified in Drawdown Notices in accordance with the SFA.
Bank Guarantee	
8.	<p>The Customer must provide a Bank Guarantee to Aurizon, and Aurizon may draw on the Bank Guarantee, in accordance with clause 11 of the SFA.</p> <p>If Aurizon gives the Customer a Commitment Variation Request Notice that includes a request for a further or replacement Bank Guarantee for the Increased Bank Guarantee Amount, the Customer must provide the further or replacement Bank Guarantee to Aurizon within ten Business Days after Aurizon gives the Customer the Commitment Variation Request Notice.</p>
Project Management Fee and Liability of Aurizon	
9.	<p>Aurizon is entitled to be paid a Project Management Fee for the management of the Rail Study. If Aurizon fails to ensure that the Study Costs for the Rail Study do not exceed the Target Study Cost, or that the Rail Study is completed by the Target Date, the amount of the Project Management Fee payable by the Customer will be reduced. Aurizon will have no other liability to the Customer in respect of such a failure.</p> <p>Except to the extent that Aurizon has committed fraud, Gross Negligence or Wilful Default, or as otherwise prohibited by law, Aurizon's liability to the Customer under the SFA is limited to the amount of \$1.00.</p> <p>The Customer must not make a Claim against Aurizon unless it first notifies Aurizon of the purported Claim and allows Aurizon a reasonable period to rectify the relevant default.</p>

