

Final Decision

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## Aurizon Network's Capricornia system rules

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February 2014

The QCA wishes to acknowledge the contribution of the following staff to this report:

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## PREAMBLE

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The Queensland Competition Authority (QCA) has made a final decision to refuse to approve Aurizon Network's draft Capricornia system rules.

The purpose of the Capricornia system rules is to provide more detail on matters addressed by the network management principles. In particular, on how Aurizon Network provides capacity information and how it plans, schedules and coordinates train services. The network management principles are general in nature and apply across all of the central Queensland coal network. The system rules provide additional detail on how the network will be managed and provide flexibility to allow for different arrangements to apply to the different circumstances that arise across the network and over time.

The QCA's assessment has considered the criteria for approval in the 2010 access undertaking, including ensuring consistency with the matters contained in the network management principles. The QCA has also had regard to the criteria in section 138(2) of the *Queensland Competition Authority Act 1997 (Qld)* and has sought to balance the interests of Aurizon Network, access holders and access seekers. Noting that increased flexibility for one party may result in higher costs and/or decreased flexibility for other parties.

In April 2013, the QCA released its draft decision not to approve the draft Capricornia system rules, on the basis that Aurizon Network's approaches to scheduling and train control should be more transparent and equitable. For example, the QCA wanted greater transparency so access holders and their customers could be confident there was sufficient capacity in the rail network.

Aurizon Network's response to the draft decision included a revised set of system rules that sought to address most of the QCA's concerns. Stakeholders have agreed with many elements of the QCA's draft decision and, in turn, with many elements of Aurizon Network's revised rules. For example, the QCA's final decision accepts many of Aurizon Network's revised positions on train-scheduling and control, including:

- (a) making the system rules consistent with the alternative-form standard access agreements
- (b) clarifying how the contested train path decision-making process operates
- (c) considering two train cycles (instead of one) when determining the cause of cancellations.

This final decision does not seek to focus on matters that have now largely been agreed. Rather, this final decision focuses on matters where:

- (a) stakeholders have continued to raise material concerns
- (b) the QCA considers Aurizon Network's revised rules have not satisfactorily addressed the draft decision's requirements.

Accordingly, there are a number of amendments the QCA considers should be made to the revised rules. While these changes are not lengthy, they are material and are necessary. The QCA has taken careful note of the need for the system rules to provide greater clarity on the network management principles, and the way Aurizon Network:

- (a) provides capacity-related information and
- (b) schedules and coordinates trains.

The draft Capricornia rules and Aurizon Network's revised proposal have generally limited the scope of the rules to train scheduling and control matters, and have not focused on Aurizon Network's

responsibilities to provide capacity-related information to access holders. The QCA's required amendments to the Capricornia proposal seek to address this.

Where the QCA has required changes, it has mostly sought to improve the robustness and clarity around how the system rules work, so Aurizon Network considers constraints on other supply chain participants, just as other supply chain participants need to consider the limits on what Aurizon Network can reasonably be expected to provide. The QCA's amendments, among other things:

- (a) provide more detail on how Aurizon Network will adjust train orders to reflect maintenance
- (b) specify that meeting contractual obligations is the primary supply chain objective
- (c) require Aurizon Network to consider two train cycles when determining causes of delays.

Overall, the QCA considers that its required changes to the Capricornia system rules will improve the efficiency of the supply chain in a way that is transparent and equitable, consistent with the QCA's assessment criteria, and in the interests of all stakeholders.

In addition, it is also apparent that a number of the QCA's concerns with the Capricornia system rules deal with framework and governance arrangements. The QCA accepts that these are not matters for the system rules, but they are matters that need to be addressed in the undertaking itself. These include:

- (a) publishing a transparent, system-wide master train plan
- (b) developing reporting requirements to improve the effectiveness of the system rules
- (c) improving the process for access holders and seekers to promote or dispute changes to the rules.

While these issues are discussed in this decision, they will have to be considered as part of the QCA's review of Aurizon Network's UT4 proposal.

This preamble highlights key elements of the QCA's decision on Aurizon Network's draft Capricornia system rules, and should not be read as a substitute for the details in the decision. The full list of the QCA's required amendments is set out in Appendix A of this decision.

## Way Forward

This decision constitutes written notice from the QCA to Aurizon Network for the purposes of clause 5.2(h) of the 2010 access undertaking. It states the reasons for the QCA's refusal to approve the draft Capricornia system rules, and includes the way in which the QCA considers Aurizon Network should amend its proposal. The specific amendments the QCA considers should be made are shown in Appendix A as a mark-up to the revised Capricornia system rules that Aurizon Network provided in August 2013.

The QCA requires Aurizon Network to amend its draft Capricornia system rules in the way set out in this final decision and Appendix A, and requests the amended rules to be resubmitted by 30 April 2014.

If Aurizon Network resubmits system rules in the form set out in Appendix A or in a way which otherwise addresses the reasons for refusal set out in this final decision, the QCA will approve Aurizon Network's resubmitted Capricornia system rules if it considers it appropriate to do so having regard to the requirements of clause 5.2(j) of the 2010 access undertaking.

The QCA thanks stakeholders for their submissions to date, and encourages stakeholders to raise any outstanding matters in the UT4 review.

Submissions are not invited on this final decision.

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# 1 DRAFT CAPRICORNIA SYSTEM RULES

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*In August 2011, Aurizon Network submitted draft Capricornia system rules to the Queensland Competition Authority (QCA) for approval. System rules detail train scheduling and operating procedures and measures for demonstrating capacity that are suited to the specific characteristics of an individual coal system.*

*The QCA's consideration of Aurizon Network's draft system rules is subject to the approval criteria in the 2010 access undertaking and the Queensland Competition Authority Act 1997 (the QCA Act).*

*The QCA has made a final decision to refuse to approve Aurizon Network's proposal. The reasons for the QCA's final decision, and required amendments to the draft Capricornia system rules are set out in chapters 2-5. In particular, the QCA has identified in Appendix A of this final decision how Aurizon Network should amend the draft system rules to meet the approval criteria in the 2010 undertaking and QCA Act.*

*The QCA requires Aurizon Network to resubmit an amended proposal to the QCA by no later than 30 April 2014.*

## 1.1 Introduction

This paper sets out the Queensland Competition Authority's (QCA's) final decision on Aurizon Network's draft Capricornia system rules.

System rules provide details on the manner in which Aurizon Network plans, schedules, and controls train services operating on its rail infrastructure. The way Aurizon Network undertakes these activities can affect above-rail competition, especially since Aurizon Network is vertically integrated with Aurizon Holdings (above rail).

The QCA's draft decision identified the need for the system rules to be transparent. Aurizon Network accepted most aspects of the QCA's draft decision, and, in responding to it, has provided a submission that includes a revised set of Capricornia system rules. These rules have addressed many, but not all, of the issues the QCA raised in its draft decision.

While the QCA supports many of Aurizon Network's new positions, the assessment in this decision is made against the draft Capricornia system rules that were formally submitted in August 2011. However, the amendments to the rules set out in Appendix A have been made to the revised set of system rules provided by Aurizon Network.

This section expands on the development of the draft Capricornia system rules, their relevance, and how the QCA has considered these rules against the criteria in Aurizon Network's access undertaking and the QCA Act in arriving at its final decision.

## 1.2 Background

Queensland's rail infrastructure is operated by:

- (a) Aurizon Network Pty Ltd (formerly QR Network Pty Ltd) – which operates the below-rail coal network in central Queensland and is a wholly owned subsidiary of Aurizon Holdings Ltd
- (b) Queensland Rail Ltd – which operates the state's below-rail network outside central Queensland.

The two businesses were separated on 30 June 2010, when the Queensland Government split the former government-owned QR Ltd in preparation for the sale and public float of QR National (since renamed Aurizon Holdings) on 22 November 2010. Queensland Rail remains government owned.

The below-rail infrastructure of both businesses is declared for third-party access under the QCA Act. In October 2010, the QCA approved Aurizon Network's 2010 access undertaking.

There are five coal rail systems in the central Queensland coal network, and each system has differing operating characteristics, driven by the nature of the mine and port infrastructure connected by the rail lines. These systems are:

- Moura – the southernmost system that carries coal to Gladstone
- Blackwater – also serves Gladstone, and has a northern connection with Goonyella
- Goonyella – connects with terminals near Mackay, and links with Blackwater to the south, and Newlands to the north
- Newlands – the northernmost system that carries coal to a terminal near Bowen and is linked to Goonyella
- Goonyella Abbot Point Expansion (GAPE) - the connecting infrastructure between the Goonyella and Newlands coal systems.

The 'Capricornia' coal system consists of Moura and Blackwater, the two systems which export through terminals at Gladstone (see Figure 1).

**Figure 1: Capricornia coal chain in the Central Queensland Coal Region**



Source: Aurizon Network, sub. no. 1: 7

Each coal system needs to run according to planning, scheduling, and operating protocols, both for services within the system, and for interactions with services to and from other systems. The network management principles in Schedule G of the 2010 undertaking provide principles that Aurizon Network must adhere to when it:

- plans, schedules, and controls those operations for train services

- (b) provides capacity-related information to access holders (clause 7.1 of the 2010 undertaking).

The network management principles describe how Aurizon Network will deliver train service entitlements (TSEs) – a train path between a defined origin and destination pair for a coal-carrying train of defined dimensions (e.g. length, axle load).

However, the network management principles are general, and are not specifically tailored to the characteristics of each individual coal chain served by the rail systems.

To address this, the purpose of the system rules is to specify in greater detail the way in which Aurizon Network will plan, schedule and control the operation of train services on a single or combination of individual coal systems (2010 undertaking, schedule G, appendix 1, clause (a)).

### 1.3 Evolution of system rules

System rules were originally proposed in 2008 by Aurizon Network for the Goonyella system, as a way to reconcile the operating requirements of Dalrymple Bay Coal Terminal (DBCT), which has a small stockyard relative to throughput, with the way train services were contracted.

Aurizon Network said DBCT's 'dynamic scheduling environment' created a risk that meeting the demands of the Goonyella supply chain would conflict with the TSEs in access agreements, and with the network management principles. It indicated the system rules would increase transparency for all supply chain participants about how scheduling decisions were made, as well as provide the flexibility required to maximise system throughput (Aurizon Network, August 2008: 5-6).

Aurizon Network's 2009 draft access undertaking (DAU) formally proposed a framework for system rules. In its draft decision on this DAU, the QCA approved the concept of system rules, saying it accepted 'the principle of having specific operating rules that match the priorities of each system's ports and mines' (QCA, September 2009: p. 197).

While the QCA considered the system rules concept to be reasonable, it was not convinced that access holders and seekers (and their customers) would be sufficiently protected if the system rules sought to materially change the way Aurizon Network managed its network. As Aurizon Network had not provided an indication of what the system rules would look like, the QCA said the undertaking should require Aurizon Network to consult with access holders, access seekers and their customers when making or amending system rules. The 2010 undertaking includes these requirements (clause 7.1(b)).

The QCA considered that the system rules should be fluid enough to respond to changes in how the coal supply chain would operate. To effect this, the 2010 undertaking included a process for amending system rules (Schedule G, Appendix 1). This included a mechanism for access holders and seekers, and their customers, to raise disputes about any proposed amendments. However, the QCA rejected Aurizon Network's proposal that there should be a mechanism to compensate access holders for changes to the system rules. The QCA considered that raising any disputes should come as a last resort, and that:

*... the system rules would be developed with give and take among the various participants in the supply chain, as all should benefit in the longer term from a more efficient system (QCA, September 2010: 126).*

In deciding which coal systems would benefit most from system rules, the QCA considered that system rules were most likely to be relevant to the Goonyella coal system, where customers



and infrastructure providers (i.e. DBCT and Aurizon Network) were working towards altering the operating arrangements to improve supply chain coordination (QCA, September 2010: 127).

Given the focus on supply chain issues at DBCT during the discussion of the system rules concept, the 2010 undertaking required Aurizon Network to submit Goonyella system rules within nine months of that undertaking's approval, and allowed Aurizon Network to develop rules for other systems.

On 31 August 2011, Aurizon Network submitted draft Capricornia system rules to the QCA.

## 1.4 Capricornia system rules and QCA's draft decision

Aurizon Network's draft Capricornia system rules are based on the premise that:

*System rules aim to provide transparency around the planning and scheduling decision making process. They are not intended to limit flexibility in the supply chain, but to create certainty in respect to access entitlements for Access Holders, ensuring [Aurizon] Network's compliance with regulatory and contractual obligations (Aurizon Network, sub. no. 1: 4).*

and:

*The purpose of the System Rules is to provide a transparent planning and scheduling process which is clearly understood by all stakeholders (Aurizon Network, sub. no. 1: 7).*

Aurizon Network's draft Capricornia system rules propose:

- (a) an approach for how, and in what form, long-term capacity-related information would be provided to access holders and other supply chain participants
- (b) a train-planning process (i.e. a scheduling constraint summary and weekly train plan) that Aurizon Network would use to schedule access holders' train orders
- (c) a mechanism (i.e. a maintenance multiplier) to provide additional train paths to access holders when network maintenance activities consume system capacity that would have otherwise been available
- (d) methods to manage access holders' requests to amend the train schedule before the day of operation (i.e. amendments to the daily train plan)
- (e) approaches to manage emergency issues, and delays and cancellations of train services
- (f) a dispute resolution framework for determining the causes of train service delays and cancellations.

Stakeholders said Aurizon Network's proposed long-term planning documents did not provide enough information, especially on the capacity impact of maintenance and construction activities. Stakeholders also questioned the way Aurizon Network proposed to calculate train service entitlements (i.e. TSEs), and raised concerns about the lack of clarity on what point in the scheduling process Aurizon Network would consider a TSE had been consumed. Stakeholders also said the rules were not sufficiently transparent for them to be convinced that Aurizon Network was not unfairly favouring its related-party above-rail operator.

In April 2013, the QCA made a draft decision to refuse to approve Aurizon Network's draft Capricornia system rules. While the QCA found a number of Aurizon Network's proposals reasonable, it considered the draft system rules were not sufficiently transparent to:

- (a) give access holders (and their customers) confidence that there was sufficient capacity in the rail network and that they would get their monthly TSEs

- (b) demonstrate that train services would be scheduled and coordinated in an equitable manner.

The QCA also considered that Aurizon Network needed to improve its proposed approach to determining the causes of train-service delays and cancellations.

The criteria for approving system rules required the QCA to be satisfied the rules were, among other things, transparent, equitable, and consistent with the network management principles and terms in the standard access agreements. These criteria are set out in more detail in sections 1.5 and 1.6 below.

### Stakeholder submissions on QCA's draft decision

The QCA received five submissions on its draft decision (i.e. from Anglo American, Asciano, Aurizon Network, CS Energy and Stanwell Corp). Aurizon Network's submission included revised system rules that sought to address most aspects of the QCA's draft decision (Aurizon Network, sub no. 7: 3).

The QCA sought stakeholder comment on Aurizon Network's revised rules, particularly on the revised approach to calculating the maintenance multiplier and the newly proposed coal supply objectives Aurizon Network would have regard to in making train-scheduling decisions. In October 2013, the QCA received four submissions on these matters, from Anglo American, Asciano, Glencore and CS Energy.

### Northern Bowen Basin system rules

The QCA is also assessing Aurizon Network's draft Northern Bowen Basin (NBB) rules, which cover the Goonyella and Newlands coal systems, and the GAPE infrastructure connecting those systems. Aurizon Network submitted these rules to the QCA in August 2013.

The draft NBB rules replaced the draft Goonyella system rules that Aurizon Network submitted to the QCA in June 2011, and withdrew in October 2013. Aurizon Network said its draft NBB rules sought to address a number of the concerns that stakeholders had previously expressed about the draft Goonyella system rules – in particular, that they did not treat users of different ports equitably, and did not address the cross-system issues that would arise when the GAPE infrastructure connected the Goonyella and Newlands systems.

### Consideration of Capricornia and NBB proposals

Many of the concerns about system rules are common to both the Capricornia and NBB proposals, so the QCA is seeking to ensure its approach to both sets of rules is consistent.

At the same time, the QCA notes that stakeholder comments on the Capricornia rules have largely focussed on issues of transparency and non-discrimination, rather than capacity management and supply chain flexibility. The draft Capricornia system rules relate to a rail network that anecdotally has less operational variability and fewer capacity issues than Goonyella, as Capricornia's main port has greater stockpile capacity as a proportion of annual throughput.<sup>1</sup>

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<sup>1</sup> RG Tanna terminal at Gladstone (in Capricornia) has 5.95 million tonnes of reported stockpile capacity for 70 million tonnes of annual throughput (Port of Gladstone Information Handbook 2011, p. 13-14), a ratio of 8.5%. DBCT has 2.3 million tonnes of reported stockpile capacity for 85 million tonnes of nameplate annual throughput (DBCT Master Plan 2009, p. 3, 7), a ratio of 2.7%.

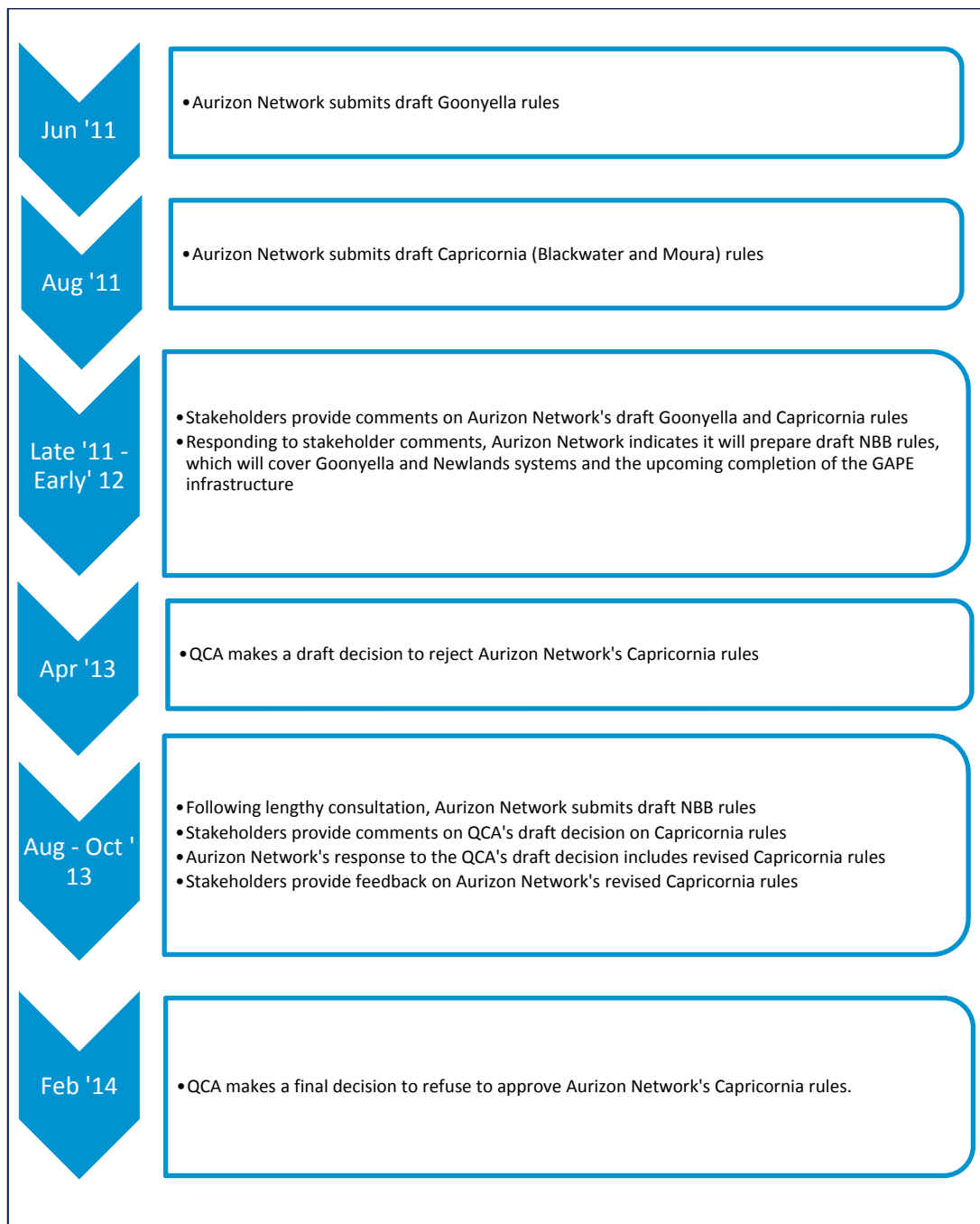
Indeed, the QCA's draft decision said the concerns relating to Aurizon Network's Capricornia proposal:

*... are not so much about flexibility in railway operations to compensate for constraints at the mine load outs and the terminals. Rather, the issues are more about a vertically integrated rail network business undertaking scheduling and train control for both its related party above-rail operator and third parties – i.e. it is about the equitable treatment of all above-rail operators so that network operations do not adversely impact the effectiveness of competition in the above-rail market (QCA, April 2013: iii).*

For these reasons, the QCA has not focused heavily on supply chain aspects in its review of the draft Capricornia system rules. The QCA recognises, however, that supply chain issues will become more relevant for Capricornia when the Wiggins Island Coal Export Terminal (WICET) starts operating (anticipated to be in 2015).

Further, while the Capricornia and NBB rules have many elements in common, and address similar concerns, the two systems have different operating characteristics. The QCA may therefore take a different approach to aspects of the NBB rules than it has for Capricornia.

Figure 2 provides a timeline of Aurizon Network's system rules submissions to the QCA and the QCA's consideration of these proposals.

**Figure 2: Timeline of Capricornia system rules decision**

Source: QCA and Aurizon Network

## 1.5 Approval criteria for draft system rules

By operation of clauses 7.1(d) and 5.2(e) of the 2010 undertaking, the QCA may approve Aurizon Network's draft system rules only if it:

- is satisfied that the draft system rules are consistent with the undertaking including the standard access agreement (SAA) principles (Schedule E) and clause 5.2(n) (the proposed alternative SAAs<sup>2</sup>), as applicable

<sup>2</sup> On 1 August 2013, the QCA approved alternative SAAs for Aurizon Network.

- (b) considers it appropriate to do so having regard to the matters listed in section 138(2) of the *Queensland Competition Authority Act 1997* (QCA Act)
- (c) has published Aurizon Network's draft system rules, invited stakeholders to make submissions on them, and considered all submissions received (clause 5.2(d)).

The QCA's interpretation of these requirements is set out below.

### Consistency with the 2010 undertaking

As noted in the draft decision, the QCA considers consistency with the undertaking for the purposes of clause 5.2(e) requires consistency with the:

- (a) requirements for developing system rules (clause 7.1(c)(i))
- (b) network management principles (clause 7.1 and Schedule G)
- (c) non-discriminatory treatment provisions (clause 2.2(a)(iii))
- (d) SAA principles (schedule E) and SAAs
- (e) proposed new SAAs (clause 5.2(n)).

When Aurizon Network prepared the draft system rules to submit to the QCA for approval it was required to have regard to:

*... the equitable operation of System Rules across Access Holders and Access Seekers (should they become Access Holders) and their Customers and the terms of Access Agreements (clause 7.1(c)(i)).*

These are the same grounds for an affected party to make submissions to Aurizon Network in relation to, and ultimately to raise a dispute with the QCA against a subsequent change in the approved system rules (schedule G, appendix 1, clause (e)).

Aurizon Network is also required not to unfairly differentiate between access seekers in negotiating to provide access, or between access holders in providing access, including in relation to providing scheduling and train-control services in accordance with the network management principles (clause 2.2(a)(iii)).

At the same time, the system rules need to be consistent with the network management principles, the purpose of which is to set out how Aurizon Network will:

- (a) perform scheduling, train-control and associated services
- (b) provide capacity-related information to access holders (clause 7.1(a) of the undertaking).

The undertaking provides that the purpose of the system rules is to provide greater detail on the way in which the network management principles will be implemented (Schedule G, Appendix 1).

### Section 138(2) in QCA Act

The QCA Act states that the QCA may approve a DAU only if it considers it appropriate having regard to each of the matters in the approval criteria (s.138(2)). These criteria extend to the QCA's assessment of any draft system rules submitted by Aurizon Network.

Section 138(2)(c) does not apply as the owner and operator of the service are the same entity. The QCA has had regard to all of the other criteria in section 138(2). In its consideration, the QCA has given most weight to the following paragraphs of section 138(2):

- (a) the object of Part 5 of the QCA Act, 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 (s.69E)
- (b) the legitimate business interests of the owner or operator of the service
- (d) the public interest, including the public interest in having competition in markets
- (e) the interests of persons who may seek access to the service, including whether adequate provision has been made for compensation if the rights of users of the service are adversely affected
- (h) any other issues the QCA considers relevant (the interests of access holders and their customers).

While the QCA has also had regard to paragraphs 138(2)(f) (the effect of excluding existing assets for pricing purposes) and 138(2)(g) (the pricing principles in s.168A of the QCA Act), as the system rules do not deal with pricing matters, those criteria are less relevant and have been given less weight and focus in the QCA's consideration.

These matters are discussed further in Chapters 2 to 5.

### Publication of draft system rules

The QCA published Aurizon Network's draft system rules and invited stakeholders to make submissions. The QCA received three submissions on the draft system rules – from Asciano, Rio Tinto Coal Australia (Rio Tinto) and BHP Billiton Mitsubishi Alliance/BHP Mitsui Coal (BMA). In response to its draft decision of April 2013, the QCA received five stakeholder submissions. These came from Aurizon Network, Asciano, Anglo American, Stanwell Corporation and CS Energy.

The QCA sought additional stakeholder feedback on matters raised in Aurizon Network's submission. In October 2013, the QCA received four further submissions from Anglo American, Asciano, CS Energy and Glencore.

The QCA considered all these submissions in arriving at its final decision on Aurizon Network's draft Capricornia system rules.

## 1.6 QCA's interpretation of criteria

To address the approval criteria in the 2010 undertaking and section 138(2) of the QCA Act discussed above, the QCA's draft decision required the system rules to be:

- (a) *equitable* – non-discriminatory treatment across access holders, access seekers and their customers
- (b) *transparent* – provide greater detail and information on the way Aurizon Network will manage train scheduling, train control, and network capacity
- (c) *consistent* with the SAAs (and associated principles) and the network management principles approved under the 2010 undertaking – do not conflict with terms in the SAAs (including the alternative-form agreements) and the network management principles (QCA, April 2013: 6-7).

The QCA's final decision has retained these interpretations of the approval criteria. In doing so, it is noted that no new evidence or arguments were presented to the QCA to amend its approach.

## 1.7 Structure of decision

The QCA is required to make a final decision on Aurizon Network's original Capricornia system rules proposal of August 2011.

However, it is noted that Aurizon Network's August 2013 submission on the draft decision included a revised set of system rules that Aurizon Network said was its proposed way to address the QCA's concerns set out in its draft decision.

The QCA has included a marked-up version of Aurizon Network's revised Capricornia system rules (see Appendix A), that provides an indication of a set of system rules the QCA would be willing to approve if resubmitted by Aurizon Network.

The structure of this final decision is as follows:

- (a) Chapter 2 – assesses the capacity-related information the draft system rules have proposed that Aurizon Network will provide to access holders and access seekers, and how the capacity impact of Aurizon Network's maintenance and construction activities will be conveyed to them
- (b) Chapter 3 – assesses the scheduling and day-of-operation procedures proposed in the draft system rules, and the method proposed for determining consumption of TSEs held by access holders
- (c) Chapter 4 – assesses the dispute-resolution process in the draft system rules and other matters, including the impact of cross-system traffic and the expected completion of WICET and the Surat Basin Railway (SBR)
- (d) Chapter 5 – summarises the QCA's final decision against the criteria in the 2010 undertaking and section 138(2) of the QCA Act
- (e) Appendix A – provides the QCA's mark up of Aurizon Network's revised Capricornia system rules.

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## 2 SUPPLY CHAIN CAPACITY

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*In the draft system rules, Aurizon Network set out its proposed approach to providing supply chain stakeholders with capacity-related information over long-term, medium-term and short-term planning horizons. Aurizon Network considered that this information complied with the 2010 undertaking's train planning principles.*

*The QCA's draft decision required Aurizon Network to be more transparent about its capacity and scheduling documents, so access holders had enough information to operate efficiently. The QCA also proposed monthly reporting requirements for Aurizon Network.*

*Aurizon Network has accepted most of the draft decision's requirements, but has not agreed with the QCA's position on the reporting requirements – which has been noted by stakeholders. Stakeholders have also retained their concerns about the robustness of the maintenance multiplier process.*

*The QCA has maintained its position in a number of areas, including the content of the master train plan and Aurizon Network's obligation to consult with access holders when undertaking maintenance and construction activities. However, the QCA has accepted Aurizon Network's argument that reporting requirements can only be implemented through an amendment to the access undertaking, which would need to be addressed in UT4.*

### 2.1 Introduction

The network management principles serve a number of purposes, including setting out how Aurizon Network will schedule train services and provide capacity-related information to access holders (2010 undertaking, cl. 7.1(b)). This information is important because it allows train operators to plan their rollingstock requirements more efficiently and permits end users (i.e. coal miners) to plan mine loadout activities accordingly. Such information also allows access holders (either operators or miners) to understand how their TSEs, which refer to the monthly number of train paths between an origin and destination, will be delivered.

This section assesses whether the capacity-related information Aurizon Network proposed to provide is consistent with the 2010 undertaking's and QCA Act's requirements. In the proposed changes to the system rules that accompanied Aurizon Network's response to the draft decision, Aurizon Network complied to a significant extent with the QCA's positions on:

- (a) the rights of access holders (and other supply chain stakeholders) to participate in Aurizon Network's development of maintenance-scheduling documents (section 2.2)
- (b) providing a greater level of transparency, including more detail on mathematical assumptions, on the proposed maintenance-multiplier approach (section 2.5.2).

As stakeholders did not comment further on these matters, the QCA does not intend to discuss them in detail in this final decision. This chapter therefore focuses on Aurizon Network's proposed approaches to:

- (a) presenting capacity through a master train plan (section 2.2)
- (b) reporting (section 2.3)
- (c) defining train paths and their characteristics (section 2.4)
- (d) undertaking maintenance and construction activities (section 2.5).



## 2.2 Capacity and master train plan

A master train plan (MTP) provides long-term capacity information through a graphical representation of potential capacity and train services traversing a network over a given time period. This is referred to as a train graph. The MTP also shows times allocated to Aurizon Network's maintenance and construction activities.

Train services can be either timetabled traffics or cyclic traffics. Timetabled traffics run to a regular schedule, with particular train paths assigned to specific services, while cyclic traffics are not time-specific but refer to a number of train paths operated in a given period – coal-carrying train services are considered to be cyclic traffics in the 2010 undertaking.

The network management principles provide for Aurizon Network to develop a MTP in the form of a train graph or equivalent representation (Schedule G, Part A.2, clause (a)). In particular, the network management principles require the MTP to show the time/distance relationship of all train services and maintenance activities on the rail infrastructure.

Aurizon Network's draft system rules proposed the role of the MTP would be fulfilled by three documents, namely:

- (a) the critical asset calendar (long-term capacity)
- (b) three-month and four-week critical asset constraint summaries (medium-term capacity)
- (c) the scheduling constraints summary (short-term capacity) (Aurizon Network, sub. no. 1: 10-14).

These documents would provide access holders (and other supply chain participants) with long-term, medium-term and short-term indications of available network capacity. Aurizon Network proposed to use the Capricornia Coal Chain portal (an internet site) to make these documents accessible to access holders and other supply chain participants (Aurizon Network, sub. no. 1: 11).

### Draft decision

The QCA's draft decision required Aurizon Network to provide a train graph of the Capricornia rail network on which available cyclic train paths (including system paths) are overlaid on the paths allocated to timetabled traffics and maintenance/construction activities. The QCA required that this train graph be produced in a manner consistent with the network management principles, and show:

- (a) train paths (including system paths) allocated to cyclic traffics, where such train paths reflect the existing capacity required for the maximum level of TSE operation (but may not necessarily reflect the train paths those train services will operate on a given day)
- (b) system paths (which have been declared in the system rules) in an individual coal system that are available for scheduling cyclic traffics from a specified location within that coal system to the nominated unloading facilities (Schedule G, Part A.2, clause (a)(ii)).

The QCA considered Aurizon Network's publication of a properly specified MTP would be consistent with the approval criteria in the QCA Act, including promoting the efficient operation of the rail infrastructure and providing the transparency necessary to satisfy access holders' interests (which include understanding network capacity) (ss. 138(2)(a) and (h)).

The QCA also required Aurizon Network to update Capricornia Coal Chain portal documents in a timely fashion, to notify all supply chain participants of these updates, and to permit supply chain participants to participate in developing the planning documents.

### Stakeholders' comments

Stakeholders (including Aurizon Network) said they accepted most aspects of the QCA's draft decision on Aurizon Network's proposed approach to the MTP. A summary of stakeholders' comments and how Aurizon Network has sought to address the draft decision's requirements is set out in Table 1.

**Table 1 MTP**

| <b><i>QCA draft decision</i></b>   | <b><i>Stakeholder comments</i></b>  | <b><i>Aurizon Network's comments and revised rules</i></b>   |
|--|---|--|
| <p>Aurizon Network must develop an MTP in the form of a train graph, in a manner consistent with the network management principles.</p> <p>Aurizon Network's train graph must show cyclic train paths overlaid on paths for timetabled traffics and those set aside for network possessions.</p> | <p>Anglo and Asciano agreed with the QCA's draft decision (Anglo, sub. no. 9: 1). However, Asciano added that the MTP should also:</p> <ul style="list-style-type: none"> <li>(a) identify any excess capacity built into the network, and the ability of the network to handle maintenance and day-of-operation variability</li> <li>(b) indicate the days per year that contractual paths would not be provided (because of maintenance activities)</li> <li>(c) show there were system paths that connect an origin with a destination (typically a port slot)</li> <li>(d) be supported by a table or document that outlined the number of system contracted paths and available paths (Asciano, sub. no. 10: 3).</li> </ul> <p>Asciano said providing this information would increase transparency, improve supply-chain coordination, and provide access holders with a better understanding of how Aurizon Network will deliver contracted TSEs (Asciano, sub. no. 10: 3).</p> | <p>Aurizon Network agreed to develop a MTP in the form of a train graph that would be based on contractual entitlements, and a defined maintenance program (Aurizon Network, sub. no. 7: 4).</p> <p>Aurizon Network's revised approach included providing access holders:</p> <ul style="list-style-type: none"> <li>(a) an MTP, updated monthly for a rolling three-month period</li> <li>(b) a four-week pathing availability plan, that would indicate capacity set aside for maintenance/construction activities and indicative system paths, to be provided on a weekly basis (Aurizon Network, sub. no. 8: 11-12).</li> </ul> <p>Aurizon Network also proposed to use a critical asset alignment calendar (CAAC) to provide a two-year overview of planned maintenance activities for the rail network, ports, and mines. Aurizon Network said it would coordinate monthly meetings with supply chain stakeholders, so the CAAC would be updated and aligned, where practical, with known supply chain demand (Aurizon Network, sub. no. 8: 10).</p> |
| <p>Aurizon Network must update Capricornia-Coal-Chain portal documents in a timely fashion, and notify all supply chain participants.</p>  | <p>Non-Aurizon Network stakeholders did not comment on this issue.</p>  | <p>Aurizon Network said the Capricornia Coal Chain portal was a relevant means for communicating the MTP and allowed supply chain participants to subscribe to updates, with email alerts automatically generated for updates to the MTP.</p> <p>Aurizon Network said it would continue using this portal to communicate key documentation, and ensure that the documents were updated in a timely way (Aurizon Network, sub. no. 7: 4)</p>  |
| <p>Aurizon Network must permit supply chain participants to participate in developing planning documents, and must treat each access holder equitably.</p>   | <p>Non-Aurizon Network stakeholders did not comment on this issue.</p>  | <p>Aurizon Network said key stakeholders could participate in the maintenance planning process through various stakeholder forums (e.g. the Capricornia Coal Chain Steering Group and bi-monthly meetings with stakeholders) to ensure alignment of system closures.</p> <p>Aurizon Network proposed that access holders and port operators could provide demand forecasts. Aurizon Network noted the purpose of developing the MTP was to represent how contracted TSEs could be used, and not necessarily to reflect the particular train paths that trains services would operate on. Aurizon Network would therefore consider this information when developing the MTP, and access holders would be provided more opportunities to request specific paths through the Intermediate Train Planning Process (Aurizon Network, sub. no. 7: 5).</p>  |

### Comments on Aurizon Network's revised system rules

Anglo American and Asciano said Aurizon Network's revised system rules would still not provide a MTP that was consistent with the QCA's draft decision (Anglo American, sub. no. 14: 1; Asciano, sub. no. 13: 4). In particular, Asciano said the QCA draft decision had requested Aurizon Network to make available cyclic MTP train paths overlaid on timetabled and possession train paths, but that Aurizon Network had instead:

*... offered a separate suite of documents being the Critical Asset Constraint Summary, Scheduling Constraint Summary and the MTP Train Graph (Asciano, sub. no. 13: 4)*

Asciano questioned whether Aurizon Network would provide an MTP that complied with the QCA's draft decision:

*Aurizon Network has proposed that they will develop the Master Train Plan using their APEX system; however APEX will not be in place till April 2014 at the earliest. Asciano believes that in any Final Decision the QCA must outline what data the Master Train Plan is to include, both from the APEX tool and more generally. Asciano is concerned that the Master Train Plan may contain information that is not relevant or useful for users (Asciano, sub. no. 13: 6).*

### QCA's analysis and final decision

The QCA considers that the MTP performs two separate but related functions:

- (a) forecasting maintenance and other planned outages over the medium to long term so all supply chain participants can coordinate their activities
- (b) demonstrating capacity, so access holders/seekers (and their customers) know that capacity is sufficient and has been allocated equitably.

### Maintenance planning

Aurizon Network's revised system rules provide for a variety of documents, each of which showed planned maintenance over different time horizons. Its submission on the draft decision proposed a further document, the CAAC, that would give two years of planned maintenance across the supply chain (Aurizon Network, sub. no. 8: 10).

The QCA accepts that publishing these documents would provide greater visibility about future maintenance. Aurizon Network's revised system rules require the documents to be published and updated promptly on the Capricornia Coal Chain portal, and they also provide a role for supply chain participants in preparing those documents. Therefore, the QCA considers these issues resolved, provided Aurizon Network resubmits system rules consistent with the revised system rules.

### Network capacity

Stakeholders were concerned about Aurizon Network's proposed approach to the MTP and in particular whether it achieves the objective of demonstrating capacity. The QCA considers the MTP is a key component of the scheduling, master planning and capacity contracting framework for Aurizon Network, and that developing a MTP is not inconsistent with what occurs elsewhere.<sup>3</sup>

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<sup>3</sup> See, for example, the ARTC's Hunter Valley access undertaking (ARTC 2011, clause 12.1) and the web page where ARTC publishes its MTP, in a table that is equivalent to a train graph (<http://www.artc.com.au/Content.aspx?p=160>).

### What the MTP should include

The MTP is typically a template that sets out how paths would be allocated if each access holder received its pro-rata entitlement for its origin-destination pairs. The MTP needs to be amended and re-published each time a contractual entitlement is added, amended or removed (see Schedule G, Part A.2., clause (b)(v)). A properly specified MTP achieves a number of objectives for operating an efficient, competitive and equitable rail network, including:

- (a) showing there is sufficient capacity to provide all contracted paths, after allowing for the paths needed to accommodate supply chain variability, and for the maintenance possessions required to keep the network fit for purpose
- (b) allowing access seekers and their customers to see what paths are available to be contracted
- (c) allowing access holders and their customers to see what paths might be available for receiving their TSEs and for running any *ad hoc* services
- (d) enabling access holders, their customers, and other supply chain participants to confirm that paths have been allocated equitably.

Given this, the QCA welcomes Aurizon Network's revised proposal to provide an MTP.

However, it is unclear whether Aurizon Network's proposed MTP would be provided for the Capricornia system's branchlines. Overall network capacity is based on constraints in both the mainline and branchlines. The system rules need to clearly state that the MTP will show system paths for both the mainline and branchlines.

Aurizon Network's MTP needs to be consistent with the relevant provisions in the network management principles and SAAs.

Accordingly, the MTP needs to show the train paths (including system paths) available for cyclic traffics from an origin to destination, and the paths that have been allocated to those traffics for the maximum level of train service entitlements, which may not reflect the paths those services will take on the day of operation (Schedule G, Part A.2., clause (a)(ii)). In other words, the MTP needs to show the 'first draft' of the monthly schedule, 'in a form that is readily convertible into a DTP<sup>4</sup>, which is the principal reference document for train controllers in carrying out their duties' (Schedule G, Part A.2., clause (i)).

In addition, Aurizon Network has proposed a three-month MTP, supported by four-week pathing availability plans. The QCA does not consider that a three-month MTP offers the same clarity about capacity availability and allocation that a shorter timeframe MTP would offer.

Aurizon Network has emphasised in its revised Capricornia system rules that the system rules' 'primary goal is to create certainty in respect to access entitlements for Access Holders, ensuring Aurizon Network's compliance with regulatory and contractual obligations' (Aurizon Network, sub. no. 8: 3).

Given that Aurizon Network's existing contracts are based on monthly TSEs, there is some logic in Aurizon Network preparing a MTP that covers a full month. This would link the MTP to access holders' contractual entitlements and show that there is sufficient capacity to provide the contracted TSEs, as well as the monthly system-wide shutdowns, and ongoing maintenance at other times.

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<sup>4</sup> Daily Train Plan

This MTP, covering a representative month of operations will promote efficient operation, use of and investment in the rail infrastructure, by clearly showing the amount of available capacity (s. 138(2)(a) of the QCA Act). This provides access holders with assurance that contracted capacity will be provided and information on what paths might be available for their TSEs or other services. It also enables access seekers and customers to see what paths are available for contracting, and allows access holders and seekers to assess whether path allocation is equitable.

An MTP which provides information about available capacity will also have the effect of promoting effective competition by allowing access holders to confirm that one is not being favoured over another in allocating train paths (the second limb of the objects clause in section 138(2)(a) of the QCA Act). The MTP would also serve the public interest in efficient operation of the coal supply chain, by allowing access holders and their customers to see what paths might be available to use immediately, or to contract for access (s. 138(2)(d) of the QCA Act). All of these outcomes would be in the interests of access seekers and access holders (ss. 138(2)(e) and (h) of the QCA Act).

The QCA considers that an MTP as outlined above will address a number of the specific concerns Asciano raised regarding Aurizon Network's proposed MTP process.

The QCA considers that a representative one-month MTP, updated when the infrastructure or contractual entitlements change, will address Asciano's concern that Aurizon Network's proposed MTP, produced with its APEX system, 'may include information that is irrelevant to access holders (Asciano, sub. no. 13: 6). This is because the QCA's final decision has specified in detail what the MTP needs to contain. Nevertheless, the QCA notes there are a number of outstanding issues regarding transparency of the MTP – these are discussed in the next subsection.

Asciano also requested further information to supplement Aurizon Network's proposed MTP (see second column of Table 1 above). This information includes identifying excess capacity built into the network, showing the ability of the network to handle maintenance and day-of-operation variability, and clearly depicting system paths. The QCA considers that a properly specified MTP would achieve those outcomes, and that the QCA's MTP requirements identified above would address Asciano's concern.

The QCA also accepts Asciano's argument that a table detailing the number of contracted and available system paths (as part of the MTP planning process) would be in the interests of access seekers and holders (ss. 138(2)(e) and (h) of QCA Act). To provide information on the availability of system paths, the QCA considers Aurizon Network needs to provide information on the number of train paths available each day on the mainlines and branchlines of the Capricornia coal system. The revised rules propose that Aurizon Network's four-week pathing availability plan will include information on the number of mainline paths but not branchline paths. Therefore, the QCA requires Aurizon Network's four-week pathing availability plans to include the number of branchline paths available each day, and to note the number of branchline paths that are not available due to possessions.

#### Transparency of the MTP

To achieve all the objectives for demonstrating capacity, the MTP should be a *public* document, available to all access holders and access seekers. Doing so would show, for example, that no party is being favoured when Aurizon Network assigns paths. This already occurs in the Hunter

Valley<sup>5</sup> where the need is less (i.e. there are not the same vertical integration issues between the supplier of below- and above-rail services) and where many of the same customers operate in central Queensland (e.g. Anglo American, BHP Billiton, Glencore and Rio Tinto). For example, the MTP for the Muswellbrook-to-Moree journey in New South Wales includes the names of all operators using that infrastructure for a given day. It also details each train service's identification numbers, and includes information on arrival, departure and dwell times of the various train services.

The need for transparency is relevant in the Blackwater system, as a third-party operator (Asciano) already competes with Aurizon Holdings in the above-rail market. Transparency will become even more important when the new terminal starts operating at WICET, and stakeholders become concerned that services to one terminal may be favoured over those to the other. It is important, therefore, that Aurizon Network can demonstrate that, for example, better paths with shorter scheduled below-rail transit times are not inequitably distributed between different access holders and customers. This will address stakeholders' concerns that their rivals may be receiving favourable treatment in the train scheduling process.

However, the QCA accepts that this level of transparency would go beyond that permitted in the 2010 undertaking, which provides for an access seeker to only be shown its own potential paths and parts of the network that would affect its capacity (schedule D, part A). While this does not directly relate to access holders, the QCA understands Aurizon Network has applied it to access holders as well as access seekers.

The QCA is aware that such restrictions on information impede attempts to achieve transparency, and reduce many of the benefits that a transparent MTP would provide. However, this decision deals only with the system rules process and does not address amendments to the 2010 undertaking. Rather, this will need to be addressed as part of the review of Aurizon Network's UT4 proposal.

### Decision 2.1

- **The QCA requires Aurizon Network to amend section 3.3 of its revised system rules, consistent with Appendix A, so:**
  - (a) **the MTP provides a one-month representation of the:**
    - (i) **train paths (including system paths) available for cyclic traffics from an origin to destination**
    - (ii) **train paths that have been allocated to those cyclic traffics for the maximum level of train service entitlements, which may not reflect the paths those services will take on the day of operation (Schedule G, Part A.2., clause (a)(ii)).**
  - (b) **the four-week pathing availability plans detail the number of train paths available in each of the Capricornia branchlines, for each day, and to note the number of branchline train paths not available due to possessions each day.**

## 2.3 Reporting requirements

Reporting information on how train services are performing relative to schedule is important for assessing operations of a rail network. Checking the length and frequency of delays or

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<sup>5</sup> ARTC's MTP (in tabular form) is available at: <http://www.artc.com.au/Content.aspx?p=161>.

cancellations enables a service provider to determine whether the rail network is performing well. Aurizon Network's draft system rules did not propose any regular reporting regime for this purpose.

The QCA's draft decision required Aurizon Network to provide monthly reporting on:

- (a) how above- and below-rail delays have affected dispatch intervals, to show there is equitable treatment across the various train services
- (b) the number and proportion of reference and non-reference trains
- (c) how the use of non-reference trains affects the number of available system paths.

The QCA's draft decision also required Aurizon Network to document and record information on whether an operator's scheduled section running times (including any below-rail transit times), in each weekly period, had significantly exceeded those of the access agreements.

### Stakeholders' comments

Anglo American and Asciano supported the QCA's proposed reporting requirements (Anglo American, sub. no. 9: 1; Asciano, sub. no. 10: 3). However, Asciano was concerned about how Aurizon Network attributed responsibility for delays, noting that:

*... there are a large proportion of delays which are not attributed to either above rail or below rail delays. Asciano believes the system rules should also include a requirement to introduce a process which will reduce the proportion of un-attributable delays (Asciano, sub. no. 10: 3).*

While most stakeholders accepted the QCA's proposed reporting requirements, Aurizon Network disagreed and argued that system rules should not cover such reporting as system rules provide a process for allocating capacity, not measuring it.

Aurizon Network said the appropriate home for the reporting requirements was the supply chain operating assumptions and key performance indicators (KPIs) in the access agreements (Aurizon Network, sub. no. 7: 6).

While Asciano agreed with Aurizon Network's position on KPIs, it said there was no useful KPI reporting in Aurizon Network's access agreements with third-party users, and that the KPI reporting under the 2010 access undertaking was not particularly relevant (Asciano, sub. no. 13: 7).

Finally, regarding the use of non-reference trains affecting system paths, Aurizon Network said it did not:

*... differentiate between Access Seekers on the basis of the consists they intend to use. Additionally, the use of non-Reference Train Services is a contractual entitlement. Should an Access Holder request to operate a non-Reference Train Service, a capacity assessment will be undertaken prior to contracting to assess whether the required amount of capacity is available (Aurizon Network, sub. no. 7: 6).*

In response to this, Asciano said it was not convinced by Aurizon Network's argument on how non-reference trains influenced system paths, in particular if this allowed Aurizon Network to:

*... unilaterally exempt some train services from the system rules and / or differentially negotiate with some train operators to exempt some train services from the system rules then such power raises strong concerns with regard to the potential for discriminatory behaviour by Aurizon Network (Asciano, sub. no. 13: 7).*

Asciano said that to address this, the supply chain operating assumptions should be developed in conjunction with all supply chain participants and not unilaterally by Aurizon Network (Asciano, sub. no. 13: 7).



### QCA's analysis and final decision

The QCA considers that reporting is important for a number of reasons, including preventing the unreasonable exercise of monopoly power, and promoting efficient operation of the supply chain. The QCA has therefore maintained the position in its draft decision that a regular reporting regime to support the system rules would maximise the efficient use of below-rail capacity.

However, the QCA accepts Aurizon Network's position that the system rules should not include these requirements, as the network management principles do not include reporting requirements.

Notwithstanding this, the QCA accepts stakeholders' concerns that the supply chain will only operate effectively with detailed and relevant reporting of information on operations, including:

- (a) achievement of KPIs
- (b) accurate attribution of the causes of delays and cancellations (as per Asciano's concern)
- (c) the proportion of reference and non-reference trains that have operated each month (envisaged to be included in the Reporting Requirements of the next undertaking)
- (d) how this mix of reference and non-reference trains is expected to affect section running times and above- and below-rail delays (envisaged to be included in the supply chain operating assumptions)
- (e) how the operation of non-reference trains has affected system capacity
- (f) documenting and recording information on whether an operator's scheduled section running times, in each weekly period, have significantly exceeded those of the access agreements (see section 3.2.1).

While the system rules can operate without effective operational reporting in place, they will be much more effective once the reporting requirements discussed above have been implemented. The QCA will consider reporting requirements as part of its review of Aurizon Network's UT4 proposal.

## 2.4 Paths and train characteristics

Each train has to travel across similar sections of track in making its way from mine to port and back. Aurizon Network's draft Capricornia system rules defined these generic paths as 'below-rail network paths'. At the same time, each train service may use different mine loading slots, port unloading slots and have different stopping/break locations (i.e. dwells) on the network.

Aurizon Network proposed that a 'system path' would link a below-rail network path to a specific mine slot and port slot and account for a train service's dwells (Aurizon Network, sub. no. 1: 10).

Aurizon Network's draft Capricornia system rules proposed that below-rail network paths would begin at Bluff for the Blackwater system and begin at Dumgree for the Moura system. The draft system rules proposed that below-rail network paths would be dependent on the reference train's section run times.

### Draft decision

The QCA's draft decision proposed that below-rail network paths begin at Burngrove for the Blackwater system and Earlsfield for the Moura system.

The QCA's draft decision also proposed the draft system rules be amended so:

- (a) they specify the reference train service will be that train service that is described in Part B of Schedule F of the 2010 undertaking, including clause 5.2 for Blackwater trains and clause 7.2 for Moura trains
- (b) the definition of system paths includes above-rail dwells consistent with the reference train characteristics in the 2010 undertaking.

### Stakeholders' comments

Table 2 summarises stakeholders' comments on the QCA's draft decision.

**Table 2 Paths and Train Characteristics**

| <i>QCA draft decision</i>   | <i>Stakeholder comments</i>  | <i>Aurizon Network's comments and revised rules</i>  |
|---|--|--|
| Starting point of below-rail network paths                                  | <p>Asciano said below-rail paths should start at the mine as this is the path and TSE which is contracted. Asciano said there should be clarity as to what would occur if a path was lost between the mine and Burngrove or Earlsfield.</p> <p>For example, Asciano queried what take-or-pay obligations or implications would arise if the path was lost due to a force majeure event or Aurizon Network Cause (Asciano, sub. no. 10: 3).</p> | <p>Aurizon Network said it would replace the concept of 'below-rail network paths' with 'mainline paths'. Aurizon Network said it used mainline paths as a scheduling tool to maximise system capacity by providing set slots that access holders could nominate to use to-and-from their origins and destinations (Aurizon Network, sub. no. 8: 27).</p> <p>In doing so, Aurizon Network's revised rules stated the mainline path would be the journey between:</p> <ul style="list-style-type: none"> <li>(a) Bluff and Callemondah, for the Blackwater system</li> <li>(b) Dumgree and Callemondah, for the Moura system (Aurizon Network, sub. no. 8: 27).</li> </ul> <p>Aurizon Network said it had limited the mainline path definition to the network section that all access holders used, and that this approach was consistent with that of the draft NBB system rules (Aurizon Network, sub. no. 7: 5).</p> |
| Including reference train service characteristics in the draft system rules | Non-Aurizon Network stakeholders did not comment on this issue.  | Aurizon Network's revised system rules do not link the definition of main line path to any reference train characteristics.  |
| Treatment of above-rail dwells in the system path definition                | Non-Aurizon Network stakeholders did not comment on this issue.  | Aurizon Network said it considered the QCA had misinterpreted the system path definition. It clarified that system paths were based on each access holder's contracted above-rail dwells, and not those associated with the reference train (Aurizon Network, sub. no. 7: 5)   |

Asciano said in response to Aurizon Network's revised system rules that the 'mainline path' concept did not comply with the draft decision. Asciano said that Aurizon Network should clarify what impact this switch from below-rail network path to mainline path would have on capacity allocations (Asciano, sub. no. 13: 6).

Asciano also said the definition of 'Dwell' in the revised system rules was not consistent with that in the 2010 undertaking, and that 'Port Unloading Slots' were incorrectly placed in that definition. Asciano said this allowed Aurizon Network to exclude port unloading slots from its performance measurements (Asciano, sub. no. 13: 4).

## QCA's analysis and final decision

The Blackwater system has several branch lines, some of which serve multiple mines. However, all train services use the same mainline, i.e. between Bluff and Callemondah. Similarly, for the Moura system, all train services use the track section between Dumgree and Callemondah. A fair degree of the flexibility in supply-chain use comes from the ability to switch between origins, while using the same mainline path from Bluff (in Blackwater) or Dumgree (in Moura) to the port.

Aurizon Network has said that mainline paths:

*... are used as a scheduling tool to maximise system capacity by providing set slots that Access Holders can nominate to use to and from their origins and destinations. In defining the parameters of a Mainline Path, Aurizon Network has limited these to the section of track that all Access Holders utilise (Aurizon Network, sub. no. 7: 5).*

By contrast, a system path is defined in the 2010 undertaking as the path used by a specific mine, i.e.: 'a path that can be taken by a Train Service within an Individual Coal System from a specific origin to a Nominated Unloading Facility' (2010 undertaking, "System Path" definition).

Aurizon Network's proposal to replace 'below-rail network paths' with 'mainline paths' makes it clear that these paths are not intended to be a version of system paths, but are the common portion of the rail infrastructure that is used by all access holders on the system.

Applying the mainline path concept will help deliver the flexibility access seekers/holders and their customers are asking for. Aurizon Network will make it easy for access holders to switch from one origin to another, as long as the service from the 'new' origin uses the same mainline path as the original origin was scheduled to use. This is consistent with the efficient operation of the coal supply chain, which is in the public interest and also in the interests of access holders (ss. 138(2)(d) and (h) of the QCA Act).

The QCA's draft decision required Aurizon Network to link the draft system rules to the 2010 undertaking's reference train service characteristics. This was because much of the path-related information provided in the draft system rules was based on those characteristics.

In addressing the QCA's draft decision, Aurizon Network's revised system rules have not proposed to link the mainline path definition to the reference train service. The QCA notes the number of available mainline paths per day in each coal system (48/day in Blackwater and 16/day in Moura) has been determined by using reference train service characteristics. Therefore, it is important Aurizon Network's draft system rules specify that the reference train characteristics for the Blackwater and Moura system are found in part B, schedule F of the 2010 undertaking.

The QCA's draft decision found there needed to be common attributes across system paths, and that system paths should therefore have above-rail dwells consistent with the reference train service, and not specific to the access holder (QCA, April 2013: 18). Aurizon Network has argued that the system path definition should be linked to contracted above-rail dwells rather than dwells associated with the reference train.

System paths can have different origins (i.e. Mine A vs. Mine B), different destinations (i.e. RG Tanna vs. Barney Point), and different above-rail dwells (i.e. 20-min dwell for a crew change at Callemondah vs. 35-min dwell for refuelling at another location).

Therefore, a TSE for mine A cannot use the same system path as TSE for mine B. However, all train services use the mainline during their journey from origin to destination. As discussed

earlier, Aurizon Network's revised system rules have included the concept of mainline paths, that are the common element of system paths.

The QCA therefore accepts Aurizon Network's view that it is not appropriate to restrict the definition of system path to above-rail dwells for the reference train. Rather, the QCA has accepted the revised system rules' proposal that the mainline path concept is the most appropriate way to address the issue, and that contracted above-rail dwells should form part of the system path definition.

Finally, Asciano noted that the revised system rules' treatment of 'Dwell' is not consistent with the 2010 undertaking, and that a 'Dwell' should not include port unloading slots.

The system rules must be consistent with the 2010 undertaking and the SAAs. The 2010 undertaking provides that a 'Dwell' is 'the short-term storage of Trains on Rail Infrastructure at locations specified by [Aurizon] Network as required for crew changes, meal breaks and on Track maintenance, examination and provisioning of that Train' (2010 undertaking: 136).

While the 2010 undertaking is not specific about whether port unloading slots form part of a dwell, the QCA notes that the SAA<sup>6</sup> provides that 'planned dwell times' include the time spent at an unloading facility.

The revised system rules state that the:

*'... unloading slots at a Port for a Train Service are a Dwell and will be agreed in the relevant Access Agreement. The Dwell for an unloading slot at a Port is inclusive of port unloading time and time taken for pre and post unload activities' (Aurizon Network, sub. no. 8: 9).*

The QCA considers Aurizon Network's proposal to include port unloading slots in the definition of 'Dwell' is consistent with the SAA. Therefore, the QCA does not accept Asciano's view that port unloading slots should be excluded from the definition of 'Dwell'.

### Decision 2.2

- **The QCA requires Aurizon Network to amend section 2.1 of its revised system rules, consistent with Appendix A, so they indicate the reference train characteristics are found in the 2010 undertaking (clause 5.2 for Blackwater and clause 7.2 for Moura).**

## 2.5 Effect of maintenance and construction

Maintenance and construction are important because they keep Aurizon Network's infrastructure safe and operational, and provide new capacity. The duration and extent of maintenance and construction activities can have a short-term effect on access rights, so it is important that access holders are aware of when such activities are scheduled.

The draft system rules proposed that Aurizon Network would provide a scheduling constraint summary to access holders every week, to show planned maintenance activities and available network capacity for the following week (Aurizon Network, sub. no. 1: 13-14).

Aurizon Network's proposal also included a maintenance multiplier, which would provide additional train paths to access holders when maintenance and construction activities take away capacity that would have otherwise been available. Aurizon Network said this was necessary to ensure access holders obtained their contracted TSEs (Aurizon Network, sub. no. 1: 14).

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<sup>6</sup> See page 26 of the Operator Access Agreement Coal.

Aurizon Network's proposed scheduling constraint summary and maintenance multiplier are considered in turn below.

### 2.5.1 Scheduling constraint summary

Aurizon Network's draft system rules indicated the scheduling constraint summary would show, on a weekly basis, the:

- (a) number of available below-rail network paths and indicative system paths
- (b) surge capability in the relevant branch lines
- (c) dates and times of all planned network outages
- (d) contracted timetabled passenger, freight and livestock services (Aurizon Network, sub. no. 1: 13-14).

#### Draft decision

The QCA considered Aurizon Network's proposed scheduling summary was not sufficiently transparent for access holders' information requirements. The QCA's draft decision required Aurizon Network's scheduling constraint summary to include:

- (a) details on locations and times of any planned disruptions
- (b) reasons for any changes to the 21-day maintenance lock-down period
- (c) contingency plans that will be implemented if possessions result in track not being ready for services to resume on time, including any communication process to notify access holders about these delays
- (d) the maintenance multiplier figure to be applied each week.

The QCA also required Aurizon Network to provide further detail on how it would consult with access holders in respect of unplanned maintenance and changes to planned maintenance activities that would not be consistent with the terms in the access agreements.

#### Stakeholders' comments

Aurizon Network was the only stakeholder to comment on the scheduling constraint summary aspect of the draft decision.

Aurizon Network said it would supplement its proposed scheduling constraint summary with an MTP in the form of a train graph, which would continue to be improved as its software to prepare MTPs became more sophisticated (Aurizon Network, sub. no. 7: 4). The revised rules said the information in the scheduling constraint summary would be supplemented by the MTP and four-week pathing availability plans. The four-week pathing availability plans would detail:

- (a) the number of mainline paths and indicative system paths
- (b) details on locations, dates and times of known possessions
- (c) reasons for any changes to the 21-day maintenance lock down period
- (d) maintenance multiplier figure to be applied in determining Aurizon Network's TSE obligations (Aurizon Network, sub. no. 8: 12).

However, Aurizon Network said its scheduling constraint summary did not need to provide contingency plans should track possessions not be completed in time. Instead, Aurizon Network said above-rail operators should develop their own contingency plans to respond to such situations (Aurizon Network, sub. no. 7: 7).

Aurizon Network also said that if any access holders' train services would not be met because of an unplanned possession, or changes to a planned possession, then it would consult with the affected access holders and seek their agreement before making the proposed amendment (Aurizon Network, sub. no. 8: 23).

#### QCA's analysis and final decision

Access holders need to be aware of any activities on the network that may preclude them from running their train services. Aurizon Network's proposed scheduling constraint summary supports that objective.

While Aurizon Network has accepted most of the QCA's draft decision, it did not accept the requirement to provide contingency plans where track undergoing maintenance has not been returned to service on schedule.

Aurizon Network argued that the above-rail operators are better placed to develop their own contingency plans. However, the QCA notes that the operators will be assisted to mitigate the disruption caused by Aurizon Network if they have plenty of information about the expected delay, as early as possible. Aurizon Network is best placed to provide that information, and to cooperate with the above-rail operators as they work to mitigate the harm caused by Aurizon Network's delay.

The QCA therefore welcomes Aurizon Network's suggestion that it would consult with affected access holders before changing the schedule to reflect a change in a possession or an unplanned possession.

Accordingly, the QCA accepts the general approach to the scheduling constraint summary that Aurizon Network has proposed in its submission on the QCA's draft decision. However, the QCA requires Aurizon Network to add a provision that it will provide information on potential delays to resuming service after a possession as early as possible, and that it will cooperate with access holders' efforts to mitigate the disruption, including providing replacement paths that the affected access holders are able to use.

#### Decision 2.3

- **The QCA requires Aurizon Network to amend section 7.3 of its revised system rules, consistent with Appendix A, so Aurizon Network is required to:**
  - (a) provide information to access holders on expected late returns to service after possessions**
  - (b) cooperate with access holders' efforts to mitigate any disruptions caused by the possessions not going according to plan.**

#### 2.5.2 Maintenance multiplier

Aurizon Network's draft system rules indicated the maintenance multiplier would provide flexibility in scheduling train paths for a particular month. When maintenance or construction activities prevented an access holder from receiving its TSE during a particular period in a month, the maintenance multiplier would make up for those 'lost' paths by providing them at a time in that same month where there was sufficient capacity available. The draft system rules proposed that the maintenance multiplier would enable Aurizon Network to determine an *adjusted weekly TSE* for each access holder (Aurizon Network, sub. no. 1: 14).

The difference between the maintenance multiplier and backward-looking mechanisms already in place, such as the Contested Train Path Decision-making Process, was that the multiplier

allowed extra paths to be allocated early in a month, where maintenance was scheduled in the later weeks of that month. In essence, the maintenance multiplier would supplement the Contested Train Path Decision-making Process.

#### Draft decision

The QCA required the draft system rules be amended so the description of the maintenance multiplier clearly indicated how:

- (a) the maintenance multiplier will be applied to nominal weekly TSE figure to obtain the adjusted nominal weekly TSE.
- (b) network capacity will be managed to deliver the adjusted nominal weekly TSE by providing access holders with train orders higher in number than the nominal daily TSE figure on days without maintenance.
- (c) Aurizon Network will provide access holders with paths, in accordance with the Contested Train Path Decision-making Process in the network management principles (see section 3.2.1 for more details).

In doing so, the QCA required Aurizon Network to account for constraints that affected end users' and train operators' ability to manage the maintenance multiplier.

The QCA also required the draft system rules be amended so Aurizon Network would not have scope to change maintenance activities in the 21-day lock-down period, unless doing so was consistent with the network management principles (Schedule G, Part A, cl. 4.(d)(iv)).

#### Stakeholders' comments

Stakeholders' concerns on Aurizon Network's proposed maintenance multiplier can be grouped into three categories, namely the:

- (a) transparency of the maintenance multiplier
- (b) application of the maintenance multiplier
- (c) obligation to provide monthly TSEs.

#### Transparency of maintenance multiplier

Stakeholders (e.g. Anglo American) supported the QCA's requirement that the maintenance multiplier operate more transparently (Anglo American, sub. no. 9: 1). Anglo American noted the maintenance multiplier was a significant issue as access holders' TSEs were the fundamental services purchased by the access holder, and that to have unclear processes in place would undermine certainty around the value of the access rights (Anglo American, sub. no. 9: 3).

While Asciano agreed that the maintenance multiplier should operate more transparently, it said the QCA's draft decision did not overcome the fundamental problem of the maintenance multiplier resulting in Aurizon Network not providing the paths that it was contractually required to deliver (Asciano, sub. no. 10: 3-4).

Aurizon Network agreed with the QCA's position that the process for the maintenance multiplier needed to be clarified (Aurizon Network, sub. no. 7: 7). Aurizon Network's revised rules sought to address this by introducing:

- (a) a maintenance reduction factor, which reduced paths on days of maintenance activities
- (b) assumptions for determining adjusted weekly TSEs, i.e. the sum of:
  - (i) upwardly adjusted paths (calculated from the maintenance multiplier)

- (ii) downward adjusted paths (calculated from the maintenance reduction factor) (Aurizon Network, sub. no. 8: 12-14).

#### Application of maintenance multiplier

The revised system rules indicated that the size of the maintenance multiplier and reduction factor would be based on the relevant access holder's monthly number of available train paths and paths expected to be lost in the month due to planned maintenance activities (Aurizon Network, sub. no. 8: 13). Aurizon Network also supplemented the calculation of adjusted weekly TSEs with some rounding assumptions (Aurizon Network, sub. no. 8: 14). In doing so, the revised rules indicated Aurizon Network's calculation of upwardly adjusted paths would, within its knowledge, have regard to the mine loadout's capability (Aurizon Network, sub. no. 8: 14).

Stakeholders were not convinced by Aurizon Network's amendments to the maintenance multiplier. Glencore questioned Aurizon Network's need for a maintenance reduction factor, given the maintenance multiplier already appeared to account for decreased capacity in a given month (Glencore, sub. no. 15: 2).

Asciano questioned whether the maintenance multiplier should apply across the whole system when, for example, only 25% of access holders may be affected by maintenance activities. Asciano argued the remaining 75% of access holders not affected by network maintenance in a particular month should not get the benefits of that month's maintenance multiplier (Asciano, sub. no. 13: 3).

#### Obligation to provide monthly TSEs

Anglo American said the proposed maintenance-multiplier approach should ensure a customer's contracted train paths (or TSEs) were delivered as opposed to maximising system throughput, which might unfairly discriminate against customers with 'unfavourable' mine-specific characteristics (Anglo American, sub. no. 14: 3).

Anglo American said it was concerned that the:

*(a) ... Redrafted CSR does not make it clear whether Aurizon Network must take into account any constraints of loading or unloading facilities or Rail Operators other than those directly attributable to Aurizon Network itself; and*

*(b) maintenance multiplier does not necessarily apply to offer a Rail Operator paths that are usable for a particular end customer that is supposedly receiving the benefit of any Upwardly Adjusted Paths (Anglo American, sub. no. 14: 3).*

Asciano had a similar concern, that the maintenance multiplier masked what it considered to be Aurizon Network's latent intention to:

*... shift the impact and obligations of [Aurizon Network's] non-performance onto other parties in the supply chain with no consideration as to whether other parties in the supply chain can carry their non-performance. Under this process, Aurizon Network are not required to meet their contractual obligations, while other parties are required to meet their obligations (Asciano, sub. no. 13: 3).*

Separately, stakeholders (i.e. Anglo American) accepted the QCA's position that Aurizon Network should not change its 21-day maintenance lock-down period, unless doing so was consistent with the network management principles (Anglo American, sub. no. 14: 1).

However, Aurizon Network said the 2010 undertaking identified other circumstances (in addition to clause 4(d)(iv)) in which Aurizon Network was entitled to amend its maintenance plan. Aurizon Network therefore proposed it would tie its maintenance obligations directly to



Schedule G (i.e. all clauses in the network management principles) in the undertaking (Aurizon Network, sub. no, 7: 7-8).

### QCA's analysis and final decision

Aurizon Network has sought to address many of the QCA's concerns with its original maintenance multiplier proposal by providing more details on how the maintenance multiplier will be applied to access holders' TSEs.

Nevertheless, stakeholders have raised several concerns on Aurizon Network's revised maintenance multiplier process. These concerns have been divided into matters relating to the: transparency of the maintenance multiplier; application of the maintenance multiplier; and mechanisms to 'compensate' access holders for paths not provided in a month.

This maintenance multiplier issue has highlighted a clear tension between the delivery of contractual rights and who should make the capital investments and operating decisions to ensure that those contractual rights are delivered.

It is not unreasonable for all parties to expect that there should be sufficient network capacity to deliver contracted train paths on a regular basis, taking into account planned maintenance closures. However, this seems to mean different things to different people, depending on what 'regular' means.

If capacity is delivered on a monthly basis, a 48 hour maintenance track closure implies at least 7% more network capacity. If capacity is interpreted to be delivered on a weekly basis, a 48-hour track closure implies about 30% more network capacity.<sup>7</sup> Indeed, the entire network would need to be duplicated if capacity was required to be delivered on a daily basis (or even a two daily basis). There is clearly a cost implication for each of these interpretations.

Aurizon Network's maintenance multiplier proposal seems to try to manage capacity allocations on a monthly basis with planned maintenance closures over that month. Stakeholders' concerns indicate they seek greater certainty than what a monthly allocation would otherwise entitle them to.

This is intriguing as stakeholders were highly critical in their views that Aurizon Network was seeking to reinterpret a monthly entitlement as a weekly entitlement in its now-withdrawn draft Goonyella system rules.

The QCA understands that executed access agreements are based on monthly entitlements, with any weekly entitlements only being indicative. A published, one month MTP (as proposed in section 2.2 above) should allow Aurizon Network to demonstrate that it has sufficient capacity to deliver its contractual requirements given its need to regularly close the network for maintenance activities. In this context, the maintenance multiplier is simply the mechanism that allows Aurizon Network to coordinate with its customers (i.e. train operators and coal miners) about how those entitlements will be delivered in a real-world situation of maintenance track closures.

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<sup>7</sup> The 7% monthly estimate is based on two days out of 30. The 30% weekly estimate is based on two days out of seven, or 28.6%, plus an allowance for the 'shoulder' required for positioning trains and maintenance equipment.

Importantly, this coordination needs to be seen to have occurred on an equitable basis given the impacts it might have on the competitive positions of rivalrous customers, whether that be in the:

- (a) *above-rail market* – where Aurizon Network's related party train operator competes with third parties (e.g. Asciano and BMA Rail)
- (b) *Queensland coal supply market* – where coal companies compete with each other to supply the needs of their customers (e.g. power stations or steel mills).

The QCA's draft decision indicated that Aurizon Network's reallocation principles should take into account constraints on train operators and coal miners. However, that cannot be an open-ended obligation. If the effects of a two-day maintenance shutdown had to be addressed within a silo of a single week of operation, then both Aurizon Network and the above-rail operators would need to have much more spare capacity than they would need if the shutdown was managed within a month-long scheduling period.

The burden shifts if one side has flexibility over a month, while the other is limited to a week. In one case, it leads to a disproportionate increase in costs for the train operator or coal miner while in the opposite case, the increase comes in network costs, which tend to be shared across many network participants.

There is an element of the 'tragedy of the commons' problem in all of this that may well mask an overall system-wide efficient solution. In particular, what is the cost, who bears that cost and what is its impact on competition?

Transparency and reliability/repeatability of decision-making are clearly key elements of any solution. However, it is difficult to outline strict rules on how this should be undertaken as the most efficient solution depends on the relative costs of the alternative allocations of the obligations.

It is within this context, that the QCA has sought to reconcile the competing views of Aurizon Network and other stakeholders on how the Capricornia system rules can manage maintenance track closures.

#### **Transparency of maintenance multiplier**

The QCA maintains its position that the maintenance multiplier is useful as it provides access holders with greater flexibility to manage their train path consumption and to coordinate and align better with Aurizon Network's planned maintenance activities over the course of any one month. The QCA notes that Aurizon Network's revised rules have made the operation of the maintenance multiplier more transparent, by introducing the concept of a maintenance reduction factor and including some assumptions underpinning the relevant calculations.

However, the QCA accepts Asciano's view that the maintenance multiplier process could still benefit from further clarity, in that the calculations must have further detail on how maintenance activities on the mainline might be treated differently from those on a branchline. While mainline maintenance activities affect all access holders, this is clearly not the case with branchlines. The revised system rules need further details on the treatment of branchline maintenance to allow access holders (and seekers) to have more confidence that there is a robust way in which the maintenance multiplier will be applied. This is consistent with the interests of access seekers and holders (ss. 138(2)(e) and (h) of the QCA Act).

### Decision 2.4

- **The QCA requires Aurizon Network to amend section 3.4 of its revised system rules, consistent with Appendix A, so that Aurizon Network must inform the relevant access holder whether the maintenance multiplier and maintenance reduction factor have been applied for:**
  - (a) branchline maintenance**
  - (b) mainline maintenance.**

#### Application of maintenance multiplier

The maintenance multiplier is meant to allow for extra paths to be provided to an access holder or end user that has lost (or will lose) paths due to maintenance or construction activities. However, Anglo American has argued that Aurizon Network's proposal does not address the constraints that might affect an operator's or end user's ability to take advantage of the extra paths it is offered in a given week (Anglo American, sub. no. 14: 3).

While Aurizon Network has retained the loadout capability of the origin as a key constraint, the QCA considers that other constraints may also be relevant. These include the port infrastructure's unloading capability and above-rail scheduling constraints, including crew and rollingstock availability. So, for example, an access holder with five trains available in a given day might be offered paths for that day that require seven trains to operate. Or a port might be allocated more trains at a particular time than it has slots to unload. The QCA considers it reasonable that Aurizon Network should use reasonable endeavours to ensure that an access holder's weekly TSE is only increased to the extent that the train operator and other supply chain members can reasonably be expected to accommodate it.

Offering access holders replacement train paths that they are unable to use has the effect of allowing Aurizon Network to claim take-or-pay charges from the affected access holder in situations where it is clearly not reasonable to do so. Hence, the QCA considers it necessary that the draft system rules ensure that Aurizon Network, when determining the maintenance multiplier, has due regard for constraints relevant to supply chain participants. This is consistent with the interests of access seekers and holders (ss. 138(2)(e) and (h) of the QCA Act).

The QCA notes Anglo American's view that the maintenance multiplier should be governed by the principle that Aurizon Network should meet its contractual obligations first before pursuing other supply chain objectives. The QCA has addressed this issue as part of section 3.2.2 of this final decision.

### Decision 2.5

- **The QCA requires Aurizon Network to amend section 3.4 of its revised system rules, consistent with Appendix A, so Aurizon Network uses reasonable endeavours to ensure that an access holder's weekly TSE is only increased to the extent that the relevant above-rail operator and other supply chain members can reasonably be expected to accommodate it. To achieve this, the QCA requires Aurizon Network's proposed maintenance-multiplier process to:**
  - (a) **use reasonable endeavours to ensure any upwardly adjusted paths do not exceed the port's unloading capability or otherwise are only increased to the extent that the relevant supply chain stakeholder can be reasonably expected to accommodate the change**
  - (b) **have regard to above-rail scheduling constraints (reasonably known to Aurizon Network), including rollingstock and crewing availability.**

#### Aurizon Network's obligation to provide monthly TSEs

The QCA's draft decision required Aurizon Network to provide additional paths to access holders (in a manner consistent with the Contested Train Path Decision-making Process) to make up for monthly TSEs unable to be delivered due to an Aurizon Network Cause (QCA, April 2013: 27). Asciano and Anglo American have argued the maintenance multiplier in Aurizon Network's revised system rules still does not commit Aurizon Network to provide additional paths to access holders in cases where it has failed to deliver the required monthly TSE obligations. The QCA acknowledges this concern.

Aurizon Network should be able to plan and allocate capacity for a year, accounting for: known maintenance and construction activities, anticipated day-of-operation variability, and the likely impact of unplanned events (such as extreme wet weather) on the network.

Therefore, it should be reasonable to expect Aurizon Network can meet its monthly contractual obligations to access holders, and demonstrate this through a monthly MTP. It is also reasonable to expect that, where paths have not been delivered during a month, and there is usable capacity in a subsequent month, those 'surplus' paths should be used to make up for any paths not provided due to an Aurizon Network Cause.

Moreover, the QCA considers the onus on Aurizon Network to provide those paths in subsequent months is greater where the cause of the non-delivery is in Aurizon Network's control – i.e., a maintenance possession, as opposed to a weather event or above-rail issue.

'Aurizon Network Cause' in the 2010 undertaking covers matters Aurizon Network can control, and situations beyond its control. It applies where:

*[Aurizon] Network is unable to make Rail Infrastructure available for the operation of Train Services in accordance with an access holder's Train Service Entitlement as a result of:*

- (a) *Planned Possessions, Urgent Possessions or Emergency Possessions;*
- (b) *a Force Majeure Event; or*
- (c) *any other action by [Aurizon] Network which may directly result in the Rail Infrastructure not being so available,*

*provided the above reasons are not in any way attributable to the Access Holder (2010 undertaking: 146-147).*

The QCA considers that possessions and other Aurizon Network actions (i.e. (a) and (c) in the definition above) are within Aurizon Network's control, and that it is reasonable in those instances for Aurizon Network to make particular efforts to provide those paths at a later time. However, for Force Majeure Events (i.e. (b) above), that clearly lie outside Aurizon Network's control, the QCA considers Aurizon Network should be subject to a less stringent commitment.

Therefore, Aurizon Network must use:

- (a) *best endeavours* to provide replacement paths to access holders, for possessions and other actions (or inactions) within its control
- (b) *reasonable endeavours* to provide replacement paths to access holders, for Force Majeure Events,

where it has failed to meet its monthly contractual obligations to those access holders due to an Aurizon Network Cause.

Aurizon Network should also indicate in the system rules that the mechanism for providing replacement paths in subsequent months will have regard to any allowable thresholds (i.e. materiality thresholds for not being able to provide paths to access holders) that have been negotiated in the access agreements.

These requirements are consistent with Aurizon Network's legitimate business interests, and also with the interests of access seekers and holders (ss. 138(2)(b), (e) and (h) of the QCA Act). The QCA's position is also consistent with the Contested Train Path Decision-making Process in the network management principles. In particular, it is consistent with the requirement that Aurizon Network award a contested path to an access holder that is most behind in receiving its contracted train services due to an Aurizon Network Cause (Schedule G, Appendix 2, clause c(iii)).

Given that Aurizon Network contracts to provide a number of paths in a given month, it might be argued that Aurizon Network has an obligation beyond 'best endeavours' to provide replacement paths where it under-delivers an access holder's monthly paths for reasons within its control.

However, system rules specify in greater detail how Aurizon Network plans, schedules and coordinates train services operating on the network – this role does not extend to establishing the terms and conditions under which access seekers/holders contract with Aurizon Network. Any changes to parties' contractual obligations will need to be considered as part of the review of the SAAs (and other aspects) of Aurizon Network's UT4 proposal.

Finally, the QCA accepts Aurizon Network's view that the network management principles (and other parts of the 2010 undertaking) identify circumstances, beyond those identified in the draft decision, in which Aurizon Network can amend the schedule for its maintenance activities. Accordingly, the QCA considers it sufficient for Aurizon Network's ability to alter its maintenance activities (including the 21-day maintenance lock-down period) to be consistent with the 2010 undertaking.

### Decision 2.6

- **The QCA requires Aurizon Network to amend sections 3.3.1 and 4.2.8 of its revised system rules, consistent with Appendix A, to require that Aurizon Network:**
  - (a) use best endeavours to provide additional paths to access holders in subsequent months where it has failed to meet its monthly contractual obligations due to Aurizon Network Cause events (other than Force Majeure Events), consistent with the Contested Train Path Decision-making Process. In doing so, Aurizon Network will have regard to any allowable thresholds that have been negotiated in the access agreements**
  - (b) use reasonable endeavours to provide additional paths to access holders in subsequent months where it has failed to meet its monthly contractual obligations due to a Force Majeure Event, consistent with the Contested Train Path Decision-making Process. In doing so, Aurizon Network will have regard to any allowable thresholds that have been negotiated in the access agreements.**
  - (c) can only vary the 21-day maintenance lock-down period be in a manner consistent with the 2010 undertaking.**

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## 3 TRAIN SCHEDULING

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*Aurizon Network's draft system rules set out its proposed approach to developing a weekly schedule (i.e. the intermediate train plan – ITP) and the process for transferring the ITP into a daily train plan (DTP).*

*The QCA's draft decision required Aurizon Network to amend the system rules so the process for access holders to order, and amend, their train paths was more transparent and flexible. The draft decision also required Aurizon Network to provide more detail on the approaches to calculating and recording consumption for access holders' TSEs, and to develop supply chain objectives.*

*Aurizon Network has accepted a number of the draft decision's requirements, but has not agreed to provide flexibility so that an access holder that cancels a scheduled train path in the day of operation is not recorded as having consumed a TSE when that access holders has found another party that will use that path.*

*The QCA has supplemented Aurizon Network's revised approaches to scheduling and train-control with measures to provide greater transparency, so access holders (and seekers) will have sufficient information to discharge their activities. The QCA has also retained its view that allowing an access holder to cancel its train path in the day of operation, provided another access holder is able to use it, is consistent with promoting the efficient use of the rail infrastructure.*

### 3.1 Introduction

An access holder only receives value from its TSE when a train has been scheduled and has completed its trip from origin to destination.

It is therefore important that the scheduling process be transparent and equitable, so that it provides confidence to access holders that their train orders will be processed fairly and delivered according to contract.

In the proposed changes to the system rules that accompanied Aurizon Network's response to the draft decision, Aurizon Network addressed the QCA's proposed requirements that:

- (a) the ITP specify whether an access holder's train orders are classified as contracted, additional contracted, or *ad hoc* services
- (b) Aurizon Network provide details to each access holder on how many TSEs they have consumed.

As stakeholders did not comment on these matters, the QCA does not intend to discuss them in detail in this final decision. This chapter therefore focuses on Aurizon Network's proposed approaches to:

- (a) scheduling and network management principles (section 3.2)
- (b) the DTP and day-of-operation issues (section 3.3)
- (c) train service entitlements (section 3.4).

## 3.2 Scheduling and network management principles

The 2010 undertaking's network management principles set out rules Aurizon Network must follow when scheduling train services for access holders. In particular, they set out the conditions under which Aurizon Network will prepare its intermediate train plan (i.e. ITP), which is the document that shows the particular paths that have been allocated to each origin-destination pair and operator in a given operating period (typically a week, but it can be a different period).

The system rules specify a number of factors Aurizon Network has to consider when determining the ITP. This section considers these in relation to the:

- (a) Contested Train Path Decision-making Process (section 3.2.1)
- (b) supply chain objectives (section 3.2.2)
- (c) treatment of power stations (section 3.2.3)
- (d) process for the ITP (section 3.2.4).

### 3.2.1 Contested train path decision-making process

The Contested Train Path Decision-making Process (CTPDMP) is used to inform the preparing of the ITP when there is insufficient network capacity to fulfil access holders' train orders for a particular week (Schedule G, Appendix 2). Aurizon Network's ITP for the Capricornia coal system is a weekly train plan.

The CTPDMP contains criteria Aurizon Network must use to decide which access holder should be allocated a contested train path. The draft system rules proposed Aurizon Network would apply the CTPDMP to allocate contracted, additional contracted and *ad hoc* train orders. Contracted orders fall within an access holder's adjusted weekly TSEs; additional orders are over and above the adjusted weekly TSE; and *ad hoc* orders refer to train services for which the access holder does not have an access agreement with Aurizon Network (Aurizon Network, sub. no. 1: 13).

In applying the CTPDMP, Aurizon Network must, among other things, measure how many TSEs it has provided an access holder over the year to date (Schedule G, Appendix 2, cl. (c)(iii)-(iv)).

#### Draft decision

The QCA's draft decision required Aurizon Network to provide information on the outcomes arising from the CTPDMP. The QCA required Aurizon Network to be transparent about why an access holder has lost a contested train path, or has been offered alternative paths from those scheduled in the weekly train plan.

The QCA's draft decision required Aurizon Network to correctly specify how the CTPDMP works – i.e. that it exactly follows the requirements in the network management principles.

The QCA required Aurizon Network to indicate whether an access holder's train orders are considered to be contracted, additional contracted, or *ad hoc* when the weekly train plan is distributed.

Finally, the QCA required Aurizon Network to explain to access holders if the scheduled section run times were longer than those in the access agreements, including any below-rail transit time allowances.



### Stakeholders' comments

Aurizon Network agreed that the CTPDMP in the system rules should be consistent with the network management principles (Aurizon Network, sub. no. 7: 9). The revised system rules included an illustration of how that approach to the CTPDMP might work in practice (Aurizon Network, sub. no. 8: 18). Aurizon Network also said it would provide information on CTPDMP outcomes (Aurizon Network, sub. no. 7: 9).

The revised rules proposed Aurizon Network would specify whether it had considered an access holder's train order to be contracted, additional contracted, or *ad hoc* (Aurizon Network, sub. no. 8: 16).

While Aurizon Network agreed with most aspects of the QCA's draft decision on the CTPDMP, Aurizon Network did not accept the QCA's proposed reporting requirements. In particular, Aurizon Network did not agree it needed to report, as part of the system rules, why an access holder's scheduled section run times were longer than those in the access agreements. Aurizon Network said:

*Each individual Train Service is scheduled in accordance with its contracted section run times, and to minimise delays across the system. In doing so, Aurizon Network will not individually assess each Train Service to determine its [Below Rail Transit Time], rather information on actual running of all services will be reported on through Aurizon Network's quarterly performance reporting requirements in accordance with Part 9 of the Access Undertaking (Aurizon Network, sub. no. 7: 9).*

Aurizon Network also said the QCA's draft decision indicated above-rail dwells should be considered as part of this reporting. Aurizon Network said the QCA's position was not correct because above-rail activities do not form part of the Below Rail Transit Time definition (Aurizon Network, sub. no. 7: 9).

### QCA's analysis and final decision

The QCA considers it important for Aurizon Network to provide enough information on CTPDMP outcomes to show that paths are being allocated equitably. In particular, access holders should have confidence Aurizon Network's related party, Aurizon Holdings (above rail), is not receiving unfair priority.

Aurizon Network's revised rules correctly link the CTPDMP to the network management principles in the 2010 undertaking (Aurizon Network, sub. no. 8: 17). The QCA therefore accepts the approach to applying the CTPDMP that Aurizon Network has proposed in the revised system rules.

While Aurizon Network indicated in its submission that it would provide access holders with reasoning on why they were not allocated contested paths, the QCA notes that the revised system rules have not included that requirement. The QCA understand this error is inadvertent, and that Aurizon Network will correct this in response to the QCA's final decision. The QCA considers Aurizon Network's proposed approach is consistent with the interest of access seekers and holders, which are relevant concerns under section 138(2)(e) and (h) of the QCA Act.

The QCA does not accept Aurizon Network's view that the definition of 'Below Rail Transit Time' excludes above-rail activities. Among other things, above-rail activities include dwells at the port, which are part of the nominated section running times in access holders' TSEs. However, the QCA accepts Aurizon Network's position that reporting of divergences in an access holders' scheduled section running times is not required under the 2010 access undertaking's network

management principles. Therefore, the QCA cannot require that the system rules include such reporting.

That said, the supply chain will operate more efficiently if access holders receive reports on whether an operator's scheduled section running times (including above-rail dwells and storage) exceed the times in the relevant access agreements. This matter will need to be considered by the QCA as part of the review of UT4 (see section 2.3 of this final decision).

### Decision 3.1

- **The QCA requires Aurizon Network to amend section 4.2.3 of its revised system rules, consistent with Appendix A, so Aurizon Network must (within confidentiality requirements) provide information to access holders as to which step in the CTPDMP was used to allocate the contested path and how it was applied.**

### 3.2.2 Supply chain objectives

The system rules are generally required to be consistent with the network management principles. The 2010 undertaking also allows Aurizon Network to rely on the system rules in achieving coal supply chain objectives in:

- scheduling trains – the intermediate (weekly) train plan (schedule G, appendix 2, clause (c)(i))
- managing conflicts on the day of operations – the *Traffic Management Decision Making Matrix* (schedule G, appendix 3, rule 8)

Given that the network management principles refer to the system rules for establishing supply chain objectives, the QCA's draft decision said it was 'particularly important that the circumstances where these measures are applied, and how they will be applied, are clearly set out in the system rules' (QCA, April 2013: 45).

The QCA's draft decision therefore required Aurizon Network to specify what coal supply objectives it would use in arriving at train-scheduling and train-control decisions.

#### Stakeholders' comments

Asciano said Aurizon Network was not the appropriate party to decide what the coal supply objectives should be, as there would be conflicts between that role and that of operating the network. It said the system rules should clarify that Aurizon Network's role is to operate the network, not coordinate a coal supply chain (Asciano, sub. no. 10: 4).

Aurizon Network said it had included a set of supply chain objectives in its revised system rules (Aurizon Network, sub. no. 7: 10). Aurizon Network said these would aid in achieving maximum system throughput while ensuring equitable distribution of train paths (Aurizon Network, sub. no. 7: 10).

The revised rules propose Aurizon Network would have a primary objective to 'maximise the system available pathing for the equitable distribution of train service entitlements' when preparing the ITP. This would be achieved subject to the objectives of

- maximising system throughput
- minimising parcel build times, which refers to how long it takes to assemble coal from various miners at a port to load onto a ship.

Aurizon Network also said that, when maximising train paths, it would aim to offer paths with minimal delays en route to trains arriving from (or leaving for) adjoining networks (i.e. through-

running trains), and take into account the dwells and operating plans in each access agreement (Aurizon Network, sub. no. 8: 17).

Stakeholder views were mixed on Aurizon Network's proposed supply chain objectives.

Glencore said the objective of minimising parcel build times should not supersede the overarching objective of meeting access holders' contracted TSEs. Glencore requested Aurizon Network provide more clarity and transparency around the proposed supply chain objectives (Glencore, sub. no. 15: 2).

Anglo American shared a similar view to Glencore. It said maximising system throughput might mean that mines closer to the port received more available train paths than those further away. This would occur because it was more efficient for Aurizon Network to increase system throughput by several short-haul increases at the expense of long-haul mines, which may not receive their contracted capacity. Anglo American considered this raised equity issues and was inconsistent with Aurizon Network meeting its contractual obligations (Anglo American, sub no. 14: 2).

Asciano said maximising throughput should be the principal objective, and the other objectives, such as equitable pathing and parcel build times, should be secondary (Asciano, sub. no. 13: 3).

#### QCA's analysis and final decision

There are two areas in the 2010 undertaking's network management principles that refer to the system rules for supply chain objectives, namely the:

- (a) *Contested Train Path Decision-making process*, which allows Aurizon Network to base its contested-path allocations on 'any requirement for giving priority to certain train services or certain unloading facilities identified within the system rules' (Schedule G, Appendix 2, cl. (c)(i))
- (b) *Traffic Management Decision Making Matrix*, which allows Aurizon Network's train controllers to 'resolve conflicts that may arise in maximising coal supply chain throughput subject to meeting predefined and agreed objectives' (Schedule G, Appendix 3, Notes for the application of the Traffic Management Decision Making Matrix and Rule 8).

The first area, relating to preparing the ITP, reflects Aurizon Network's discretion to give priority to different types of train services. For example, Aurizon Network proposed to schedule timetabled traffics (such as passenger and freight trains) before cyclic traffics (coal trains) (Aurizon Network, sub. no. 8: 17). The second area, relating to the day of operation, clearly indicates a system throughput objective.

The QCA considers that Aurizon Network should specify supply chain objectives for each of those areas.

#### Supply chain objectives for scheduling

Aurizon Network's and stakeholders' submissions highlight significant disagreement on supply chain objectives for train scheduling, in particular:

- (a) Aurizon Network's revised rules included a primary supply chain objective of maximising train paths available for equitable distribution<sup>8</sup>
- (b) above-rail operators have sought primacy of maximising system throughput, while

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<sup>8</sup> This is to be done while maximising throughput and minimising parcel build times. It is also subject to constraints of minimising delays for through-running trains and considering contracted dwells.

- (c) end users concentrate on Aurizon Network meeting its contractual obligations.

The QCA accepts that Aurizon Network is responsible for delivering train paths, as that is its core business. However, the situation is different for throughput, as that is influenced by factors beyond Aurizon Network's control, such as late cancellations of train services and operation of trains that are either not fully laden and/or are shorter than a particular system's maximum allowable length.

The QCA therefore considers that it is unreasonable to ask Aurizon Network to be responsible for throughput as that requires it to be responsible for matters beyond its control. Rather, Aurizon Network should be responsible for what it can control which is train paths – the QCA agrees with Aurizon Network on this point.

The QCA considers that the seemingly divergent views of Aurizon Network and end users, are likely to be consistent more often than not. In particular, where network capacity is sufficient to meet contracted demand, it would seem that the best way of seeking to meet contractual obligations is to maximise the available train paths and to equitably allocate those train paths amongst all access holders/end users – or, in other words, if you seek to grow the size of the cake, most people will end up with a slice that meets their needs.

The QCA also accepts that there may be occasions and circumstances where this alignment does not apply. In these situations, it seems reasonable that the regulatory arrangements should support Aurizon Network to meet its contractual obligations to all of its customers – i.e. Aurizon Network needs to allocate train paths to access holders that have contracts, and in a way that they can use them.

It is reasonable that the first supply chain priority is meeting contractual obligations, as Aurizon Network has already committed in its access agreements to provide access holders with their monthly entitlements. This requirement is consistent with the legitimate business interests of Aurizon Network (s.138(2)(b) of the QCA Act), the public interest (s. 138(2)(d)), and the rights of access holders (s. 138(2)(h)). Accordingly, the QCA accepts Glencore's and Anglo American's view that meeting contractual TSEs should be the principal objective for the supply chain.

However, subject to meeting contractual obligations, the supply chain criteria proposed by Aurizon Network in its revised system rules are also relevant. In particular, Aurizon Network has proposed that:

- (a) its 'primary responsibility is to maximise the system available pathing for equitable distribution of TSEs'
- (b) to achieve this, Aurizon Network will be assisted by 'scheduling considerations' including:
  - (i) ensuring 'maximum throughput can be achieved, taking into consideration TSEs'.
  - (ii) Using 'the 21 day port rail plan from each Port Operator as a basis for ITP development and allocating paths, seeking to minimise parcel build times' (Aurizon Network, sub. no. 8).

While some of these objectives may conflict with each other (e.g. minimising parcel build times may not always align with an equitable pathing distribution) they represent a sensible set of goals. That is, in most circumstances they will be consistent with each other and they have a sensible primary objective of meeting contractual obligations. Overall, these objectives are consistent with the efficient use of the rail infrastructure, as well as effective competition, which are relevant considerations under the objects clause of the QCA Act (s.138(2)(a)).

Aurizon Network's proposal to include maximising throughput and minimising parcel build times as 'scheduling considerations' when maximising paths is also reasonable. Neither of these objectives is entirely within Aurizon Network's control, but it has the ability to help the overall supply chain achieve them, through its scheduling and train control activities.

However, Aurizon Network has included in its supply chain 'scheduling considerations' that it:

- (a) offers train paths with minimal delays to trains travelling to or arriving from adjoining networks – it is not evident to the QCA why the same consideration should not be applied to train services that operate entirely within one system
- (b) takes into account the dwells and operating plans in each access agreement – which the QCA accepts are contractual requirements on Aurizon Network, and are reasonable matters to consider when scheduling trains, but they are not supply chain objectives in themselves.

These considerations are also covered in other parts of the access agreements and system rules. The SAAs commit Aurizon Network to provide paths that fit within an access holder's below rail transit time, while Aurizon Network commits to a schedule when it agrees to provide access to a timetabled service. The requirement that it provide contracted TSEs therefore already covers the commitment to minimal delays. The revised system rules also specify that dwells identified in the access agreement and operating plan will be taken into account in the scheduling process (Aurizon Network, sub. no. 8: 9 (section 2.1)). Accordingly, the QCA does not consider these matters should be singled out as supply chain objectives or considerations.

#### **Supply chain objectives for day of operation**

Aurizon Network has proposed supply chain objectives only for scheduling – i.e. preparing the ITP. However, the draft decision also required Aurizon Network to set out supply chain objectives to follow when managing emergency changes to the DTP and for day-of-operation issues.

During the day of operation, and immediately before it, the role of planning is largely over, and the task for the train controllers is making the best of whatever challenges emerge when trains do not run to plan.

However, the QCA considers that the priorities should largely remain the same. While safety should be the primary objective of train controllers on the day of operations, achieving the other objectives remains important – indeed, while meeting contractual requirements should be the primary goal on the day of operation, important contributors to achieving that goal include maximising paths and distributing them equitably, maximising throughput and minimising parcel build times.

### Decision 3.2

- **The QCA requires Aurizon Network to amend section 4.2.1 of its revised system rules, consistent with Appendix A, so:**
  - (a) meeting contractual obligations is the principal coal supply chain objective, and that maximising available paths will be the second objective. In achieving these objectives, Aurizon Network will aim to:**
    - (i) maximise system throughput, taking into consideration access holders' TSEs**
    - (ii) minimise parcel build times, with the support of the 21 day port rail plan.**
  - (b) it is clarified that the coal supply chain objectives apply to Aurizon Network's:**
    - (i) preparing of the ITP**
    - (ii) management of emergency changes to the daily train plan**
    - (iii) management of delays in the day of operation.**

#### 3.2.3 Power stations

Aurizon Network's draft system rules proposed that coal train services heading to power stations would receive priority over those destined for port terminals (Aurizon Network, sub. no. 1: 13). Aurizon Network said the provision would increase the security of energy supply, and the priority would also keep the Capricornia coal chain operational.

The QCA's draft decision required Aurizon Network to provide equal priority for trains serving power stations or port terminals. The QCA said there was no legislative or undertaking requirement for the priority, and argued Queensland's integration with the National Electricity Market (NEM) would largely protect security of energy supply.

##### Stakeholders' comments

While Aurizon Network accepted the QCA's draft decision, the generators disagreed, arguing the security of Queensland's energy supply was not adequately protected by NEM integration.

Stanwell said the reliability from NEM integration related to network stability rather than energy output (Stanwell, sub. no. 12: 2). Stanwell said it recognised the importance of equity in the scheduling of trains, but there would be times when power stations should receive priority. It said this priority could be triggered when a force majeure event interrupted coal supply to power stations for seven days, or another timeframe after which electricity supply could be materially impacted (Stanwell, sub. no. 12: 2).

CS Energy said there was no trading mechanism to allocate the rail slots to users that valued them most and that, in times of power-system stress, the high NEM wholesale electricity price would yield significantly higher value than exporting coal through RG Tanna (CS Energy, sub. no. 11: 1-2). CS Energy also said it should be recognised that:

*... authorities would act to prioritise supply to power stations in instances whereby electricity load has the potential to be shed. The Capricornia System Rules should reflect this reality (CS Energy, sub. no. 11: 2).*

##### QCA's analysis and final decision

In the QCA's view, the system rules should operate equitably between various classes of access holders and customers. However, power station operators have proposed that there should be an exception to this principle, when coal deliveries are required to maintain electricity supply.

The QCA understands the concern relates to maintaining sufficient supplies of coal to the power stations under extenuating circumstances. But, it is likely that all consumers of coal (whether they be overseas or domestic) have a very clear interest in maintaining supply under all circumstances.

Rail network users manage the risks of supply chain variability by establishing stockyards. For example, stockpiles allow shiploading to continue at a port, even if some train services are held up. Similarly, power stations use stockpiles to mitigate the commercial risk they face if they are unable to generate power they have contracted to provide. Given this ability, it is not reasonable for the system rules to contain special measures to protect the generators from commercial risks. All consumers of coal have to make decisions as to what is the optimum size of their stockyard to maintain continuity of operations – or to devise alternative arrangements in the event that a shortfall in coal supply interrupts their commercial activities.

Nevertheless, the QCA accepts that there is a public interest aspect to delivering coal to keep the lights on for Queenslanders during an emergency (s. 138(2)(d) of the QCA Act). It is also in the interests of access holders and their customers, to the extent that they share the public interest in ensuring an electricity supply for their operations (s. 138(2)(h)).

The QCA does not accept Stanwell's argument that power stations should receive priority when a force majeure event interrupts coal supply for seven days, as this would leave the trigger in the hands of the party that would receive the benefit, but that has other ways of addressing the risk. However, CS Energy has pointed out that authorities would act to ensure coal supply to power stations when Queensland's electricity supply was being threatened. The QCA considers that this action by government is the appropriate independent trigger.

The QCA therefore requires Aurizon Network to amend the draft Capricornia system rules so cyclic services destined for power stations will obtain priority over other cyclic services in the preparation of the ITP (or day of operation), if Aurizon Network receives a direction from the Queensland or Federal Government (or nominated representatives) to do so.

### Decision 3.3

- **The QCA requires Aurizon Network to amend section 4.2.1 of its revised system rules, consistent with Appendix A, so Aurizon Network may only prioritise cyclic train services destined for power stations if the Queensland or Federal Government (or nominated representatives) directs it to do so while relying on their statutory powers .**

#### 3.2.4 Process for the ITP

There are a series of interactions between Aurizon Network and access holders before the ITP is finalised. The process starts when access holders provide train orders to Aurizon Network based on information from, among other things, the scheduling constraint summary. This would occur on a Tuesday, the week before the ITP for the upcoming week (Monday to Sunday) is finalised (Aurizon Network, sub. no 1: 14-15).

Access holders can change their orders after they have been submitted. Aurizon Network's draft system rules proposed that:

*For any additional orders, or variations to existing orders that are requested after 16:00 Tuesday, [Aurizon] Network will schedule these on a best endeavours basis only (Aurizon Network, sub. no. 1: 15).*

The draft system rules also said Aurizon Network would reject train orders from an access holder that failed to provide written acknowledgement on the draft ITP on time (Aurizon Network, sub. no. 1: 18).

#### Draft decision

The QCA required Aurizon Network to:

- (a) clarify the meaning of 'best endeavours basis' when accommodating access holders' requested variations to the ITP
- (b) not reject an access holder's weekly train orders if the access holder failed to acknowledge receiving the draft ITP. Rather, the QCA proposed Aurizon Network should process the order as the plan indicates.

The QCA also required that the ITP amendment process in the system rules have regard to the alternative SAAs, which allow end users to reallocate access rights between above-rail operators with at least two business days' notice provided to Aurizon Network.

#### Stakeholders' comments

Aurizon Network responded to the QCA's draft decision on the ITP in two ways. First, Aurizon Network said it would apply the 'best endeavours' principle a day later – on Wednesday instead of Tuesday before the ITP began. Second, Aurizon Network clarified that a 'best-endeavours basis' meant it would schedule those access holders' train services around other access holders' already-scheduled services. The revised rules proposed that:

*For changes to Train Orders, or requests for additional Train Services after 12:00 hours on the Wednesday prior to the Weekly Period of operation, Aurizon Network will schedule these on a best endeavours basis only. This means that additional Train Services or changes will be scheduled around those Train Services that have already been ordered and allocated a path (Aurizon Network, sub. no. 8: 16).*

Aurizon Network's revised system rules indicated that if an access holder missed the deadline to formally accept the draft ITP, then Aurizon Network would process that access holder's train orders as proposed in that ITP (Aurizon Network, sub. no. 8: 19).

The revised system rules also indicated Aurizon Network would have regard to alternative SAAs, by allowing end-user access holders' variations of operators (Aurizon Network, sub. no. 8: 22).

#### QCA's analysis and final decision

Aurizon Network has indicated that a 'best-endeavours basis' means that an access holder's requested changes to the ITP will be restricted by other access holders' train services that Aurizon Network has already scheduled. The QCA considers this to be a reasonable and equitable principle to support Aurizon Network's process of re-scheduling an access holder's train services.

Aurizon Network has accepted the QCA's proposed requirements, namely that the:

- (a) process for access holders to acknowledge the draft ITP should be more flexible
- (b) draft system rules must have regard for end users' flexibility under the alternative-form SAAs to re-appoint above-rail operators at short notice during the scheduling process (Aurizon Network, sub. no. 7: 8).

As Aurizon Network's proposed approaches are consistent with the draft decision, the QCA accepts the principles set out in sections 4.1.1, 4.2.6 and 7.1 of the revised Capricornia system rules (Aurizon Network, sub. no. 8: 19 & 22).



### 3.3 DTP and day-of-operation issues

The DTP shows the trains to be run on the day of operation. The process for amending the DTP needs to be transparent, so that supply chain participants can be confident that Aurizon Network will efficiently and equitably manage changes to the DTP.

The network management principles set out how Aurizon Network should deal with diversions and cancellations on the day of operation (see Schedule G, Appendix 3). For example, they specify how Aurizon Network will treat late trains relative to punctual trains, and the circumstances in which train services transporting different products can obtain priority in the day of operation.

Aurizon Network's draft system rules indicate how Aurizon Network will manage changes in the day of operation, including emergency requests from supply chain participants to amend the DTP (Aurizon Network, sub. no. 1: 21-22).

#### 3.3.1 Daily train plan

Aurizon Network's draft system rules proposed that the DTP will be finalised at 2.00 pm on the business day before the day of operation, and transferred to Aurizon Network's Production Control Centres in the form of train control diagrams (Aurizon Network, sub no. 1: 21).<sup>9</sup>

The draft system rules proposed the DTP would be distributed electronically to access holders and GPC (the RG Tanna terminal operator) at the close of the business day on which Aurizon Network printed the train control diagrams.

The QCA required the draft system rules to be amended so:

- (a) the DTP will be released to all access holders at the earlier of the time at which the train control diagrams are printed for Aurizon Network's planners or at the close of the business day on which the diagrams are printed
- (b) scheduled sectional running times for the access holder, including all scheduled dwells (i.e. crossing and passing times of the relevant train services), be published with the DTP.

#### Stakeholders' comments

Aurizon Network said the revised system rules set out a more timely way to provide the DTP to access holders. Access holders would have access to the Network Operations Path Planning (NOPP) tool, which would show what services had been scheduled and the proposed operating times.

Aurizon Network also proposed that an access holder would receive the finalised DTP (in a format only containing that access holder's services) through electronic means as it was published (Aurizon Network, sub. no. 7: 9 & sub. no. 8: 21).

#### QCA's analysis and final decision

Aurizon Network has proposed a revised approach to distributing the DTP that is likely to deliver the documents sooner than the process in its original application. However, Aurizon Network's revised proposal has not specifically addressed the draft decision's requirement to provide access holders with their DTPs at the same time the train control diagrams are printed (i.e. at the time they are first finalised). While the revised proposal is likely to be more timely, the QCA

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<sup>9</sup> Train control diagrams are time-and-motion representations of train services on the network reflecting the DTP.

considers that the system rules should still include the QCA's principal objective that access holders receive the DTP at the earliest opportunity.

Aurizon Network's revised system rules do not indicate that crossing and passing times of other train services will be included in an access holder's DTP (Aurizon Network, sub. no. 8: 21). However, access holders need this information to understand how their TSEs are being delivered. The QCA has therefore retained its view that the DTP should include scheduled sectional running times for the access holder, including crossing and passing times of other train services.

### Transparency

The benefits of a transparent MTP, available to all access holders, that shows all allocated paths from origin to destination, are discussed in section 2.2. These same advantages apply to the DTP. Transparency helps constrain the use of monopoly power by a vertically integrated Aurizon Holdings, and makes the supply chain more efficient by enabling exchange of paths.

However, the 2010 undertaking restricts the DTP information an access seeker can receive. When an access seeker for coal services requests capacity information, Aurizon Network must provide at least a week's worth of DTPs to that access seeker, subject to the caveats that the:

- (a) identities of other access holders are not disclosed
- (b) terms and conditions of access holders' TSEs will not be described
- (c) DTP will not show all parts of the rail infrastructure except the parts of the network that are likely to impact upon existing capacity (2010 undertaking, Schedule D, Part B, cls. 1(a) and 1(b)(ii)).

The QCA understands that Aurizon Network also applies these conditions to the DTP it provides to existing access holders. This process deprives access holders and their customers of a number of benefits, including:

- (a) showing them that the rail infrastructure is being scheduled and operated efficiently
- (b) allowing them to see what paths might be available for receiving their TSEs, exchanging with other access holders and customers (see section 3.3.2 of this decision), and for running any *ad hoc* services
- (c) enabling them, and other supply chain participants, to confirm that paths have been allocated equitably.

As with the MTP, the restrictions in the 2010 undertaking cannot be addressed through this system rules approval process. Aurizon Network, stakeholders and the QCA will need to consider the benefits of making the DTP transparent as part of the review of UT4.

### Decision 3.4

- **The QCA requires Aurizon Network to amend section 6 of its revised system rules, consistent with Appendix A, so:**
  - (a) **Aurizon Network will release the DTP to all access holders at the earliest opportunity after the train control diagrams and DTP are finalised**
  - (b) **Aurizon Network will publish sectional running times for the access holder, including passing and crossing times of other train services.**

### 3.3.2 Day-of-operation flexibility

On the day of operation, there are many factors that can affect Aurizon Network's ability to supply, or an access holder's ability to use, its train paths. For example, the variable operating environment may result in an access holder requesting Aurizon Network to amend the times for its train service or cancel it altogether.

Aurizon Network's draft system rules provide that, if an access holder requests a change in destination, whether it be a port or mine, within the final 48-hour period, Aurizon Network will process the request and deem it as a:

- (a) cancellation of the original origin-destination TSE
- (b) separate request for the new origin-destination pair (Aurizon Network, sub. no. 1: 22).

Aurizon Network proposed the access holder would be billed for the original path and for the diverted-to path (Aurizon Network, sub. no. 1: 22).

The QCA's draft decision required Aurizon Network to amend the draft system rules so that when an access holder cancelled its system path in the day of operation, that access holder would not consume a train path if another access holder used the mainline path associated with that system path.

#### Stakeholders' comments

Anglo American supported the QCA's draft position on cancelling paths (Anglo American, sub. no. 9: 2).

However, Aurizon Network disagreed that it should allow an access holder to cancel its system path in the day of operation without a TSE penalty. Aurizon Network said it was unlikely another access holder, with less than 48 hours' notice, could use the same mainline path as the first access holder that had cancelled its system path. Aurizon Network said:

*Where changes are made within 48hrs, all pathing has been confirmed. In most circumstances where a new Access Holder requests to run on a path that was cancelled, the capacity consumed will vary due to different origin/destinations, and the schedule will require adjustment. If this change had been known prior to the 48hr Lockdown, the schedule may have been better optimised to account for the variation. Aurizon Network therefore considers that by providing Access Holders with the disincentive to cancel services at the last minute, the schedule can be better maintained and optimised (Aurizon Network, sub. no. 7: 10).*

Asciano noted Aurizon Network had not accepted the QCA's recommendation, and said the QCA should retain its position (Aurizon Network, sub. no. 13: 8).

#### QCA's analysis and final decision

In its draft decision, the QCA proposed that train consumption would continue to be recorded against an access holder unless another access holder could use the mainline path associated with the first access holder's system path.

This encourages access holders to provide timely notice of their intention to change origins or destinations. At the same time, the public interest is served because the coal supply chain's operation would be more efficient when Aurizon Network has more information to make its train-control decisions. Last-minute cancellations can impose a coordination cost on Aurizon Network and other participants in the supply chain, but they also free up capacity that other access holders may be able to use.

The QCA's position in the draft decision sought to balance the likely level of coordination costs against the benefits of providing an incentive to access holders to contract honestly and to 'keep' only the paths they are actually able to use. The QCA formed the view that:

*... it is best to give an access holder an incentive to cancel its order as soon as it knows it will not be using a system path. This will happen if the access holder is not liable for the cost of that path, when another access holder is able to use the network paths that were earmarked to deliver that capacity (QCA, April 2013: 43).*

The network management principles provide that Aurizon Network can vary the DTP if, before the day of operation, an access holder requests to run an *ad hoc* service, provided that:

- (a) no other access holders' scheduled train services are affected
- (b) Aurizon Network's maintenance activities for the day are not affected (Schedule G, part A, cl. 4(i)(i)).

This would arise where one access holder has cancelled its system path, and another access holder is able to use the same mainline path associated with the first's system path. The network management principles operate so the second access holder is essentially the party making a request to run an *ad hoc* service. If the request does not affect another access holder's scheduled train services and/or Aurizon Network's maintenance activities, Aurizon Network should be able to accept the request.

The QCA considers that if this approach is feasible before the day of operation, it cannot be discounted that it could be feasible *during* the day of operation. The QCA acknowledges Aurizon Network's position that a 48-hour lock-down drives scheduling certainty and it provides the correct incentives to an access holder to cancel its system paths earlier rather than later.

However, this incentive would apply during the 48 hours, provided that the cancellation and new operator request did not conflict with other access holders' scheduled train services or Aurizon Network's planned possessions, in a manner consistent with the network management principles. This is a difficult hurdle to satisfy, and will become increasingly difficult the later the cancellation request is made. Therefore, this approach would still provide the correct incentives for access holders to cancel their system paths outside the 48-hour lockdown period rather than within it. Accordingly, the QCA maintains its position that an access holder would not have TSE consumption recorded against it, if another access holder was able to use the same mainline path, and nobody else was adversely affected.

Finally, while the access holder should have the flexibility to pass its mainline path onto another access holder, the onus should be on the cancelling access holder to find another access holder to use its path. Aurizon Network's obligations would be limited to coordinating the request for an *ad hoc* path, cancelling the original path, and ensuring the access holders' requests are consistent with the network management principles (Schedule G, part A, cl. 4(i)(i)).

This position is consistent with the public interest in efficient operation of the supply chain, and with the interests of access seekers and holders (ss. 138(2)(d), (e) and (h) of QCA Act).

### Decision 3.5

- **The QCA requires Aurizon Network to amend section 7.4 of its revised system rules, consistent with Appendix A, so if an access holder cancels its system path in the day of operation it will not accrue any path-consumption penalty, provided that the cancelling access holder (at its own cost and effort) can find another access holder to use the same mainline path. These must be managed in a manner that is consistent with the network management principles.**

## 3.4 Train service entitlements

A TSE is the fundamental service that an access holder purchases from Aurizon Network – it represents the right to operate a train over a specified duration, between a specified origin and destination, including any temporary stops on the network. Aurizon Network's draft system rules set out how TSEs are determined, delivered and consumed.

This section considers Aurizon Network's draft system rules' treatment of how TSEs are: calculated (section 3.4.1), consumed (section 3.4.2) and transferred (section 3.4.3).

### 3.4.1 Calculating TSEs

TSEs need to be calculated in a clear way so access holders know how many train paths they have each week and each month, as this affects their access charges (including take-or-pay liabilities) and their priority in train scheduling. It is also important they know how train-path availability (which is linked to TSEs) is affected by maintenance and construction activities and system variability.

The draft system rules indicated Aurizon Network would calculate its TSE obligations on the basis that all contracted TSEs were for reference train services that were specified in terms of a cyclic traffic operated evenly throughout each yearly, monthly and weekly period (Aurizon Network, sub. no. 1: 13)

The QCA's draft decision required the draft system rules to be amended so they clearly explained the rounding assumptions for nominal weekly (and daily) TSE levels, and how monthly TSEs were calculated.

The QCA's draft decision also required Aurizon Network to provide additional paths to access holders in a future period where an Aurizon Network Cause had prevented that access holder from getting its TSEs for a particular month. It required Aurizon Network to do this in a manner consistent with the network management principles' Contested Train Path Decision-making Process (i.e. CTPDMP).

In addition, the QCA required Aurizon Network to explain how the allowance for system variability was applied across access holders' TSEs.

#### Stakeholders' comments

Stakeholders supported the QCA's decision to require transparency on how TSEs were calculated.

In particular, Asciano said Aurizon Network should be held accountable for any inability to provide monthly TSEs if it was triggered by an Aurizon Network Cause. Asciano retained its position, on Aurizon Network's original proposal, that the outstanding annual TSE balance should be divided by the remaining months in the contract year to determine future months' TSEs (Asciano, sub. no. 10: 4).

In retaining its position, Asciano disagreed with the QCA's draft decision that this approach would not be practical because the network was capacity constrained. Asciano argued the MTP would identify excess capacity built into the network, which it considered would support the practicality of Asciano's proposed approach. It said the excess capacity:

*... should allow for TSEs to be recalculated as the outstanding annual balance divided evenly over the remaining months of the year. This methodology provides the greatest transparency with regard to other inputs (e.g. rolling stock) required to deliver contracted tones) and allows other service providers and producers time to develop amended asset management plans (Asciano, sub. no. 10: 4).*

Where an Aurizon Network Cause resulted in TSEs not being delivered for a particular month, Aurizon Network said it would use the CTPDMP to allocate paths to affected access holders (Aurizon Network, sub. no. 7: 10-11).

Asciano said Aurizon Network had not included a method or formula for calculating weekly TSEs in its draft Capricornia system rules, and that this was not consistent with the draft NBB system rules, that included such a formula. However, in making this comment, Asciano noted that the weekly-TSE formula in the draft NBB system rules was inconsistent with the equivalent calculations set out in the access agreements (Asciano, sub. no. 13: 6).

On the issue of system variability, Aurizon Network said it had not included details on how it would apply this measure across access holders when managing their TSEs. Aurizon Network said:

*... [s]ystem variability is a system-wide measure, and not applicable to a particular access holder. Inherently, an allowance is built into each system for day of operation disruptions, as Train Service Entitlements are only contracted to a level where each system can robustly operate. Where there is a disruption in the supply chain, in most cases, spare capacity will be available to operate additional or rescheduled services (Aurizon Network, sub. no. 7: 11).*

#### QCA's analysis and final decision

Aurizon Network should be able to explain clearly to its access holders and their customers how many TSEs they have in a given period, and how that number was derived. The QCA's draft decision required this on both a weekly and monthly basis.

Aurizon Network's revised system rules comply with the draft decision for weekly TSEs, as they include rounding assumptions and other information relevant to the process for calculating weekly TSEs. However, Aurizon Network has not complied with the draft decision requirements for:

- (a) showing how monthly TSEs are calculated
- (b) specifying how system variability is applied across access holders
- (c) providing additional train paths where Aurizon Network has failed to provide monthly entitlements due to an Aurizon Network Cause.

Aurizon Network's revised Capricornia rules define "Monthly Paths" as 'the paths the relevant Access Holder is entitled to order in accordance with the Access Holder's monthly TSE for the relevant month' (Aurizon Network, sub. no. 8: 13-14). However, Aurizon Network has omitted a formula for calculating these monthly TSEs, even though its proposed way of calculating adjusted weekly entitlements relies on the number of "Monthly Paths". Consistent with its draft decision, the QCA considers Aurizon Network should show how the number of Monthly Paths is determined. The QCA requires Aurizon Network to amend the draft system rules to specify that:

$$\text{Monthly Paths}^{10} = \frac{\frac{\text{Annual Net Tonnage}}{\text{Nominal Payload}}}{360 \text{ Days}} \times 30 \text{ Days} \times 2$$

This calculation is consistent with the formula used by Aurizon Network to calculate the monthly entitlements in the access agreements.

Aurizon Network seeks to ensure it has sufficient capacity by having paths available each day to manage system variability. This variability allowance of at least 12.25%<sup>11</sup> of contracted paths amounts to several paths a day on the Blackwater and Moura systems. While these paths are required to cope with events that emerge on the day of operation, that does not mean Aurizon Network has no responsibility to explain how they have been used. In particular, it needs to be able to demonstrate that these paths have been allocated equitably.

Aurizon Network has argued that, as it applies system variability uniformly across access holders, it need not provide system-variability information.

However, Aurizon Network's system-variability allowances can be allocated between different access holders, including Aurizon Network's related party operator. Therefore, it is important that the way the paths are allocated is transparent, to show they have been allocated equitably.

Even if the allowances are applied uniformly across access holders, as Aurizon Network says, it is reasonable for access holders (and their customers) to know what capacity Aurizon Network has allocated for operational flexibility. This flexibility is part of the service those access holders are paying for through the reference tariffs. The QCA therefore does not accept Aurizon Network's argument that it need not provide details of how system-variability allowances are applied across access holders.

Accordingly, the QCA still considers that the system rules should require Aurizon Network to provide details of the system variability allowances used in aligning access holders' TSEs with available capacity. Such information would aid the efficient operation of the supply chain, which is an important consideration under section 138(2)(h) of the QCA Act. This position is also consistent with the interests of access seekers and holders (ss. 138(2)(e) and (h) of QCA Act).

The QCA's required mechanism for providing paths in later months, where they have been missed due to an Aurizon Network Cause, is discussed in section 2.5.2.

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<sup>10</sup> Rounded up if any fraction of a path  $\geq 0.3$  and rounding down where fraction of a path  $< 0.3$ .

<sup>11</sup> The 12.25% allowance for scheduling flexibility refers to one of the operating assumptions Aurizon Network applies to its process of determining annual TSE levels for the Capricornia coal chain, in accordance with the 2009 Coal Rail Infrastructure Master Plan. More recently, however, Aurizon Network has said in its 2013 Network Development Plan that a 25-30% allowance (referred to as headroom) is given for day-of-operation variability – see page 12 of <http://www.aurizon.com.au/Downloads/Aurizon%20Network%20Development%20Plan%202013.pdf>.

### Decision 3.6

- **The QCA requires Aurizon Network to amend section 3.4 of its revised system rules, consistent with Appendix A, so:**
  - (a) **Aurizon Network must set out how it calculates monthly TSEs, and do so with the following formula:**
    - (i) ***Monthly Paths = ((Annual Net Tonnage)/(Nominal Payload))/(360 Days) x 30 Days x 2***
  - (b) **Aurizon Network must provide details on system-variability allowances used for aligning access holders' TSEs with available capacity, and demonstrate it is applying those allowances equitably.**

### 3.4.2 Consuming TSEs

As the day of operation approaches, it becomes increasingly difficult for Aurizon Network and operators to reschedule train services. To recognise this, Aurizon Network's draft system rules proposed that an access holder would be deemed to have consumed a train service where it had cancelled the service too late in the scheduling process.

The QCA's draft decision required Aurizon Network clearly set out at what point in the scheduling process TSE consumption was recorded against an access holder.

#### Stakeholders' comments

Anglo American supported the QCA's proposal to require more transparency on the circumstances in which a TSE was deemed to be consumed (Anglo American, sub. no. 9: 2).

Aurizon Network said it had clarified when this occurred. Aurizon Network's revised rules indicated a 48-hour lock-down period would apply (Aurizon Network, sub. no. 7: 11). This would mean that, for example, on Monday at 4.00 p.m., the train schedule for Tuesday and Wednesday would be locked down.

However, Aurizon Network proposed in its revised system rules that any amendments requested by the access holder within the 48-hour period might not always result in additional TSE consumption being recorded (Aurizon Network, sub. no. 7: 11; Aurizon Network, sub. no. 8: 24). Aurizon Network said this would occur where an access holder's path diversion enabled the same access holder to use the same 'mainline path' as its original journey (Aurizon Network, sub. no. 8: 22).

Aurizon Network also proposed in its revised rules that, in determining how the Contested Train Path Decision-making Process (i.e. CTDM) applied, it would measure an access holder's year-to-date TSE consumption as the greater of:

- (a) MTP allocation of TSEs for that year to date; or
- (b) train services actually consumed (Aurizon Network, sub. no. 8: 18).

Stakeholder responses to Aurizon Network's revised proposals on TSE consumption are grouped into matters of:

- (a) the TSE lock-down period
- (a) measuring TSE consumption.



### TSE lock-down period

Anglo American said that, while Aurizon Network's revised system rules were more transparent on most aspects of TSE consumption, the process for cancelling and reallocating train paths was still uncertain (Anglo American, sub. no. 9: 2).

Asciano said Aurizon Network should ensure it correctly recorded TSE consumption if it amended the scheduled times of an access holder's train service during the 48-hour lockdown period (Asciano American, sub. no. 13: 5).

### Measuring TSE consumption

Asciano did not support Aurizon Network's revised method for measuring year-to-date TSE consumption, as it only took into account train services actually consumed. It said that using the year-to-date MTP allocation figures would be misleading because their calculation would include services not actually operated by the access holder (Asciano, sub. no. 13: 5).

In addition, Asciano said that Aurizon Network's intermediate train plan (i.e. ITP) reflected an 11-day, rather than weekly, plan. Asciano said it was concerned Aurizon Network was placing the onus on access holders to order train services quite far in advance, and that this appeared to reduce Aurizon Network's obligation to provide contracted TSEs. It said:

*... under the Aurizon Network ordering process Aurizon Network only has to deliver the paths ordered rather than the [TSEs] contracted (Asciano, sub. no. 13: 5).*

Asciano considered it unfair that the revised system rules allowed Aurizon Network to recover take-or-pay charges on a *contracted-TSE basis* and only have responsibility to deliver train paths *ordered*. Asciano argued Aurizon Network's 'reduction' of responsibility to provide paths would be unfairly borne by the access holder in two ways:

- (a) not receiving its TSEs (that the access holder was actually entitled to get in the first place)
- (b) being billed for the TSEs not used (TSEs which Aurizon Network has proposed it should not have to deliver because paths were not ordered).

Asciano said this was not reasonable and Aurizon Network should deliver the TSEs contracted (Asciano, sub. no. 13: 5).

### QCA's analysis and final decision

For a train that has departed at its scheduled time, and run to its destination according to plan, there is no question that it has consumed a path. For a cancelled or rescheduled train service, the answer is less clear – the access holder should bear the opportunity cost if no replacement user can be found to use the path, but there is no opportunity cost if another train ends up using the path.

Any mechanism to deal with this has to balance the interest of an access holder in flexibility to change the running of its train, with the opportunity cost that may be borne by other network users.

### TSE lock-down period

Aurizon Network has proposed in the revised system rules to provide some flexibility for last-minute changes that do not adversely affect other users by allowing an access holder to:

- (a) change or cancel its train path at any time up to a 48-hour lockdown period, without penalty

- (b) amend its train path, without penalty, within the lock-down period when the access holder is able to use the same mainline path as its original origin-destination combination.

Overall, this is a reasonable compromise that balances the various interests. It will aid the efficient operation of the supply chain, and is consistent with the interests of access seekers and holders (ss. 138(2)(d),(e), and (h) of the QCA Act). The QCA therefore accepts Aurizon Network's proposed arrangements for the 48-hour lock-down period and for mainline pathing, where an access holder transfers paths within its own portfolio of origins and destinations (the treatment for transfers to other access holders is discussed in section 3.3.2).

Aurizon Network has described the lock-down period as 48 hours. However, the proposed cut-off time is at 4.00 p.m. on the day before the 48-hour period begins. This means the lock-down period is, strictly speaking, 56 hours. Therefore, the QCA requires the system rules to clarify that the lock-down period is 56 rather than 48 hours.

#### Measuring TSE consumption

An access holder's cumulative TSE consumption for the year is important as it establishes priority in train path contests.

Aurizon Network has proposed that consumption be the greater of the MTP allocation of TSEs for that year to date, or train services actually consumed. On the other hand, Asciano has argued it should be based only on actual consumption.

The QCA considers that using the MTP allocation will not take account of the normal fluctuations that may happen from week to week, as allowed under the access agreements. Using the greater of MTP allocation, or services actually run, could penalise an access holder that chose to under-rail in one week.

Therefore, the QCA's position is that an access holder's year-to-date TSE consumption should be the train services actually run, including paths cancelled within the 56-hour lockdown period for which the access holder was unable to use the same mainline path, or find someone else to use it (see section 3.3.2).

#### Carry-over of unordered paths

As discussed in relation to the maintenance multiplier, it would not be efficient for either the below-rail or above-rail operator be forced to deliver or receive all of its pro-rata path entitlement within a particular week (see section 2.5.2). It is reasonable, however, to expect that an access holder will use – and receive – its contractual entitlement within a month.

However, in any given month, an access holder may choose not to use its full entitlement of train paths for an origin-to-destination pair. This may benefit other access holders or customers, if they have the opportunity to use the paths not ordered. At the same time, the access holder that under-ordered will be liable for take-or-pay charges for the paths it did not order.

It might be appropriate for such an access holder to be able to carry forward the unordered paths to a subsequent month, to be used if there are train paths available. However, it is unclear the extent to which the system rules can put in place such an arrangement.

On the one hand, carrying forward unordered paths may require Aurizon Network to go beyond the obligations in the executed access agreements, and may therefore need to be resolved as part of UT4.

Conversely, such an arrangement is already addressed in part in the CTPDMP, as under some circumstances it requires Aurizon Network to allocate a contested path to an access holder that is furthest behind in receiving its TSEs (Schedule G, Appendix 2, cl. c(iv)). Access holders choosing not to use all their TSEs in a particular month would fall into this category, when competing for train paths in subsequent months.

These access holders would not incur take-or-pay charges, provided there was spare capacity in subsequent months to deliver the unordered paths from the previous month (i.e. Aurizon Network was able to schedule the unordered paths after scheduling its maintenance activities and other access holders' TSE for the relevant month). This addresses Asciano's concern that it might be liable to pay for paths, with no ability to use them in subsequent months, and that Aurizon Network should deliver the TSEs it has contracted to provide.

### Decision 3.7

- **The QCA requires Aurizon Network to amend sections 4.2.3 (Figure 5), 4.2.8 and 5.1 of its revised system rules, consistent with Appendix A, so:**
  - (a) it is clarified the lock-down period for requesting amendments to the DTP is 56 hours rather than 48 hours**
  - (b) an access holder's year-to-date TSE consumption is measured as the train services actually run, including paths:**
    - (i) cancelled within the 56-hour lockdown period for which the access holder was unable to use the same mainline path**
    - (ii) that the access holder was unable to pass on the another access holder.**

### 3.4.3 Transferring TSEs

The transfer of paths allows an access holder to temporarily transfer access rights from one mine-port combination to another without incurring any additional TSE consumption.

Aurizon Network's draft system rules provided for the transfer of paths *within* an access holder's portfolio, but not *across* different access holders (Aurizon Network, sub. no. 1: 15).

The QCA's draft decision considered that, should Aurizon Network commit to the transfer of paths between different access holders, it would need to be done as part of amendments to UT4's proposed network management principles, in parallel with any necessary changes to the SAAs and other provisions.

#### Stakeholders' comments

In responding to the QCA's draft decision, Asciano said it continued to support developing and implementing clearer rules and processes that facilitated more effective and timely transfers of paths between different access holders. Asciano said this would allow for improved efficiencies in the management of TSE portfolios, and that it would pursue this issue through the UT4 process (Asciano, sub. no. 10: 2-3).

#### QCA's analysis and final decision

The system rules must be consistent with the 2010 undertaking, including the network management principles and the SAAs. The alternative-form SAAs allow an end user to nominate multiple operators to give effect to its access rights, and to do so within a single access agreement. For example, if an end user contracts to run 60 train services per month from its mine to a port, it can allocate 40 train services to one operator and 20 to another.

In these SAAs, an end user can request a short-term reallocation of access rights between its nominated above-rail operators, provided the end user gives Aurizon Network at least two business days' notice to implement that request (End User Access Agreement, cl. 2.3(f)). It is important to note this reallocation relates to the:

- (a) same access holder (i.e. the end user)
- (b) same origin-destination pair.

The QCA notes that the flexibility the alternative-form SAAs provide the end user (relating to the *same* access holder) is not the same as the idea of the transfer of paths between *different* access holders. The discussion in this subsection relates to the latter issue.

The QCA has maintained its position that the transfer of paths between different access holders is a desirable goal, but should be addressed via the UT4 review. This is consistent with Aurizon Network's legitimate business interests (s. 138(2)(b) of QCA Act), because the 2010 undertaking does not require Aurizon Network to provide such flexibility to access holders. As stakeholders have indicated their willingness to discuss the matter as part of UT4, the QCA will pursue this matter in that process.

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## 4 DISPUTE RESOLUTION AND OTHER MATTERS

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*In the draft system rules, Aurizon Network set out its proposed approaches to determining causes of train-service cancellations and delays and managing train-scheduling and control disputes.*

*The QCA's draft decision required Aurizon Network, when determining the causes of delays and cancellations, to lengthen the review period from one train cycle to two. Stakeholders supported this position. However, they were concerned that Aurizon Network was not the most appropriate party to determine the cause of delays and cancellations. The QCA has retained its view that Aurizon Network is, given the circumstances, the most appropriate party to ascertain the cause of a delay/cancellation.*

*Stakeholders are concerned there is no formal process in the 2010 undertaking for stakeholders to promote changes to the system rules, once the initial rules have been approved. However, given this relates to the provisions in the 2010 undertaking, rather than the system rules, the QCA considers that the UT4 review is the most appropriate place to address the amendment process.*

### 4.1 Introduction

Aurizon Network's draft Capricornia system rules set out protocols for recording delays and cancellations of train services, and a process for resolving scheduling and train-control disputes.

Disputes need to be resolved in a way that allows access holders (and other supply chain participants) to be confident that the cause of a delay will be appropriately identified. This will enable supply chain participants to be aware of issues that need to be addressed to improve coal throughput.

Stakeholders also said they were concerned that Aurizon Network's draft Capricornia system rules did not appropriately account for cross-system train services (from the NBB) and new infrastructure developments.

In responding to the QCA's draft decision, Aurizon Network's revised system rules have extended the review period of train-service cancellations from one train cycle to two train cycles (i.e. 48 hours). As stakeholders have not raised further concerns on this matter, the QCA's final decision does not discuss this aspect of the draft decision. Therefore, this chapter focuses on:

- (a) disputes over causes of delays (section 4.2)
- (b) system congestion and cross-system traffic (section 4.3)
- (c) the process for amending the system rules (section 4.4).

### 4.2 Scheduling and train-control disputes

Once the 48-hour train schedule has been locked down, a train-service may be:

- (a) cancelled, which can occur before or on the day of operation
- (b) delayed, on the day of operation.

Aurizon Network proposed to use root-cause analysis to identify causes of train service cancellations and delays, with a review period that started from the beginning of the previous

train cycle. Any disagreements about cause could be settled through the dispute resolution process identified in the access holder's access agreements (Aurizon Network, sub. no. 1: 23).

The QCA's draft decision required that the review period for cancellations and delays be extended to cover the last two (rather than one) train cycles.

### Stakeholders' comments

Stakeholders (e.g. Asciano) said it would be expensive and impractical to settle train-control disputes in the way set out in the draft system rules submitted in 2011 (Asciano, sub. no. 13: 6).

In addition, stakeholders argued Aurizon Network should not be the final party to arbitrate on who was at fault for delays or cancellations. Asciano said Aurizon Network had an incentive to attribute faults to access holders so it could make its performance data look better and/or produce favourable take-or-pay outcomes. Asciano said:

*... in relation to both Delay Cause and Cancellation Cause it may be more appropriate for the operator to have the final decision as to the nature of the Delay Cause or Cancellation Cause (Asciano, sub. no. 13: 6).*

Aurizon Network accepted the QCA's proposal that the review period for cancellations should be two train cycles (i.e. the previous 48 hours). However, it said the review period for delays should be maintained at one train cycle, as the DTP relevant to a train's operations would already reflect any delays from the previous day of operation (Aurizon Network, sub. no. 7: 11).

Asciano did not agree with Aurizon Network's position on the review period for delays. It said delays could originate from events that happened before the beginning of the previous train cycle (Asciano, sub. no. 13: 6).

### QCA's analysis and final decision

The operation of a supply chain will be improved if detailed and accurate performance information is recorded and distributed to all participants. This allows both transient and long-term problems to be fixed effectively, and encourages a culture of continuous improvement to develop. It also gives supply chain participants a chance to mitigate risks, and respond to opportunities to be more efficient.

A key part of this information is the causes of delays, cancellations and other disruptions to the operation of the supply chain. However, as this same performance information also has commercial implications, there are incentives for any party with a vested interest in the commercial outcome to shape or interpret the information to put itself in a good light.

In this context, Aurizon Network has proposed that it be the final arbiter of disputes about causes of disruptions, while Asciano has suggested that the above-rail operators be given this role.

Given the conflicts of interest inherent in either side having a determinative role, it would be better if there were an independent party that had a role in compiling and distributing information on delays and cancellations. However, it is not the role of system rules to establish such an arbiter.

Stakeholders argued that the dispute resolution processes in the system rules and 2010 undertaking are costly, and therefore will not be used. However, experience overseas has shown that other options would be even more costly<sup>12</sup>.

The QCA considers that the process in the system rules for determining the causes of delays needs to be consistent with the 2010 undertaking and with access agreements. Accordingly, the QCA has retained its draft-decision position, that Aurizon Network is, given the situation, the most appropriate party to ascertain the cause of a delay. While this is a second-best solution, any independent arbitration process would have to come out of the review of UT4, or a subsequent regulatory process.

#### Review period for attributing delays

Parties responsible for causing train-service delays or cancellations should be held accountable for their actions. An important input for such a process is the period that is taken into account when reviewing the cause of the cancellation or delay.

Aurizon Network has accepted that the review period for cancellations should be extended to two train cycles but has argued the review period for delays should remain at one cycle.

While Aurizon Network is correct that the DTP for a particular day would be updated for any delays that occurred on previous days, access holders will still face the consequential effects of delays from previous periods. For example, an access holder's train service may not arrive at the RG Tanna Terminal in time for shiploading because of a delay to another train service that happened two days ago. The QCA considers that an up-to-date DTP will not resolve such an issue. If the access holder is unable to reschedule its unloading time at the port, then it bears the costs associated with being late in arriving at the terminal.

As discussed above, the QCA considers it important that the access holder be able to find out what the root cause of the delay was. Even though there may be no compensation from Aurizon Network for the delay, the access holder would be able to communicate the reasons for the delays to its customers (or other relevant stakeholders), which may prove useful for keeping its business relationships intact. This would be consistent with the public interest and the interests of access seekers and holders (ss. 138(2)(d),(e) and (h) of the QCA Act).

Therefore, the QCA has retained its position that review period for delays should be two train cycles (and not one train cycle). This will allow Aurizon Network (and other supply chain participants) a sufficient amount of information to determine the cause of delays.

#### Decision 4.1

- **The QCA requires Aurizon Network to amend section 8.3.3 of its revised system rules, consistent with Appendix A, so the review period for delays should be two train cycles (i.e. 48 hours).**

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<sup>12</sup> See, for example: <http://www.telegraph.co.uk/news/uknews/road-and-rail-transport/8393927/Train-firms-hire-300-delay-attribution-officers-to-avoid-paying-compensation.html>

### 4.3 System congestion and cross-system traffic

NBB traffic entering Capricornia (i.e. cross-system traffic) may affect Capricornia access holders' use of system capacity. At the same time, new infrastructure like WICET and SBR can change the dynamics of the scheduling process in the Capricornia system.

Aurizon Network's draft system rules were silent on the issue of cross-system traffic and new infrastructure.

While the draft decision acknowledged cross-system-traffic and new infrastructure increased operating complexity and had an impact on capacity, the QCA considered that these issues could only be addressed through amending the network management principles and/or processes for amending system rules in UT4.

#### Stakeholders' comments

Anglo American said Aurizon Network's proposal did not address connections to the Capricornia system that had significant capacity and scheduling impacts (Anglo American, sub. no. 9: 2). Anglo American also said WICET and SBR would affect the Moura line's capacity. It said the Capricornia system rules should include a consultation process to enable end users and operators to contribute to any system-rules amendments when capacity became materially different from when the rules were approved (Anglo American, sub. no. 9: 2).

The revised system rules indicated that Aurizon Network's Capricornia planning team would consult with the NBB team in respect of cross-system train services (Aurizon Network, sub. no. 8: 7-18).

The revised rules also stated that:

- (a) trains arriving from NBB would be subject to the Capricornia rules (Aurizon Network, sub. no. 8: 7-18)
- (b) Aurizon Network would, in the event the ITP planning process revealed that cross-system train services were causing congestion at a mine loadout, use the CTPDMP to determine path allocations (Aurizon Network, sub. no. 8: 18-19).

#### QCA's analysis and final decision

The system rules are supposed to be adaptable, so that Aurizon Network and its customers can agree on changes to procedures that reflect new circumstances, including new infrastructure developments and cross-system traffic.

In this context, the QCA accepts Anglo American's view that impending infrastructure developments can affect system capacity and the workability of the system rules. However, it is hard to know what capacity impacts will be without the MTP (or capacity modelling) to show the effect of relevant infrastructure enhancements (i.e. WICET and SBR).

The 2010 undertaking required Aurizon Network to provide a capacity review for each coal system within six months of October 2010 (cls. 11.1.4(a)-(b)). The 2010 undertaking also requires Aurizon Network to perform further capacity reviews if it has provided access seekers with access rights that are conditional on completing of infrastructure enhancements (clause 11.3(c)).

However, Aurizon Network is still developing the capability to address this requirement and its inability to comply with this aspect of the 2010 undertaking in a fully transparent manner has been particularly disappointing. It is not proposed to address this issue through the Capricornia



system rules. Rather, this is a matter to be resolved as part of the undertaking process, including the review of UT4.

Aurizon Network's revised system rules have clarified that NBB traffics entering Capricornia would be subject to the Capricornia system rules and that the CTPDMP would be applied where cross-system train services are causing congestion at a mine load-out. As this is consistent with the network management principles, the QCA considers this a reasonable approach to scheduling cross-system train services.

#### 4.4 Amendments to the system rules

The 2010 undertaking provides for Aurizon Network to amend the system rules and for an access holder to dispute these amendments if they:

- (a) are materially inconsistent with the terms of the access agreement; or
- (b) do not, as a whole, operate equitably across access holders, seekers (should they become holders), and their customers (Schedule G, Appendix 1, clause (e)).

In its draft decision, the QCA noted there was no formal process in the 2010 undertaking for stakeholders to promote changes to the system rules, once the initial rules had been approved.

Rather, it was up to Aurizon Network to propose changes, and for any access holders to appeal if they considered the changes were not consistent with the undertaking or access agreements. Given the impact of the measures in the system rules, the QCA considered UT4 should include an ability for access holders to propose changes, when it was clear that the system rules were not operating effectively.

##### Stakeholders' comments

Anglo American said there was a clear lack of power in the amendment process for end users (Anglo American, sub. no. 9: 3). While Anglo American acknowledged this process was consistent with the 2010 undertaking's provisions, it said that end users, at the time the 2010 undertaking was approved, did not envisage that the system rules would affect end users' legal rights and obligations (Anglo American, sub. no. 14: 1). It said:

*... Aurizon Network has a broad and unfettered ability to make amendments, deletions or additions to the [Capricornia system rules], as it is considered a purely operational document. However, this assumption is not correct and the [Capricornia system rules] can affect fundamentally important issues such as the consumption of TSEs (Anglo American, sub. no. 14: 3).*

To address this, Anglo American said Aurizon Network should adopt a compulsory and more considered, consultative approach for particular amendments to the system rules (Anglo American, sub. no. 14: 3).

Asciano supported the QCA's position and agreed that the UT4 review would be the most appropriate place to discuss this concern (Asciano, sub. no. 10: 4).

Aurizon Network's revised rules allowed stakeholders to request amendments. They said:

*Any Supply Chain Stakeholders may request additional reviews at any time where required and Aurizon Network will consider any such requests. All reviews of these System Rules conducted by Aurizon Network will include consultation with the relevant Supply Chain Stakeholders (Aurizon Network, sub. no 8: 7).*

Stakeholders were concerned the revised rules did not provide certainty that disputes would be resolved quickly. Anglo American said the lack of a fast and effective dispute resolution process

in the rules undermined the application of those rules. To address this, Anglo American suggested that the QCA consider:

*... implementing, or asking Aurizon Network to implement, a short timeframe dispute resolution process that can see users' objections considered and dealt with before the operation of the system is detrimentally affected (Anglo American, sub. no. 9: 4).*

Anglo American added Aurizon Network's control of the draft Capricornia system rules was undermining the intent of regulating a monopoly:

*There is no appropriate method to review Aurizon Network's decisions under the Redrafted CSR and no true oversight, giving Aurizon Network the ability to control an important operational aspect of the Queensland coal chain without any effective regulatory oversight. This seems to be similar to the aggressive stance taken by Aurizon Network in response to its regulation in the 2013 Draft Access Undertaking (UT4) and Anglo American submits that the QCA must require transparency and accountability for Aurizon Network or the regulation of the business will be rendered ineffective (Anglo American, sub. no. 14: 2).*

### QCA's analysis and final decision

The system rules can cause substantial changes in the way access holders' contractual entitlements are delivered. These effects can vary over time depending on a variety of developments, such as new infrastructure or operating practices, either on the rail network, or elsewhere in the supply chain.

The system rules mechanism is supposed to give flexibility to make changes in the way the rules operate to reflect new circumstances, without the need for amending the undertaking or access agreements. However, this flexibility needs to be balanced by protections given the potential for the rules to alter the way access rights are delivered.

Aurizon Network said in its revised proposal that, the 'System Rules are intended to be a living document, continuously improving and aligning with supply chain requirements' (Aurizon Network, sub. no. 8: 7).

There is already a process in the 2010 undertaking that provides the flexibility to change the rules to reflect such new circumstances (Schedule G, Appendix 1). However, this flexibility is not balanced – the process in the undertaking only provides for Aurizon Network to propose changes to the system rules.

Aurizon Network has proposed in its revised system rules that it will review them in the first year of their operation and will conduct further reviews every year. It also said it would consider stakeholders' requests for additional reviews (Aurizon Network, sub. no. 8: 7).

However, as this proposal gives Aurizon Network discretion to refuse to consider access holders' requests for reviews, it does not provide an adequate balance between flexibility and protections for access seekers and holders.

Indeed, the QCA considers it is necessary that access holders have stronger rights than those included in the 2010 undertaking, to dispute proposed amendments or promote changes to the system rules.

The QCA considers this is best addressed through the broad review of UT4. However, the approach could be expected to include:

- (a) a mechanism for aligning the system rules with a new undertaking once it is approved
- (b) clearer appeal criteria for changes proposed to the system rules

- (c) a balanced approach to changes, that allows them to be proposed by both access holders/seekers and Aurizon Network.

While these do not bind the QCA's consideration of UT4, they give a indication of a potential way forward.

#### 4.5 Implementing the system rules

Asciano and Glencore have requested that the approval of any system rules be deferred until after UT4 is approved (Asciano, sub. no. 10: 2; Glencore, sub. no. 15: 1).

The QCA considers that the system rules are an outstanding matter from the 2010 undertaking, and should be settled in as timely a manner as possible.

If Aurizon Network amends its proposed Capricornia system rules in the way set out in Appendix A, then they will be consistent with the requirements of clauses 5.2 and 7.1 of the 2010 undertaking, and it is appropriate that they be implemented. It is anticipated that UT4, once approved, will include a more comprehensive amendment process for the system rules (see section 4.4 above).

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## 5 FINAL DECISION

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*This chapter draws together the QCA's analysis in the previous chapters and how it relates to the system rules assessment criteria that are set out in the 2010 undertaking and that include the QCA Act criteria for approving undertakings.*

*For the QCA to approve a resubmitted set of Capricornia system rules they will need to contain the amendments in Aurizon Network's August 2013 revised rules as well as the amendments highlighted in this decision.*

*This chapter necessarily focuses on the reasons why the QCA requires the revised system rules to be amended. The rationales for why the QCA would accept the amendments in the revised system rules are noted in the previous chapters and addressed in detail in the QCA's earlier April 2013 draft decision.*

### 5.1 Introduction

Aurizon Network has, in its draft Capricornia system rules submitted in August 2011, proposed a variety of policies and procedures to supplement the network management principles for the Blackwater and Moura coal systems. These measures include, among other things:

- (a) providing capacity-related information through a critical asset calendar, critical asset constraint summaries and scheduling constraint summaries
- (b) adjusting path availability for the effect of maintenance and construction by using the maintenance multiplier
- (c) treating a change in destination on the day of operation as a cancellation of the original origin-destination TSE and a separate request for a new origin-destination pair.

As required by clauses 7.1(d) and 5.2(e) of the 2010 undertaking, the QCA has considered whether:

- (a) the draft system rules are consistent with the 2010 undertaking, including the requirements for preparing system rules (clause 7.1(c)(i)), the network management principles (schedule G), the non-discriminatory treatment provisions (clause 2.2(a)(iii)), the SAA principles (schedule E) and SAAs (including the alternative-form SAAs)
- (b) it is appropriate to approve the draft system rules having regard to the criteria in section 138(2) of the QCA Act.

### 5.2 Consistency with the 2010 undertaking

For the reasons set out in this final decision, the QCA considers that the draft Capricornia system rules are not consistent with the 2010 undertaking.

The draft Capricornia system rules do not sufficiently provide for the equitable operation of system rules across access holders and access seekers (should they become access holders) and their customers and the terms of access agreements (clause 7.1(c)(i)).

Further, as set out in this final decision, the QCA considers Aurizon Network's proposals are not consistent with the network management principles for several reasons, including that they do not provide for distribution of an MTP consistent with those principles (schedule G).

The draft Capricornia system rules are not consistent with the terms of access agreements and the SAA principles, including the requirement that Aurizon Network conduct its maintenance and construction activities in a manner consistent with the network management principles.

In addition, they do not provide sufficient flexibility to allow effective operation of the alternative form SAAs that the QCA approved in August 2013.

### 5.3 Approval criteria in the QCA Act

The QCA considers the following matters are relevant to assessing Aurizon Network's proposals in the draft Capricornia system rules against the approval criteria in section 138(2) of the QCA Act. These are important features, meant to be representative of the types of issues that are relevant, but are not meant to be a comprehensive listing of all matters considered in the QCA's assessment under section 138(2) as set out in the previous chapters<sup>13</sup>. This section summarises the QCA's assessment and balancing of the criteria in section 138(2) in chapters 2,3 and 4 of this final decision.

#### 5.3.1 Object of Part 5

*s.138(2)(a) – the object of this part 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*

**Table 3: s.138(2)(a) of QCA Act**

| <b>Decision Section</b>              | <b>Aurizon Network's 2011 Proposal</b>   | <b>QCA's required amendments</b>   |
|--------------------------------------|--|--|
| 2.2 - Capacity and Master Train Plan | Aurizon Network's proposal to provide capacity-related information through the critical asset calendar and constraint summaries, rather than an MTP, does not promote efficient use of infrastructure, or effective competition. | A properly specified one-month MTP, that is consistent with the network management principles, would promote the efficient use of or investment in the rail infrastructure.                            |
| 3.4.2 - Consuming TSEs               | Aurizon Network's proposed trigger for recording TSE consumption is not sufficiently clear to promote effective competition.   | A 56-hour TSE lock-down period (which is an idea canvassed in the revised system rules) for making amendments to train orders would promote the efficient use of or investment in rail infrastructure. |

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<sup>13</sup> Section 138(2)(c) is not relevant as the owner and operator of the service are the same entity. The QCA has had regard to sections 138(2)(f) and (g), but as the system rules do not deal with pricing matters, it has not focussed on them.

### 5.3.2 Legitimate business interests of owner

*s.138(2)(b) – the legitimate business interests of the owner or operator of the service*

**Table 4 s.138(2)(b)**

| <b>Decision Section</b>         | <b>Aurizon Network's 2011 proposal</b>   | <b>QCA's required amendments</b>   |
|---------------------------------|--|--|
| 3.2.2 - Supply chain objectives | Aurizon Network did not propose to include any supply chain objectives for preparing its ITP or to manage delays and emergency schedule changes in the day of operation. | The QCA's final decision is to require that Aurizon Network's principal supply chain objective (in preparing the ITP and the day of operation) is to meet contractual obligations to access holders. This is consistent with having regard to Aurizon Network's legitimate business interests.                           |
| 3.4.3 - Transferring TSEs       | Aurizon Network proposed that it would allow the 'transfer of paths' within an access holder's portfolio but not across different access holders.                        | The QCA's final decision is to not require Aurizon Network to commit to the 'transfer of paths' between different access holders because the network management principles (2010 undertaking, Schedule G) do not require this. This is consistent with having regard to Aurizon Network's legitimate business interests. |

### 5.3.3 Public interest

*s.138(2)(d) – the public interest, including the public interest in having competition in markets (whether or not in Australia)*

The QCA considers the public interest includes the efficient operation of the coal supply chain. It is important to note that the efficient operation of the rail infrastructure is a concern under section 138(2)(a) of the QCA Act but that of the supply chain is a concern under section 138(2)(d).

**Table 5: s.138(2)(d) of QCA Act**

| <b>Decision Section</b>                     | <b>Aurizon Network's 2011 Proposal</b>  | <b>QCA's required amendments</b>  |
|---|---|---|
| 3.3.2 - Day-of-operation flexibility        | Aurizon Network's proposal to treat minor, inconsequential day-of-operation changes in train origins/destinations as cancellations and new orders, even where they do not result in additional capacity being consumed, is not consistent with the public interest in the efficient operation of the coal supply chain. | An access holder should be able to request minor changes in its destination/origin for a journey where the mainline path it uses is the same one associated with its original train order.<br><br>This is consistent with promoting the public interest, which includes the efficient operation of the coal supply chain. |
| 4.2 - Scheduling and train-control disputes | Aurizon Network proposed to review events that happened up to one train cycle to determine the root cause of a train service's delay; this short review period is not consistent with the public interest in the efficient operation of the coal supply chain.  | The review period for train-service delays and cancellations be extended to at least two train cycles (i.e. 48 hours). This is consistent with promoting the public interest, which includes the efficient operation of the coal supply chain.  |

### 5.3.4 Interests of access seekers

*s.138(2)(e) – the interests of persons who may seek access to the service, including whether adequate provision has been made for compensation if the rights of users of the service are adversely affected*

**Table 6: s.138(2)(e) of QCA Act**

| <b>Decision Section</b>         | <b>Aurizon Network's 2011 Proposal</b>  | <b>QCA's required amendments</b>  |
|---------------------------------|---|---|
| 2.5.2 - Maintenance multiplier  | Aurizon Network proposed to use a maintenance multiplier to adjust access holders' weekly train orders to account for the capacity impact of maintenance activities. The proposal did not have sufficient regard for above-rail scheduling constraints, which is not consistent with the interests of access seekers. | The QCA has required Aurizon Network's proposed maintenance-multiplier process to have regard for above-rail constraints (including rollingstock and crewing availability) and port-related constraints. This is consistent with the interests of access seekers. |
| 3.2.2 - Supply chain objectives | Aurizon Network's proposal did not include any supply chain objectives. This is inconsistent with the interests of access seekers.  | The QCA has required that the principal supply chain objective be that Aurizon Network must meet its contractual obligations to provide access holders with their TSEs. This is consistent with the interests of access seekers.                                  |

### 5.3.5 Other relevant issues (interests of access holders and their customers)

*s.138(2)(h) – any other issues the Authority considers relevant*

The QCA considers the interests of access holders, including that Aurizon Network be non-discriminatory in its approach to scheduling and coordinating their train services, are relevant considerations under s.138(2)(h).

**Table 7: s.138(2)(h) of QCA Act**

| <b>Decision Section</b>                              | <b>Aurizon Network's 2011 Proposal</b>   | <b>QCA's required amendments</b>  |
|--|--|---|
| 2.5.2 - Maintenance multiplier                       | Aurizon Network proposed to use a maintenance multiplier to adjust access holders' weekly orders for the capacity impact of maintenance activities. This did not have sufficient regard to other supply chain participants' operating constraints, which is not consistent with the interests of access holders and their customers. | The QCA has required Aurizon Network's proposed maintenance-multiplier process to have regard for above-rail constraints (including rollingstock and crewing availability) and port-related constraints. This is consistent with the interests of access holders and their customers. |
| 3.2.1 - Contested Train Path Decision-making Process | Aurizon Network's proposed process to allocate contested paths is not sufficiently transparent to demonstrate Aurizon Network is not unreasonably favouring its related party above-rail operator. This is not consistent with the interests of access holders and their customers.  | The QCA has required that Aurizon Network must provide information (within confidentiality requirements) to access holders on why they have not been allocated a contested train path. This is consistent with the interests of access holders and their customers.                   |
| 4.2 - Scheduling and train-control disputes          | Aurizon Network proposed to review events that happened up to one train cycle to determine the root cause of a train service's delay or cancellation; this short review period is not consistent with the interests of access holders and their customers.   | The review period for train-service delays and cancellations be extended to at least two train cycles (i.e. 48 hours). This is consistent with the interests of access holders and their customers.   |

## 5.4 Summary

The QCA considers Aurizon Network's draft Capricornia system rules are not consistent with the objective of Part 5 of the QCA Act (s.138(2)(a)), the public interest, including the public interest in having competition in markets (s.138(2)(d)), the interests of persons who may seek access to the service (s.138(2)(e)), and other relevant issues (s.138(2)(h)). These criteria have been balanced against and outweigh the legitimate business interests of the owner or operator of the service (s.138(2)(b)). However, the QCA notes there are some instances where the legitimate business interests of the owner or operator of the service can be consistent with the public interest and other decision-making criteria (see, for example, section 3.2.2 in this decision on supply chain objectives).

For the reasons set out in Chapters 2, 3 and 4, the QCA's final decision is that it is not appropriate to approve the draft Capricornia system rules, having regard to the criteria in clauses 7.1(c)(i) and 5.2(e) of the 2010 undertaking. The QCA therefore refuses to approve the draft system rules under clause 5.2(h)(i) of the 2010 undertaking.

For the purposes of clause 5.2(h)(i) of the 2010 undertaking, the QCA has, in Chapters 2, 3 and 4 of this final decision, set out the reasons for the refusal and the way in which the QCA considers the draft system rules should be amended to be approved. In particular, the QCA has provided a mark-up of Aurizon Network's revised Capricornia system rules (in Appendix A) that the QCA considers would satisfy the approval criteria in the 2010 undertaking and QCA Act.

The QCA requests that Aurizon Network amend its draft Capricornia system rules in the way set out in this final decision, and provide these to the QCA by no later than **30 April 2014**.



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## APPENDIX A: QCA'S MARK UP OF AURIZON'S NETWORK REVISED CAPRICORNIA SYSTEM RULES

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Appendix A is provided separately.

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## APPENDIX B: LIST OF SUBMISSIONS

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### List of Submissions

| <i>Organisation</i>  | <i>Submission number</i>                                 |
|----------------------|--|
| Anglo American       | 9, 14  |
| Asciano              | 3, 10, 13  |
| Aurizon Network      | 1, 2, 6(covering letter), 7(Response), 8 (Revised rules) |
| BMA                  | 4  |
| CS Energy            | 11, 16   |
| Glencore             | 15   |
| Rio Tinto            | 5  |
| Stanwell Corporation | 12   |

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## GLOSSARY

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### A

|                       |   |
|-----------------------|---|
| Aurizon Network Cause | As defined in the 2010 access undertaking |
| ARTC                  | Australian Rail Track Corporation         |

### B

### C

|        |  |
|--------|--|
| CAAC   | Critical asset alignment calendar            |
| CTPDMP | Contested Train Path Decision-making Process |

### D

|                    |  |
|--------------------|--|
| DTP                | Daily Train Plan   |
| Draft system rules | The proposal submitted by Aurizon Network on 31 August 2011. |

### E

### F

### G

|      |                                 |
|------|---------------------------------|
| GAPE | Goonyella Abbot Point Expansion |
| GPC  | Gladstone Ports Corporation     |

### H

### I

|     |                         |
|-----|-------------------------|
| ITP | Intermediate Train Plan |
|-----|-------------------------|

### J

### K

### L

### M

|               |  |
|---------------|--|
| Mainline Path | For Blackwater, the section between Bluff and Callemondah. For Moura, the section between Dumgree and Callemondah. |
| MTP           | Master Train Plan  |

### N

|     |   |
|-----|---|
| NBB | Northern Bowen Basin, which comprises the Goonyella, Newlands and Goonyella Abbott Point Expansion coal systems |
|-----|---|

## O

## P

## Q

QCA Act

*Queensland Competition Authority Act 1997*

## R

Revised system rules

The amended proposal submitted by Aurizon Network on 21 August 2013 in response to the QCA's draft decision

## S

SAA

Standard Access Agreement

SBR

Surat Basin Railway

Schedule E

Standard Access Agreement Principles

Schedule G

Network Management Principles

## T

TSE

Train Service Entitlement

## U

## V

## W

WICET

Wiggins Island Coal Export Terminal

WTP

Weekly Train Plan

## X

## Y

## Z

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## REFERENCES

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### Anglo American

August 2013. Submission to the Queensland Competition Authority: Response to the Draft Decision on the Draft Capricornia System Rules (submission no. 9).

October 2013. Supplementary submission regarding Aurizon Network's resubmission of the Capricornia System Rules (submission no. 14).

### Asciano

October 2011. Submission to the QCA Review of the QR National Draft Capricornia System Rules (submission no. 3).

August 2013. Asciano Comments on the QCA Draft Decision on the Aurizon Network Capricornia System Rules (submission no. 10).

October 2013. Asciano Comments on Aurizon Network's Draft Capricornia System Rules - Submissions on New Matters (submission no. 13).

### Aurizon Network

August 2008. QR Network's 2009 Access Undertaking: Principles Paper – Network Management Principles.

August 2011. System Rules: Capricornia Coal Chain (submission no. 1).

August 2011. Letter re: Capricornia System Rules (submission no. 2).

August 2013. Letter re: Aurizon Network's Capricornia System Rules (submission no. 6).

August 2013. Aurizon Network Submission to the QCA - Capricornia System Rules: Response to the QCA's Draft Decision (submission no. 7).

August 2013. Aurizon Network System Rules Capricornia Coal Chain (submission no. 8).

Australian Rail Track Corporation (ARTC) 2011. Hunter Valley Coal Network Access Undertaking.

BMA. October 2011. Submission on QR Network System Rules – Goonyella and Capricornia Coal Chains (submission no. 4).

### CS Energy

August 2013. Capricornia System Rules - Draft Determination (submission no. 11).

October 2013. Capricornia System Rules - Draft Determination (submission no. 16).

Femol International Pty Ltd. (2012). Report re: Assessment of QR Network's Draft System Rules Capricornia Coal Chain, October.

Glencore. Re Aurizon Network's Revised Draft Capricornia System Rules (submission no. 15).

### Queensland Competition Authority (QCA)

September 2009. Draft Decision, QR Network's 2009 DAU.

September 2010. Final Decision, QR Network's 2010 DAU.

April 2013. Draft Decision, Capricornia System Rules.

Rio Tinto. October 2011. Submission on draft Capricornia System Rules submitted by QR Network on 31 August 2011 (submission no. 5).

Stanwell Corporation. Re: Capricornia System Rules - Draft Decision (submission no. 12).