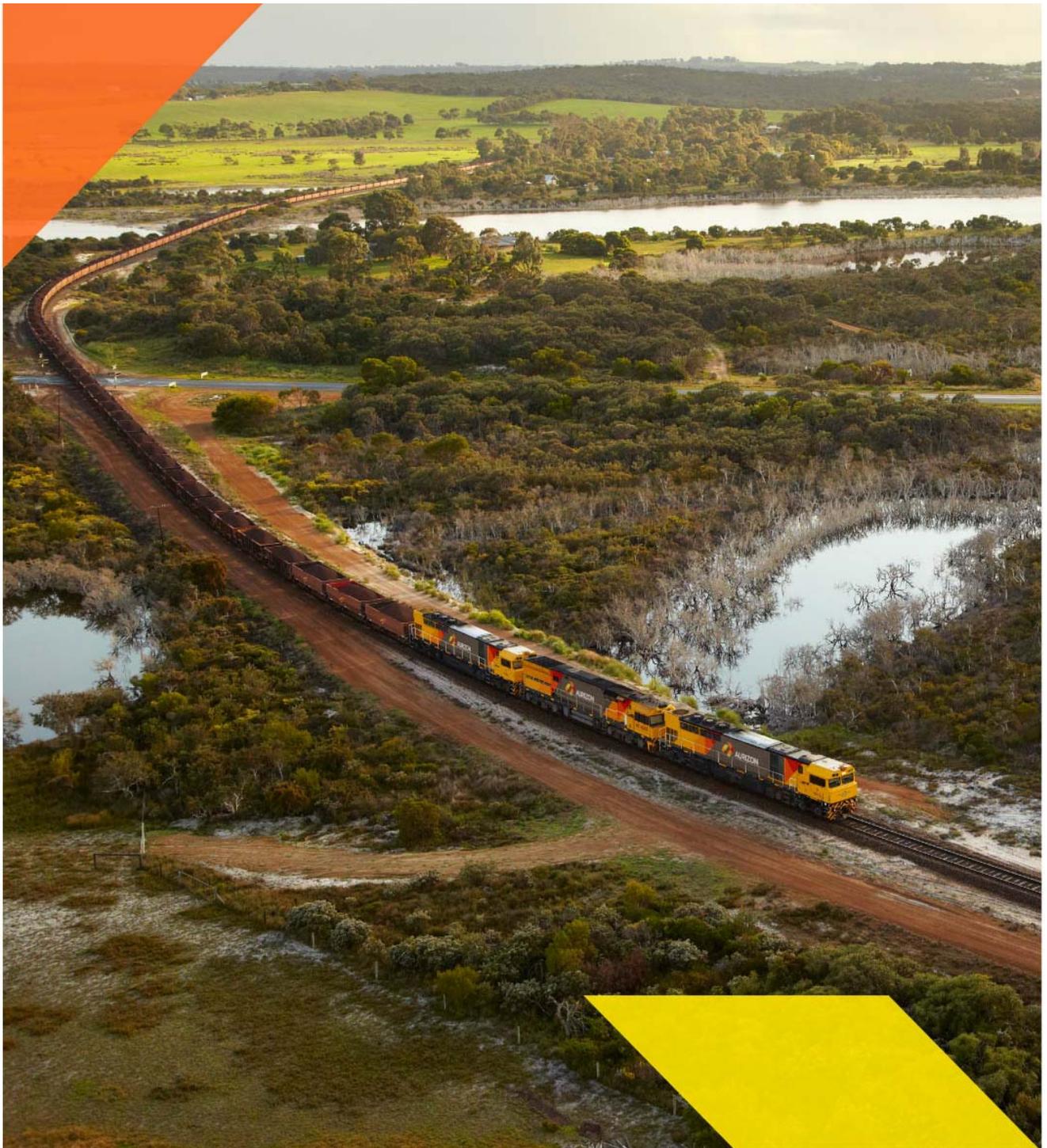


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## Aurizon Network

### Submission to the QCA – Capricornia System Rules

### Response to the QCA's Draft Decision



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# 1. Introduction

On 30 August 2011, Aurizon Network submitted to the Queensland Competition Authority (QCA) for approval the proposed Capricornia System Rules (System Rules), in accordance with clause 7.1(b) of the Access Undertaking 2010. The QCA's Draft Decision on the proposed System Rules (referred to in this submission as the Draft Decision) was released on 24 April 2013. Submissions were sought in response to the Draft Decision by 21 August 2013.

The QCA notes in its submission that they have assessed the proposed Capricornia System Rules based on the following criteria:

1. *equitable* – non-discriminatory treatment across access holders, access seekers and their customers;
2. *transparent* – provide greater detail and information on the way Aurizon Network will manage train scheduling, train control, and network capacity;
3. *consistent with Standard Access Agreements and Schedule E* – do not conflict with terms in standard access agreements; and
4. *consistent with clause 5.2(n)* – does not conflict with the terms of the Proposed Standard Access Agreements which can be entered by users of rail haulage services to be contracted directly with Aurizon Network for access rights without bearing liability and obligations for above-rail operational issues (clause 5.2(n)(i)).

The purpose of this submission is to set out Aurizon Network's views on the Draft Decision. This submission is supplemented by Aurizon Network's proposed revised drafting of the System Rules.

Aurizon Network considers that in general, the Draft Decision is broadly acceptable, and will assist in improving the System Rules. Aurizon Network has however identified some components of the Draft Decision that it considers are either not required to be included within the drafting, or do not reflect Aurizon Network's preferred processes. A detailed assessment of the Draft Decision is contained within Sections 2 to 4 of this document.

The revised Capricornia System Rules have been developed, incorporating the relevant elements of the Draft Decision. They also take into consideration, and align where possible with the drafting of the proposed Northern Bowen Basin System Rules. Aurizon Network has undertaken extensive stakeholder consultation to develop the Northern Bowen Basin rules. This stakeholder consultation has influenced the Capricornia System Rules, and as such elements of the Northern Bowen Basin System Rules have been included. This ensures that where possible, the System Rules are consistent across the central Queensland coal systems.

In this document:

- all references to the Undertaking are to the Aurizon Network 2010 Access Undertaking
- all clause and subclause references are to the Undertaking, except where otherwise indicated; and
- all defined terms are with reference to the definitions in the Undertaking, except where otherwise indicated.

## 2. Supply Chain Capacity

### 2.1 Master Train Plan

#### **Draft Decision 2.1 - Master Train plan**

*The Authority requires the draft system rules be amended such that:*

- a) they require 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 timetabled train paths and paths set aside for planned possessions, in a manner consistent with the network management principles. The train graph must show:
  - (i) 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); and*
  - (ii) the 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;**
- b) they specify that Aurizon Network will update documents on the Capricornia Coal Chain portal in a timely fashion, and notify access holders and supply chain participants whenever the documents are updated; and*
- c) access holders and other supply chain members are provided with rights to participate in the development of the planning documents, and provide that Aurizon Network will treat each access holder equitably.*

#### 2.1.1 MTP to be developed in the form of a Train Graph

Aurizon Network has previously produced and demonstrated system available capacity through the development of a Critical Asset Constraint Summary and Scheduling Constraint Summary. These documents provided a clear representation of the monthly paths available in the Capricornia Coal systems, and the paths consumed by maintenance activities. The information provided was developed to be interpreted by a broad audience.

Aurizon Network has proposed within the revised System Rules to develop an MTP in the form of a Train Graph. Currently, Aurizon Network can produce this through the long term capacity modelling tool, the Central Queensland Supply Chain Model. This MTP will be based on contractual entitlements, and a set maintenance program.

Development is currently underway on integrated Network Planning, Scheduling and Execution tool, APEX. As part of this process, Aurizon Network is considering functionality to include the provisions for demonstration of MTP's. Once implemented, it is expected that this application will be able to take into consideration Access Holder demand profiles and live Rail and Port planned asset activity to develop the MTP data.

It is anticipated that the first stage of APEX will be in place by April 2014. Following this, Aurizon Network will put in place an implementation process to use APEX to develop a more detailed MTP. This MTP will continue to be supplemented with the Scheduling Constraints Summary to provide an indication of capacity utilisation and availability for the month.

#### 2.1.2 Process for updating the MTP

Aurizon Network considers the Capricornia Coal Chain Portal is a relevant means for communicating the MTP. The portal allows users to subscribe to updates, with email updates automatically generated for updates to the MTP. Aurizon Network proposes to continue to use this means for communicating key documentation, and will ensure that documents are updated in a timely fashion.

### 2.1.3 Stakeholder Participation in development the MTP

The existing long term planning process provides key stakeholders with the opportunity to participate in the maintenance planning process. This is achieved through various stakeholder forums such as the Capricornia Coal Chain Steering Group and bi-monthly meetings with stakeholders to ensure alignment of system closures.

In addition to this, Aurizon Network has amended the System Rules to include the ability for Access Holders and Port Operators to provide demand forecasts. It should be noted that the purpose of developing the MTP is to provide a representation as to how contracted Train Service Entitlements can be used, and not necessarily reflect the particular Train Paths that Train Services will operate on. Aurizon Network will therefore consider this information when developing the MTP, and Access Holders will be provided more opportunities to request specific paths through the Intermediate Train Planning Process.

## 2.2 Paths

### **Draft Decision 2.2 – Paths**

*The Authority requires the draft system rules be amended so:*

- a) below-rail network paths and system paths conclude at RG Tanna (or any relevant future port) instead of Callemondah;*
- b) below-rail network paths begin at Burngrove, instead of Bluff, for the Blackwater system;*
- c) below-rail network paths begin at Earlsfield, instead of Dumgree, for the Moura system;*
- d) they specify the reference train service will be that described in Part B of Schedule F of the undertaking, including clause 5.2 for Blackwater trains, and clause 7.2 for Moura trains;*
- e) they specify the treatment of above-rail and below-rail delays, and their relationship to the actual dispatch intervals that are achieved on the day of operation, must be transparent and equitable;*
- f) Aurizon Network is required to report, for each month:
  - (i) how above-rail and below-rail delays have affected dispatch intervals;*
  - (ii) the number and proportion of reference and non-reference trains that have operated; and*
  - (iii) how the use of non-reference trains has increased/decreased the number of system paths available in the Capricornia coal chain; and**
- g) the definition of system paths includes above-rail dwells consistent with the reference train characteristics in the undertaking.*

### 2.2.1 Defining Network Paths

Aurizon Network considers that from Draft Decision 2.2, the QCA has misinterpreted Aurizon Network's definition of a System Path. Aurizon Network seeks to clarify how a System Path is defined within the revised drafting.

A System Path includes the sum of each of the components of the train cycle, including the Mainline Path (previously identified as the Below Rail Network Path), Port Unloading Slot, Mine Loading Slot, and contracted Above Rail Dwells. Aurizon Network has clarified the drafting to ensure the full cycle is identified, including the path from Callemondah to the relevant Unloading Slot as a component of the Port Unloading Slot.

Aurizon Network has not addressed the QCA's proposed changes to the definition of Below Rail Network Paths, as we consider these are not required. To align with the Northern Bowen Basin System Rules, Aurizon Network has included the Mainline Path concept. 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.

## 2.2.2 Reporting Requirements

The QCA's draft decision proposes a series of reporting requirements on pathing, intended to provide transparency on how capacity is being consumed in the system. Aurizon Network considers that the intent of the System Rules is to provide a process for allocating capacity, not a system-wide measurement of capacity. Aurizon Network considers that there are various other mechanisms where this reporting is provided, and the requirement to report within the System Rules may lead to duplication of reports:

- Aurizon Network and Access Holders are required to negotiate Key Performance Indicators (KPIs) as part of the standard Access Agreement. Aurizon Network considers it more appropriate for reporting on above and below rail delays to be included within KPI reporting as negotiated between the parties.
- Supply Chain Operating Assumptions are developed and reviewed annually to review and determine any changes to Reference Train Characteristics.
- Aurizon Network also undertakes quarterly and annual reporting as per the requirements of Part 9 of the Access Undertaking.

In addition, the QCA's Draft Decision 2.2 cites the requirement to report on how the use of non-Reference Train Services has affected the number of System Paths available in the Capricornia Coal System. The QCA has indicated that this requirement is to drive the most efficient use of the network.

Whilst efficiencies may be made through the use of a standard consist, Aurizon Network does 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. If available, an Access Agreement will be negotiated accordingly. The Access Holder will also be required to contribute to the cost of the additional infrastructure it is utilising through the calculation of adjusted Access Tariffs in accordance with Section 3, Part A of Schedule F in the Access Undertaking.

Aurizon Network therefore considers that reporting on any additional capacity a non-reference train service is not required as part of the System Rules. The System Rules detail how contractual rights will be allocated available capacity, including where these contractual rights are for the operation of a non-reference train service, and are not intended to measure system capacity. Aurizon Network considers that such analysis is better placed within the assessment of Supply Chain Operating Assumptions, and may consider an analysis as part of this process.

## 2.3 Scheduling Constraint Summary

### ***Draft Decision 2.3 - Scheduling constraint summary***

*The Authority requires the draft system rules be amended so:*

- a) *they detail how Aurizon Network will undertake the consultation process relating to:*
  - (i) *unplanned maintenance; and*
  - (ii) *amendments to scheduled maintenance that affect an access holder's TSE in a way which is not consistent with terms of the relevant access agreement; and*
  
- b) *the scheduling constraint summary includes:*
  - (i) *details on locations and times of any planned disruptions;*
  - (ii) *reasons for any changes to the 21-day maintenance lock-down period;*
  - (iii) *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; and*
  - (iv) *the maintenance multiplier figure to be applied each week.*

### 2.3.1 Consultation for unplanned maintenance

Aurizon Network has included a new process (Section 7.3 of the System Rules) to provide further detail on the consultation process for changes to possessions. It is proposed that the 4 Hourly Phone Hook-Up be used to communicate any changes, or as required. This process is intended to supplement the existing consultation requirements within Schedule G of the Access Undertaking for consultation on changes, providing the mechanism for this consultation to occur.

### 2.3.2 Scheduling Constraint Summary Inclusions

Aurizon Network has made amendments to the System Rules to specify the majority of the inclusions within the Scheduling Constraint Summary as proposed within Draft Decision 2.3. Aurizon Network has not included the requirement for a contingency plan. Aurizon Network considers that a contingency plan is more relevant for each of the Railway Operators. The Railway Operators should be developing these rather than Aurizon Network. In relation to communication protocols for the early / late return of a possession, this process has been included in Section 7.3 of the System Rules as outlined above.

## 2.4 Maintenance Multiplier

#### **Draft Decision 2.4 – Maintenance Multiplier - Transparency**

*The Authority requires the draft system rules be amended so the description of the maintenance-multiplier clearly indicates how:*

- a) the maintenance multiplier will be applied to nominal weekly train service entitlement (i.e. 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; and*
- c) Aurizon Network will provide access holders with paths, in accordance with the Contested Train Path Decision-making process in the network management principles, to make up for the portions of their monthly TSEs (which have already been adjusted to account for planned maintenance activities in that month) it is unable to deliver due to an Aurizon Network Cause (as defined in the undertaking).*

#### **Draft Decision 2.5 - Maintenance Multiplier - Flexibility**

*The Authority requires the draft system rules be amended so the description of the process for calculating and applying the maintenance multiplier indicates:*

- a) how constraints that affect access holders' abilities to manage the maintenance-multiplier approach will be accounted for in calculating the maintenance multiplier; and*
- b) that Aurizon Network will not have the scope to change activities included in the 21-day maintenance lock-down period unless any proposed changes are allowed for under schedule G, Part A, 4.(d)(iv) in the network management principles.*

### 2.4.1 Transparency and Flexibility of Maintenance Multiplier

Aurizon Network has amended the System Rules to include further clarification around the Maintenance Multiplier, as proposed within the Draft Decision. Aurizon Network has updated the calculations for the Maintenance Multiplier, to provide a clear process for the calculations, and how they are applied to each Access Holders TSEs. TSE. In doing so, Aurizon Network provides the opportunity for Access Holders to request higher Train Orders on days where no maintenance is planned to account for reduced pathing on maintenance days.

In relation to Draft Decision 2.4(a), Aurizon Network has used the Maintenance Multiplier to generate an Adjusted Weekly Entitlement. To reach this figure however, the Maintenance Multiplier cannot be applied directly to the nominal weekly TSE. The Maintenance Multiplier is a ratio calculation that is applied evenly across the month, and then multiplied by the days of the week.

In relation to Draft Decision 2.5 (b), Aurizon Network considers that the Access Undertaking provides many other circumstances where a change to planned possessions can be modified within the DTP. As an example, Schedule G, Part A, 4(d)(v) provides for Aurizon Network to request a change to scheduled Train Services to accommodate Emergency Possessions. Aurizon Network has therefore not included drafting as suggested in Draft Decision 2.5 (b) as it is inconsistent with the Access Undertaking. Accordingly, Aurizon Network will continue to manage the scheduling and alterations of Possessions in accordance with Schedule G of the Undertaking. Aurizon Network has however included a new section (Section 7.3) within the System Rules to provide the process for communicating alterations to Possessions.

## 3. Train Scheduling

### 3.1 Scheduling and Network Management Principles

#### **Draft Decision 3.1**

*The Authority requires the draft system rules to be amended such that:*

- a) access holders not providing written acknowledgement of receiving the weekly train plan (i.e. WTP) to Aurizon Network does not translate to the access holder's train orders being rejected; rather, it means the orders will be processed as the WTP indicates;*
- b) end users (via the End User Access Agreements in the alternative SAAs) can re-appoint above-rail operators to undertake the relevant train order scheduled in the WTP, provided they give Aurizon Network at least two business days' notice. Aurizon Network must accept this request when the relevant conditions in the End User Access Agreement are satisfied; and*
- c) they clarify the meaning of a 'best-endeavours basis' when accommodating variations to requested train services in the WTP.*

#### **Draft Decision 3.2**

*The Authority requires the draft system rules to be amended such that:*

- a) the use of the Contested Train Path Decision-making Process is consistent with the relevant description in the network management principles of the undertaking;*
- b) they clearly set out the process for the interaction between GPC and Aurizon Network for scheduling trains through the port unloading slots;*
- c) Aurizon Network must supply reasons (within confidentiality requirements) for outcomes arising from the Contested Train Path Decision-making Process and the scheduling process more generally;*
- d) the process for assessing whether an operator's scheduled below-rail transit time (including time for above-rail dwells and storage) exceeds the time specified in the undertaking and relevant access agreements (i.e. the section run times plus below-rail transit time allowances), is clearly documented and significant decisions recorded;*
- e) the WTP indicates whether an access holder's train orders are considered by Aurizon Network to be contracted TSE, additional contracted TSE or ad hoc services; and*
- f) cyclic train services destined for export terminals obtain the same scheduling priority as domestic cyclic services destined for power stations, as specified in the network management principles.*

#### 3.1.1 Schedule Acceptance and Variation

Aurizon Network has amended the Capricornia System Rules as described within Draft Decision 3.1. Some of these changes include:

- Changes to the process of acknowledgment and acceptance process of the Intermediate Train Plan to streamline requirements
- A new process detailing how Aurizon Network will process requested Rail Operator alterations for Access Holders contracting access rights under an End User Access Agreement.

- Amendments to ensure the Contested Train Path Decision Making Matrix is consistent with the description within the Network Management Principles of the Access Undertaking.
- Reasoning will be provided to Access Holders around the outcome of a contested path

Aurizon Network has however not included the process for assessing whether an operator's scheduled below rail transit time exceeds the time specified in the undertaking and relevant access agreements. The QCA's Draft Decision notes Above Rail dwells should be considered as part of this process. Aurizon Network considers this incorrect, as Above Rail activities do not form part of the Below Rail Transit Time definition. More so, Below Rail Transit Time is determined as a yearly average across each system. 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 BRTT, 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.

## 3.2 DTP and Day of Operation Issues

### **Draft Decision 3.3**

*The Authority requires the draft system rules to be amended such that:*

- 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 in which the diagrams are printed; and*
- 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.*

### **Recommendation 3.4**

*The Authority requires the draft system rules to be amended such that:*

- a) an access holder's cancelled system path in the day of operation will not be recorded as TSE consumption against that access holder if another access holder is able to order and use the below-rail network path that was associated with the original system path;*
- b) above-rail dwells be clearly defined and consistent with the relevant definitions in the undertaking and access agreements.*

### **Draft Decision 3.5**

*The Authority requires the draft system rules be amended such that they include a clear set of principles and coal supply objectives that will be applied in assessing whether a solution is best for the supply chain as a whole.*

*These principles and objectives must be consistent with the undertaking, including the network management principles.*

### 3.2.1 DTP Progression

Aurizon Network has made amendments to the System Rules to reflect a more timely manner of providing Access Holders with their DTP. Throughout the week, Access Holders will have access to the Network Operations Path Planning (NOPP) tool, providing up to date information on what services have been scheduled, and their proposed operational times. Access Holders will receive the finalised DTP through electronic means as it is published.

### 3.2.2 Day of Operation Cancellations

Within its Draft Decision, the QCA indicates Aurizon Network's proposed consumption of TSEs due to cancellations within 48hrs of operation does not promote the most efficient use of the infrastructure. The QCA has suggested that by removing any penalties associated with cancelling a service (where the path can be

taken up by another party) promotes the Access Holder to cancel train services as soon as it is aware that the path is not required, and that this practice may reduce hoarding. Aurizon Network does not consider that the proposed changes can be accommodated. Rather, Aurizon Network has retained the position that where a Train Service is cancelled within the 48hr Lockdown, the path will be deemed as consumed for scheduling purposes.

The QCA cites that more efficient use of the network can be achieved by promoting earlier cancellation of services where the Access Holder does not intend for the Train Service to operate. Whilst Aurizon Network agrees with this concept, Aurizon Network's original approach to achieve the same outcome remains within the drafting.

Aurizon Network considers it reasonable that an Access Holder would have sufficient information, prior to the 48hr Lockdown, on whether they require a scheduled service. Cancellations prior to the 48hr Lockdown provide other Access Holders with sufficient time to schedule additional services. 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.

### 3.2.3 Coal Supply Chain Objectives

Aurizon Network has included a set of Supply Chain Objectives within Section 4.2 of the System Rules. These objectives have been developed to achieve maximum throughput through the system, whilst ensuring equitable distribution of paths. Aurizon Network considers that this can be achieved by scheduling services according to contractual obligations, alignment (where possible) to port shipping requirements, and to minimise Below Rail Transit Time. Aurizon Network will use these objectives when scheduling Train Services, and as overarching decision making objectives.

## 3.3 TSE Determination and Consumption

### **Draft Decision 3.6**

*The Authority requires the draft system rules to be amended such that:*

- a) rounding assumptions for nominal weekly (and daily) TSE levels and how monthly TSEs are calculated are explicit;*
- b) there is a process in place to provide additional paths to access holders for TSEs not delivered in a particular month due to any Aurizon Network Cause, consistent with the Contested Train Path Decision-Making Process in the network management principles;*
- c) Aurizon Network clearly explains how the allowance for system variability is applied across access holders; and*
- d) there is a mechanism in place to provide additional paths to access holders for paths lost due to emergency and urgent possessions arising from an Aurizon Network Cause.*

### **Draft Decision 3.7**

*The Authority requires the draft system rules to be amended such that:*

- a) it is explicit when a TSE is deemed by Aurizon Network to be consumed; and*
- b) it is clearly specified that access agreements are based on monthly TSEs, and that take-or-pay obligations relate to annual TSE performance.*

### 3.3.1 TSE Determination

Aurizon Network considers that the System Rules can be improved to provide more clarity around the process for determining TSE Obligation. This has been incorporated into the drafting as follows:

- rounding assumptions have been included within Section 3.2

- in accordance with the Contested Train Path Planning Process, path allocation priority is provided to services where Aurizon Network is behind in providing their Train Service Entitlements due to an Aurizon Network Cause (i.e. Planned, Emergency or Urgent Possessions, Force Majeure Events).
- the Maintenance Multiplier acts to ensure Access Holders have the opportunity to request their total Train Service Entitlements across the month, taking into consideration maintenance closures.

Aurizon Network has however not included specific details on how system variability is applied across Access Holders. System 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.

### 3.3.2 TSE Consumption

Aurizon Network recognises that further clarification was required around specific TSE consumption rules. Accordingly, a new section (Section 7.4) has been inserted into the System Rules. This section provides clear rules around how TSEs are consumed, and provides a matrix to for clear distinction on the number of TSEs to be consumed.

## 4. Dispute Resolution and other matters

### 4.1 Scheduling and Train Control Disputes

#### **Draft Decision 4.1**

*The Authority requires that the draft system rules be amended to increase the period of consideration for reviewing causes of delays and cancellations to be at least two train cycles.*

#### 4.1.1 Delay and Cancellation Cause Analysis

Aurizon Network accepts the recommendation to extend the period of consideration for reviewing causes of cancellations by at least two train cycles. Aurizon Network has amended the System Rules accordingly, to provide a 48hr window for review and determination of cancellations. In addition to this, a dispute resolution process has been inserted to enable a clear process for considering cancellation causes.

Aurizon Network has however maintained its position on assessing delay causes to reviewing incidents that occurred on or after the commencement of train services. Aurizon Network considers this a relevant measure due to the reallocation of paths that would occur prior to the service operating. For example, if a disruption occurred on the network prior to a service commencing its cycle, Aurizon Network will readjust the schedule to account for this disruption. The Train Service is considered 'on-time' where the service has been provided a new path. Under this example, any new disruptions that cause delays to the service after it has commenced its cycle, the Train Service will be considered and delay causes attributed.