

# Aurizon Network System Rules Central Queensland Coal Network

Attachment B -

All Changes to

System Rules

# Preamble

The Aurizon Network System Rules (**System Rules**) provide additional details of the processes and systems used to plan and schedule Train Services in Aurizon Network's Central Queensland Coal Network (**CQCN**).

The System Rules are an important tool for Aurizon Network to transparently demonstrate the equitable allocation of Access to the CQCN in accordance with Access Agreements. The System Rules also fulfil Aurizon Network's regulatory obligations and are an ancillary document to Aurizon Network's Access Undertaking 2017 (Access Undertaking).

These rules have been developed in consultation with our Customers, Ports and other CQCN Stakeholders with the objective of balancing the need for train ordering flexibility and the certainty of disciplined scheduling rules.

Following significant industry consultation, changes to Aurizon Network's planning and scheduling processes are proposed to be trialled across the CQCN for an approximate 7-month period commencing on or around 1 July 2024 (**Daily Rolling Plan Project**). The required amendments to enable this are reflected in the drafting of these System Rules. The previous System Rules (which came into effect on 5 December 2022) have been retained at Appendix 1 to allow for a reversion (if required) in accordance with the agreed conditions of the Daily Rolling Plan Project outlined in section 1.2 of these System Rules.

The System Rules are a baseline to facilitate Aurizon Network's strategy of continuous improvement of the planning and scheduling function. They are periodically reviewed in accordance with the provisions of the Access Undertaking.

Readers should refer to Section 6.0 of this document for definitions to ensure correct interpretation of these System Rules.

# Table of contents

01	
Introduction4	
1.1 Context	
1.2 Governance and transition	
1.3 Key Interfaces	
1.4 Communications	
1.5 Train Cycle Components	
02	
02.	
Integrated Rail Planning & Intermediate Train Planning Processes	
2.1 Timeframes	
2.2 Planning considerations	
2.3 Scheduling horizon	
03	
03.	
Daily Train Plan	
$()4_{-}$	
Cabadula Alterationa 1215	
Schedule Alterations	
4.1 Schedule alteration rules	
4.2 Scheduled alterations for Possessions	
05	
00.	
Plan Implementation	
5.1 Train Control and operations procedures	
5.2 Performance Measurement	
06	
Definitions and Interpretation	

# 01. Introduction

## 1.1 Context

The System Rules for the CQCN are an ancillary document to the Access Undertaking. They provide accompanying detail to the Network Management Principles contained within Schedule G of the Access Undertaking, describing the planning and scheduling processes for Train Services in the CQCN.

Figure 1 below sets out Aurizon Network's train planning process, identifying each discrete process and respective time horizon.

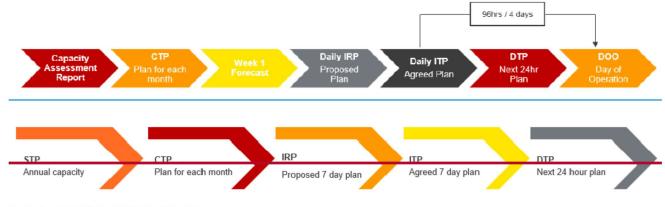


Figure 1:- Aurizon Network train planning process

The System Rules relate directly to the following planning processes:

- Integrated Rail Plan (IRP)
- Intermediate Train Plan (ITP)
- > Daily Train Plan (DTP)

Aurizon Network publishes a number of documents that provide information about system operating parameters and long-term planning within the CQCN. Those which directly relate to the Train planning process are as follows.

- System Operating Parameters
- Capacity Assessment Report
- Strategic Train Plan (STP)
- Capability Train Plan (CTP)

These documents are made available at www.aurizon.com.au/what-we-deliver.

## 1.2 Governance and Transition

The System Rules have been developed in accordance with and are governed by the Access Undertaking<sup>1</sup>.

Following the approval of these System Rules for the CQCN by the Queensland Competition Authority (**QCA**), Aurizon Network will put in place a change management process and proposed timeframes for implementation. Supply Chain Stakeholders will be given a summary of their responsibilities under the System Rules via email. These System Rules will apply to all Train Services operating in the CQCN.

The approved System Rules (as amended from time to time) for the CQCN are made available at <u>www.aurizon.com.au</u>.

### Daily Rolling Plan Trial

These System Rules will be used for the Daily Rolling Plan Project and will apply to all Train Services operating in the CQCN on an initial trial basis (**Trial**) for an approximate 7-month period (unless ended earlier by vote) commencing on or around 1 July 2024 (**Trial Period**). It is acknowledged that the Daily Rolling Plan Project is a Trial, and that subsequent changes to the planning processes may be necessary throughout the Trial Period. Such changes will be communicated to and consulted on with stakeholders as required throughout the Trial Period.

These System Rules will remain in effect unless Train Operators and End Users (**Voting Parties**) vote to discontinue the Trial in accordance with the Voting Methodology. The existing System Rules which are contained in Appendix 1 will apply to all Train Services operating in the CQCN with effect on and from the second Monday after the relevant Voting Date should the Voting Parties vote to discontinue the Trial.

During and immediately after the Trial Period, the Voting Parties will be asked to cast votes to determine whether the Trial should be discontinued. These votes will occur in two initial tranches, the first being at least three months after the Trial Period commences (**First Voting Date**) and the second being seven months after the Trial Period commences (**Second Voting Date**), and at any other time during the Trial Period as determined by Aurizon Network or the Chair of the Rail Industry Group (**RIG**) (together the **Voting Dates**). The following Voting Methodology will be used:

### **Voting Administration:**

- The vote will be conducted electronically via a third-party survey website (Survey Monkey). Should
   <u>Affected Parties be unable to utilise the third-party website, votes can be sent to Aurizon Network via
   email at Access.Services@aurizon.com.au.
  </u>
- Votes must be cast by 5pm (AEST) on the relevant Voting Date. Voting will open for five (5) Business
   Days prior to the relevant Voting Date.
- Evidence of votes cast will be maintained and distributed to all Affected Parties.
- Determination of whether or not to discontinue the Trial will be based on the Voting Calculation below.

### Voting Rationale:

- End User votes are weighted by contracted Train Paths and normalised by Coal System to ensure all three Port Precincts have proportional voting rights (in aggregate).
- Train Operators are weighted by the number of Coal Systems for which they hold Access Rights under Access Agreements and/or Train Operations Deeds.
- The Chair of the RIG will advise Aurizon Network that a vote is required only if a Majority of End Users
   <u>have requested a vote. The Majority of End Users will be as defined in the Access Undertaking and
   based on item (b) of the definition (i.e. network rather than system vote). Voting Rights will be based on
   the latest information available from the Independent Expert.
  </u>
- The Voting Threshold is the level of votes cast in favour of discontinuing the Trial that must be received by the relevant Voting Date (**Voting Threshold**). The Voting Threshold may be met by either:
  - the Voting Rights cast as a percentage of the total Voting Rights of all Voting Parties, or;
  - the number of End User votes cast expressed as a percentage of the total number of End Users.
- The Voting Threshold is higher on the First Voting Date to require a strong vote to discontinue the Trial. <u>The Voting Threshold for the Second Voting Date will be lower.</u>
  - First Voting Date Voting Threshold: 70%
  - Second Voting Date Voting Threshold: 60%

• At any other Voting Date during the Trial Period as advised by Aurizon Network or the Chair of the RIG – Voting Threshold: 60%

### **Voting Calculation:**

A Voting Party's Voting Rights will be calculated in the following way:

- Per Coal System, each End User is weighted according to their FY25 contracted Train Paths in that Coal System (calculated as at the date just prior to 5 Business Days before the relevant Voting Date). For clarity:
  - Cross system Train Paths will be allocated to the system in which the Destination is located.
  - The Destination within a Port Precinct defines a Coal System. For example, any Train Paths with a Destination of RG Tanna, Wiggins Island, all domestic Destinations, will be classified under "Blackwater or Moura" for the purposes of the Voting Calculation.
- Each Coal System is weighted evenly by Port Precinct (i.e. 1/3 each).
- The End User volume in each Coal System is then normalised based on the Coal System weighting.
- End Users and Train Operators have a weighting split of 80% and 20% respectively.

A Voting Party's Voting Rights will be calculated by Aurizon Network using the following formula (Voting Rights):

 $End \ User \ Voting \ Rights \ = \frac{[EU.GY \times Norm.GY] + [EU.NLGP \times Norm.NLGP] + [EU.BWMR \times Norm.BWMR]}{TP} \times 0.80$ 

System Normalisation = 
$$\left[\frac{1}{3}\right] / \left[\frac{TSP}{TP}\right]$$

Where:

- EU.[System] = FY25 End User Train Paths in each of the Goonyella [GY], Newlands or GAPE [NLGP], and Blackwater or Moura [BWMR] Systems
- Norm.[System] = System Normalisation
- <u>TSP = Total System Paths</u>
- <u>TP = FY25 Total Paths</u>

$$Train Operator Voting Rights = \frac{[TO, GY] + [TO, NLGP] + [TO, BWMR]}{\sum TO.All} \times 0.20$$

Where:

- TO.[System] = 1 if Train Operator utilises that system, 0 if Train Operator does not utilise that system for each of the Goonyella [GY], Newlands or GAPE [NLGP], and Blackwater or Moura [BWMR] Systems
- ΣΤΟ.All = Sum of all Train Operator System Allocation

### **Cost Recovery**

 If the vote on the Second Voting Date to discontinue the Trial is not passed, and therefore these System Rules remain in effect and form part of business as usual operations, any forecast incremental costs that are not within Aurizon Network's existing operating allowance may be submitted to the QCA for prudency review through a Draft Amending Access Undertaking (DAAU). Aurizon Network will provide information to End Users and Train Operators on the forecast incremental costs prior to the Second Voting Date.

In addition to the performance metrics outlined in section 5.2 of these System Rules, as agreed with Affected Persons as part of the System Rules consultation required under clause 7A.7.4 of UT5, the following metrics will be reviewed and reported on periodically during the Trial Period, and may be used by Aurizon Network to determine the requirement for a Voting Date:

Category	Metric	
<u>Stable and</u> Robust Plan	<u>Performance</u> to Plan (P2P)	Measures the performance of Day of Operations (DOO) compared to the plan that was produced for that day.
<u>Stable and</u> Robust Plan	<u>Planning</u> <u>Stability and</u> <u>Decay</u>	Measures the performance of order vs execution at each snapshot phase (# services), and loss causation.
<u>Stable and</u> Robust Plan	Schedule Alteration	Measures the amount, frequency, timeline and impact of schedule alterations (deviations, cancel/additional).
Improved Response to Variability	<u>Forecast</u> <u>Reliability</u>	Measures executed services against Week 1 forecast on a weekly basis to determine forecast efficiency and reliability.
Supply Chain Performance	Throughput	Billed tonnes.
Supply Chain Performance	Cycle Time	Measures cycle time performance by IRP, ITP, Scheduled and Actual timeframes.
Supply Chain Performance	<u>Capacity</u> <u>Utilisation</u>	Measures the utilisation of capacity by Ordered, Agreed, Scheduled and Executed services. Provides insight into demand signal and maintenance opportunity utilisation.
Supply Chain Performance	Fleet Utilisation	Measures the utilisation of Train Operator fleet through the IRP.
Supply Chain Performance	<u>Empty</u> <u>Wagons</u>	Measures the quantity of empty wagons for each service.
Stakeholder	Stakeholder sentiment	Measures the stakeholder satisfaction with the process change.

# 1.3 Key Interfaces

L

I

The following table outlines key interfaces for train operations at Aurizon Network.

Key Interface	Key Interface Responsibility
Head of Planning, Scheduling and Control	Responsible for supporting the delivery of contracted tonnages across the CQCN
Integrated Rail Planning Manager	Management of operational integrated planning from IRP to the ITP
Integrated Rail Scheduling Manager	Responsible for the rolling <del>96 hour<u>3</u>-day</del> schedule and development of the DTP
Manager Train Control	Responsible for execution of the DTP

# 1.4 Communications

The planning and scheduling process generally requires the exchange of information between Aurizon Network and Train Operators and Infrastructure Service Providers. The form of this communication is subject to change as process, systems and technological improvements are made.

Prior to making changes to the form and method of communication under these System Rules, Aurizon Network will consult and obtain agreement from relevant Train Operators and Infrastructure Service Providers where such agreement cannot be unreasonably withheld.

# 1.5 Train Cycle Components

A Train Cycle is composed of several components as detailed below. For the avoidance of doubt, the System Rules applies to the entire Train Cycle.

### **Mainline Paths**

Mainline Paths are determined based on the runs (both empty and loaded) between:

- Callemondah and Bluff for the Blackwater System<sup>2</sup>;
- Callemondah and Dumgree for the Moura System;
- Jilalan and Coppabella for the Goonyella System; and
- Pring and Collinsville for the Newlands System.

Aurizon Network will provide information on how it calculates dispatch intervals to Train Operators, Access Holders and Access Seekers requesting such information.

### Port Unloading Slot

The time at an unloading facility for a Train Service is contained in the relevant Access Agreement. The time at the unloading facility is inclusive of unloading time and time taken for pre and post unload activities (**Port Unloading Slot**).

Port Unloading Slots are determined by the Port Operator and are based on the sustainable capability of the unloading facility. Aurizon Network schedules Train Services to align with these Port Unloading Slots.

### **Mine Loading Slots**

Arrival slots at a mine for a Train Service are based on the recharge capability of the loadout for the mine, and the number of Train Services that can be loaded per day (**Mine Loading Slot**).

Aurizon Network will schedule Train Services to align with these Mine Loading Slots from the Mainline Path to the relevant mine loadout.

### Dwells

The dwells for a Train Service are taken into account and included in the cycle time for that Train Service and consequently in the scheduling process. The dwell may include provisioning activities, crew changes, meal breaks, maintenance, and examination of the Train. Specific dwells are identified in the Access Agreement and Operating Plan for the Train Service.

### **Reference Train Service**

<sup>&</sup>lt;sup>2</sup> Mainline Path comprises the path between Callemondah and Kabra and the path between Kabra and Bluff Aurizon Network's System Rules – Central Queensland Coal Network – effective <u>5 December 2022DD MMM 2024</u>

Aurizon Network's assumptions for pathing arrangements rely on, among other things, the characteristics of the Reference Train Services as specified in Schedule F of the Access Undertaking.

# 02. Integrated Rail Planning & Intermediate Train Planning Processes

The Intermediate Train Plan (**ITP**) is produced by Aurizon Network in consultation with Train Operators and in accordance with the Access Undertaking<sup>3</sup>. The ITP is the process by which Train Operators submit Train Orders and Aurizon Network allocates Train Paths to the Train Orders in accordance with the timeframes set out in the Access Undertaking and these System Rules.

Integrated Rail Planning (IRP) is a supplemental process that uses optimisation-based planning technology to develop plans using weekly demand assumptions and other relevant planning inputs provided by the Train Operators. Acceptance of the IRP by Train Operators is voluntary. Where the IRP is fully accepted by all Train Operators, it forms the basis of the draft ITP. Where the IRP is not unanimously accepted by all Train Operators, any resulting Train Cycle conflicts will be resolved using the Contested Train Path principles set out in clause 8.3(a) of Schedule G of the Access Undertaking.

In the event the Integrated Rail Planning process cannot be completed for any <u>24-hour period commencing at</u> <u>00:00 hours and ending at 23:59 hours on the DOO (Relevant Period)</u>, Aurizon Network will notify Train Operators that no IRP will be published for that Relevant Period and Aurizon Network will proceed with drafting the ITP per the ITP Timeframes detailed below.

The Week 1 Forecast is another supplementary process produced by Aurizon Network in consultation with Train Operators. The Week 1 Forecast sets throughput expectations for the entire Supply Chain for the following week. The inputs to the Week 1 Forecast are not considered as comprising a Train Order, and the output is non-binding.

# 2.1 Timeframes

The relevant forms and contact details, as updated from time to time, are available on the Aurizon Network Customer Portal at <u>www.aurizon.com.au/portals/existing-customers</u>.

It is the responsibility of the Train Operator to coordinate relevant planning inputs with their Customers-(if any).

### Week 1 Forecast

- Aurizon Network collates load point, dump station and track possession maintenance data which is provided to Train Operators by 16:00 hours on the Monday prior to the seven day period commencing at 00:00 hours the following Monday (Week 1 Forecast Period).
- Train Operators must submit forecast demand and consist availability to Aurizon Network by 16:00 hours on the Tuesday prior to the next Week 1 Forecast Period.
- Aurizon Network will develop and distribute the Week 1 Forecast to Train Operators and relevant stakeholders on or before 16:00 hours on the Wednesday prior to the next Week 1 Forecast Period.

Day	Ţ	ime	Ne	twork Actior	n	Data Share	Operato	r Action	Data Shar		Producer Ac	tion
TBD	T	BD					Receives Fore	ecast Deman	d ←	Supp	olies Forecast	t Demand
Monday	1	600	Distribu	ite Network Ir	nputs	$\rightarrow$	Receives Ne	etwork Inputs				
Tuesday	1	600		Forecast Der perator Inputs		←	Supply Forect Operate	ast Demand or Inputs	8.			
Tuesday	1	600	Ru	ins Optimiser	r							
Wednesday	1	600	Distribute	s Forecast O	utcome	$\rightarrow$	Receives Fore	ecast Outcom	ie /	Rece	ives Forecast	t Outcome
						1						
Week 1 Forecast	Development							Week	1 Forecast I	Period		
Mon Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun

Figure 2: Week 1 Forecast

### IRP Timeframes Rolling Daily IRP

- Aurizon Network collates load point, dump station and track possession maintenance data which is provided to Train Operators by 15:00 hours on the Monday prior to the next Relevant Period of operation. The IRP is developed daily for a period of one day, four days in advance of the DOO (i.e. the IRP is developed on day 0 for the service departing on day 4).
- To allow for the most efficient use of the optimisation tool there is an optimisation window which includes the service departure day (day 4) and the following two days (days 5-6). Services planned within the optimisation window are subject to (and likely to) change with subsequent optimisations.
- > On day 0 (being four days prior to the day of service operation):
  - Train Operators are tomust submit demand assumptions<sup>4</sup> and other relevant planning inputs for the next Relevant Period to Aurizon Network by 1709:00 hours; on the Tuesday prior to the next Relevant Period of operation.
  - o Aurizon Network will publish the IRP for all coal systems across the CQCN by 12:00 hours; and
  - Train Operators will inform other Train Operators and Aurizon Network whether they accept the IRP for each coal system by 12:30 hours.
- Where required (and subject to obtaining agreement from Train Operators in the relevant Coal System) Aurizon Network may need to extend these timeframes.
- Aurizon Network may require Train Operators to adjust demand to reflect capability through consultation and where required for the purpose of managing optimisation processing time

#### >\_\_\_

- On or before the Wednesday prior to the next Relevant Period of operation:
  - o Aurizon Network will publish the IRP for all systems across the CQCN by 10:00 hours;
  - Train Operators will inform other Train Operators and Aurizon Network whether they accept the IRP for each system by 11:00 hours; and
  - Train Operators may submit substitution requests (i.e. replacing 'Train Cycle A' from the IRP with another 'Train Cycle B') to Aurizon Network by 14:00 hours.

<sup>&</sup>lt;sup>4</sup> Train Operators can prioritise their demand assumptions by modifying their inputs to occur at or below the Aurizon Network tiered contract position (which, similar to the Contested Train Path principles contained in Schedule G of the Access Undertaking, is based on factors such as year to date and/or month to date contract utilisation). Aurizon Network's System Rules – Central Queensland Coal Network – effective <u>5 December 2022DD MMM 2024</u>

Day	Time	Network Action	Data Share	Operator Action
Day -1	1600	Distribute Network Inputs	$\rightarrow$	Receives Network Inputs
Day 0	0900	Receives Demand & Operator Inputs	←	Supply Demand & Operator Inputs
Day 0	0930	Runs Optimiser		
Day 0	1200	Distributes IRP	$\rightarrow$	Receives IRP
Day 0	1230	Receives Acceptance/Rejection	←	Provides Acceptance/Rejection of IRF
	Acce	ptance produces ITP. If IRP rejected, see ITP proc	ess	

IRP Developed	Schcduling Process			ITP Service Depart	Optimisatio	on Window
Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6

Figure 3: Rolling Daily IRP

### ITP TimeframesRolling Daily ITP

- The ITP is developed daily for a period of one day, four days in advance of the DOO (i.e. the ITP is developed on day 0 for the service departing on day 4).
- On the Wednesday prior to the next Relevant Period of operation day 0 (being four days prior to the day of service operation);
  - -Train Operators will submit Train Orders (via Journey Order Request (JOI) files) to Aurizon Network by <u>1413:300</u> hours. Should a Train Operator require Stowage for a Train, a Stow Location Request form must also be submitted;
  - Aurizon Network will compile the draft ITP using the IRP Rights and Obligations detailed in section 2.2 of these System Rules and, where necessary to determine the allocation of any Train Cycle conflicts, apply the Contested Train Path principles set out in clause 8.3(a) of Schedule G of the Access Undertaking:
  - <del>.</del>

• On the Thursday prior to the next Relevant Period of operation;

- Aurizon Network will provide the draft ITP to Train Operators by <u>1416</u>:00 hours;
- Train Operators may submit change requests (i.e. modifying components of a Train Order) to Aurizon Network by <u>1516</u>:00-30 hours;
- o Aurizon Network will incorporate final agreed alterations and distribute the final draft ITP;
- Train Operators will receive the ITP and provide acknowledgement of receipt by <u>1617</u>:00 hours; and
- The ITP is deemed accepted at <del>1617</del>:<del>30-15</del> hours.

Day	Time	Network Action	Data Share	Operator Action	Data Share	Producer Action
Day 0	1330	Receives ITP Request	$\leftarrow$	Provide ITP Requests		
Day 0	1430	Produces Clash Summary	$\rightarrow$	Receives Clash Summary		
Day 0	1500	Receives alterations requests to remedy clashes	~	Rectifies Clashes		
Day 0	1530	Apply Contested Train Paths principles	$\rightarrow$	Receives CTP outcomes		
Day 0	1600	Publish Draft ITP	$\rightarrow$	Receives Draft ITP		
Day 0	1630 – 1700	Process alterations (reasonable endeavours)	$\leftrightarrow$	Requests any alterations to Draft ITP		
Day 0	1700	Receives acknowledgement & acceptance	←	Provides acknowledgement & acceptance		
Day 0	1715	ITP is deemed agreed	$\rightarrow$	Receives agreed ITP	$\rightarrow$	Receives agreed ITI

ITP Developed	Scheduling Process			ITP Service Depart	Optimisati	on Window
Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6

Figure 4: Rolling Daily ITP

The following flow chart (Figure 2) provides an overview of the IRP and ITP processes.

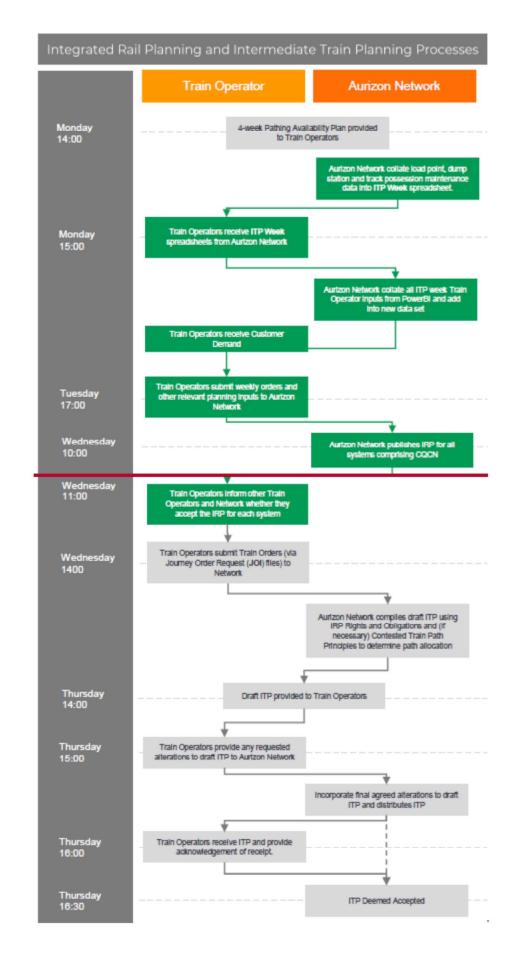


Figure 2: Integrated Rail Planning and Intermediate Train Planning Process for the CQCN

# 2.2 Planning Considerations

### **Key Considerations**

Aurizon Network's key considerations when developing the ITP are as follows:

- As the principal objective, Aurizon Network will aim to ensure delivery of Access Holders' contracted TSEs with the objective of an equitable outcome maximising the ability of each coal system to meet contractual entitlements.
- > Timetabled Traffic will be scheduled before Cyclic Traffic unless the unloading destination is a domestic power station and Aurizon Network has a legal obligation to prioritise these services.
- > The ITP will be developed in accordance with appropriate Safety Standards and Safeworking Procedures.

### **Cross System Traffic**

In the event that the ITP planning process identifies that there is congestion at a specific mine loadout as a result of a requested Cross System Train Service(s), in absence of express agreement between the mine management and train operators, the Contested Train Path Principles in the Access Undertaking will be used to determine path allocation.

### **IRP Rights and Obligations**

The following IRP Rights and Obligations will apply after Aurizon Network publishes the IRP for all systems across the CQCN (which will occur <u>daily</u> by <u>1012</u>:00 hours on the Wednesday prior to the next Relevant Period of operation).

- Where the IRP is fully accepted by all Train Operators it forms the basis of the draft ITP;
- Substitution requests (i.e. replacing 'Train Cycle A' from the IRP with another 'Train Cycle B') will only be accepted if:

Train Cycle B formed part of the weekly orders submitted by the Train Operator to Aurizon Network; and

- Train Cycle B, as submitted by the Train Operator to Aurizon Network, is a contracted Train Service Entitlement.
- Change requests (i.e. modifying components of a Train Order) will be accommodated on a best endeavours basis;
- Conflicts are defined as clashes at any point in the Train Cycle. Conflicts will be identified by Aurizon Network when drafting the ITP and will be resolved using the Contested Train Path principles set out in clause 8.3(a) of Schedule G of the Access Undertaking;
- In the case that a change or substitution request ultimately conflicts with the change or substitution request of another Train Operator, the Contested Train Path principles set out within Schedule G of the Access Undertaking will be used to resolve the conflict at the relevant point of the Train Cycle.

### ITP Acknowledgement and Acceptance

The ITP is to be communicated to Train Operators and Infrastructure Service Providers electronically, or subject to section 1.4 in a format advised by Aurizon Network by <u>1400-16:00</u> hours <u>each day</u> on the Thursday prior to the Relevant Period of operation.

- The Train Operator must provide written acknowledgment of receipt and acceptance of the ITP by 1600 <u>17:00</u> hours on the same Thursday day to Aurizon Network electronically, or subject to section 1.4 in a format advised by Aurizon Network.
- > Once confirmation is received by Aurizon Network, the ITP forms the basis for the DTP.

Note: Where documented acknowledgement of receipt and acceptance does not occur by <u>1600-17:15</u> hours-on that Thursday, the relevant Train Operator is deemed to have accepted the ITP.

## 2.3 Scheduling Horizon

Aurizon Network will schedule Train Services for the Train Operator in accordance with the ITP.

Aurizon Network develops the schedule, at a minimum, <u>96 hours3 days</u> in advance of the <u>day of operationDOO</u>. This is referred to as the <u>rolling\_Rolling\_96 hour3-day scheduleSchedule</u>. The <u>96 hourRolling 3-day schedule</u> Schedule includes 24 hours of finalised train schedules and a pathing plan for Train Services departing in the <u>>24 to 96 hour period\_subsequent 3-day period</u>.

The <u>96 hourRolling 3-day schedule Schedule</u> will be communicated daily to all Train Operators and Infrastructure Service Providers electronically, or subject to section 1.4 in a format advised by Aurizon Network at 2000 hours. For the purpose of clause 8.2(c)(i)(A) of Schedule G changes made outside of 24 hours prior to the <u>day of operationDOO</u> will not result in TSE consumption. <u>Changes to services scheduled to depart during the DOO</u> (day 4) or the following day (day 5) may consume TSEs for the purpose of Schedule G.

### Train Schedule finalisation

Aurizon Network will confirm and finalise the next 24 hours of train schedules daily at 14:00 hours<sup>5</sup>. To request access to the relevant scheduling system, please email <u>access.services@aurizon.com.au</u>.

Aurizon Network's System Rules - Central Queensland Coal Network - effective 5-December 2022DD MMM 2024

<sup>&</sup>lt;sup>5</sup> Aurizon Network acknowledges the finalisation period is actually 34 hours, given the cut-off time is 14:00 hours and the 24-hour period starts from 00:00 on the next day.

# 03. Daily Train Plan

The ITP, along with agreed schedule alterations (as applicable) will form the DTP, specifying:

- > departure and arrival times for Train Services at depots, stations, loading and unloading facilities,
- > planned Dwells, and

I

> the Loading and Unloading schedules,

in a form that indicates the time/distance (location) relationship of all activities on that part of the Rail Infrastructure to which the DTP relates.

The finalisation and handover of the DTP to the Manager Train Control will occur at 14:00 hours on the business day prior to the day of operation (DOO). Following finalisation of the DTP Aurizon Network will release a copy of the DTP subject to compliance with its confidentiality obligations under the Access Undertaking.

The DTP development flow chart below (Figure 4) outlines the process:

Figure 3: Daily Train Plan Development Flo	w Chart		
Mon Tue	→ Wed → Thu →	🕨 Fri 🔪 Sat	Sun
	DoO + DTP	96 hr Schedule	
Past •	Present •	Future	
Mon Tue	│ Wed │ Thu	🕨 Fri 🔪 Sat	Sun
	ITP (next week)		
	Future		

# 04. Schedule Alterations

Train Operators are able to request alterations to their Train Orders in variation to the ITP. Requests will only be considered by Aurizon Network if submitted electronically, or subject to section 1.4 in a format advised by Aurizon Network (contact details are available on the Aurizon Network Customer Portal at <a href="http://www.aurizon.com.au/portals/existing-customers">www.aurizon.com.au/portals/existing-customers</a>).

Any submitted requests to alter a Train Service will be assessed in accordance with the Schedule Alteration Rules in section 4.1 of these System Rules.

The types of alterations that can be requested are as follows:

- > Additional Train Services A Train Operator may request to add a Train Service to the Schedule.
- Cancelled Train Services A Train Operator may choose to cancel a Train Service. Aurizon Network will remove that Train Service from the Schedule upon request by the Train Operator. Cancelled paths return to the pool of paths available to all Train Operators. Train Operators can access this information on Aurizon Network's scheduling system.
- Rescheduled Train Services A Train Operator or Aurizon Network may request to reschedule the date or time of a scheduled Train Service to another date or time within the <u>4-day period prior to and including the DOO (i.e. days 1-4)</u>Relevant Period. Where a request to reschedule a Train Service cannot be accommodated or is not accepted by the Train Operator or Aurizon Network, the Train Operator must either cancel the Train Service, or keep the originally scheduled path. If the request to reschedule a Train Service can be accommodated, the Schedule will be amended and this Schedule will be the one against which the Train Service is measured as being an 'on time' Train Service.
- Diverted Train Services A Train Operator may request to divert a Train Service from its original origin destination to a new origin or destination that it has an entitlement to operate to/from under its Access Agreements, or another Access Holder's Access Agreement that it has authority to operate. Where a request to divert a Train Service cannot be accommodated, the Train Operator must either cancel the Train Service, or keep the original scheduled Train Service. In the instance when a requested change to the origin of a scheduled Train Service that is able to be accommodated utilises the same Mainline Paths, the diversion will not be an additional TSE Consumption for the relevant Access Holder.
- End User (EU) Access Holder variation to Operators Where an EU Access Holder holds Access Rights under an EU Access Agreement, it is entitled to vary or withdraw its nominations of an Operator operating its Train Services in accordance with its EU Access Agreement. Accordingly, where an EU Access Holder notifies Aurizon Network that it wishes to change the Operator of a scheduled Train Service, Aurizon Network will assess whether the change can be accommodated within the Schedule (e.g. changes to Operating Plans may affect performance of the Schedule). In this paragraph, "Operator" has the meaning given under the relevant EU Access Agreement.

## 4.1 Schedule Alteration Rules

The Schedule Alteration Rules detailed below governs how Aurizon Network considers each requested Train Order alteration submitted by Train Operators.

- Train Operators must contact the appropriate Aurizon Network personnel (see Rule 2) to discuss any alterations prior to submitting a request for a schedule alteration (Change Request). Aurizon Network will assess the contractual requirements of the proposed alteration and provide initial assessment of the capacity requirements for the proposed alteration.
- 2. Change Requests can be submitted to Aurizon Network at any time for consideration. Each Change Request must be submitted electronically, or subject to section 1.4 in a format advised by Aurizon Network and will be assessed in order of the time stamp noting receipt attached to each submission. Aurizon Network will assess alteration requests received for the DTP each day. For all other scheduling alterations, Aurizon Network will assess during business hours or within the agreed planning and scheduling timeframes.
- 3. Aurizon Network will determine the availability of a Port Unloading Slot as part of the process of reviewing a submitted Change Request.
- 4. For each submitted Change Request, Aurizon Network will alter the Schedule where the requested alteration:
  - a. does not result in any other Train Operator's scheduled Train Services not being met, or the only adversely affected Train Services are for the same Train Operator and that Train Operator consents to those Train Services being adversely affected; and
  - b. can be accommodated within the current Schedule.
- 5. In the event that a requested alteration by a Train Operator conflicts with a Planned Possession, the request will not be met and, where possible, Aurizon Network may offer an alternative path if available.
- 6. In the event of an Emergency Possession by Aurizon Network, Aurizon Network will notify affected Train Operators. Where possible, Aurizon Network will endeavour to offer an alternate path to reschedule affected Train Services. Where this is not possible, the Train Operator will be required to cancel the affected Train Service.
- 7. In the event of a relevant Port Operator or operator of a loading facility requesting alterations to the Schedule, Aurizon Network will manage requests in accordance with 7a. or 7b. as appropriate:
  - a. If the alteration is required due to an emergency (e.g. equipment fault) the Port Operator or operator of a loading facility may notify Aurizon Network via phone, email, or subject to clause 1.4 in a format advised by Aurizon Network; or
  - b. If the alteration is required for any other reason, the Port Operator or operator of a loading facility will be required to submit any Change Request via the relevant Train Operator as per rule 1 above. The Port Operator or operator of a loading facility may inform Aurizon Network of a proposed Change Request electronically or subject to section 1.4 in a format advised by Aurizon Network.

Where possible, Aurizon Network may endeavour to consult with affected Train Operators and offer an alternative path to reschedule affected Train Services. Where this is not possible, the Train Operator will be required to cancel the affected Train Service.

8. Aurizon Network will keep records of all decisions made in regard to submitted Change Requests.

## 4.2 Schedule Alterations for Possessions

There may be situations where Aurizon Network requires an alteration to the DTP due to Possessions, including for:

- > the modification of an existing Planned Possession;
- the creation of an Urgent Possession; or
- > any other Operational Constraint affecting the DTP.

Where any of the above alterations result in any Train Operator's Train Services not being met, the change will only be made following consultation with, and the agreement of, those affected Train Operators. Where any of the above alterations affect a Planned Possession, Infrastructure Service Providers will also be consulted.

Where Aurizon Network requires an alteration to the DTP to accommodate an Emergency Possession, Aurizon Network will follow the procedure set out in rule 6 of the Schedule Alteration Rules in section 4.1 of these System Rules.

Any consultation with Train Operators required as a result of DTP alterations due to Possessions will occur between Train Operators, Port Operators and Aurizon Network. Aurizon Network will provide advice as to how Possessions are progressing against the DTP, and an indicative time of when the network will become available.

Aurizon Network will provide information to Train Operators as soon as it is available on any expected delay to the scheduled end of a Possession. Aurizon Network will cooperate with Train Operators' efforts to mitigate the associated disruptions, subject to the Access Undertaking, any relevant Access Agreement, any applicable Law and this document.

Aurizon Network will notify all affected Train Operators of changes in temporary speed restrictions which would result in a time service change to any scheduled Train Services in the DTP from the ITP, electronically, or subject to clause 1.4 in a format advised by Aurizon Network, prior to finalisation of the DTP.

Consistent with the requirements of clause 5.5(c) of Schedule G, any changes to the plan due to the application or removal of a temporary speed restriction once the DTP has been finalised will be reflected as deviations to the DTP.

# 05. Plan Implementation

## 5.1 Train Control and Operations Procedures

All Train Control Services, including but not limited to Train running, crossings and Dwells, are managed by Aurizon Network's Train Control Centre. In providing these Train Control Services, Aurizon Network will comply with the Traffic Management Decision Making Matrix in Schedule G of the Access Undertaking to the extent applicable. Train Control Procedures and Train Operations Procedures are detailed in the Interface Coordination Arrangements contained in Schedule 9 of the Standard Train Operations Deed.

## 5.2 Performance Measurement

### **Train Service Performance**

Train Service performance on a particular day, including on-time running and delays, will be measured against the DTP published for that day unless such changes have been agreed between Aurizon Network and the relevant Train Operator (s).

### **Delay Cause Identification**

For a delay to a Train Service that has occurred in exception to the DTP, Aurizon Network will identify and consult with the relevant Supply Chain Stakeholders to determine the cause of the delay. Consultation will occur between Train Operators, the Port Operators and Aurizon Network.

For a Train Service that is Cyclic Traffic, the review process will be limited to reviewing possible causal incidents that occurred within a 48 hour time period prior to the delay. For a Train Service that is Timetabled Traffic, this process will be limited to reviewing possible causal incidents that occurred on or after the commencement of that Train Service. A delay cause will be classified to one of the following:

- > Aurizon Network
- > Adjoining Network Manager
- > Port
- > Mine
- > Operator A- Z
- > FM Event
- > Other

Where no decision can be reached collectively, Aurizon Network will determine the cause for the delay. Where a dispute arises with the determined cause, affected Access Holders can escalate the dispute through the dispute resolution mechanisms of their relevant Access Agreements.

### **Cancellation Cause Identification**

For the cancellation of a Train Service from the DTP, Aurizon Network will identify and consult with relevant Supply Chain Stakeholders to determine the cause of the cancellation. Consultation will occur between Train Operators, Port Operators and Aurizon Network.

For a Train Service that is Cyclic Traffic, the review process will be limited to reviewing possible causal incidents that occurred within a 48 hour time period prior to the cancellation. For a Train Service that is Timetabled Traffic, this process will be limited to reviewing possible causal incidents that occurred on or after the commencement of the relevant Train Service. A cancellation cause will be classified to one of the following:

- > Aurizon Network
- > Adjoining Network Manager
- > Port
- > Mine
- > Operator A- Z
- FM Event
- > Other

Where no decision can be reached collectively, Aurizon Network will determine the cause for the cancellation. Where a dispute arises with the determined cause, affected Access Holders can escalate through the Network Customer Service Lead.

# 06. Definitions and interpretation

Unless otherwise specified:

- a term that is defined in the Access Undertaking has the same meaning in this document; and.
- the interpretation provisions of the Access Undertaking<sup>6</sup> apply to this document.

Where there are public holidays that impede on any timeframes outlined in this document, Aurizon Network will discuss the required alteration to the timeframes with the Train Operators in advance.

All timeframes listed in this document are subject to change. Consultation will be undertaken with Train Operators prior to the implementation of any timeframe changes.

If this document is inconsistent with the Access Undertaking, then the Access Undertaking prevails to the extent of that inconsistency.

Other definitions specific to this document include:

Access Undertaking	The access undertaking prepared by Aurizon Network and approved by the QCA pursuant to the Act in force and as amended, from time to time.
Adjoining Network Manager	A Railway Manager in relation to a railway (including proposed railway) connecting to any Individual Coal System.
Integrated Rail Plan (IRP)	An optimised or ideal rail plan for each system based on weekly-daily orders and other relevant planning inputs provided by Train Operators and considering all known system constraints.
Integrated Rail Planning	A process that uses optimisation-based planning technology to develop an ideal rail plan (the Integrated Rail Plan or IRP) for each system based on <u>weekly daily</u> orders and other relevant planning inputs provided by Train Operators.
Relevant Period	The 24-hour period commencing at 00:00 hours and ending at 23:59 hours on the DOO (day 4).
Rolling 3-Day Schedule	Includes 24 hours of finalised train schedules and a pathing plan for Train Services departing in the subsequent 3-day period.
Train Cycle	A Train Cycle is composed of several components including mainline Train Paths (one loaded and one empty), a mine loading slot, a port unloading slot and dwells (as required).
TSE	Train Service Entitlement.
Week 1 Forecast Period	Seven-day period commencing at 00:00 hours the following Monday.

<sup>6</sup> As at the date of this document, see clause 12.2 of the AU

Aurizon Network's System Rules - Central Queensland Coal Network - effective 5-December 2022DD MMM 2024

# 07. Appendix



# Aurizon Network System Rules Central Queensland Coal Network

# Preamble

The Aurizon Network System Rules (**System Rules**) provide additional details of the processes and systems used to plan and schedule Train Services in Aurizon Network's Central Queensland Coal Network (**CQCN**).

The System Rules are an important tool for Aurizon Network to transparently demonstrate the equitable allocation of Access to the CQCN in accordance with Access Agreements. The System Rules also fulfil Aurizon Network's regulatory obligations and are an ancillary document to Aurizon Network's Access Undertaking 2017 (Access Undertaking).

These rules have been developed in consultation with our Customers, Ports and other CQCN Stakeholders with the objective of balancing the need for train ordering flexibility and the certainty of disciplined scheduling rules.

The System Rules are a baseline to facilitate Aurizon Network's strategy of continuous improvement of the planning and scheduling function. They are periodically reviewed in accordance with the provisions of the Access Undertaking.

Readers should refer to Section 6.0 of this document for definitions to ensure correct interpretation of these System Rules.

# Table of contents

### 011.1 Context 1.2 Governance and transition 1.3 Key Interfaces 1.4 Communications 1.5 Train Cycle Components 02. Integrated Rail Planning & Intermediate Train Planning processes 2.1 Timeframes 2.2 Planning considerations 2.3 Scheduling horizon 03. Daily Train Plan ......12 Schedule Alterations ......13 Schedule alteration rules 4.1 4.2 Scheduled alterations for Possessions 05. Plan Implementation ......16 5.1 Train Control and operations procedures 5.2 Performance Measurement 06.

# 01. Introduction

## 1.1 Context

The System Rules for the CQCN are an ancillary document to the Access Undertaking. They provide accompanying detail to the Network Management Principles contained within Schedule G of the Access Undertaking, describing the planning and scheduling processes for Train Services in the CQCN.

Figure 1 below sets out Aurizon Network's train planning process, identifying each discrete process and respective time horizon.



Figure 1: Aurizon Network train planning process

The System Rules relate directly to the following planning processes:

- > Integrated Rail Plan (IRP)
- > Intermediate Train Plan (ITP)
- > Daily Train Plan (**DTP**)

Aurizon Network publishes a number of documents that provide information about system operating parameters and long-term planning within the CQCN. Those which directly relate to the Train planning process are as follows.

- > System Operating Parameters
- > Strategic Train Plan (STP)
- > Capability Train Plan (CTP)

These documents are made available at www.aurizon.com.au/what-we-deliver.

## 1.2 Governance and Transition

The System Rules have been developed in accordance with and are governed by the Access Undertaking<sup>1</sup>. Following the approval of these System Rules for the CQCN by the Queensland Competition Authority (**QCA**), Aurizon Network will put in place a change management process and proposed timeframes for implementation. Supply Chain Stakeholders will be given a summary of their responsibilities under the System Rules via email. These System Rules will apply to all Train Services operating in the CQCN.

The approved System Rules (as amended from time to time) for the CQCN are made available at: <a href="http://www.aurizon.com.au">www.aurizon.com.au</a>.

# 1.3 Key Interfaces

The following table outlines key interfaces for train operations at Aurizon Network.

Key Interface	Key Interface Responsibility
Head of Planning and Scheduling	Responsible for supporting the delivery of contracted tonnages across the CQCN
Integrated Rail Planning Manager	Management of operational integrated planning from IRP to the ITP
Integrated Rail Scheduling Manager	Responsible for the rolling 96-hour schedule and development of the DTP
Manager Train Control	Responsible for execution of the DTP

## 1.4 Communications

The planning and scheduling process generally requires the exchange of information between Aurizon Network and Train Operators and Infrastructure Service Providers. The form of this communication is subject to change as process, systems and technological improvements are made.

Prior to making changes to the form and method of communication under these System Rules, Aurizon Network will consult and obtain agreement from relevant Train Operators and Infrastructure Service Providers where such agreement cannot be unreasonably withheld.

# 1.5 Train Cycle Components

A Train Cycle is composed of several components as detailed below. For the avoidance of doubt, the System Rules applies to the entire Train Cycle.

### Mainline Paths

Mainline Paths are determined based on the run between:

- Callemondah and Bluff for the Blackwater System<sup>2</sup>;
- · Callemondah and Dumgree for the Moura System;
- Jilalan and Coppabella for the Goonyella System; and
- · Pring and Collinsville for the Newlands System.

Aurizon Network will provide information on how it calculates dispatch intervals to Train Operators, Access Holders and Access Seekers requesting such information.

### Port Unloading Slot

The time at an unloading facility for a Train Service is contained in the relevant Access Agreement. The time at the unloading facility is inclusive of unloading time and time taken for pre and post unload activities (**Port Unloading Slot**).

<sup>&</sup>lt;sup>2</sup> Mainline Path comprises the path between Callemondah and Kabra and the path between Kabra and Bluff Aurizon Network's System Rules – Central Queensland Coal Network – effective 5 December 2022

Port Unloading Slots are determined by the Port Operator and are based on the sustainable capability of the unloading facility. Aurizon Network schedules Train Services to align with these Port Unloading Slots.

### **Mine Loading Slots**

Arrival slots at a mine for a Train Service are based on the recharge capability of the loadout for the mine, and the number of Train Services that can be loaded per day (**Mine Loading Slot**).

Aurizon Network will schedule Train Services to align with these Mine Loading Slots from the Mainline Path to the relevant mine loadout.

### Dwells

The dwells for a Train Service are taken into account and included in the cycle time for that Train Service and consequently in the scheduling process. The dwell may include provisioning activities, crew changes, meal breaks, maintenance, and examination of the Train. Specific dwells are identified in the Access Agreement and Operating Plan for the Train Service.

### **Reference Train Service**

Aurizon Network's assumptions for pathing arrangements rely on, among other things, the characteristics of the Reference Train Services as specified in Schedule F of the Access Undertaking.

# 02. Integrated Rail Planning & Intermediate Train Planning processes

The Intermediate Train Plan (**ITP**) is produced by Aurizon Network in consultation with Train Operators and in accordance with the Access Undertaking<sup>3</sup>. The ITP is the process by which Train Operators submit Train Orders and Aurizon Network allocates Train Paths to the Train Orders in accordance with the timeframes set out in the Access Undertaking and these System Rules.

Integrated Rail Planning is a supplemental process that uses optimisation-based planning technology to develop plans using weekly demand assumptions and other relevant planning inputs provided by the Train Operators. Acceptance of the IRP by Train Operators is voluntary. Where the IRP is fully accepted by all Train Operators, it forms the basis of the draft ITP. Where the IRP is not unanimously accepted by all Train Operators, any resulting Train Cycle conflicts will be resolved using the Contested Train Path principles set out in clause 8.3(a) of Schedule G of the Access Undertaking.

In the event the Integrated Rail Planning process cannot be completed for any Relevant Period, Aurizon Network will notify Train Operators that no IRP will be published for that Relevant Period and Aurizon Network will proceed with drafting the ITP per the ITP Timeframes detailed below.

# 2.1 Timeframes

The relevant forms and contact details, as updated from time to time, are available on the Aurizon Network Customer Portal at <u>www.aurizon.com.au/portals/existing-customers</u>.

It is the responsibility of the Train Operator to coordinate relevant planning inputs with their Customers (if any).

### **IRP** Timeframes

- Aurizon Network collates load point, dump station and track possession maintenance data which is provided to Train Operators by 15:00 hours on the Monday prior to the next Relevant Period of operation.
- Train Operators are to submit demand assumptions<sup>4</sup> and other relevant planning inputs for the next Relevant Period to Aurizon Network by 17:00 hours on the Tuesday prior to the next Relevant Period of operation.
- > On or before the Wednesday prior to the next Relevant Period of operation:
  - o Aurizon Network will publish the IRP for all systems across the CQCN by 10:00 hours;
  - Train Operators will inform other Train Operators and Aurizon Network whether they accept the IRP for each system by 11:00 hours; and
  - Train Operators may submit substitution requests (i.e. replacing 'Train Cycle A' from the IRP with another 'Train Cycle B') to Aurizon Network by 14:00 hours.

<sup>&</sup>lt;sup>3</sup> AU, Schedule G, Clause 4

<sup>&</sup>lt;sup>4</sup> Train Operators can prioritise their demand assumptions by modifying their inputs to occur at or below the Aurizon Network tiered contract position (which, similar to the Contested Train Path principles contained in Schedule G of the Access Undertaking, is based on factors such as year to date and/or month to date contract utilisation). Aurizon Network's System Rules – Central Queensland Coal Network – effective 5 December 2022

### **ITP Timeframes**

- On the Wednesday prior to the next Relevant Period of operation Train Operators will submit Train Orders (via Journey Order Request (JOI) files) to Aurizon Network by 14:00 hours. Should a Train Operator require Stowage for a Train, a Stow Location Request form must also be submitted.
- Aurizon Network will compile the draft ITP using the IRP Rights and Obligations detailed in section 2.2 of these System Rules and, where necessary to determine the allocation of any Train Cycle conflicts, apply the Contested Train Path principles set out in clause 8.3(a) of Schedule G of the Access Undertaking.
- > On the Thursday prior to the next Relevant Period of operation;
  - Aurizon Network will provide the draft ITP to Train Operators by 14:00 hours;
  - Train Operators may submit change requests (i.e. modifying components of a Train Order) to Aurizon Network by 15:00 hours;
  - o Aurizon Network will incorporate final agreed alterations and distribute the final draft ITP;
  - Train Operators will receive the ITP and provide acknowledgement of receipt by 16:00 hours; and
  - The ITP is deemed accepted at 16:30 hours.

The following flow chart (Figure 2) provides an overview of the IRP and ITP processes.

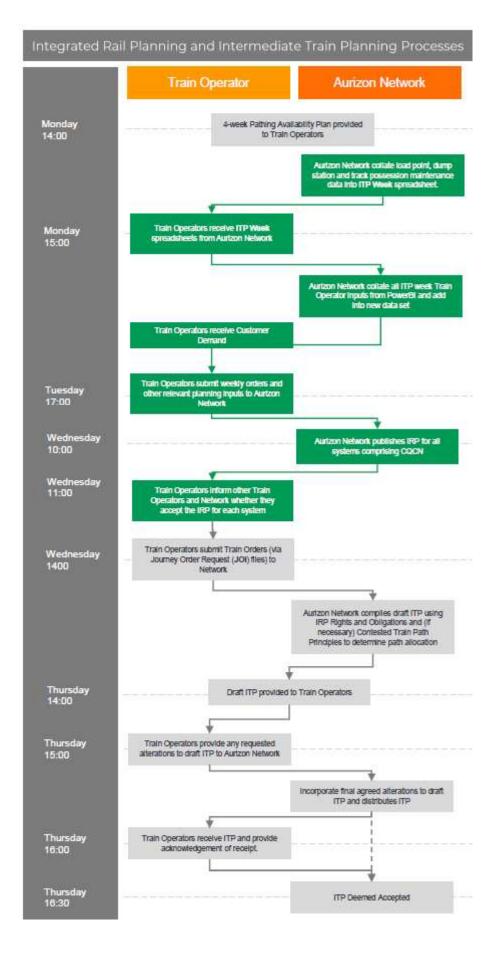


Figure 2: Integrated Rail Planning and Intermediate Train Planning Process for the CQCN

# 2.2 Planning Considerations

### **Key Considerations**

Aurizon Network's key considerations when developing the ITP are as follows:

- As the principal objective, Aurizon Network will aim to ensure delivery of Access Holders' contracted TSEs with the objective of an equitable outcome maximising the ability of each coal system to meet contractual entitlements.
- > Timetabled Traffic will be scheduled before Cyclic Traffic unless the unloading destination is a domestic power station and Aurizon Network has a legal obligation to prioritise these services.
- > The ITP will be developed in accordance with appropriate Safety Standards and Safeworking Procedures.

### **Cross System Traffic**

In the event that the ITP planning process identifies that there is congestion at a specific mine loadout as a result of a requested Cross System Train Service(s), in absence of express agreement between the mine management and train operators, the Contested Train Path Principles in the Access Undertaking will be used to determine path allocation.

### **IRP Rights and Obligations**

The following IRP Rights and Obligations will apply after Aurizon Network publishes the IRP for all systems across the CQCN (which will occur by 10:00 hours on the Wednesday prior to the next Relevant Period of operation).

- > Where the IRP is fully accepted by all Train Operators it forms the basis of the draft ITP;
- Substitution requests (i.e. replacing 'Train Cycle A' from the IRP with another 'Train Cycle B') will only be accepted if:
  - $\circ~$  Train Cycle B formed part of the weekly orders submitted by the Train Operator to Aurizon Network; and
  - Train Cycle B, as submitted by the Train Operator to Aurizon Network, is a contracted Train Service Entitlement.
- Change requests (i.e. modifying components of a Train Order) will be accommodated on a best endeavours basis;
- Conflicts are defined as clashes at any point in the Train Cycle. Conflicts will be identified by Aurizon Network when drafting the ITP and will be resolved using the Contested Train Path principles set out in clause 8.3(a) of Schedule G of the Access Undertaking;
- In the case that a change or substitution request ultimately conflicts with the change or substitution request of another Train Operator, the Contested Train Path principles set out within Schedule G of the Access Undertaking will be used to resolve the conflict at the relevant point of the Train Cycle.

### ITP Acknowledgement and Acceptance

The ITP is to be communicated to Train Operators and Infrastructure Service Providers electronically, or subject to section 1.4 in a format advised by Aurizon Network by 1400 hours on the Thursday prior to the Relevant Period of operation.

- The Train Operator must provide written acknowledgment of receipt and acceptance of the ITP by 1600 hours on the same Thursday to Aurizon Network electronically, or subject to section 1.4 in a format advised by Aurizon Network.
- > Once confirmation is received by Aurizon Network, the ITP forms the basis for the DTP.

Note: Where documented acknowledgement of receipt and acceptance does not occur by 1600 hours on that Thursday, the relevant Train Operator is deemed to have accepted the ITP.

## 2.3 Scheduling Horizon

Aurizon Network will schedule Train Services for the Train Operator in accordance with the ITP.

Aurizon Network develops the schedule, at a minimum, 96 hours in advance of the day of operation. This is referred to as the rolling 96 hour schedule. The 96 hour schedule includes 24 hours of finalised train schedules and a pathing plan for train services departing in the >24 to 96 hour period.

The 96 hour schedule will be communicated daily to all Train Operators and Infrastructure Service Providers electronically, or subject to section 1.4 in a format advised by Aurizon Network at 2000 hours. For the purpose of clause 8.2(c)(i)(A) of Schedule G changes made outside of 24 hours prior to the day of operation will not result in TSE consumption.

### Train Schedule finalisation

Aurizon Network will confirm and finalise the next 24 hours of train schedules daily at 14:00 hours<sup>5</sup>. To request access to the relevant scheduling system, please email <u>access.services@aurizon.com.au</u>.

<sup>5</sup> Aurizon Network acknowledges the finalisation period is actually 34 hours, given the cut-off time is 14:00 hours and the 24-hour period starts from 00:00 on the next day.

Aurizon Network's System Rules - Central Queensland Coal Network - effective 5 December 2022

# 03. Daily Train Plan

The ITP, along with agreed schedule alterations (as applicable) will form the DTP, specifying:

- > departure and arrival times for Train Services at depots, stations, loading and unloading facilities,
- > planned Dwells, and
- > the Loading and Unloading schedules,

in a form that indicates the time/distance (location) relationship of all activities on that part of the Rail Infrastructure to which the DTP relates.

The finalisation and handover of the DTP to the Manager Train Control will occur at 14:00 hours on the business day prior to the day of operation (**DOO**). Following finalisation of the DTP Aurizon Network will release a copy of the DTP subject to compliance with its confidentiality obligations under the Access Undertaking.

The DTP development flow chart below (Figure 4) outlines the process:

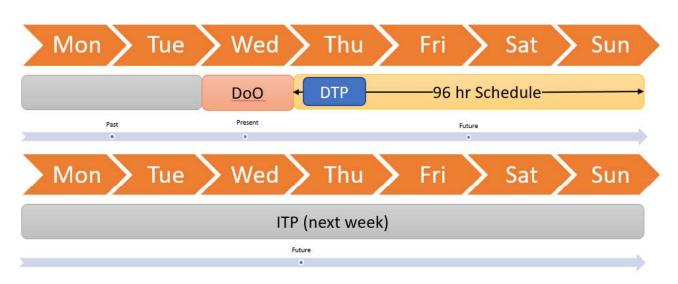


Figure 3: Daily Train Plan Development Flow Chart

# 04. Schedule Alterations

Train Operators are able to request alterations to their Train Orders in variation to the ITP. Requests will only be considered by Aurizon Network if submitted electronically, or subject to section 1.4 in a format advised by Aurizon Network (contact details are available on the Aurizon Network Customer Portal at <u>www.aurizon.com.au/portals/existing-customers</u>).

Any submitted requests to alter a Train Service will be assessed in accordance with the Schedule Alteration Rules in section 4.1 of these System Rules.

The types of alterations that can be requested are as follows:

- > Additional Train Services A Train Operator may request to add a Train Service to the Schedule.
- Cancelled Train Services A Train Operator may choose to cancel a Train Service. Aurizon Network will remove that Train Service from the Schedule upon request by the Train Operator. Cancelled paths return to the pool of paths available to all Train Operators. Train Operators can access this information on Aurizon Network's scheduling system.
- Rescheduled Train Services A Train Operator or Aurizon Network may request to reschedule the date or time of a scheduled Train Service to another date or time within the Relevant Period. Where a request to reschedule a Train Service cannot be accommodated or is not accepted by the Train Operator or Aurizon Network, the Train Operator must either cancel the Train Service, or keep the originally scheduled path. If the request to reschedule a Train Service can be accommodated, the Schedule will be amended and this Schedule will be the one against which the Train Service is measured as being an 'on time' Train Service.
- Diverted Train Services A Train Operator may request to divert a Train Service from its original origin destination to a new origin or destination that it has an entitlement to operate to/from under its Access Agreements, or another Access Holder's Access Agreement that it has authority to operate. Where a request to divert a Train Service cannot be accommodated, the Train Operator must either cancel the Train Service, or keep the original scheduled Train Service. In the instance when a requested change to the origin of a scheduled Train Service that is able to be accommodated utilises the same Mainline Path, the diversion will not be an additional TSE Consumption for the relevant Access Holder.
- End User (EU) Access Holder variation to Operators Where an EU Access Holder holds Access Rights under an EU Access Agreement, it is entitled to vary or withdraw its nominations of an Operator operating its Train Services in accordance with its EU Access Agreement. Accordingly, where an EU Access Holder notifies Aurizon Network that it wishes to change the Operator of a scheduled Train Service, Aurizon Network will assess whether the change can be accommodated within the Schedule (e.g. changes to Operating Plans may affect performance of the Schedule). In this paragraph, "Operator" has the meaning given under the relevant EU Access Agreement.

## 4.1 Schedule Alteration Rules

The Schedule Alteration Rules detailed below governs how Aurizon Network considers each requested Train Order alteration submitted by Train Operators.

- Train Operators must contact the appropriate Aurizon Network personnel (see Rule 2) to discuss any alterations prior to submitting a request for a schedule alteration (Change Request). Aurizon Network will assess the contractual requirements of the proposed alteration and provide initial assessment of the capacity requirements for the proposed alteration.
- 2. Change Requests can be submitted to Aurizon Network at any time for consideration. Each Change Request must be submitted electronically, or subject to section 1.4 in a format advised by Aurizon Network and will be assessed in order of the time stamp noting receipt attached to each submission. Aurizon Network will assess alteration requests received for the DTP each day. For all other scheduling alterations, Aurizon Network will assess during business hours or within the agreed planning and scheduling timeframes.
- 3. Aurizon Network will determine the availability of a Port Unloading Slot as part of the process of reviewing a submitted Change Request.
- 4. For each submitted Change Request, Aurizon Network will alter the Schedule where the requested alteration:
  - a. does not result in any other Train Operator's scheduled Train Services not being met, or the only adversely affected Train Services are for the same Train Operator and that Train Operator consents to those Train Services being adversely affected; and
  - b. can be accommodated within the current Schedule.
- 5. In the event that a requested alteration by a Train Operator conflicts with a Planned Possession, the request will not be met and, where possible, Aurizon Network may offer an alternative path if available.
- 6. In the event of an Emergency Possession by Aurizon Network, Aurizon Network will notify affected Train Operators. Where possible, Aurizon Network will endeavour to offer an alternate path to reschedule affected Train Services. Where this is not possible, the Train Operator will be required to cancel the affected Train Service.
- 7. In the event of a relevant Port Operator or operator of a loading facility requesting alterations to the Schedule, Aurizon Network will manage requests in accordance with 7a. or 7b. as appropriate:
  - a. If the alteration is required due to an emergency (e.g. equipment fault) the Port Operator or operator of a loading facility may notify Aurizon Network via phone, email, or subject to clause 1.4 in a format advised by Aurizon Network; or
  - b. If the alteration is required for any other reason, the Port Operator or operator of a loading facility will be required to submit any Change Request via the relevant Train Operator as per rule 1 above. The Port Operator or operator of a loading facility may inform Aurizon Network of a proposed Change Request electronically or subject to section 1.4 in a format advised by Aurizon Network.

Where possible, Aurizon Network may endeavour to consult with affected Train Operators and offer an alternative path to reschedule affected Train Services. Where this is not possible, the Train Operator will be required to cancel the affected Train Service.

8. Aurizon Network will keep records of all decisions made in regard to submitted Change Requests.

## 4.2 Schedule Alterations for Possessions

There may be situations where Aurizon Network requires an alteration to the DTP due to Possessions, including for:

- > the modification of an existing Planned Possession;
- the creation of an Urgent Possession; or
- > any other Operational Constraint affecting the DTP.

Where any of the above alterations result in any Train Operator's Train Services not being met, the change will only be made following consultation with, and the agreement of, those affected Train Operators. Where any of the above alterations affect a Planned Possession, Infrastructure Service Providers will also be consulted.

Where Aurizon Network requires an alteration to the DTP to accommodate an Emergency Possession, Aurizon Network will follow the procedure set out in rule 6 of the Schedule Alteration Rules in section 4.1 of these System Rules.

Any consultation with Train Operators required as a result of DTP alterations due to Possessions will occur between Train Operators, Port Operators and Aurizon Network. Aurizon Network will provide advice as to how Possessions are progressing against the DTP, and an indicative time of when the network will become available.

Aurizon Network will provide information to Train Operators as soon as it is available on any expected delay to the scheduled end of a Possession. Aurizon Network will cooperate with Train Operators' efforts to mitigate the associated disruptions, subject to the Access Undertaking, any relevant Access Agreement, any applicable Law and this document.

Aurizon Network will notify all affected Train Operators of changes in temporary speed restrictions which would result in a time service change to any scheduled Train Services in the DTP from the ITP, electronically, or subject to clause 1.4 in a format advised by Aurizon Network, prior to finalisation of the DTP.

Consistent with the requirements of clause 5.5(c) of Schedule G, any changes to the plan due to the application or removal of a temporary speed restriction once the DTP has been finalised will be reflected as deviations to the DTP.

# 05. Plan Implementation

## 5.1 Train Control and Operations Procedures

All Train Control Services, including but not limited to Train running, crossings and Dwells, are managed by Aurizon Network's Train Control Centre. In providing these Train Control Services, Aurizon Network will comply with the Traffic Management Decision Making Matrix in Schedule G of the Access Undertaking to the extent applicable. Train Control Procedures and Train Operations Procedures are detailed in the Interface Coordination Arrangements contained in Schedule 9 of the Standard Train Operations Deed.

## 5.2 Performance Measurement

### **Train Service Performance**

Train Service performance on a particular day, including on-time running and delays, will be measured against the DTP published for that day unless such changes have been agreed between Aurizon Network and the relevant Train Operator (s).

### **Delay Cause Identification**

For a delay to a Train Service that has occurred in exception to the DTP, Aurizon Network will identify and consult with the relevant Supply Chain Stakeholders to determine the cause of the delay. Consultation will occur between Train Operators, the Port Operators and Aurizon Network.

For a Train Service that is Cyclic Traffic, the review process will be limited to reviewing possible causal incidents that occurred within a 48 hour time period prior to the delay. For a Train Service that is Timetabled Traffic, this process will be limited to reviewing possible causal incidents that occurred on or after the commencement of that Train Service. A delay cause will be classified to one of the following:

- > Aurizon Network
- > Adjoining Network Manager
- > Port
- > Mine
- > Operator A- Z
- > FM Event
- > Other

Where no decision can be reached collectively, Aurizon Network will determine the cause for the delay. Where a dispute arises with the determined cause, affected Access Holders can escalate the dispute through the dispute resolution mechanisms of their relevant Access Agreements.

### **Cancellation Cause Identification**

For the cancellation of a Train Service from the DTP, Aurizon Network will identify and consult with relevant Supply Chain Stakeholders to determine the cause of the cancellation. Consultation will occur between Train Operators, Port Operators and Aurizon Network.

For a Train Service that is Cyclic Traffic, the review process will be limited to reviewing possible causal incidents that occurred within a 48 hour time period prior to the cancellation. For a Train Service that is Timetabled Traffic, this process will be limited to reviewing possible causal incidents that occurred on or after the commencement of the relevant Train Service. A cancellation cause will be classified to one of the following:

- > Aurizon Network
- > Adjoining Network Manager
- > Port
- > Mine
- > Operator A- Z
- FM Event
- > Other

Where no decision can be reached collectively, Aurizon Network will determine the cause for the cancellation. Where a dispute arises with the determined cause, affected Access Holders can escalate through the Network Customer Service Lead.

# 06. Definitions and interpretation

Unless otherwise specified:

- a term that is defined in the Access Undertaking has the same meaning in this document; and.
- the interpretation provisions of the Access Undertaking<sup>6</sup> apply to this document.

Where there are public holidays that impede on any timeframes outlined in this document, Aurizon Network will discuss the required alteration to the timeframes with the Train Operators in advance.

All timeframes listed in this document are subject to change. Consultation will be undertaken with Train Operators prior to the implementation of any timeframe changes.

If this document is inconsistent with the Access Undertaking, then the Access Undertaking prevails to the extent of that inconsistency.

Other definitions specific to this document include:

Access Undertaking	The access undertaking prepared by Aurizon Network and approved by the QCA pursuant to the Act in force and as amended, from time to time.
Adjoining Network Manager	A Railway Manager in relation to a railway (including proposed railway) connecting to any Individual Coal System.
Integrated Rail Plan (IRP)	An optimised or ideal rail plan for each system based on weekly orders and other relevant planning inputs provided by Train Operators and considering all known system constraints.
Integrated Rail Planning	A process that uses optimisation-based planning technology to develop an ideal rail plan (the Integrated Rail Plan or IRP) for each system based on weekly orders and other relevant planning inputs provided by Train Operators.
Train Cycle	A Train Cycle is composed of several components including mainline Train Paths (one loaded and one empty), a mine loading slot, a port unloading slot and dwells (as required).
TSE	Train Service Entitlement

<sup>&</sup>lt;sup>6</sup> As at the date of this document, see clause 12.2 of the AU Aurizon Network's System Rules – Central Queensland Coal Network – effective 5 December 2022