

# **QR Network System Rules**

Goonyella Coal Chain

Date: 30/06/2011



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# Preamble

QR Network's System Rules are a subsidiary document to QR Network's Access Undertaking (the Access Undertaking) 2010. They provide accompanying detail to Schedule G of the Access Undertaking, describing the planning and path allocation process in each of the Coal Systems. Specifically detailed are the monthly maintenance, weekly and daily planning processes, as well as specific operational aspects of the Central Queensland Coal Networks.

The concept of the System Rules was established in line with the commencement of the multi-user environment in the central Queensland coal networks, resulting in a more dynamic and complex operating environment. Additionally, with new entrants in the Goonyella System, the operating dynamics of the supply chain have become less cohesive, with each individual coal chain operating in variation to another.

The System Rules aim to provide transparency around the planning and scheduling decision making process. They are not intended to limit flexibility in the supply chain, but to create certainty in respect to access entitlements for Access Holders, ensuring QR Network's compliance with regulatory and contractual obligations. They also provide a means of integrating and coordinating various scheduling environments within contractual boundaries, in that operating modes such as cargo assembly operations can be accommodated subject to ships berthing and train orders driving a uniform utilisation of rail infrastructure.

The System Rules have been developed through a process of consultation with Supply Chain Stakeholders and other industry bodies. Along with the Network Management Principles in Schedule G of the Access Undertaking, the System Rules provide Access Seekers with confidence that QR Network will treat all operators in a fair and consistent manner.

Whilst the scope of the proceeding Goonyella System Rules reflect current Goonyella System operations, it is recognised that there are various existing and future coal chains interacting with the Goonyella System, and as such, once endorsed by the Queensland Competition Authority, QR Network intends to extend the Goonyella System Rules to include these interactions with other coal chains. It is intended to provide coordination and alignment of the planning and scheduling environments across all coal chains in the Northern Bowen Basin, as well as coal chains linking from the Southern Bowen Basin. QR Network will be seeking stakeholder input into these alterations, and any proposed alterations to the rules will be made following the governance process outlined in section 1.1 of this document.

# **Definitions**

Unless otherwise specified, the capitalised terms used in this document have the same meaning as those terms defined within the Access Undertaking and Access Holder and/or Operator Access Agreements.

#### In this document:

#### "Adjoining Network Manager"

Means the below rail network manager of a rail network adjoining to the central Queensland coal network managed by QR Network.

#### "Supply Chain Stakeholders"

Means any or all stakeholders in the Goonyella Coal Chain including, but not limited to all Rail Operators, Producers, Domestic and Export Unloading Facilities, Adjoining Rail Network Managers, Maintenance and Construction and other Service Providers.

#### "Network Cause"

Means where QR Network is unable to make available the Infrastructure for Train services at the Scheduled Time in the Train Schedule or at a reasonable alternate Scheduled Time as a result of:

- (i) Planned Possessions, Emergency Possessions or Urgent Possessions;
- (ii) a Force Majeure Event which prevents QR Network from making the Infrastructure available for Train services in accordance with the relevant access rights; or
- (iii) any other action by QR Network which directly resulted in the Infrastructure not being so available

where such inability by QR Network is not attributable in any way:

- (i) to a Railway Operator; or
- (ii) QR Network complying with its Passenger Priority Obligations; or
- (iii) to the unavailability of the Loading and/or Unloading Facilities or their failure to meet the performance parameters detailed in part 1 of Schedule 1.

# Considerations

The following points should be taken into consideration where relevant:

- Any planning timeframes listed in this document are subject to change. Any changes will be agreed
  with Access Holders prior to commencement, through the governance framework detailed in section
  1.1 of this document.
- Where there are public holidays that impede on any timeframes outlined in this document, QR Network will discuss the required alteration to the timeframes with the Access Holders in advance.
- QR Network proposes to extend the 4 Week Critical Asset Constraint Summary outlined in sections 2.2 and 2.3 is to a 6 Week Critical Asset Constraint Summary. QR Network is negotiating with the service provider for the extension of the maintenance lock down period from the current 21 days to the proposed 28 days. QR Network is currently in negotiations to achieve this outcome, and will continue to work towards delivery. QR Network will advise all Access Holders when this is achieved; until such time, the current 4 Week Critical Asset Constraint Summary will be provided, with 21 days of maintenance locked down.

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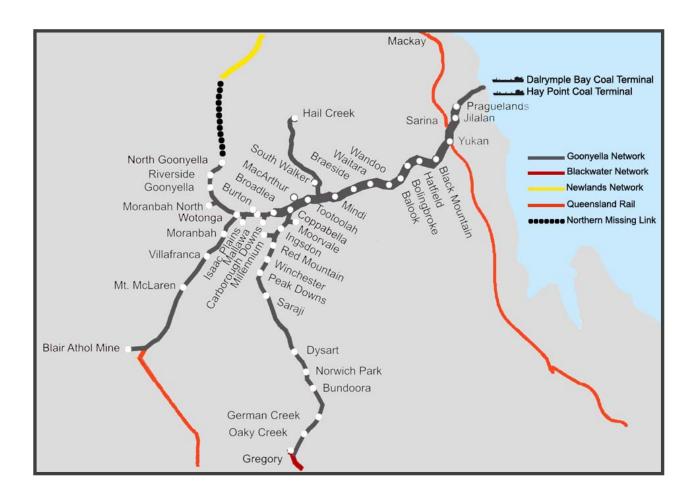
## 1 Introduction

QR Network's' System Rules have been prepared in accordance with Schedule G of the Access Undertaking. The purpose of the System Rules is to provide a transparent planning and scheduling process which is clearly understood by all stakeholders. The System Rules provide flexibility within the scheduling environment, whilst ensuring sufficient certainty for Access Holders in respect to their access entitlements.

This document outlines the rules as they apply to the various coal chains (including the Dalrymple Bay Coal Chain and the BMA Coal Chain) within the Goonyella System. Whilst it is recognised that these coal chains may have various operating modes, the System Rules provide consistency to planning and scheduling environment of the shared rail network. The System Rules relate directly to the following environments and decision making processes:

- (i) Master Train Planning Process
- (ii) Weekly Planning Process
- (iii) 48 Hour and Daily Planning Process
- (iv) Plan Implementation/Operation
- (v) Performance Measurement

The following map provides an overview of the Goonyella System, and the surrounding rail networks. These System Rules are in relation to the Goonyella System only.



### 1.1 Governance Framework

The System Rules are created under and governed by the Access Undertaking. QR Network is responsible for the development, maintenance and implementation of the System Rules.

Where alterations to the System Rules are proposed, QR Network will notify:

- (i) Access Holders and Access Seekers whose Train Services will be affected by the amendments and their Customers (together "Affected Persons");
- (ii) affected infrastructure providers for infrastructure forming part of the relevant supply chain (including, for example, the operator of a port that is the destination of Train Services operating in the relevant individual coal system;
- (iii) affected Infrastructure Service Providores:
- (iv) Railway Operators; and
- (v) the QCA,

of QR Network' intention to amend the System Rules and provide a copy of the amendments proposed to be made by QR Network ("Proposed Amendments"). QR Network will consult with these parties, having regard to the equitable operation of the System Rules across Access Holders and Access Seekers (should they become Access Holders) and their Customers and the terms of Access Agreements.

If the Access Holder or Access Seeker considers the proposed amendments would not, as a whole operate equitably amongst Access Holders and Access Seekers (should they become Access Holders) and their customers, or are materially inconsistent with the terms of the Access, they should provide a written submission to QR Network, within thirty (30) days after being given notice of the proposed amendments. QR Network will then consider the submissions and notify each person making a submission on whether they intend to vary the System Rules. If within fifteen (15) days of receiving this notification, an Affected Person considers that the proposed amendments are materially inconsistent with the terms of an access agreement, or would not as a whole operate equitably, then the person may refer the matter to the QCA for determination as a Dispute in accordance with Clause 10.1.4 of the Access Undertaking.

QR Network will lead a consultation process for each proposed change, consulting with the affected Access Holders as outlined above. The governance of the System Rules is detailed in Appendix 1 of Schedule G of the Access Undertaking.

# 1.2 Associated Documents

The following Documents have been identified as relevant to this document:

Document Title	Document Section Rel	evance Docume	ent Location
Access Undertaking	Schedule G Part A – Scheduling Principles	Details scheduling principles by which QR Network will schedule trains	Available on the QR Network website: www.qrnational.com.au
	Schedule G Part B – Train Control Principles	Details train control principles by which QR Network will abide	
	Schedule G Appendix 1  – System Rules	Overview of the purpose of the System Rules, and details the governance structure	
	Schedule G Appendix 2  - Contested Train Path Decision Making Process	Provides decision making rules for contested train paths	
	Schedule G Appendix 3  – Traffic Management Decision Making Matrix	Provides decision making rules for Traffic Management	
Standard Access Agreement		Sets out the standard contractual arrangements by which the Access Holder contracts access rights to the network	QCA Endorsed Standard Access Agreement available on the QR Network website: www.qrnational.com.au

# 1.3 Key Positions

The following table outlines key positions for QR Network in the planning and scheduling environment.

Position Title	Responsibility
Network Planning Manager	To manage the planning team of QR Network
Tactical Supply Chain Planner (Long Term)	Develop the Critical Asset Constraint Calender out to 18
	months aligning all maintenance and construction
	activities
Tactical Supply Chain Planner (Mid Term)	Develop the Critical Asset Constraint Summary by aligning
	maintenance and construction activities on the network
Operational Planning Supervisor	To manage the monthly, weekly and daily planning
	process
Network Service Designers	To develop the daily schedule and train diagrams
Network Production Manager	To manage network production including control centres
	and yards management for QR Network
Shift Production Manager	Control daily train movements and activities within the
	corridor, through the Network Control Centre
Performance Monitoring Officer	Facilitate any change to the Daily Train Plan outside of
	business hours

# 2 Master Train Plan

In accordance with Schedule G of the Access Undertaking, QR Network will develop a Master Train Plan (MTP) detailing the paths that are available for scheduling cyclic traffic. The MTP will also include time allocated for planned possessions, and timetabled traffic.

# 2.1 System Paths

A system path can be declared as a Below Rail Network Path that is aligned with a specific Mine Loading Slot and Port Unloading Slot, plus Above Rail dwells as contracted in various Access Agreements. This serves to align rail and port capacity so as to facilitate the optimal use of supply chain resources. The key objective of the system path concept is to optimise supply chain throughput through more closely linking Train Service Entitlements (TSEs) to port capacity availability.

#### **Below Rail Network Path**

Below Rail Network Paths are based on the reference train sectional run times.. Below Rail Network Paths are generic one way paths that are able to be utilised by all trains on the network. The dispatch rate of these paths is determined by the track configuration, signalling infrastructure and the associated impacts of these on the safe running of one train following another at normal operating speed. Below Rail Network Paths in the Goonyella System are determined based on the section between the ports to Coppabella, and have a dispatch interval of 20 minutes from the depot of Jilalan, and 24 minute from Coppabella (i.e. 60 per day; 420 per week for loaded services).

West of Coppabella, paths are scheduled on 30 minute intervals, allowing for 48 paths per day on each of the North Goonyella, and Blair Athol Branch Lines. Paths on the South Goonyella Line vary along the length of the branch line, with a maximum of 72 paths per day from Coppabella to Saraji, 54 paths per day from Saraji to Bundoora, and 26 paths per day from Bundoora to Gregory. There are 32 paths per day on the Hail Creek Branch Line. Whilst this allows for some surge capacity from each of the branch lines, these branch line paths must be aligned with each of the components of system path to be usable, being a Mine Loading Slot, Below Rail path from Coppabella to the Port, and a Port Unloading Slot to be usable.

## **Port Unloading Slots**

The Port Unloading Slots are an agreed dwell, inclusive of port unloading capability, and pre and post unload activities. The unload point capability is the sustained unloading figure as supplied by Dalrymple Bay Coal Terminal (DBCT) and Hay Point Coal Terminal (HPCT).

#### Mine Loading Slots

Arrival slots at the mine are based on the recharge capability of each loadouts, and the number of train services that can be loaded per 24 hours. This information will be provided for in the mine capability statements, supplied by the respective mine.

#### **Above Rail Dwells**

Above rail dwells that occur on each cycle of a train service are included in the definition of a System Path. This includes but is not limited to provisioning activities and crew changes. Specific Above Rail Dwells are identified in each Access Agreement, and corresponding Operator Operating Plan. These dwells will be taken into consideration for planning purposes.

# 2.2 Maintenance and Construction Planning

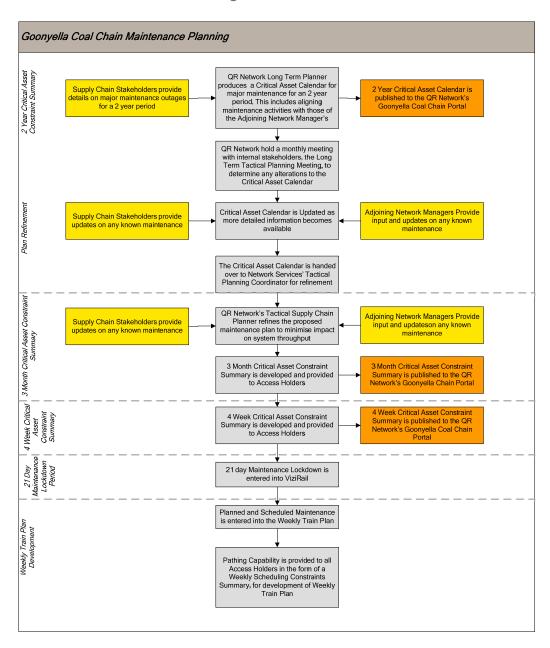
QR Network coordinates the alignment of the maintenance and construction activities throughout the Goonyella Coal Chain. The QR Network Tactical Supply Chain Planner (Long Term) produces a Critical Asset Calendar for major maintenance for a 2 year period, taking into account all major closure information from the Supply Chain Stakeholders. Monthly meetings (Monthly Long Term Tactical Planning Meeting) with Supply Chain Stakeholders will be held to ensure this information is kept up to date. This process includes

aligning general maintenance with the known berthing plan of the ports, in order to maximise throughput outside of complete closures.

At 4 months prior to the activities being performed, the Critical Asset Calendar is handed over to QR Network' Tactical Supply Chain Planner (Mid Term) for refinement. The Tactical Supply Chain Planner (Mid Term) collates more specific detail on outages, and aligns maintenance activities to minimise the impact on system throughput. The Tactical Supply Chain Planner produces the 3 month and the 4 week Critical Asset Constraint Summaries on a rolling monthly basis. These are made available to supply chain stakeholders on the Goonyella Coal Chain portal following the Monthly Long Term Tactical Planning Meeting. Supply Chain Stakeholders should advise the Tactical Supply Chain Planner of any revisions to their plans as they occur.

The 4 week Critical Asset Constraint Summary contains 21 days of locked down maintenance. The remaining days in the 4 week Critical Asset Constraint Summary are an indicative forecast of maintenance and construction closures only, and are subject to change until they enter the 21 day lockdown.

# 2.3 Maintenance Planning Process Flow Chart



## 2.4 Network Traffic

### 2.4.1 Cyclic Trains

Coal trains operating in the Goonyella Coal Chain are said to have cyclic schedules. In accordance with orders received, the contractual entitlements (Train Service Entitlements (TSEs)) for these trains are generally scheduled evenly across the month. They are not fixed; rather they feature a degree of variation that is determined on a week by week basis depending on the requirements of the system stakeholders.

Access Holders may submit a Monthly TSE forecast to QR Network, demonstrating how the Access Holder anticipates utilisation of TSEs over the month. This may involve over and under railing on a weekly basis to account for the operator resources constraints, mine production variation or ship berthing sequence, or other customer requests. The monthly TSE forecast will be used for informational purposes only. As outlined in section 3, QR Network will develop a weekly train plan, driven by demand; however the risk of varying from contractual entitlements shall sit with the Access Holder. Variations will be considered in accordance with the Contested Train Path Decisions Making Process outlined in Schedule G of the Access Undertaking.

# 3 Weekly Planning Process

As specified in the Network Management Principles in Schedule G of the Access Undertaking, a train plan is to be produced by QR Network in consultation with all Access Holders in line with their Access Agreement. In the Goonyella Coal Chain, this train plan is developed as a weekly plan, from Monday 00:00 to Sunday 23:59.

The weekly plan requires the allocation of Access Holders orders, to available system paths. The allocation of TSEs for each Access Holder in the Central Queensland Coal Network is undertaken in accordance with Part B, Schedule F (1.2) of the Access Undertaking, Reference Train Characteristics. This process assumes all contracted TSEs to be contracted reference train services, specified in terms of a cyclic traffic operated evenly throughout each yearly, monthly, and weekly period. The following process outlines the steps taken to allocate paths to Access Holders over a weekly period.

# 3.1 Scheduling Hierarchy

The schedule hierarchy outlined below will be followed for the purpose of scheduling train services in the Goonyella Coal Chain:

- 1. All agreed planned maintenance and construction requests for the following week (as agreed in the Critical Asset Constraint Summary)
- 2. Contracted timetabled passenger, livestock and freight services (where the respective Access Agreements have a timetabled TSE)
- 3. Contracted cyclic train services, up to the notional weekly allocation for the week
- 4. Additional requested contracted cyclic train services above notional weekly allocation 1
- 5. Schedule ad hoc passenger, freight and livestock services with the ability to operate services under an existing contract
- 6. Schedule ad hoc cyclic services

# 3.2 Schedule Development

Taking into account the above scheduling hierarchy, the following section outlines in detail the process for each component of the weekly train plan development.

#### 3.2.1 Scheduling Constraint Summary

QR Network develops the Scheduling Constraint Summary which details the pathing availability for the following week. The Scheduling Constraint Summary will be developed for a weekly period, and distributed to Access Holders 7 days prior to week of operation (14:00 Monday). The Scheduling Constraints Summary provides the number of Below Rail Network, and indicative System Paths available each week, and indicates the possible surge capability on each of the branch lines. It will also indicate the number of paths consumed by the following:

#### **Maintenance and Construction**

Pathing availability is based on maintenance and construction outages for the month. QR Network will determine the weekly supply chain network path availability based on information compiled on known planned and agreed system maintenance and construction outages. The Scheduling Constraint Summary will be developed detailing the date and time of all planned network outages, and the number of available network paths per day. QR Network will make evident in the Scheduling Constraint Summary, any emergency closures and variations that have occurred within the 21 day maintenance lockdown period. Supply Chain Stakeholders need to advise the Tactical Supply Chain Planner of any variations to those as listed in the Critical Asset Constraints Calendar by 14:00 on the Friday 10 days prior to the week of operation.

<sup>&</sup>lt;sup>1</sup> For a definition of Additional Requested Contracted Orders, and Non Contracted Ad Hoc Services, please see section 3.2.3 of this document.

## **Contracted Timetabled Passenger Livestock and Freight Services**

Contracted timetabled passenger, livestock and freight services that have a contracted timetabled path in the MTP are scheduled on this path (where possible). The MTP path has been developed in consultation with the Adjoining Network Manager. Where maintenance or construction activities are scheduled, passenger, livestock and freight services may be offered an alternate path. Where possible, through running train services will be offered paths with minimal delays enroute. The Adjoining Network Manager will be consulted with for any proposed changes to the MTP.

#### 3.2.2 Determination of QR Network TSE obligation

Access Agreements allow for each Access Holder to contract TSEs on an origin – destination basis. In order to attract a reference tariff and unless otherwise contracted, these services are to comply with Reference Train Characteristics outlined in Part B, Schedule F of the Access Undertaking, which states that services are to be operated evenly throughout each yearly, monthly and weekly period. Whilst Access Agreements consist of monthly entitlements, for scheduling purposes, monthly TSEs are broken down to nominal weekly entitlements, to ensure even railings across the month. In accordance with Schedule 1, 1.3 of the Standard Access Agreement, monthly paths are based on a 30 day month.

### **Nominal Weekly Entitlement**

The nominal weekly entitlement for each origin – destination TSE is calculated by dividing the total monthly TSE by the number of days in the month, then multiplying by the days in the week, rounding up to the nearest full path.

#### Adjustments to TSE Allocation for Planned Maintenance

Due to planned maintenance and construction outages on the network, QR Network will adjust the allocation of TSEs to be offered to each Access Holder across the month to ensure sufficient network paths are available. This means that notional TSE allocations made available for each Access Holder on a daily basis will be adjusted upward when no maintenance is occurring to offset reductions arising at times when maintenance is occurring. A maintenance multiplier is calculated by the following equation:

Maintenance Multiplier = Total monthly network paths available on a clear month/ (Total monthly paths available on a clear month – paths not available)

The maintenance multiplier is applied to a nominal daily TSE figure for each month. A maintenance adjusted nominal weekly entitlement can then be calculated by multiplying this maintenance adjusted nominal daily figure by the number of days in the week, and rounding up to the nearest full number to ensure all entitlements are received. In developing this figure, QR Network will ensure that pathing does not exceed the loadout capability of each origin. The maintenance multiplier will be communicated to Access Holders for each month through a monthly report.

The final figure is the adjusted TSE for the week. This figure forms the basis for path allocation.

#### 3.2.3 Train Orders

It is the responsibility of the Access Holder to coordinate train orders with their customers. All requests are to be developed in accordance with the TSEs of an Access Holder's Access Agreement. Additional orders above or varying from contracted service levels may also be submitted by the Access Holder, and these will be handled in accordance with the scheduling process outlined in section 3.2.5 of this document.

Producers should submit a copy of their proposed weekly train orders to DBCT or HPCT. The Ports will then establish a delivery plan each, and provide a copy to Rail Operators, and QR Network for review.

Rail Operators compile their weekly train orders (as set out in Appendix A: Weekly Train Orders Template, or as otherwise agreed between the Rail Operator and QR Network) and submit these to QR Network prior to 12:00 Wednesday, outlining their train orders for the following week... The Train Orders Template provides for the following details:

- (i) Train Numbers listed by Origin Destination combination per day
- (ii) Preferred departure times from depots
- (iii) Number and type of train consist and the time at which each will become available for schedule allocation

- (iv) Any anticipated variations from operating parameters within each Access Holders Access Agreement (e.g. longer unloading, loading, dwell times, sticky coal etc.)
- Any other Access Holder specified requests including planned stowing locations and durations.

For orders where no contractual entitlements exists, Rail Operators are required to submit an Ad Hoc Revenue Service Form (refer Appendix B) to QR Network prior to 12:00 Wednesday. The Ad Hoc Revenue Services Form allows for sufficient information to be provided for the scheduling of a non-contracted service. Each proposed ad hoc train movement requires an Operating Plan, Interface Risk Management Plan and Consist Authority to be performed prior to operation.

For allocation purposes, the paths requested for each origin/destination TSE are divided into three categories, Contracted TSE Orders, Additional Requested Contracted Orders, and Ad Hoc Orders:

#### **Contracted TSE Orders**

- All orders received up to the Nominal Weekly TSE<sup>2</sup> of the Access Holder will be treated as TSE Orders.
- An Access Holder may chose to reallocate orders amongst multiple TSEs by ordering less than the nominal weekly allocation for one (the original) train service (Origin Destination TSE), and ordering more than nominal weekly allocation for another train service (Origin Destination TSE), provided total nominal weekly allocations are not exceeded, and capacity exists to do so without hindering another Access Holder's entitlement. The Access Holder must specify any reallocation of orders clearly in the weekly orders template. Where the total orders equal the total nominal weekly entitlement, QR Network will deem all requested orders as TSE Orders. Allocation of these orders will be recorded, and will be deemed full performance against the original entitlement by QR Network for the purpose of scheduling the Access Holder's future train orders.

#### **Additional Requested Contracted Orders**

 Unless outlined above, any cyclic coal paths ordered in excess of nominal weekly TSEs, where a current contract exists, will be treated as Additional Requested Contracted Orders.

#### Ad Hoc Orders

- Any passenger or freight service for which a contract exists without MTP requirements will be deemed an Ad Hoc Order.
- Any requested cyclic coal paths for which no contractual TSE exists will be deemed an Ad Hoc Order.

### 3.2.4 Schedule Train Service Entitlements

- Contracted TSE Orders for each Access Holder are assigned available System Paths first. QR Network will determine if sufficient paths are available to schedule all Contracted TSE Orders.
- If sufficient paths are available to schedule all Contracted TSE Orders, then paths are assigned to each Access Holder in line with Orders received.
- In the event of insufficient paths to schedule all TSE Orders, QR Network will allocate the available paths (where rollingstock availability is ensured by the Access Holder, and Port Unloading Slots are available) in accordance with the Contested Train Path Guidelines within Schedule G of Network Service's Access Undertaking. Paths will be allocated using the following process:
  - QR Network will advise Access Holders if there are insufficient paths, who may chose to agree amongst themselves to whom the paths are allocated. This decision must be made in consideration of port requirements. If an agreement is made, confirmation via email is required from both Access Holders of the proposed solution. A record will be kept by QR Network on any decisions made by Access Holders.
  - (ii) If no agreement can be reached, QR Network will schedule paths, considering the contracted entitlements of each Access Holder.
    - If QR Network is behind (in the contract month to date) in providing an Access Holder with its contracted Train Services on an origin – destination basis, due to Network Cause, that Access Holder will get priority over an Access Holder that QR Network is

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<sup>&</sup>lt;sup>2</sup> Refer to 3.2.2 Determination of QR Network TSE obligation

- either ahead or has been provided contracted Train Services. Where QR Network is behind in providing contracted Train Services to more than one Access Holder, the Access Holder most behind (in services) will get proportionate priority<sup>3</sup> over others.
- 2. If an Access Holder is behind (in the contract year to date) in receiving contracted Train Services (due to Network Cause) on an aggregate TSE basis, that Access Holder will get priority over an Access Holder that is either ahead of contract, or on target. Were more than one Access Holder is behind in receiving contracted Train Service, the Access Holder most behind (in services) will get proportionate priority<sup>3</sup> over others.
- (iii) If after the above mentioned processes, all orders have not been allocated paths and paths remain available, QR Network will allocate the remaining paths unilaterally, taking into consideration the best solution for the supply chain as a whole. The considerations in determining this solution involve:
  - 1. Requested Operations of the Port;
  - 2. The impact on the pathing plan; and
  - 3. The ability of the Train Services to load and unload.
- QR Network will keep written records of all decisions made in regard to TSE allocations. Relevant
  information may be made available upon request for dispute resolution purposes in accordance with
  Clause 10.1 of the Access Undertaking.

### 3.2.5 Schedule Additional Requested Contracted Orders

- In accordance with the Contested Train Path Decision Making Process outlined in Schedule G of the Contested Train Path Decisions Making Process outlined in Schedule G of the Access Undertaking. QR Network will schedule additional requested contracted orders, where additional paths remain available.
- Where sufficient paths exist to accommodate all requested contracted non-TSE orders, all orders will be allocated a path.
- In the event of insufficient paths to fulfil all requested services, QR Network will allocate the available paths (where rollingstock availability is ensured by the Access Holder, and Port Unloading Slots are available) in accordance with the Contested Train Path Guidelines within Schedule G of the Access Undertaking:
  - (i) QR Network will advise Access Holders if there are insufficient paths, who may chose to agree amongst themselves to whom the paths are allocated. This decision must be made in considering port requirements. If an agreement is made, confirmation via email is required from both Access Holders of the proposed solution.. A record will be kept by QR Network on any decisions made by Access Holders.
  - (ii) If no agreement can be reached, QR Network will schedule paths, considering the contracted entitlements of each Access Holder
    - 1. If QR Network is behind (in the contract month to date) in providing an Access Holder with its contracted Train Services on an origin destination basis, due to Network Cause, that Access Holder will get priority over an Access Holder that QR Network is either ahead or has been provided contracted Train Services. Where QR Network is behind in providing contracted Train Services to more than one Access Holder, the Access Holder most behind (in services) will get proportionate priority<sup>3</sup> over others.
    - 2. If an Access Holder is behind (in the contract year to date) in receiving contracted Train Services (due to QR Network Cause) on an aggregate TSE basis, that Access Holder will get priority over an Access Holder that is either ahead of contract, or on target. Were more than one Access Holder is behind in receiving contracted Train Service, the Access Holder most behind (in services) will get proportionate priority<sup>3</sup> over others.
  - (iii) If after the above mentioned processes, all orders have not been allocated paths, and paths remain available, QR Network will allocate the remaining paths unilaterally, taking into consideration the best solution for the supply chain as a whole. The considerations in determining this solution involve:
    - 1. Requested Operations of the Port;
    - 2. The impact on the pathing plan; and

<sup>3</sup> Prioritisation will be proportionate on the amount of services an Access Holder is behind due to Network Cause. For example, if one Access Holder is behind by 60%, and another Access Holder is behind by 40%, the first Access Holder will receive 60% of the available paths, and the other will receive 40% of the available paths.

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- 3. The ability of the Train Services to load and unload.
- QR Network will keep written records of all decisions made in regard to TSE allocations. Relevant
  information may be made available upon request for dispute resolution purposes in accordance with
  Clause 10.1 of the Access Undertaking.
- Any additional requested contracted orders scheduled in the 48hr Plan will be deemed as performance against TSE for the month by QR Network for the purposes of scheduling the Access Holder's future train orders.

#### 3.2.6 Schedule Ad Hoc Orders

In accordance with the Contested Train Path Decision Making Process outlined in the Contested Train Path Decisions Making Process outlined in Schedule G of the Access Undertaking. QR Network will schedule Ad Hoc Orders where additional paths remain available. In accordance with the scheduling hierarchy, the following process will be used to schedule ad hoc orders:

- Where sufficient paths exist to accommodate all Ad Hoc Orders, all orders will be allocated a path.
- In the event of insufficient paths to accommodated all Ad Hoc Orders, QR Network will allocate the
  available paths (where rollingstock availability is ensured by the Access Holder, and Port Slots are
  available) in accordance with the Contested Train Path Guidelines within Schedule G of the Access
  Undertaking:
  - QR Network will advise Access Holders if there are insufficient paths, who may chose to agree amongst themselves to who the paths are allocated. This decision must be made in considering port requirements. If an agreement is made, confirmation via email is required from both Access Holders of the proposed solution. A record will be kept by QR Network on any decisions made by Access Holders.
  - (ii) Where Access Holders do not reach a solution on the allocation of an Ad Hoc path, QR Network will unilaterally schedule the path on a best endeavours basis, taking into consideration the priorities of the supply chain as a whole.

QR Network will keep written records of decisions made in relation to Ad Hoc Path allocation.

#### 3.2.7 Draft Development and Distribution

The weekly train plan will be developed in accordance with appropriate train operation and safeworking standards. It will be communicated to Access Holders for review and comment by 09:00 Thursday. Access Holders are to provide QR Network's Operational Planning Supervisor with comments on the plan. Any requested alterations are to be provided in writing to QR Network prior by 10:00 Thursday. These alterations will be negotiated on a case by case basis, in accordance with the Plan Alteration Rules outlined in Section 5.1. All requested changes will be finalised by 11:00 Thursday.

QR Network will provide a written response to the Access Holder on the outcome of any requested alterations.

# 3.2.8 Final Acknowledgment and Acceptance

The final weekly train plan is to be communicated to Access Holders and Ports by 14:00 Thursday. Access Holders will receive an edited format of the weekly train plan, containing their respective planned services only.

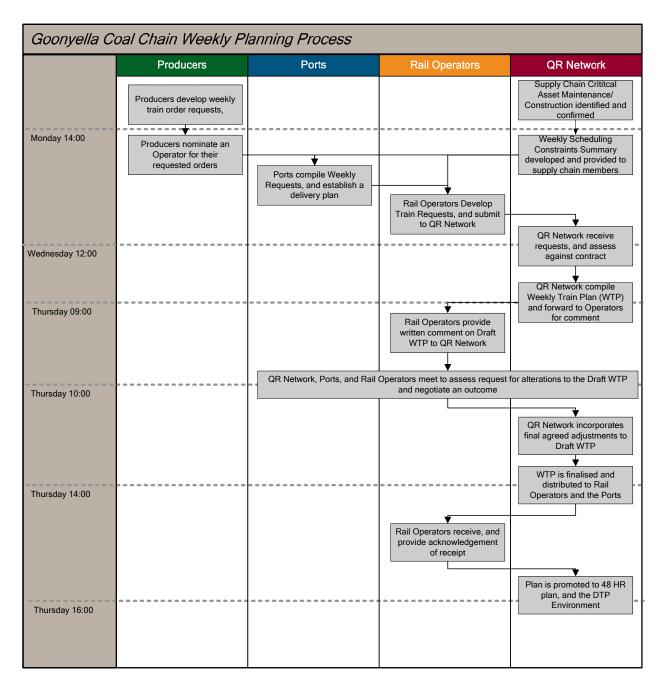
The agreed Weekly train plan will specify:

- (i) Service numbers for each origin destination TSE
- (ii) Indicative departure and arrival times for planned services at depots, loading and unloading facilities
- (iii) Planned Dwells
- (iv) Indicative port sequencing
- (v) Scheduled system outages

The Access Holder must provide written acknowledgment of receipt and acceptance of the weekly train plan by 16:00 Thursday to QR Network' Operational Planning Supervisor. Once confirmation is received, the weekly train plan is progressively promoted to the Daily Train Plan environment. Where written acknowledgement of receipt and acceptance does not occur, the Access Holder is deemed to have rejected

the weekly train plan, and following appropriate consultation with the Access Holder, QR Network will not schedule services for that Access Holder.

# 3.2.9 Weekly Planning Process Flow Chart



# 4 48 Hour Planning Process

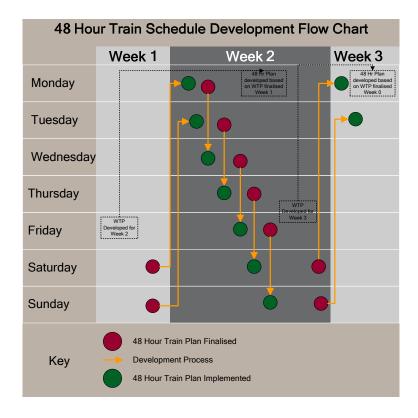
#### 4.1 48 Hour Train Plan Schedule

The agreed weekly train plan will form the basis for the 48 Hour Train Plan Schedule. The 48 Hour Train Schedule will specify:

- (i) Departure and arrival times for planned services at depots, loading and unloading facilities;
- (ii) Port unloading schedule;
- (iii) Scheduled system outages; and
- (iv) Planned dwells for scheduled services on the network.

The 48 Hour Train Schedule will take into account any requested daily changes, in accordance with the Schedule Alteration Rules outlined in Section 5 of this document.

Finalisation of the 48 Hour Train Schedule will occur at 16:00 36 hours prior to implementation. The flowchart below outlines the timeframes. Where required, this plan may be revised on a 24 hour basis, developing a Daily Train Plan (DTP). However, for scheduling purposes, TSE consumption will be measured on the original 48 Hour Train Plan.



#### 4.1.1 Schedule progression and distribution

The 48 Hour Train Schedule forms the basis of a Daily Train Plan. The DTP is developed by QR Network using the electronic ViziRail Planning Tool. This allows the plan to be communicated to operators, and to be progressed into a train control diagram. Train control diagrams are printed at 14:00 hours on the business day prior to operation, and transferred to Network Control Centres.

An electronic version of the DTP will be distributed to Access Holders and DBCT and HPCT at the close of business prior to the day of operation, via an electronic transfer. Access Holders will receive an edited format of the DTP, containing their respective planned services, and maintenance traffic only.

# 5 Schedule Alterations

## 5.1 Schedule Alteration Rules

Requests by operators to alter their train orders, including cancellations, additions and time alterations will be considered by QR Network. The Alteration Decision Making Process outlined below are a set of rules which govern any requested schedule alterations for the 48hr and Daily Train Plan as established in Clause 4(d) of Schedule G of the Access Undertaking.

#### **Alteration Decision Making Process**

- Supply Chain Stakeholders must phone the appropriate QR Network Personnel (see Plan Alteration Rule 2) to discuss any changes prior to submitting a DTP Request Form. QR Network will assess the contractual requirements of the proposed change, and provide an initial verbal assessment of the capacity requirements for the proposed change.
- 2. DTP Requests can be submitted to QR Network at any time for consideration. Each alteration must be submitted on a DTP Change Request Form via email to <a href="mailto:NSOMackay@qrnational.com.au">NSOMackay@qrnational.com.au</a>, and will be assessed in order of the time stamp attached to each email. The Network Service Designers will assess requests received within normal business hours, 7 days a week (0800 1830). The Shift Production Manager will assess requests received outside of business hours.
- 3. QR Network will determine the availability of a port slot in conjunction with DBCT and HPCT as part of the process of reviewing a DTP change request.
- 4. For each DTP request submitted, QR Network may alter the DTP where the requested alteration
  - (i) Does not impact on other Access Holder's performance;
  - (ii) Can be accommodated within the current DTP; and
  - (iii) Do not impact on QR Network' ability to provide Monthly TSE's in accordance with its contracts.
- 5. In the event of a requested alteration by a Rail Operator that conflicts with a scheduled maintenance or construction possession, the request will not be met, and an alternate path may be offered if available.
- 6. In the event of an emergency possession by QR Network, QR Network may endeavour to offer an alternate route, where paths are available (in accordance with Schedule G of the Access Undertaking).
- 7. In the event of a Loading or Unloading location requesting emergency alterations to a plan, QR Network will attempt to accommodate affected services and may endeavour to offer an alternate path, where paths are available, taking into consideration port requirements.
- 8. For the purpose of scheduling an Access Holder's future Train Orders, any requested diversions in the Day Of Operations environment that can be accommodated but result in a cancellation of the original destination, will be recorded as the path being provided for the diverted to Origin Destination TSE, and a cancellation for the diverted from Origin Destination TSE.
- 9. QR Network will keep written records of all decisions made in regard to DTP Change Requests.
- 10. In the event of a dispute arising, the dispute resolution process of the Access Holder's Access Agreement will be followed.

# 6 Plan Implementation

# 6.1 Train Control Operations

All network control procedures, including but not limited to train running, crossings and dwells will be managed by Network Control Centre. These operations will be in accordance with Appendix 3, Traffic Management Decision Making Matrix of Schedule G of the Access Undertaking.

# 6.2 Departure Procedures

A Rail Operator is required to contact Network Control 1 hour prior to the scheduled departure time, for the purpose of advising that the train will be ready to depart as scheduled.

A Rail Operator must contact Network Control 15 minutes prior to the scheduled departure time (or if the scheduled time has been modified due to previous agreement with Network Control, then 15 minutes prior to amended scheduled departure time) to confirm that the train will be ready to depart as scheduled, or to confer as to the consequences of any delay. The Rail Operator's Controller is required to provide the Network Controller with the required information as specified in Part 2 of Schedule 10 of their Access Agreements. As a minimum, this information includes:

- Number of the Train
- Traincrew names and depot
- Length of the Train in metres including locomotives
- Gross trailing load of the Train in tonnes
- Any Known defects eg brakes cut out.

In the event that the Rail Operator has reason to believe the train will not be ready to depart as scheduled, the operator and Network Control will consult to determine an alternative departure time.

# 6.3 Delays

In the event of a Rail Operator's service being delayed by another Rail Operator's incident, QR Network will endeavour to provide the best recovery solution for the supply chain as a whole.

In the event of an Infrastructure Provider, including but not limited the Ports, or QR Network, causing a delay, QR Network will endeavour to provide the best recovery solution for the Supply Chain as a whole. This will include consultation with the Port and Rail Operators.

# 6.4 Storage /Capacity consumption

Any dwells greater than TSE allowances, unless directed by QR Network, will be treated as storage on the network. Any requested storage on QR Network' track must be negotiated with QR Network. All requests for storage are to be submitted 72 hours in advance. No storage will be permitted on the rail network without the prior agreement from QR Network.

#### 6.5 Diversions

If a diversion is requested and can be allocated, the new schedule to which the train service is allocated will be the one against which it is measured on being a 'On Time' service (in accordance with Appendix 3 of Schedule G of the Access Undertaking – Traffic Management Decision Making Matrix).

# 7 Measuring Performance

#### 7.1 Train Service Entitlement Performance

Performance of a Contract in relation to TSEs, including paths made available to Access Holders and contract entitlements achieved, will be measured by comparing TSEs (subject to section 4.2.3 of this document) of Access Holders against paths made available in the Weekly Train Plan plus any additional paths provided in the DTP environment.

QR Network will provide each Access Holder with a Weekly TSE Performance Report. Distributed on a weekly basis, the report will detail current TSE performance levels, and QR Network obligations for the month, and a comparison of orders vs. scheduled vs. actual services. An example report can be found in Appendix C.

## 7.2 Schedule Performance

#### 7.2.1 Train Performance

Train Performance, including on-time running and delays, will be measured against the original DTP published.

#### 7.2.2 Delay Accountability

For delays that have occurred in exception to the DTP, QR Network will consult with Supply Chain Stakeholders to determine the cause of the delay, by conducting a root cause analysis. For Cyclic Services, the process will be limited to reviewing possible causal incidents that occurred on or after the commencement of the last train cycle. For Timetabled Services, this process will be limited to reviewing possible causal incidents that occurred on or after the commencement of the timetabled service. Consultation will occur on a daily basis, at the 10am morning phone hook-up. Causes will be classified to one of the following accountabilities:

- (i) Network
- (ii) Port
- (iii) Mine
- (iv) Rail Operator A − Z

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

## 7.2.3 Cancellation Accountability

For cancellations from either the WTP or DTP, QR Network will consult with Supply Chain Stakeholders to determine the cause of the cancellation, by conducting a root cause analysis. For Cyclic Services, the process will be limited to reviewing possible causal incidents that occurred on or after the commencement of the last train cycle. For Timetabled Services, this process will be limited to reviewing possible causal incidents that occurred on or after the commencement of the timetabled service. Consultation will occur on a daily basis, at the 10am morning phone hook-up. Causes will be classified to one of the following accountabilities:

- (i) Network
- (ii) Port
- (iii) Mine
- (iv) Operator A Z

Where no decision can be reached collectively, QR Network will determine accountability for the cancellation. Where a dispute arises with the determined cause, affected Access Holders can escalate the dispute through the dispute mechanisms of their relevant Access Agreement.

# 8 System Rules Implementation and Endorsement

QR Network will seek endorsement of the Goonyella System Rules from each Access Holder. Endorsement is required in the form of a formal letter outlining the Access Holders understanding and commitment to the System Rules.

Following extensive consultation, QR Network will provide to the Queensland Competition Authority (QCA) the proposed draft Goonyella System Rules. Once endorsed by the Queensland Competition Authority, QR Network intends to implement the Goonyella System Rules in their current form for existing operations.

The endorsed Goonyella System Rules will be published on QR National Network Service's website: www.grnational.com.au/NetworkServices

# **Appendices**

# Appendix A: Train Orders Template

Consist Number	Region	Consist Type	Date\Time Available					
1	Goonyella	Electric	1/07/11 18:00					

Consist Types	
Electric	1
Diesel	0

## Comments:

	Weekl Train Plan Templ											We Comm	ek encing Date						
Ex Depot	Depot Dept	Loco ID	Mine ID	Path Empty	Load	Mine Arr	Mine Dept	Path Loaded	Arr Depot	Dept Depot	Unload	Belt	Spile	Port Arr	Comm Unld	Comp Unld	Dest	Dest Arr	Commen ts
Jilalan	1:00	E		01/02		7:00	10:00	11:15	17:35	18:50	DBCT	2	1234	20:00	20:25	22:20	Jilalan	22:30	

# Appendix B: Ad Hoc Revenue Services Form

QR NATIONAL. NETWORK SERVICES	Ad Hoc Services Form							
Service Information	Contact Details							
Operator	Name							
Proposed Start Date	Position							
Depot	Phone No.							
Load Location	Email							
Unload Location	Cycle Time Information							
Belt	Depart Depot (hh:mm)							
Stockpile	Run Time Empty							
	Time at Mine							
Consist Information	Run Time Loaded							
Type of Loco	Time at Port							
Consist is approved in Operator Access Agreement	Time at Depot							
TRA No.	Ready to next Depart (hh.mm)							
Consist requires Authority to Travel	nearly to reach Depart (mining)							
Att No.	Interface Risk Management Plan Information							
	IRMP Details:							
	ells, Crew Change, Provisining etc)							
Location Nominated Road	Dwell/Shunt Reason Time Required							
QR Netw	vork Use Only							
Date / Time Received	Name of Recipient							
Date / Time Processed Signature								

# Appendix C: Example Weekly Report

