

# QR Network System Rules

Capricornia Coal Chain

Date: 31/08/2011



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#### Preamble

QR Network's System Rules is a subsidiary document to QR Network's Access Undertaking (the Access Undertaking) 2010. It provides 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.

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.

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.

#### **Definitions**

Unless otherwise specified, the terms used in this document have the same meaning as those defined within QR Network's Access Undertaking and Access Holder Access Agreements.

Other Specific Definitions include:

#### "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 Capricornia 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;
- (iii) the unavailability of, or a cancellation of train services on, the Adjoining Network; or
- (iv) to the unavailability of the Loading and/or Unloading Facilities or their failure to meet the performance parameters detailed in the relevant Access Agreement.

### 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.
- 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 3.2 to a 6 Week Critical Asset Constraint Summary. QR Network is currently in negotiations 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.

# Table of Contents

1 INTRODUCTION	7
1.1 GOVERNANCE FRAMEWORK	8
1.2 ASSOCIATED DOCUMENTS	9
1.3 Key Interfaces	9
2 MASTER TRAIN PLAN	10
_	-
2.1 SYSTEM PATHS	10
2.2 MAINTENANCE AND CONSTRUCTION PLANNING	10
2.3 Maintenance Planning Process Flow Chart	11
2.4 NETWORK TRAFFIC	12
3 WEEKLY PLANNING PROCESS	13
3.1 SCHEDULING HIERARCHY	13
3.2 SCHEDULE DEVELOPMENT	13
4 DAILY PLANNING PROCESS	20
4.1 DAILY TRAIN PLAN	20
F. DI ANI AL TERATIONS	04
5 PLAN ALTERATIONS	21
E 4 DI AN ALTERATION DIVISO	24
5.1 PLAN ALTERATION RULES	21
6 PLAN IMPLEMENTATION	22
6.1 Train Control Operations	22
7 MEASURING PERFORMANCE	23
7.1 TRAIN SERVICE ENTITLEMENT PERFORMANCE	23
7.2 SCHEDULE PERFORMANCE	23
8 SYSTEM RULES ENDORSEMENT	24
A	
APPENDIX A: GPC PORT SLOT SCHEDULE	25
APPENDIX B: TRAIN ORDERS TEMPLATE  APPENDIX C: AD HOC SERVICES FORM	26 27
APPENDIX C: AD HOC SERVICES FORM  APPENDIX D: EXAMPLE WEEKLY REPORT	28

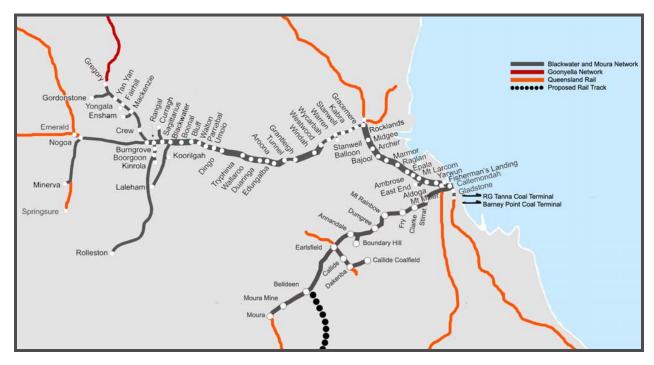
#### 1 Introduction

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.

The System Rules provide consistency to the planning and scheduling environment of the shared rail network. They relate directly to the following environments and decision making processes:

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

This document outlines the rules as they apply to Blackwater and Moura coal chains. The following map provides an overview of the Blackwater and Moura Systems, and the surrounding networks.



#### 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 Providers;
- (iv) Railway Operators; and
- (v) the QCA,

of QR Network's 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 Seeker considers the proposed rules would not operate equitably, are inconsistent with the terms of the Access Agreement, or have material commercial impacts on the Operator and/or the Access Holder, they should provide written submission to QR Network, within thirty (30) days after being given notice of the proposed rules. QR Network will then 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 System Rules are inconsistent with the terms of the Access Agreement, or would not operate equitably, the matter may be referred to dispute resolution in accordance with Clause 10.1 of the 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	Relevance	Document Location					
Access Undertaking (2010)	Schedule G Part A – Scheduling Principles							
	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 Interfaces

The following table outlines key interfaces for QR Network.

Position Title	Responsibility
Network Planning Manager	To manage the Planning team of QR Network
Long Term Planning Coordinator	Develop the Critical Asset Constraint Calender out to 18 months aligning all maintenance and construction activities
Tactical Supply Chain Planner	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
Customer Support & Scheduling Officer	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 throughout the coal systems
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 Undertaking, QR Network will develop a Master Train Plan (MTP) detailing the system 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 defined 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 resources. The key objective of the system path concept is to optimise supply chain throughput through more closely linking rail Access Rights to port capacity availability.

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

Below Rail Network paths are based on the reference train section run times. They 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 road speed. Below Rail Network paths in the Blackwater System are determined based on the run between Callemondah and Bluff, having a dispatch interval of 30 minutes (i.e. 48/day; 336/week). Below Rail Network paths for the Moura System are based on the run between Callemondah and Dumgree and have a dispatch interval of 90 minutes (ie 16/day; 112/week).

#### **Port Unloading Slots**

The Port Unloading slots are defined by unloader capability which is the nominal length of time taken for a Blackwater Reference Train to unload at a particular unloading location. Refer to Appendix A for details of unloading slots for RGTCT (Golding and Barney Point). There is ample unload capacity for Domestic hauls.

#### **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 day. This information will be provided for in the mine capability statements.

#### **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 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 Capricornia Coal Chain. The QR Network Long Term Planning Coordinator produces a Critical Asset Calendar for major maintenance for an 18 month period, taking into account all major closure information from the Supply Chain Stakeholders. Bi-Monthly meetings (Monthly Long Term 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 berthing plan of the ports, in order to maximise throughput outside of complete closures.

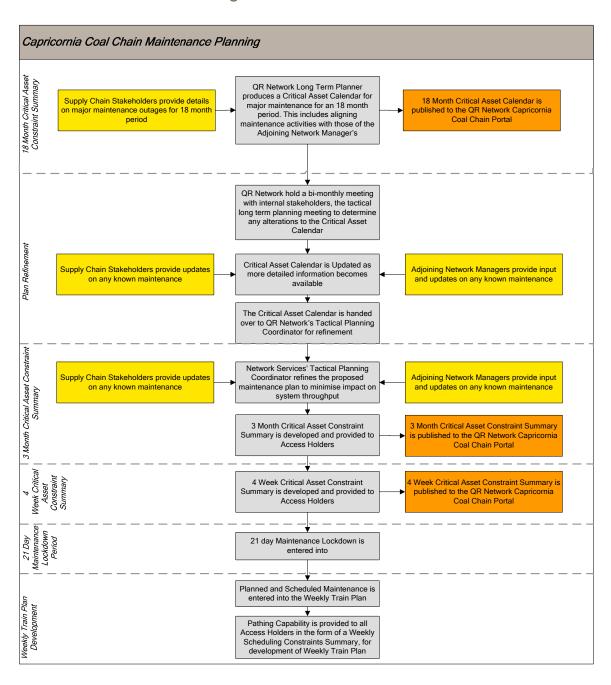
At 4 months prior to operation, the Critical Asset Calendar is handed over to QR Network's Tactical Planning Coordinator for refinement. The Tactical Planning Coordinator collates more specific detail on outages, and aligns maintenance activities to minimise the impact on system throughput. The Tactical Planning Coordinator 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 Capricornia Coal

Chain Portal. Supply Chain Stakeholders should advise the Tactical Planning Coordinator 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.

QR Network also coordinates maintenance planning activities with the Adjoining Network Manager to ensure minimal disruption for services running from and to the adjoining network. Throughout the maintenance plan process of refining the maintenance plan, communication between both network managers is required to ensure minimal disruption to services.

# 2.3 Maintenance Planning Process Flow Chart



#### 2.4 Network Traffic

#### 2.4.1 Contracted Timetabled Traffic

There are a number of contracted Freight and Passenger services that have pre-allocated paths in the MTP. This traffic consists of services operating within the Capricornia Coal Network, and through running trains operating through a portion of the Capricornia Coal Network via Network Interface Points to Adjoining Infrastructure. Contracted Timetabled Traffic feature fixed paths and schedules that are automatically generated on a week to week basis. There is no requirement to provide weekly train orders for these traffics.

# 2.4.2 Cyclic Trains

Coal Trains operating in the Capricornia 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, however 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 TSE 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 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 Capricornia Coal Chain, this train plan is developed as a Weekly Train Plan (WTP), from Monday 00:00 to Sunday 23:59.

The WTP requires the allocation of Access Holders orders to available system paths. The allocation of TSE for each Access Holder in the Central Queensland Coal Network is undertaken in accordance with Part B, Schedule F (1.2) the Access Undertaking, Reference Train Characteristics. This process assumes all contracted TSEs are 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 Capricornia 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 domestic cyclic train services with an unload location of a PowerStation, up to the notional weekly allocation for the week
- 4. Contracted cyclic train services, up to the notional weekly allocation for the week
- 5. Additional requested contracted cyclic train services above notional weekly allocation 1
- 6. Schedule ad hoc passenger, freight, livestock and coal services with the ability to operate services under an existing contract
- 7. Schedule ad hoc cyclic services with no existing contract

# 3.2 Schedule Development

Taking into account the above Scheduling Hierarchy, the following section outlines in detail the process for each component of the WTP.

# 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. The scheduling constraint summary takes into account the following components:

#### **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 variations that have occurred within the 21 day maintenance lockdown period. Supply Chain Stakeholders

<sup>&</sup>lt;sup>1</sup> For a definition of additional requested contracted orders, and ad hoc services, please see section 3.2.3 of this document.

need to advise the Tactical Planning Coordinator 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.

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

Contracted timetabled passenger, freight and livestock services that have a contracted timetabled path in the MTP are scheduled on this path (where possible). This MTP path has been provided in consultation with the Adjoining Network Manager. Where maintenance or construction activities are scheduled, passenger, freight and livestock 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 for Planned Maintenance**

Due to planned maintenance and construction outages on the network, QR Network will adjust allocation of TSEs to be offered to each Access Holder, across the month to ensure total monthly TSEs can be achieved. 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 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 Holders 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.

Access Holders should submit a copy of their proposed weekly train orders to QR Network and GPC by 14:30 on a Tuesday of the week before operation. GPC and QR Network will review the orders and provide feedback at a Weekly Train Orders meeting to be held each Tuesday around 15:00 to 16:00, between each operator, GPC and QR Network.

Access Holders should then complete the Weekly Train Orders Template (refer to Appendix B) and submit a copy to QR Network prior to 16:00 Tuesday, outlining their train orders for the following week. The Train Orders template provides 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 Holder's Access Agreement (e.g. longer unloading, loading, dwell times, sticky coal etc.)
- (v) Any other Access Holder specified requests including planned stowing locations and durations.

For orders where no contract exists, Rail Operators are required to submit an Ad Hoc Revenue Service Form (refer Appendix C) to QR Network prior to 16:00 Tuesday. 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, Risk Assessment and Consist Authority to be performed prior to operations.

For any additional orders, or variations to existing orders that are requested after 16:00 Tuesday, QR Network will schedule these on a best endeavours basis only.

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 adjusted nominal weekly TSE<sup>2</sup> of the Access Holder will be treated as contracted TSE Orders.
- An Access Holder may choose 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 the adjusted nominal weekly TSEs<sup>2</sup>, where a current contract exists, will be treated as additional requested Contracted Orders.

#### **Ad Hoc Orders**

- Any passenger, freight livestock, or coal 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

- Domestic Train Services with an unload location of a Domestic PowerStation are to receive priority, ensuring the supply chain remains operational. For this reason, domestic services with an unload location of a Domestic PowerStation (up to the notional weekly TSE allocation) are scheduled before export services.
- Contracted TSE Orders for each Access Holder are assigned available System Paths secondly.
   QR Network will determine if sufficient paths are available to schedule all Contracted TSE Orders.

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

- 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 fulfil contracted TSE's, QR Network will allocate the available paths (where rollingstock availability is confirmed by the Access Holder, and Port Slots are available) in accordance with the Contested Train Path Guidelines within Schedule G of the Undertaking:
  - (i) QR Network will advise Access Holders if there are insufficient paths, who may chose to agree amongst themselves to who the paths are allocated. 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 TSEs 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 on target. Where QR Network is behind in providing contracted TSEs 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 TSEs on an aggregate TSE basis, due to Network Cause, that Access Holder will get priority over an Access Holder that is either ahead of contract, or on target. Where more than one Access Holder is behind in receiving contracted TSEs, the Access Holder most behind (in services) will get proportionate priority<sup>3</sup> over others.
  - (iii) If after the above mentioned processes, all paths have not been allocated, 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 Access Undertaking, QR Network will schedule any additional requested contracted orders where additional paths remain available.
- Where sufficient paths exist to accommodate all Additional Requested Contracted 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 confirmed by the Access Holder, and Port Slots
  are available) in accordance with the Contested Train Path Guidelines within Schedule G of the
  Undertaking:
  - (i) QR Network will advise Access Holders if there are insufficient paths, who may chose to agree amongst themselves to who the paths are allocated. 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 TSEs 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 on target. Where QR Network is behind in providing contracted TSEs to more than

<sup>&</sup>lt;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.

- 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 on an aggregate TSE basis, due to Network Cause, that Access Holder will get priority over an Access Holder that is either ahead of contract, or on target. Where more than one Access Holder is behind in receiving contracted TSEs, the Access Holder most behind (in services) will get proportionate priority<sup>3</sup> over others.
- (iv) If after the above mentioned processes, all paths have not been allocated, 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 unloading locations;
  - 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 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 Weekly Plan will be deemed as performance against TSE for the month by QR Network for the purpose 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 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 accommodate 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 Undertaking:
  - QR Network will advise Access Holders if there are insufficient paths, who may choose to agree amongst themselves to who the paths are allocated. 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.
  - 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. The considerations in determining this solution involve:
    - Requested operations of the unloading locations:
    - The impact on the pathing plan; and
    - The ability of the Train Services to load and unload.

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

#### 3.2.7 Draft Development and Distribution

The WTP will be developed in accordance with appropriate Train Operation and Safeworking standards. It will be communicated to Access Holders and GPC for review and comment by 09:00 Thursday. Access Holders and GPC are to provide QR Network 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 <u>Plan Alteration Rules</u> outlined in Section 6.1. 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

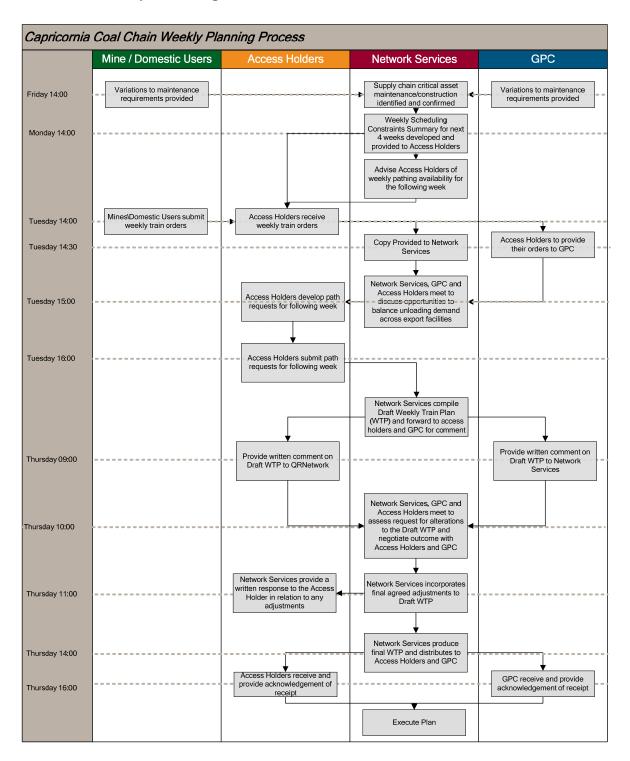
The final WTP is to be communicated to Access Holders and GPC by 14:00 Thursday. Access Holders will receive an edited format of the WTP, containing their respective planned services only.

The agreed WTP 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 WTP by 16:00 Thursday to QR Network's Operational Planning Supervisor. Once confirmation is received, the WTP 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 WTP, 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 Daily Planning Process

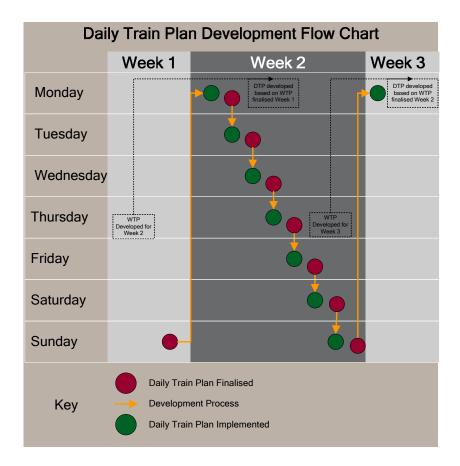
# 4.1 Daily Train Plan

The agreed WTP will form the basis for the Daily Train Plan (DTP). The DTP will specify:

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

The DTP will take into account any requested daily train plan changes, in accordance with the Plan Alteration Rules outlined in Section 5 of this document.

Finalisation of the DTP will occur at 14:00 on the day (business day) prior to implementation. The DTP Development Flow Chart outlines the timeframes.



### 4.1.1 Schedule progression and distribution

The DTP is developed 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 QR Network Production Control Centres.

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

# 5 Plan Alterations

#### 5.1 Plan Alteration Rules

Requests by operators to alter their train orders, including cancellations, diversions, 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 plan alterations for the DTP as established in Clause 4(d) of Schedule G.

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

- 1. 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="NetworkControlNSORoc@grnational.com.au">NetworkControlNSORoc@grnational.com.au</a>, and will be assessed in order of the time stamp attached to each email. The Customer Support & Scheduling Officer will assess requests received between 07:00 to 16:00 Monday to Friday. The Performance Monitoring Officer will assess requests received outside of business hours, and on weekends and public holidays.
- 3. QR Network will determine the availability of a port slot in conjunction with GPC as part of the process of reviewing a DTP change request.
- 4. For each DTP request submitted, QR Network will 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) Does not impact on QR Network's 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 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, endeavouring to provide the best solution for the supply chain as a whole.
- 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 Holders 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 the QR Network Control Centres. These operations will be in accordance with Appendix 3, Traffic Management Decision Making Matrix of Schedule G of the Undertaking.

#### 6.1.1 Departure Procedures

A Rail Operator is required to contact Network Control 1 hour prior to the scheduled departure, 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 e.g. brakes cut out.

In the event that the 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.

#### 6.1.2 Delays

In the event of a Rail Operator, Infrastructure Provider, including but not limited to GPC, 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 Access Holders.

### 6.1.3 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's track must be negotiated with QR Network Control Centre. All requests for storage are to be submitted 24 hours in advance. No storage will be permitted on the rail network without the prior agreement from QR Network.

#### 6.1.4 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 an 'On time' service (in accordance with Appendix 3 of Schedule G of the 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 3.2.2 of this document) of Access Holders against paths made available in the WTP 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 D.

#### 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) QR Network
- (ii) Adjoining Network
- (iii) Port
- (iv) Mine
- (v) 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 Members to determine the cause of the cancellation, by conducting a root cause analysis. For Cyclic Services, this process will be limited to reviewing possible causal incidents that occurred on or after the commencement of the previous train cycle. For Timetabled Services, this process will be limited to reviewing possible causal incidents that occurred no later than 24 hrs prior to planned 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) QR Network
- (ii) Adjoining Network
- (iii) Port
- (iv) Mine
- (v) 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 Endorsement

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

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

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

# **Appendices**

# Appendix A: GPC Port Slot Schedule

				ort Slots Times ween Train 1 complete ur									
Primary Pit	Primary Route	Depart CAH - CH22, CH26,	Pass	Arrive GLD - Clear 207, 209, 281A/B Points	Commenc		Complete Unload/Depart Gl - Pass CH21		CAH - Clear 1A/B Points				
Pit 1	G	23:25		23:40	0:1	5	2:10		2:20				
Pit 1	G	1:45		2:00	2:2	5	4:20		4:30				
Pit 1	G	3:55		4:10	4:3		6:30		6:40				
Pit 1	G	6:05		6:20	6:4		8:40		8:50				
Pit 1	G	8:15		8:30	8:5	55	10:50		11:00				
Pit 1	G	10:25		10:40	11:	05	13:00		13:10				
Pit 1	G	12:35		12:50	13:		15:10		15:20				
Pit 1	G	14:45		15:00	15::		17:20		17:30				
Pit 1	G	16:55		17:10	17:	35	19:30		19:40				
Pit 1	G	19:05		19:20	19:	45	21:40		21:50				
Pit 1	G	21:15		21:30	21:	55	23:50		0:00				
Pit 2	В	0:05		0:20	0:5		2:50		3:00				
Pit 2	В	2:25		2:40	3:0	)5	5:00		5:10				
Pit 2	В	4:35		4:50	5:1	5	7:10		7:20				
Pit 2	Α	6:45		7:00	7:2	25	9:20		9:30				
Pit 2	В	8:55		9:10	9:3	15	11:30		11:40				
Pit 2	A	11:05		11:20	11:		13:40		13:50				
Pit 2	Α	13:15		13:30	13:		15:50		16:00				
Pit 2	В	15:25		15:40	16:	05	18:00		18:10				
Pit 2	В	17:35		17:50	18:	15	20:10	20:20					
Pit 2	В	19:45		20:00	20::	25	22:20		22:30				
Pit 2	В	21:55		22:10	22:		0:30		0:40				
–				==:::0			3.00						
Pit 3	E	0:50		1:05	1:4	10	3:35		3:45				
Pit 3	Е	3:10		3:25	3:5	50	5:45		5:55				
Pit 3	J				6:00		7:55		8:05				
			5:20 5:35										
Pit 3	E	7:30		7:45			10:05		10:15				
Pit 3	E	9:40		9:55	10::	20	12:15		12:25				
Pit 3	E	11:50		11:50				12:05	12:	30	14:25		14:35
Pit 3	E	14:00		14:15	14:	40	16:35		16:45				
Pit 3	J	16:10		16:25	16:		18:45		18:55				
	J	18:20			19:00		20:55						
Pit 3				18:35					21:05				
Pit 3	E	20:30		20:45	21:10		23:05		23:15				
Pit 3	E	22:40		22:55	23:	20	1:15		1:25				
Primary Pit	Primary Route	Depart CAH - CH22, CH26,		Arrive GLD - Clear 207, 209, 281A/B Points	Commence Unload		Complete Unload/Depart Gi - Pass CH21		Arrive CAH - Clear 235, 271A/B Points				
			15"		115	"	. 400 01.21						
				25"		•	10"	<b></b>					
				Slots Timestar									
		15 m		ween Train 1 complete u	nload and Train			Comp					
Depart CAH – 6	Arrive BPT - At Stopboard prior to BPT Dump Station	Commence Unload	Arriv Stopbo		Complete Unload	Clear Stopboar 1	Clear d Stopboard 2	Prov/Depar t BPT - Pass SG37	Arrive CAH - Cle 283 Point				
5:25	5:50	6:00	6:50	8:30	10:30	10:35	11:25	12:10	12:35				
10:10	10:35	10:45	11:3		15:15	15:20	16:10	16:55	17:20				
14:55	15:20	15:30	16:2	0 18:00	20:00	20:05	20:55	21:40	22:05				
19:40	20:05	20:15	21:0	5 22:45	0:45	0:50	1:40	2:25	2:50				
0:25	0:50	1:00	1:50	3:30	5:30	5:35	6:25	7:10	7:35				
Depart CAH - Pass GE 202	Arrive BPT - At Stopboard prior to BPT	Commence Unload	Arriv Stopbo		Complete Unload	Clear Stopboar	Clear d Stopboard 2	Comp Prov/Depar t BPT -	Arrive CAH - CI 283 Poin				
JL 202	Dump Station	50"		120"		50'		Pass SG37 25"	2001 0111				

# Appendix B: Train Orders Template

#### Part 1: Consist Details

Consist Number	Region	Consist Typle	Date/Time Available
1	Moura	Small Wagons	17/11/11 - 18:00
2	Blackwater	Electric	17/11/11 - 19:00
3	Blackwater	Diesel	17/11/11 - 19:00
4	Moura	Blackwater Size	17/11/11 - 21:00

Consist Type	
Electric	1
Diesel	1
Minerva	0
Large Wagons	0
Small Wagons	1
Blackwater Size	1

Region	
Blackwater	2
Moura	2

Part	2:	Weekly	Orders

Weekly Train Plan Template

Operator	
Date	
Week Commencing	

Depot	Depart Depot	Loco ID	Mine ID	Path Empty	Load	Mine Arriv	Mind Dep	Path Loaded	Arr. Depot	Depart Depot.	Unload	Belt	Spile	Port Arr.	Commence Unload	Complete Unload	Destination	Destination Arrival	Special Requests / Details
CAH	1	Е	В	1-Feb	CGH	7:00	10:00	11:15	17:35	18:50	GLD	Belt	0:00	20:00	20:25	22:20	CAH	22:30	

# Appendix C: Ad Hoc 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
Consist Information	Time at Mine
	Run Time Loaded
Type of Loco  Consist is approved in Operator Access Agreement	Time at Port
TRA No.	Time at Depot
Consist requires Authority to Travel	Ready to next Depart (hh:mm)
Att No.	
	Interface Risk Management Plan Information
	IRMP Details:
Activities En Route (eg. Dwells, C	crew Change. Provisining etc)
Location Nominated Road Dwell/	
QR Network Use	e Only
Date / Time Received Na	ame of Recipient
Date / Time Processed	gnature

# Appendix D: Example Weekly Report

