

# **Queensland Competition Authority**

## **ASSESSMENT OF QR NETWORK'S DRAFT SYSTEM RULES CAPRICORNIA COAL CHAIN**

17<sup>TH</sup> OCTOBER 2012

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*Facilities*  
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## 1.0 INTRODUCTION

This review has been requested by Mr. John Hall, Chief Executive of the Queensland Competition Authority (“QCA”). The Terms of Reference are set out in a document titled “*QR Network System Rules. Assessment of Impact on Users*” dated 7<sup>th</sup> November 2011 and amended on the 17<sup>th</sup> August 2012.

The purpose of this review is to provide technical advice to the Authority on the impact (if any) of QR Network’s proposed system rules and scheduling process on:

- (i) access holders’ entitlements to train services in their access agreements [including the alternative (end user) SAAs];
- (ii) the relative commercial and operational positions of users served by the system(s);
- (iii) the overall capacity of the system, and the share of that capacity available for:
  - A. individual users;
  - B. groups of users; and
  - C. maintenance possessions; and
- (iv) the equitable treatment of different access holders, and their customers.

This review is limited to the review of *QR Network Capricornia Coal Chain System Rules*.

Femol International Pty Ltd is an independent consulting company registered in Australia providing support and advice to the rail industry in Australia and internationally.

## 2.0 BACKGROUND

### 2.1 QR Network

On 1st October 2010, the QCA approved the 2010 Access Undertaking for QR Network Pty Ltd, a subsidiary of QR National Ltd. QR National is a vertically integrated rail company which was sold by the Queensland Government on 22nd November 2010. The access undertaking regulates the activities of QR Network as a monopoly owner of the below-rail infrastructure in central Queensland, which is used to transport coal and other general freight and passenger traffic.

The undertaking sets out the principles for pricing of access and the allocation and development of new capacity. It also includes network management principles, which specify procedures for scheduling trains contracted to use the network, and managing conflicts between train services.

## **2.2 Capricornia Draft System Rules**

The 2010 access undertaking provides for QR Network to develop system rules, which would supplement the network management principles to tailor the operations of each system to suit the specific priorities of the mines and ports served by that system.

The 2010 access undertaking requires that, when making and amending system rules, QR Network have regard to:

- (a) the equitable operation of the System Rules across Access Holders and Access Seekers (should they become Access Holders) and their customers; and
- (b) the terms of Access Agreements.

## **3.0 METHODOLOGY**

In conducting this review Femol International engaged a Rail Operations Consultant with over 40 years' rail operations experience in Australia primarily in Queensland. The consultant also had access to the following documents as provided by the QCA:

- (a) QR Network's 2010 Access Undertaking as approved 1st October 2010
- (b) Draft Decision on Proposed Standard Access Agreements dated July 2012
- (c) QR Network Draft System Rules, Capricornia Coal Chain, dated 31<sup>st</sup> August 2011
- (d) Stakeholder responses to QR Network Draft Capricornia System Rules:
  - (i) Asciano
  - (ii) Rio Tinto Coal Australia
  - (iii) BHP Billiton Mitsubishi Alliance

In addition to the above, meetings with the stakeholders who made submissions and QR Network were held as follows:

- BHP Billiton Mitsubishi Alliance – Thursday 20<sup>th</sup> September 2012
- Rio Tinto Coal Australia – Thursday 20<sup>th</sup> September 2012
- Asciano – Friday 21<sup>st</sup> September 2012
- QR Network – Friday 21<sup>st</sup> September 2012

Weekly progress meeting were also held with the client during the course of this review i.e. 7<sup>th</sup>, 14<sup>th</sup>, 21<sup>st</sup> September 2012, 3<sup>rd</sup> and 17<sup>th</sup> October 2012.

## **4.0 REVIEW OF QR NATIONAL DRAFT CAPRICORNIA SYSTEM RULES**

### **Section 1.0 Introduction**

Asciano (p5 of its submission) indicated that the draft system rules should be explicit that the rules apply to all access agreements using the Capricornia rail system, including access agreements agreed under previous Access Undertakings. It appears that this is the intent of the document although it does not specifically mention it.

*Recommendation 1 – That QR Network provide a paragraph clarifying the intent of the document and to whom it applies.*

### **Section 2.0 - Master Train Plan**

Schedule G of the Undertaking requires that QR Network develop a Master Train Plan (MTP) detailing system paths that are available for scheduling cyclic traffic. System paths, as defined in the draft system rules, link a mine loading slot to a port unloading slot and include above-rail dwells as contracted for in the relevant access agreements. A MTP will vary from system to system depending on the purpose of the system and this is not clearly demonstrated in the draft system rules. However, it can be assumed that the Capricornia rail system as we know it today is primarily designed to feed the coal dumpers at Gladstone Ports Corporation (GPC) i.e. R G Tanna and Barney Point coal terminals, hence the need for system paths in the draft system rules. R G Tanna has considerable stockpile capability so port capacity is not an immediate concern in this system and therefore has little or no impact on the system paths.

The draft system rules also indicate that the MTP will include time allocated for planned possessions, and timetabled traffic. While the timetabled traffic for passenger and freight services passing through the system is relatively static, the planned possessions will vary from time to time and from location to location indicating in fact that the MTP is a living document varying from day to day. However, none of this is clear in the document and leads to uncertainty and skepticism among the Stakeholders.

Stakeholders want a degree of certainty that the rail network has the capacity to support their business. Producers need to be comfortable that the system has the capacity to transport their product to the ports in an efficient and timely manner. Train operators need to fully understand the constraints of the system to enable them to plan their resources short term and long term. A detailed MTP will assist in this regard. The three Stakeholders who made submissions to the QCA, in their documented response (and during discussions), clearly indicated that QR Network did not provide a suitable MTP as required in the Undertaking and this affected their ability to understand the capacity of the system and conduct forward planning.

This matter was raised during discussions with QR Network when they indicated that a form of MTP with planned maintenance possessions and available train paths is regularly distributed to Access Holders and Stakeholders. QR Network subsequently sent two documents on 24th September 2012 which are referred to as the critical asset calendar and critical asset constraint

summaries in the draft system rules, neither of which could be considered as a MTP in Femol's view.

A MTP for the Capricornia coal system should include timetabled train paths overlaid with cyclic train paths based on reference-train characteristics and sectional run times referred to in the Undertaking. A MTP is usually developed as a time and motion graph and can be presented on a daily or weekly basis in either electronic or hard-copy forms. As a minimum the MTP should include the maximum number of train paths available on any given day considering all the system constraints including track configuration, signaling infrastructure and other rail safe working factors.

A well-developed MTP will clearly show the number of cyclic train paths available each day and will be better able to demonstrate the relationship between available train paths and TSEs. Stakeholders will also be able to predict the impact that maintenance windows or unplanned disruptions will have on their business. The MTP may also be useful to access seekers who may wish to understand indicative capacity availability prior to submitting an access request.

In addition to the above, all three respondents to the draft system rules, Asciano, Rio Tinto Coal Australia (RTCA) and BHP Billiton Mitsubishi Alliance (BMA) also raised concerns about the planning and scheduling priorities of cross-system traffic coming from the Goonyella system and what effect this may have on the availability of capacity for Capricornia access holders. In this regard, it is noted that the system rules are meant to be a live document which evolves to take account of capacity constraints *outside* the system of interest that start to be more relevant to operations within that system.

The following recommendations are made to address the lack of clarity around the issues raised above concerning the operating nature of the system being considered and the associated MTP.

***Recommendation 2-*** *That the type of system operating in Capricornia be better explained e.g. demand pull vs. supply push. Because of the coal stockpile capacity at R G Tanna the Capricornia system operates more as a supply push where product is pushed through the system and stockpiled until loaded on ship. Dalrymple Bay Coal Terminal (DBCT) would be considered as a demand pull system, where the port is the dominating factor, because of the limited stockpile capacity. The draft system rules need to explain this concept so that users have a better understanding of the system flow.*

***Recommendation 3*** - *Better explanation of the process for developing the MTP including the scheduling of cross system traffic and how the planned possessions are applied. In doing so, QR Network should also specify the life cycle of the MTP or, if there is no given review period, what would trigger a review. QR Network should also indicate if/how the MTP is aligned with the 18-month critical asset calendar.*

***Recommendation 4*** – *That QR Network develop a MTP for both Blackwater and Moura including all timetabled traffic overlaid with coal train paths in the form of a train graph and publish it as a public document for the information of all access holders and supply chain stakeholders on the Capricornia coal chain portal. The document needs to be updated regularly (monthly or sooner if required).*

## Section 2.1 - System Paths

The purpose of a system path is to provide a stronger indication of whole-of-supply-chain capacity constraints. In linking a mine loading slot to a port loading slot, a system path is able to tell the supply chain stakeholders about relevant constraints, including those that lie outside the rail network. The concept of the system path where train paths are aligned to mine loading and port unloading slots to develop the MTP appears sound. However, the method of application is somewhat confusing e.g. further on in the draft system rules, QR Network indicates that the network paths on the Blackwater system are determined based on the track capacity between Callemondah and Bluff, while those of the Moura system are based on the track capacity between Callemondah and Dumgree.

Asciano (p6 of its submission) argues that the train paths should extend through to the coal unloaders and not stop at Callemondah. In fact, the generic train paths extend much further and should be operating from the furthestmost coal mine spur junction on the main routes to the relevant port dumping stations. This is because a significant number of train services utilise track capacity beyond QR Network's chosen locations of Bluff and Dumgree for the Blackwater and Moura systems respectively. Extending the range does not have any impact on the system capacity. It simply extends the range of the track for what is considered as appropriate for train paths and provides access holders a better overview of track capacity beyond the nominated range proposed by QR Network in the draft system rules.

QR Network indicates that cyclic coal train paths are calculated using section run times based on the reference train but does not provide any supporting information explaining either. Sectional run times may vary depending on train configuration and locomotive type and hauling capacity. System users need to be reminded that coal train paths are based on standard generic reference train run times as contained in Part A of Schedule F in the Undertaking and this matter needs to be included in this document for reference.

The paragraph about "Above Rail Dwells" in the draft system rules raises the question about how dwells that are specific to individual access holders as part of their access agreement can be included in a *generic* system path and what effect these dwells may have on other access holders' entitlements. The system paths in the Capricornia system should not include above rail dwells because not all operators will use these dwells. Unnecessary dwells in the system consume capacity and are usually used as a buffer for trains unable to maintain section run times. Capacity should not be an issue on the Capricornia system due to the provision of the 12.25% allowance for operational variation, as per the 2009 Coal Rail Infrastructure Master Plan (CRIMP).

***Recommendation 5 - The process for the development of the MTP needs to be more transparent with additional information and explanations provided to access holders and other stakeholders and that the train section run times and descriptions of the reference trains are included as an appendix to the system rules. In particular, the MTP should be displayed as a time and motion graph similar to a train control graph and be based on the trunk network for each route and include (in addition to the elements outlined in Recommendation 4) the following:***

- *all crossing loops, spur junctions, intermediate signals and refuge sidings*
- *locations and type of trackside equipment*
- *all fixed timetabled traffic*
- *domestic cyclic traffic*
- *relevant system constraints (infrastructure and operational)*

- all generic cyclic coal train paths

*The base MTP constructed using the above principles should not include maintenance windows; these are added later so that the impact on capacity is clearly visible. If this is done, access holders (and other supply chain stakeholders) can better understand the capacity and operational constraints of the rail network and be in a better position to manage their daily performance and future planning.*

**Recommendation 6** - *That the generic train paths are extended to the furthestmost point on the network where most coal train operators have exited the trunk system and capacity and the allocation of TSEs is no longer an issue.*

- *Blackwater System from Burngrove to Ports.*
- *Moura System from Earlsfield to Ports.*

## **Section 2.2 - Maintenance and Construction Planning**

The maintenance planning process appears to be well timed and coordinated between the various components of the coal supply chain but what is not clear is the involvement if any of the access holders/train operators and the impact the timings of the shutdowns may have on the producers. All miners, access holders, train operators and supply chain infrastructure providers should have the opportunity to be involved in the maintenance planning process so that they can better coordinate their resource management and haulage operations around the system maintenance. It is understood that such information is made available through the Capricornia coal chain portal but access to the system is said to be limited.

It is also not clear in the draft system rules how the 18-month critical asset calendar is to be updated. Is this a rolling plan and if so how often is it updated e.g. every month? QR Network must specify the timing e.g. is it weekly, monthly or annually?

**Recommendation 7** – *That the planned Maintenance and Construction Process be expanded to include all interested parties and the timing and process for updating the 18 month critical asset calendar is clarified.*

## **Section 2.3 - Maintenance Planning Process Flow Chart**

**Recommendation 8** - *That the Maintenance Planning Process Flow Chart (p11 of the draft system rules) be updated to reflect the above proposed changes.*

## **Section 2.4 - Network Traffic**

### **2.4.1 Contracted Timetabled Traffic**

The contracted timetabled traffic consists mainly of passenger, livestock and general freight services, most of which are passing through the Capricornia System to and from adjoining infrastructure operated by Queensland Rail. This traffic usually operates on fixed train paths



although some variability exists with seasonal traffic. QR Network has an obligation under the Undertaking to provide access for these traffics which are included in the MTP.

While coal access holders in the Capricornia coal system are not opposed to timetabled non-coal traffic using the relevant section of the network, they have expressed concern about the consequences, if any, of this type of scheduling may have on the overall capacity of the network.

Asciano (p7 of its submission) has indicated that the system rules should include further additional information regarding the priority position of timetabled non-coal traffic, the alignment of maintenance activities and alignment of contractual entitlements. Stakeholders also agreed during discussions that additional information would be useful but did not see it as a major issue.

While it appears that this is not a major concern, all system users would benefit from having a better understanding of how fixed paths are generated and what effect if any they have on the coal train paths and the capacity of the Capricornia coal system overall.

***Recommendation 9 - QR Network expand this section to better explain how Contracted Timetabled Traffic is managed and the possible effect on access holders TSEs and the capacity of the Capricornia coal chain overall.***

## 2.4.2 Cyclic Trains

The second paragraph of this section indicates that Access Holders may submit indicative monthly TSE forecasts with proposed weekly variations. QR Network makes a point that the risk of varying from contractual entitlements shall sit with the Access Holder. It is not apparent at what point in the planning process the variation is deemed to occur. It appears from meetings with stakeholders, that access agreements are specified as monthly TSEs with indicative weekly TSE figures although this is not clearly stated in the draft system rules.

Asciano (p 7 of its submission) suggests that the rules should be amended to allow an access holder to manage the risk of varying from contractual requirements by allowing the access holder to exchange TSEs within its portfolio or pool of access contracts to smooth demand variability. QR Network, during the stakeholder meeting, argued that this was an unattainable situation that had the potential to create conflicts with other users and create capacity constraints. For example if Access Holders were allowed to carry unused TSEs forward to the next month and so on then eventually the 12.25% operational variability allowance (as per the 2009 CRIMP) will be used up and the capacity of the network will become so constrained that all stakeholders will be affected.

This issue is also discussed in section 3.2.3 of the draft system rules (p15) under Contracted TSE Orders, second dot point which says the following:

*An access holder may choose to reallocate nominal weekly TSEs by ordering less than the nominal weekly allocation for one (the original) train service (Origin – Destination TSE), and ordering more than the nominal weekly allocations 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 Holders future train orders.*

Our interpretation of this clause is that access holders do have the flexibility to manage their TSEs within a pool of contracted entitlements within a given month.

However, it is not clear whether QR Network's process for undertaking the above is sufficiently transparent to reveal to access holders cases in which switching allocations between different TSE origin-destination pairs would hinder another access holder's TSE from being delivered. In other words, QR Network appears to have an unreasonably large amount of discretion to deny an access holder from opting for a higher allocation of train services associated with a TSE origin-destination pair and a lower allocation level associated with another TSE origin-destination pair. If the rationale of including TSE reallocation options in the draft system rules is to increase access holders' flexibility in managing their TSE portfolios, then the conditions under which these amendments to TSE allocations are permitted need to have corresponding flexibility and transparency.

***Recommendation 10*** – *That QR Network improve the process for managing Access Holders' requests particularly in relation to requests to reallocate weekly TSEs between contracted users including providing detailed explanations as to why any requests have been denied. QR Network should also reflect the requirements contained in chapter 2 of the QCA's draft decision on proposed standard access agreements where Access Holders can nominate a different operator (for the same TSE origin-destination combination) with at least 48 hours' notice to QR Network without TSE consumption penalty.*

## **Section 3.0 - Weekly Planning Process**

### **Section 3.1 Scheduling Hierarchy**

The scheduling hierarchy proposed is generally acceptable; however, access holders have requested additional information on the scheduling process for timetabled passenger, livestock and freight services and what impact if any these services may have on contracted TSEs.

Some stakeholders indicated at meetings that they did not agree that a domestic cycle train service destined for a power station should receive greater priority than a train service destined for RG Tanna. If there is no statutory requirement for this, then priorities for both train-service types should be identical.

There does not appear, to Femol's knowledge, to be any statutory requirements that mandate the priority that QR Network proposes in its rules. On that basis QR Network must reflect this by explicitly stating that power-station-destined domestic cycle trains get no favoring over export-terminal-destined cyclic trains.

***Recommendation 11*** - *That QR Network provide additional information to clarify the reasoning behind the schedule hierarchy in particular items 2 (contracted timetabled passenger, livestock and freight services) and 3 (contracted domestic cyclic train services with an unload destination of a Power Station) and the impact on the operation and capacity, if any, of the Capricornia coal supply chain.*

## Section 3.2 - Scheduling Development

### 3.2.1 Scheduling Constraint Summary

This process appears to be sound and straight forward but could be enhanced by providing an example of the Scheduling Constraint Summary as an appendix and include details as to why any changes to the 21 day maintenance lockdown period are necessary. QR Network should also, in the Scheduling Constraints Summary, advise access holders on the maintenance multiplier figure to be applied for the weekly period.

The Scheduling Constraints Summary should contain as a minimum:

- details on locations and times of any planned disruptions
- reasons for any changes to 21 day lock down period
- any proposed contingency plans should track not be restored on time
- number of system paths available per day
- impact on Access Holders' TSEs
- maintenance multiplier figure to be applied for weekly period

In having this information, Access Holders would be able to submit their train orders with a better understanding of capacity shortfalls expected to arise in the week of operations.

***Recommendation 12*** - *That the Scheduling Constraints Summary include reasons for any changes to the agreed Critical Asset Constraint Summary and that an example be included as an appendix to the System Rules. At the same time QR Network should publish the maintenance multiplier applicable for the nominated week.*

### 3.2.2 Determination of QR Network TSE obligation

It is understood that the individual access agreements include the monthly TSEs for each Access Holder based on the nominated train configuration for each contracted service. These monthly TSEs are then broken down into weekly TSEs and so on as described in second paragraph of section 3.2.2 in the draft system rules. What is not apparent is what process is to be followed if there is insufficient track capacity to provide for all contracted TSEs for each month. Particularly given that TSEs do not carry over to the following month. An example of how the weekly TSEs are calculated (similar to the one contained in BMA's submission) may be useful to better explain the process.

BMA, in page 2 ("Methodology underpinning the calculation of contracted Train Service Entitlements") of its response to the draft system rules, questions the process for calculating and applying the TSEs. The second paragraph in page 2 of BMA's submission makes reference to 12.25% Day of Operations losses described in QR Network's 2009 CRIMP and discussed at master planning and capacity forums to cover actual variability which exists in scheduling train services.

QR Network must provide additional detail on the methodology by which it allocates the 12.25% scheduling flexibility amongst producers.

Asciano raised the question of effects of the maintenance planning on contracted train service entitlements (TSEs) and how they are provided and adjusted. Asciano (p5 of its submission) also commented that the QR Network maintenance calendar for 2012 currently allows an average of 28.8 days per month not impacted by maintenance while the TSEs are allocated on a 30 day per month basis. If this is the case then one would expect that on every one of the 28.8 maintenance free days access holders will be allocated sufficient paths in excess of the daily allowance to make up for the shortfall. This then raises the question of sufficient capacity to meet annual contracted TSEs.

Asciano also argues that if QR Network manages maintenance by smoothing TSE consumption over a month or over another time period, then operators should also have the ability to smooth their TSE consumption over a similar period. Femol is unable to form a view on this matter as access agreements are understood to be signed on monthly entitlements, and smoothing on a month-to-month basis from the train operator's perspective is something that access holders would have to negotiate with QR Network.

In general, further clarification is required around the allocation and so called smoothing of TSEs and how they are carried forward from week to week and how they are calculated on an annual basis. However, for consistency with the QCA's draft decision on the proposed alternative standard access agreements, it is considered that this process should be sufficiently flexible to enable end users to switch train operators (with a minimum of 48 hours' notice to QR Network) without penalty to TSE consumption if the switch does not impact on system capacity.

***Recommendation 13*** - *That QR Network includes clarity and transparency around the process for calculating and allocating the monthly TSEs including the application of the maintenance multiplier and the use of the 12.25% operational variability allowance mentioned in BMA's response. It is understood that this 12.25% is provided solely for operational variability but it appears from BMA's comments that it is sometimes used to provide for the effects of the maintenance multiplier and/or additional orders. QR Network should also include examples or refer to other documentation if more applicable.*

*Stakeholders would benefit from having a clearer understanding of available capacity and what flexibility is available in the system if any. This will enable them to better plan their orders and provide opportunity to balance TSEs within a particular month.*

***Recommendation 14*** – *That QR Network provide information on how the weekly TSEs are applied to ensure that Access Holders receive their contracted TSEs. One way to achieve this is by documenting clearly:*

- *how the nominated weekly TSE is determined from the annual TSE*
- *how the maintenance multiplier will be applied to this figure (or a variant of the figure) to obtain the adjusted nominal weekly TSE*
- *how the available network capacity will be managed to deliver the adjusted nominal weekly TSE by providing access holders with train orders higher in number than the nominal daily TSE figure on days without maintenance*
- *how QR Network will manage TSEs that are unable to be allocated due to capacity constraints.*

*The draft system rules fail to clearly demonstrate this process and raise more questions than they answer. A clearly defined process for managing all aspects of the TSEs is a requirement for this document. A properly-detailed MTP empowers QR Network to demonstrate how it will manage network capacity to deliver adjusted weekly TSEs. If Access Holders have access to the MTP they can clearly see that QR Network can deliver on its TSE obligations.*

### **3.2.3 Train Orders**

The process for developing the Weekly Train Orders appears reasonable even though the timeframes are somewhat constrained. Clarification is needed around the process for determining additional orders or variations to existing orders after the Weekly Orders have been finalised. In section 3.2.3 of the draft system rules (3<sup>rd</sup> paragraph on page 15), it is indicated that QR Network will schedule these on a best endeavors basis only. This is not an acceptable process and a more professional approach must be developed which is fair and equitable and transparent to all Access Holders and Stakeholders.

One way of doing this could be to restrict processing any changes to the Weekly Train Plan (WTP) until the day before implementation i.e. the development of the Daily Train Plan (DTP). At this time it will be clear if additional train paths are available or in the case of variations what impact if any they will have on other Access Holders. If there are more requests for additional services than there are paths available then QR Network should apply the requirements of the Contested Train Path Guidelines within Schedule G of the Undertaking. Variations should only be approved if they do not conflict with another user's allocated TSE.

Asciano (p9 of its submission) also raised a couple of concerns regarding this section of the draft system rules. The first being that the draft system rules indicates that port plan and rail orders exist as two separate processes. While the last paragraph on page 14 of the draft system rules does say that, it is understood that QR Network and the GPC work together to develop the train dumping program before QR Network schedules the trains through the dumpers, and this allays Asciano's concerns in this regard.

The second point raised by Asciano is that section 3.2.3 of the draft system rules implies that consumption of paths, including TSEs is based on weekly orders and argues that this should only occur when a train is scheduled. It is assumed that TSEs are not locked in for consumption purposes until the DTP has been finalised i.e. 14:00 on the business day prior to implementation but this is not clear. QR Network needs to confirm when contracted TSEs are considered as locked in.

Asciano also suggested that the section on contracted orders should also include a requirement that QR Network complete TSE orders and distribute them to access holders and that this information should also indicate whether the order is a TSE train, a non TSE train or an ad hoc train. It appears that there may be some doubt around how QR Network classifies TSE orders so to avoid any confusion QR Network should nominate how they have classified each order for the purpose of consumption e.g. contracted TSE, non-contracted TSE or adhoc.

***Recommendation 15 - QR Network must clarify the process for dealing with additional and/or variations to the Weekly Orders and clearly nominate how each order is classified and the point in the process where train orders are locked in for consumption purposes. The process should be***

*sufficiently flexible to enable end users to switch train operators (with a minimum of 48 hours' notice to QR Network) without penalty to TSE consumption if the switch does not impact on system capacity. However, the onus must be on QR Network to demonstrate any impact on system capacity.*

### **3.2.4 Schedule Train Service Entitlements**

This section appears to be consistent with the requirements of Schedule G, Appendix 2 of the Undertaking. However, Asciano (p 9 and 10 of its submission) raises various concerns about the Contested Train Path Decision-making Process indicating that there may be instances where the port and shipping needs may legitimately outweigh the draft rules priority considerations. QR Network addresses this issue in dot point three (3) in section 3.2.4 of the draft system rules (p16) where it says “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”.

Asciano suggests (p10, paragraph 2 of its submission) that if an access holder is behind (year to date) in receiving contracted train services due to network causes, then the recalculation of TSEs should be calculated as the outstanding annual balance divided evenly over the remaining months of the year. The issue of carrying TSEs forward month to month is also discussed in section 2.4.2 of this report where it was stated that this process is not practical as the capacity of the network would not be able to handle the additional demand. If the network has additional capacity then there will not be any need to carry TSEs forward as they could be provided month by month.

Asciano then continues (p10, paragraph 3 of its submission) raising concern about the final part of the process which states “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”. This process is clearly identified as the final process in the Contested Train Path Decision-making Process contained in Schedule G, Appendix 2 of the Undertaking and QR Network is applying that process.

Asciano (p10, paragraph 5 of its submission) then describes a situation where an ad hoc train and a TSE service arrive at the port at the same time but the ad hoc service is scheduled to unload first. Asciano argues that the TSE service should receive priority. In the first instance, it is unlikely that both trains will arrive at the port at the same time as they will be separated up track for safe working reasons. It is reasonable to expect that the first train to arrive will unload first if the port is available to avoid unnecessary queuing. If both trains have been queued and the port does not have any priority, then one way of addressing this problem is to give priority to the train that arrived on or closest to its scheduled time.

In summary, it is important that QR Network correctly apply the Contested Train Path Decision-making Process outlined in Appendix 2 of Schedule G in the Undertaking to avoid unnecessary disputes arising with access holders.

***Recommendation 16*** - *That QR Network should copy Appendix 2 of Schedule G in the Undertaking word for word to ensure correct application of the process. QR Network should also address the issue of unloading sequences at the port by liaising closely with GPC when adhering to the Contested Train Path Decision-making Process.*

### 3.2.5 Schedule Additional requested contracted Orders

This section appears to be consistent with the requirements of Schedule G, Appendix 2 of the Undertaking. The same comments and recommendation as contained in section 3.2.4 (and Recommendation 16) above apply to this section.

### 3.2.6 Schedule Ad Hoc Orders

The process outlined in this section is reasonably clear and acceptable. QR Network must, however, elaborate on the term ‘best endeavors basis’ for additional clarity. From a commercial perspective, it needs to be clear to Access Holders what process QR Network has in place to manage ad hoc orders.

### 3.2.7 Draft Development and Distribution

The process contained in this section appears reasonable although the timeframes are somewhat constrained. However, Access Holders and Stakeholders did not raise any concerns in discussions with them, and indicated that the process seems to be working satisfactorily.

**Recommendation 17** – *That an example of the WTP as indicated in this section should be attached as an appendix to the draft system rules to give Access Holders an understanding of the train plan they can expect to receive prior to the week of operation. As a minimum the WTP should show the following:*

- all track closures and/or restrictions that impact on train services
- summary of TSEs ordered and allocated and reasons for any variances
- summary of TSE activity for that month showing ordered, allocated, ran, cancelled, deviated etc.
- nominated train path for each TSE and reasons for deviation from MTP if applicable

### 3.2.8 Final Acknowledgement and Acceptance

The process detailed in the last paragraph of section 3.2.8 in the draft system rules indicating that orders will not be processed if written acknowledgement of receipt and acceptance does not occur is somewhat confrontational and needs to be revised. Access Holders may not be in a position to reply within the nominated timeframes and could rightly expect that having already worked through the ordering process that their orders will be processed accordingly. Cancelling orders because they have not responded in the nominated timeframes as indicated will only lead to conflict between the parties.

**Recommendation 18** – *That QR Network alter the process to indicate that if no response is received by the nominated time then orders will be deemed as accepted and will be processed as planned and will be counted towards the access holder’s contracted TSE as normal.*

## Section 4.0 Daily Planning Process

The DTP is where the rubber meets the road and the plan is put into action. Femol understands that this is the last opportunity for alterations before penalties apply. This is where the TSEs are locked in and counted. QR Network needs to clarify at what point in the process the TSEs are

locked in. This matter has previously been raised in section 3.2.3 of this document. It is also not clear how the finalisation process takes place and what involvement Access Holders and Stakeholders have in this process, if any.

**Recommendation 19** - *This process needs to be better clarified indicating Access Holders' involvement if any. It is also recommended that an example of the DTP as provided to access holders be included in the draft system rules as an appendix.*

## **Section 5.0 Plan Alterations**

This section is reasonably clear and is consistent with the requirements of Schedule G of the Undertaking.

Asciano (p4 of its submission), under heading “Improved Rules Relating to Transfer of Paths”, indicated that the process for managing transfers of paths need to be improved and that this process must be clearly explained in the draft system rules.

RTCA (p2 of its submission) also raised concern about the process for cancelling and rescheduling of train paths and has suggested as follows:

- Train Paths ordered in the WTP or DTP and cancelled but rescheduled without a loss of capacity in the system should not count as TSE consumption for the relevant Access Holder.
- Where QR Network is the cause of a cancellation or a delay resulting in changes to the WTP or DTP, this should not be considered consumption of an Access Holder's TSE: and
- Where the cause of any delay or cancellation is an individual mine, it should be made clear that the particular mine at fault will bear any lost capacity in the system.

BMA (p5 of its submission) also requested consideration for the flexibility to reallocate train paths that cannot be used by their contracted owner. BMA also recommends a key Network Management Principle as contained in Schedule G to be included in the system rules as follows:

- That once a train service is scheduled in the WTP, then that train service cannot be removed from the schedule unless at the request of the Access Holder of that train service.

Any proposed changes to rules other than those in the draft system rules need to be dealt with in another forum but does agree that the process for applying those rules should be clarified and contained in the draft system rules.

The above stakeholder comments are reasonable and, as per Recommendation 15, it is appropriate to provide end users with flexibility to make amendments to train orders, without penalty, within a reasonable notice period prior to the day of operation. However, any flexibility in this regard must be subject to it not adversely impacting on system capacity (with any impact being demonstrable).

In this context, the draft system rules need to be explicit about the time period (WTP, DTP or day-of-operation level) at which a TSE consumption is recorded.

**Recommendation 20** – *That QR Network must clarify the process for cancelling and transferring of paths (in the WTP and DTP environments) and the effect on the TSE consumption of the relevant Access Holder. Clause 5.3 of the current Standard Access Agreement (Access Agreement*



*Coal) goes some way to address this matter but is silent on train diversions. If a train is diverted to a different mine but still maintains the forward and return schedules on the main trunk routes as discussed in section 2.1 of the draft system rules and does not conflict with any other allocated system path then no penalty should apply. However, in most cases the return journey will require a different train path due to the different turnaround time. In this situation the train operator should only incur a penalty for the return journey.*

## **Section 6.0 Plan Implementation**

This process appears consistent with general train operations principles. The only concern identified is the comment in section 6.1.3 about dwells greater than TSE allowances. It is suggested for clarity that draft system rules should include the definition of a dwell as contained in the Access Agreement and/or the Train Operations Agreements.

## **Section 7.1 Measuring Performance**

The process for managing Access Holders' TSEs has been raised several times throughout this review and again mentioned in section 7.1 of the draft system rules. Section 7.1 indicates that the performance of TSEs is measured against the WTP while section 4 indicates that TSEs can be varied up to the issue of the DTP. It is not clear whether this means that any changes from the issue of the WTP (at 1600 hours on the Tuesday prior to the week of implementation) to the issue of the DTP (on the business day prior to implementation) is treated as a deviation. This lack of clarity needs to be addressed by QR Network in order to give Access Holders certainty around how their TSEs are consumed.

## **Section 7.2 Schedule Performance**

### **7.2.1 Delay Accountability**

Femol has concerns about limiting the cause of delays to cyclic traffic to incidents that occurred on or after the commencement of the last train cycle. The cascading effect of major delays can cause rippling effects throughout the supply chain and may continue for some time (possibly more than the length of one train cycle) before they are addressed. In some cases trains may need to be cancelled to get the system back on track and this may not occur until some days later.

***Recommendation 21*** - *That consideration be given to expanding the timeframe beyond what is proposed for determining delay accountability, so as to achieve a fair and equitable outcome, particularly when major disruptions have occurred It is recommended that that at least two train cycles or until the reissue of the DTP where out of course running can be adjusted.*

RTCA (p1 of its submission) raises concern about the allocation of cause of delay and/or cancellations in particular where stakeholders cannot agree and QR Network takes it upon itself to allocate the blame and if an Access Holder is not happy with the allocation, it may have recourse to the dispute resolution mechanism in its access agreement. RTCA highlights that only Access Holders have access to this process and other Supply Chain Stakeholders have no avenue of dispute.

**Recommendation 22** - RTCA's concerns need to be addressed and it is recommended the system rules be amended to enable stakeholders, other than access holders, to have access to the dispute resolution process if they are impacted by delays or cancellations. For instance, if there is a major issue where agreement cannot be reached on fault attribution, an independent umpire should be engaged to review the situation and make an unbiased ruling. The structure for this process is not discussed here as it is outside the scope of this review.

### 7.2.2 Cancellation Accountability

The same concerns as raised in 7.2.1 apply around the timeframes for considering delay causes and the same recommendations apply.

## 5.0 CONCLUSIONS

During the course of this review Femol had various discussions with QR Network and key Stakeholders. Each has a different view on the clarity and effectiveness of the processes contained in the Capricornia draft system rules but in general is supportive of the development of the system rules. Various concerns were identified which are contained in the body of this report along with individual recommendations however one overarching concern was clearly evident and that is the transparency of the processes overall.

Femol believes that most of these concerns can be overcome by clear explanations and examples of how processes are developed and applied. The one single theme that was apparent from the Stakeholders' responses is the need for clarity and transparency. Specifically – the clarity of processes and transparency around the management of the rail network capacity and the allocation and management of Access Holders' TSEs. The issue of management and allocation of TSEs was raised on several occasions and by all three respondents. It is clear that Stakeholders are not clear on the process for managing TSEs. This matter has been dealt with throughout this document with various recommendations.

Stakeholders also requested clarity around other key issues as indicated below:

- development of the Master Train Plan (MTP)
- calculation and application of the maintenance multiplier

The Capricornia draft system rules also need to be modified to reflect the definition of Access Holder as described in the new draft proposed alternative Standard Access Agreements (SAAs) where Access Rights may be held via an End User Access Agreement (EUAA) and contracted out to a suitable haulage operator via a Train Operator Agreement. In doing so, the system rules should afford end users the flexibility to manage their access rights, including the right to switch between train operators outside the DTP period (specifically, 48 hours' notice to QR Network) without TSE consumption being recorded.

Femol does not believe that the rules when correctly applied will have any additional impact on the capacity of the network. In fact, if anything, they will add discipline and improvement to the operation of the system.

Femol suggests that further improvements to the overall management and coordination of the coal supply chain can be achieved by the creation of a joint management team consisting of

representatives from all key stakeholders e.g. miners, haulage operators (road and rail), infrastructure owners/operators (mine, rail, port) and shipping companies. This is not a new concept and operates satisfactorily in other similar systems but it does need the cooperation from all parties.

Rio Tinto Coal Australia raised concern about the capability of the Capricornia coal system to handle the increased demand flowing from the Wiggins Island Coal Export Terminal (WICET). While WICET is outside the scope of this exercise it will need to be included in the system rules in the future, hence the system rules will need to be considered as a live document and be updated accordingly.

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