QUEENSLAND COMPETITION AUTHORITY

Issues Paper

QR Network 2009 Draft Access Undertaking

October 2008

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SUBMISSIONS

Public involvement is an important element of the decision-making processes of the Queensland Competition Authority (the Authority). Therefore, submissions are invited from interested parties concerning the Authority's assessment of QR Network Pty Ltd's 2009 draft access undertaking. The Authority will take account of all submissions received by the due date.

Written submissions should be sent to the address below. While the Authority does not necessarily require submissions in any particular format, it would be appreciated if two printed copies are provided together with an electronic version on disk (Microsoft Word format) or by e-mail. Submissions, comments or inquiries regarding this paper should be directed to:

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The **closing date** for submissions is 14 November 2008.

Confidentiality

In the interests of transparency and to promote informed discussion, the Authority would prefer submissions to be made publicly available wherever this is reasonable. However, if a person making a submission does not want that submission to be public, that person should claim confidentiality in respect of the document (or any part of the document). Claims for confidentiality should be clearly noted on the front page of the submission and the relevant sections of the submission should be marked as confidential, so that the remainder of the document can be made publicly available. It would also be appreciated if two copies of each version of these submissions (ie the complete version and another excising confidential information) could be provided. Again, it would be appreciated if each version could be provided on disk. Where it is unclear why a submission has been marked "confidential", the status of the submission will be discussed with the person making the submission.

While the Authority will endeavour to identify and protect material claimed as confidential as well as exempt documents (within the meaning of the *Freedom of Information (FOI) Act 1989*), it cannot guarantee that submissions will not be made publicly available. As stated in s187 of the *Queensland Competition Authority Act 1997* (the QCA Act), the Authority must take all reasonable steps to ensure the information is not disclosed without the person's consent, provided the Authority is satisfied that the person's belief is justified and that the disclosure of the information would not be in the public interest. Notwithstanding this, there is a possibility that the Authority may be required to reveal confidential information as a result of an FOI request.

Public access to submissions

Subject to any confidentiality constraints, submissions will be available for public inspection at the Brisbane office of the Authority, or on its website at www.qca.org.au. If you experience any difficulty gaining access to documents please contact the office (07) 3222 0555.

Information about the role and current activities of the Authority, including copies of reports, papers and submissions can also be found on the Authority's website.

FOREWORD

QR Network Pty Ltd (QR Network) has proposed new tariffs and operating rules for 2009 to 2013 at a time of substantial change for the business, both internally and externally. The corporate restructure of QR Ltd has affected QR Network's position within the overall group, making it a stand-alone business, although still wholly owned by the parent company. The move towards greater coordination within the coal transport chain is also affecting QR Network's relationships with its customers and other stakeholders.

These changes are taking place amid rapid growth in demand for Queensland's coal exports, all of which are carried to port on tracks owned and managed by QR Network. This expansion of the industry has exposed shortages of transport capacity, both in the rail network and at Queensland's ports.

QR Network has detailed its proposals for tariff increases ranging from 14% to 89%, as well as changes to its operating rules, in its 2009 draft access undertaking (DAU), which was submitted to the Queensland Competition Authority (the Authority) on 9 September 2008.

The DAU retains the basic framework, and many of the principles, of the undertakings approved by the Authority in 2001 and 2006. However, many of the changes proposed for the 2009 DAU involve greater protection from risks for QR Network at a time when coal miners are exposed to greater uncertainty about the nature of their rail transport entitlements, as well as higher costs.

In particular, QR Network is seeking increased freedom to impose conditions, including demanding capital contributions from miners, in cases where it has to undertake substantial capital expenditure to accommodate increases in demand. It is also seeking the right to depart from pricing principles and from the network management principles, which govern how trains operate, when doing so will better serve the needs of the whole coal chain.

The tariff increases are driven by several factors, including the cost of capital works already undertaken, a doubling in proposed capital expenditure in the four years from 2009, and a rise of about 50% in maintenance costs.

However, one of the largest contributors to the higher tariffs is a proposed increase in QR Network's weighted average cost of capital (WACC – the regulated return on investment) from 8.43% in the 2006 undertaking to 11.76% in the 2009 proposal. This reflects higher debt and equity margins requested by QR Network which add 1.84 percentage points and an increase in the underlying risk-free rate of 1.49 percentage points.

The capital expenditure program of $1.35 billion planned for 2009 to 2013 is mostly devoted to capacity improvements to the existing coal network. QR has proposed to deal with expenditure on the Goonyella to Abbott Point (GAP) project, currently estimated at $3.8 billion, and for other major expansion projects, in a revision to the 2009 undertaking following its approval.

As well as increasing tariffs, QR Network has proposed to restructure them. It has suggested a single tariff across each of the Goonyella and Blackwater systems, to replace the current practice of breaking each system into clusters. It has proposed that the tariffs, and the revenue cap that constrains them, be subject to an annual review to take account of variations to key expenditure assumptions, such as maintenance costs and capital expenditure, from the estimates made at the time the draft undertaking was developed.

QR Network has argued that its structural separation within the QR group will eventually make it possible to remove many of the rules which seek to prevent it from unreasonably favouring other parts of QR Ltd. In the meantime, it has proposed some relaxation of those rules in the 2009 draft access undertaking.

Notable proposals include removing some requirements for reporting compliance with internal procedures, as well as changes to the ring-fencing provisions covering sharing information with other parts of the QR group.

QR Network has also argued that it needs new rules to cope with the changes in its operating environment brought about by the demands of the overall supply chain. These issues have been particularly acute in the Goonyella system, where capacity constraints at Dalrymple Bay Coal Terminal (DBCT) have changed the way shipments are managed, placing new strains on the rail network.

QR Network has proposed to deal with this focus on wider coal chain issues at several levels, from the minute-by-minute operating rules addressed by the Train Management Decision Making Matrix through to the longer term outlook over several years covered by the master planning process.

The short to medium term issues have been covered in the proposed changes to its network management principles, which govern the train service entitlements that define what customers buy from QR Network.

Specifically, the network management principles are proposed to be modified by [yet to be defined] system rules for each part of the network that address the requirements of the associated port. The general principles are also to be changed so that the weekly train plan becomes the intermediate train plan, made over two weeks to match the horizon of the coal chain planners.

In its proposed capacity management principles, QR Network has set out a revised process for rationing and allocating scarce new train paths. It has also proposed that it be able to breach the pricing principles where that is necessary to benefit the coal supply chain.

The changes outlined above attempt to address the symptoms of the underlying scarce capacity, by dealing with a series of specific short to medium term issues.

At the same time, the 2009 draft undertaking lacks a comprehensive blueprint that enables greater coordination of the long term planning and delivery of new capacity among the various participants in the coal chain. QR Network plays a central part in the chain, connecting the mines with the ports, and having to address their capacity demands and scheduling priorities.

The Queensland Government has, through the O'Donnell Review and other initiatives, worked to address the bottlenecks and supply chain issues in the state's coal industry. In addition, the federal government has turned its attention to both short term operational concerns and long term strategic issues, given that coal is Australia's most valuable export. This includes the National Transport Commission's review of the coal supply chain as part of its National Transport Plan. The Australian Competition and Consumer Commission (ACCC) has also authorised short term arrangements to ration capacity at DBCT.

The various reviews have highlighted the mismatch, in both timing and scope, of expansions to port and rail capacity in the Queensland coal transport network.

The Authority has begun its consideration of QR Network's 2009 DAU, and will soon receive a draft access undertaking for DBCT. As both draft undertakings will be reviewed at the same time, this provides an opportunity for facility owners, customers and the regulator to look for ways to address some of the problems with coordinating Queensland's coal system.

One concern is that these issues have arisen even though the 2006 undertaking already contains incentives for QR to participate in projects to improve the productivity of the coal supply chain as well as including requirements for QR to consult widely when it annually prepares a master plan.

It is evident that having a transparent and consultative master planning process is not a sufficient requirement to better align port and rail capacity expansions. This is not to say that the master planning process has not made a positive contribution in a difficult environment given the many participants in the coal chain and the changeable, and very robust, expectations of future coal exports.

Nevertheless, QR Network has responded by proposing in the 2009 DAU to dilute its master-planning responsibilities by removing the obligation that the master plan be prepared (at least) annually.

The supply chain coordination issues have not arisen by accident or by chance. Indeed, these issues are the accumulated result of individual entities acting in their own best interests and, inadvertently, not in the collective interests of the supply chain as a whole.

Resolving these issues may, therefore, involve quite a degree of give and take by these individual entities. Success will depend on how this process is managed.

The establishment of the Dalrymple Bay Coal Chain Board (the Board) has provided one vehicle for achieving greater coordination of the supply chain to DBCT. However, participation in the operations of the Board is entirely voluntary and is limited to the DBCT supply chain.

The Authority is interested to know whether the operation of the Board should be formalised in some way in the QR Network 2009 undertaking, and subsequently in the DBCT 2009 undertaking.

Also, the multiple proposals to develop infrastructure to support the development of more mines, in both existing and new coal basins, indicate the coal supply chain is likely to become increasingly complex, not simpler. Given this prospect, should the undertaking provide for greater coordination across central Queensland and not just in the DBCT supply chain?

The Authority is also interested to hear from stakeholders on how best this coordination could be achieved. Should greater coordination be a regulatory requirement? If so, what should be the nature of those obligations? QR Network already has an obligation to consult widely in preparing its master plan, yet this has not been sufficient to avoid the mismatch that has already emerged in mine, rail and port capacity.

Alternatively, should greater coordination be a contractual obligation? Should access agreements more clearly specify the reciprocal rights and obligations of QR Network and its customers?

Developing key performance indicators for access agreements has proven particularly intractable in the past. One of the problems has been that, while it may be relatively easy to develop measures of performance against someone's own responsibilities, this becomes more difficult where performance is the result of the interaction of different entities. This issue may be better addressed by developing more flexible business rules rather than relying on measurable performance indicators.

The Authority is seeking responses not only to the challenges of improving the performance of the coal supply chain but also to the specific issues summarised in the main body of this issues paper, and laid out in detail in QR Network's 2009 DAU submission.

The Authority would also welcome broader comments from stakeholders in the coal supply chain as to whether the draft undertaking provides the correct balance between offering the appropriate investment returns and management freedom to a monopoly infrastructure provider, while offering sufficient protection and certainty to its customers.

TABLE OF CONTENTS

GLOSSARY

BRTT	below-rail transit time
CAPM	Capital Asset Pricing Model
CPI	Consumer Price Index
CQCR	Central Queensland Coal Region
DAU	Draft Access Undertaking
DAAU	Draft Amending Access Undertaking
egtk	electric gross tonne kilometre
GAP	Goonyella to Abbot Point expansion
mtpa	million tonnes per annum
QCA Act	Queensland Competition Authority Act 1997
QR	Queensland Rail
RAB	regulatory asset base
SBR	Surat Basin Railway
SWR	System-wide and Regional
WACC	Weighted Average Cost of Capital
WICT	Wiggins Island Coal Terminal

1. INTRODUCTION

The services provided by QR Network's intra-state rail network were declared by regulation in 1997, making the services subject to the third party access provisions of the *Queensland Competition Authority Act 1997* (the QCA Act). As a result of that declaration, the facility owner, access provider, access seekers and access holders gained rights and obligations relating to the negotiation of the terms and conditions of access to QR Network's rail transport infrastructure.

The stated objective of the access regime is to promote the economically efficient operation of, use of and investment in, infrastructure services, with the effect of promoting effective competition in upstream and downstream markets.

The QCA Act provides for the Queensland Competition Authority (the Authority) to approve an access undertaking in relation to a declared service. While the QCA Act imposes broad obligations on a facility owner and access provider, an access undertaking for a service contains details of the terms and conditions on which an owner undertakes to provide access to the service.

The Authority has previously approved access undertakings for Queensland's intra-state below rail infrastructure in December 2001 and in June 2006. Those undertakings had been submitted by QR Ltd.

On 9 September 2008, QR Network submitted a new undertaking to take effect from 1 July 2009 (2009 DAU). QR Network has also provided the Authority with an accompanying submission and papers in support. At this time, QR Network has not provided the Authority with drafts of standard access agreements for coal-carrying train services – the Authority understands these agreements will be provided to the Authority later in 2008.

On 10 September 2008, the Authority issued a notice of investigation in relation to QR Network's 2009 DAU. This notice enables the Authority to conduct an investigation to assist in deciding whether or not to approve QR Network's 2009 DAU.

The notice of investigation invited interested parties to make a written submission to the Authority, and specified that submissions must be received by 22 October 2008. On the request of a number of stakeholders, the due date for submissions was extended to 5 November 2008. The due date has been further extended to 14 November 2008 to enable stakeholders to have the benefit of this Issues Paper, which has been prepared to assist interested parties in making submissions.

While this paper highlights matters on which the Authority particularly seeks input from interested parties, comments on any other aspect of the 2009 DAU or a related matter are welcome. In particular, this paper does not seek to comprehensively address all issues or amendments proposed by QR Network. Hence, interested parties should rely on their own analysis of QR Network's documents to determine whether there are additional matters on which they wish to comment.

1.1 Declaration for Third Party Access

The effect of the declaration of the services provided by QR Ltd's and QR Network's rail transport infrastructure under Part 5 of the QCA Act is that:

(a) statutory duties arise for an access provider, including an obligation to negotiate with and provide information to access seekers, and an obligation not to hinder or prevent access;

(b) an access seeker gains recourse to compulsory dispute resolution procedures;

(c) the owner of a facility may submit an access undertaking to the Authority for approval, if the owner considers it is appropriate to do so; and

(d) the Authority may request an undertaking be prepared by the owner if one has not been voluntarily submitted and the Authority considers it appropriate that an undertaking be in place (in certain circumstances the Authority can draft and approve its own access undertaking).

The obligations on the facility owner and access provider apply from the date of declaration, irrespective of whether the Authority has approved an access undertaking.

The access regime established by Part 5 of the QCA Act is a negotiate/arbitrate model. That is, the primary responsibility is on the access provider and access seeker to negotiate on price and non-price terms, with the Authority becoming involved only under certain circumstances – for example, where agreement cannot be reached and either party has lodged a dispute notice with the Authority.

1.2 Role and Contents of an Access Undertaking

The role of an access undertaking is to reduce uncertainty by detailing the terms and conditions on which an access provider will be prepared to provide access to the facility to an access seeker. Amongst other things, an undertaking is designed to assist the access negotiation process, to reduce the scope for disputes between access seekers and the access provider, and to provide certainty about how the Authority will deal with access disputes. This is because any access determination made by the Authority must not be inconsistent with the approved access undertaking.

Ultimately, the terms and conditions for access will be embodied in an access agreement between the access provider and the access holder. Once an access agreement has been signed, any dispute in relation to that agreement is to be resolved in accordance with the terms of the agreement, which may differ from those set out in an approved undertaking. In the event of a dispute during the negotiation of an access agreement, the Authority's determination must not be inconsistent with the terms contained in the approved undertaking. A term in an access agreement will be void if it is inconsistent with a provision of the QCA Act.

An approved undertaking also provides a 'safe harbour' for an access provider in that any conduct in accordance with an approved undertaking is deemed not to breach the preventing and hindering access provisions of the QCA Act.

The QCA Act states that an access undertaking must specify the expiry date of the undertaking, and lists the types of matters that may be addressed in an undertaking. These matters include:[1]

(a) how charges for access to the service are to be calculated;

(b) information to be given to access seekers;

(c) arrangements to be made by the owner to separate the owner's operations concerning the service from other operations of the owner concerning another commercial activity;

(d) terms relating to extending the facility; and

[1] s. 137.

(e) provisions to be included in access agreements in relation to the service.

Where the Authority has approved an access undertaking which includes reference tariffs, the QCA Act provides for certain obligations on an access provider to give information to an access seeker to be waived (for example, information about prices, costs and the value of the access provider's assets).[2]

Access Undertaking and Existing Access Agreements

An approved access undertaking does not of itself affect the terms and conditions of any pre-existing access agreement. Rather, the access undertaking will only apply to access negotiations occurring after the approval date of the undertaking. Access agreements entered into before an access undertaking is approved will be governed by the terms and conditions contained in those agreements.

1.3 The Authority's Assessment Process

The Authority has already commenced public consultation on the 2009 DAU and the publication of this Issues Paper seeks to assist stakeholders in finalising their submissions. This process may involve further consultation, for example in relation to any currently outstanding information submitted by QR Network, commissioned studies or a draft decision.

The QCA Act (s.147A) requires the Authority to use its best endeavours to make a decision on the 2009 DAU within a six-month period, excluding time allocated for public consultation or for the period taken to respond to information requests. However, given the timing of the submission of the 2009 DAU, the more binding constraint is likely to be having an undertaking approved by the time the existing undertaking expires on 30 June 2009.

In making its decision on whether or not to approve the 2009 DAU, the QCA Act requires the Authority to have regard for:[3]

(a) the objective of the access regime, namely; to promote the economically efficient operation of, use of and investment in, infrastructure services, with the effect of promoting effective competition in upstream and downstream markets;

(b) the legitimate business interests of the owner of the service;

(c) the public interest, including the public interest in having competition in markets (whether or not in Australia);

(d) the interests of persons who may seek access to the service, including whether adequate provision has been made for compensation if the rights of users of the service are adversely affected;

(e) the effect of excluding existing assets for pricing purposes;

(f) prices that should:

  (i) generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved;

[2] s. 101(4).
[3] s. 138(2).

(ii) allow for multi-part pricing and price discrimination when it aids efficiency;

(iii) not allow a vertically integrated access provider to set terms and conditions that discriminate in favour of its downstream operations, except to the extent the cost of providing access to any other operator is higher; and

(iv) provide incentives to reduce costs or otherwise improve productivity; and

(g) any other issues the Authority considers relevant.

The Authority may approve a draft access undertaking only if:

(a) it is satisfied the undertaking is consistent with any access code for the service;

(b) it has published the undertaking and invited persons to make submissions on it to the Authority within the time stated by the Authority; and

(c) it has considered any submissions received by it within the time stated by the Authority.

The Authority invites submissions on any aspect of QR Network's 2009 draft access undertaking or a related matter by 14 November 2008. The Authority encourages interested parties to consider the criteria in the QCA Act for the approval of draft access undertakings when preparing submissions. Interested parties may also wish to comment on the degree of consistency between QR Network's draft access undertaking and other network access regimes in Australia.

2. NON-PRICING ISSUES

As a part of the consultation process in the preparation of the 2009 undertaking, QR Network developed a number of principles papers that dealt with a range of issues including the management of access applications and network management principles. These papers were provided to stakeholders for discussion purposes and as an input into the development of QR Network's 2009 DAU. However, QR Network has proposed a number of significant amendments to the undertaking that had not been canvassed in those earlier papers.

The following chapter highlights some of the major non-pricing amendments as proposed by QR Network.

2.1 Scope and Term of the Undertaking (Part 2)

Scope of the Undertaking

Previously, the undertaking was for the provision of access to declared services provided by QR Ltd and included provision for infrastructure not managed by its network business to be transferred to the network business.

This arrangement was maintained as part of QR Network's 2008 draft access undertaking (DAU) that was submitted following its creation as a wholly owned subsidiary of QR Ltd.

However, as part of its 2009 DAU, QR Network has proposed amending the definition of Rail Infrastructure to:

> *… rail transport infrastructure as defined in the TIA (Transport Infrastructure Act) for which QR Network is the railway manager but only to the extent that the use of that rail transport infrastructure is declared for section 97 of the Act (QCA Act).*

This new definition ensures that the 2009 DAU does not cover access by a third party to infrastructure owned by QR Ltd and its other related parties. Access to declared services (e.g. stations and platforms) that are provided by QR Ltd or its other subsidiaries will have to be made through separate access applications to the relevant corporate entity, and governed by the access framework set out in Part 5 of the QCA Act.

This clearly represents a change in direction where, in the past, access seekers had only to deal with QR Ltd's network business yet they may now be required to deal with several entities in order to gain access to the declared services. As a result, it also raises the prospect that several entities within the QR business group may be required to provide the Authority with access undertakings.

The Authority seeks comments on whether stakeholders believe that the limitation on the scope of QR Network's undertaking significantly erodes the effectiveness of the rail access regime in Queensland. And, if so, what remedies exist to redress this issue?

Term of the Undertaking

QR Network has proposed that the term of the undertaking be four years, subject to the ability of QR Network to terminate the 2009 undertaking at an earlier date if certain events occur. In particular, the undertaking would be terminated earlier if a third party provided debt or equity funding to QR Network, QR Network ceased to be a subsidiary of QR Ltd or a related party to QR Network ceased to operate non-passenger train services.

A significant objective of an access undertaking is to provide a degree of certainty on the terms and conditions of access as well the negotiation framework for obtaining access to the declared services.

QR Network's definition of the term of the undertaking introduces a degree of uncertainty over the term of the undertaking, in particular as the triggers for the undertaking's early termination are matters over which QR Network and its related parties have a significant degree of discretion.

When the Authority made its December 2005 decision, it proposed the termination date be specified, with the possibility of a one year extension on unchanged terms.

QR Ltd applied for a Judicial Review of the Authority's December 2005 decision on a number of grounds, one of which was that the Authority had committed an error of law on the basis that the Authority's proposed termination date:

> *…does not meet the statutory requirement of s.137(1) of the [QCA] Act that the undertaking state the expiry date of the undertaking.*

The Authority seeks comments on whether it is reasonable for QR Network to be able to terminate the 2009 undertaking before the end of the proposed four-year term to address specified events, including a change in ownership or financial structure.

2.2 Negotiation framework (Part 4)

QR Network's undertaking includes a negotiation framework that imposes obligations on both QR Network and third party access seekers in order to facilitate the timely handling of access requests.

In its 2009 DAU, QR Network has proposed a number of amendments to the negotiation framework (including timeframes) and the dispute resolution procedures. The proposed changes to the undertaking include:

(a) allowing a customer's details to be provided to QR Network in circumstances where an access application is submitted by a train operator on behalf of a customer. Customers will also receive copies of all correspondence provided to an access seeker (e.g. acknowledgement of access application, formation of a queue, change in queue and negotiation cessation);

(b) replacing the capacity resumption register with the capacity notification register to manage requests for access for which available capacity does not exist;

(c) extending the time allowed for processing access applications;

(d) allowing QR Network to seek additional information from access seekers to mitigate speculative access requests (e.g. details of a port contract to be able to progress an access application); and

(e) introducing a new framework for managing access requests for major projects (e.g. Wiggins Island Coal Terminal (WICT)), including reorganising a queue based on an access seeker's, or the customer's, contributions to the funding of any feasibility studies.

The Authority seeks comments on whether QR Network's proposed changes to the negotiation framework:

- **will improve the timely conclusion of access agreements substantially; or**
- **substantially alter the rights of access seekers.**

2.3 Capacity Management Principles (Part 7)

QR Network has proposed a series of capacity queuing arrangements and allocation policies to cope with the current shortage of rail infrastructure in the face of significant demand for coal exports. These arrangements cover both what access holders need to do to retain the capacity they already have, and what they must do to secure more capacity.

QR Network has proposed to retain most of the principles in part 7 of its existing undertaking but has introduced substantial amendments to the capacity allocation process. The major amendments include:

(a) establishing a queuing framework for allocating capacity where:

  (i) it is not commercially justified to expand capacity to meet additional demand;

  (ii) the expansion takes place in phases such that it becomes necessary to create a queue to allocate capacity; and

  (iii) capacity created through a greenfields project is less than the demand for capacity.

(b) altering the trigger, and making it easier, for QR Network to query an access holder as a precursor to resuming their access rights;

(c) modifying the definition of available capacity to mean capacity that will become available through planned expansions of the network;

(d) allowing access holders to confirm in writing a requirement to renew capacity in instances where access rights expire within five years of QR Network's planning horizon – this is a non-binding commitment and is introduced purely for QR Network's capacity planning purposes;

(e) placing access seekers on the capacity notification register once available capacity has been allocated – these access seekers will not be in a queue but they will be notified as subsequent capacity becomes available;

(f) retaining a committed capacity register, but only for QR Network's infrastructure outside of the central Queensland coal system;

(g) allowing customers (mines) to reallocate their existing capacity entitlements to other access holders/seekers, as long as the new access holder/seeker agrees to adhere to the operating and scheduling requirements that applied to that entitlement;

(h) reserving the right for QR Network to re-allocate relinquished capacity in accordance with the undertaking's capacity allocation principles; and

(i) replacing transfer fee arrangements with general relinquishment fee arrangements.

The Authority seeks comments on whether QR Network's proposed capacity management principles:

- **provide an appropriate balance between**
  - **the needs of the access provider to manage bona fide access applications in an orderly manner; and**
  - **the needs of access seekers to have a well-defined and simple queuing mechanism that protects their rights to gain access to the declared services.**
- **provide QR Network with sufficient ability to manage the allocation of capacity to individual access holders, access seekers and customers, in a manner that maximises the benefits to all parties; and**
- **provide a sufficiently flexible mechanism that allows access holders and their customers to manage their affairs as they may change from time to time.**

2.4 Compliance obligations (Part 3)

Decision-making Audit

The 2006 undertaking requires QR Ltd to conduct an annual audit of its compliance with its decision-making procedures. The audit was developed to be part of a framework to encourage QR Ltd to make decisions in a consistent manner between third party operators and QR National. These arrangements were included in the 2006 undertaking to make potential breaches of the undertaking more transparent and to encourage QR Ltd to develop a 'culture of compliance' with the undertaking.

The 2009 DAU has proposed to remove reference to the decision-making principles (clause 3.4) that govern QR Network's compliance with its decision-making framework affecting third parties. QR Network has not sought to preserve these in the 2009 undertaking as it believes that third party access seekers are sufficiently protected via the existing access agreements and dispute resolution procedures.

The Authority seeks comments on the reasonableness of QR Network's proposal to remove the decision-making audit and its associated responsibilities from the undertaking.

Ring-fencing

QR Ltd's current regulatory arrangement establishes a set of obligations and procedures governing QR Ltd's treatment and disclosure of an access seeker's/access holder's confidential information, including a confidentiality deed setting out in detail QR Ltd's obligations.

These arrangements go beyond normal arrangements for the treatment of commercially confidential information as their primary purpose is to ensure that QR Ltd's above-rail groups do not get access to any information from QR Network in relation to an access seeker/access holder. Part 3 and Schedule B of QR Ltd's existing undertaking outline the ring-fencing arrangements that QR Ltd is required to observe, including organisational structure, accounting separation, managing confidential information, compliance and enforcement.

In the 2009 DAU, QR Network has proposed to limit its ring-fencing obligations with regards to disclosure and collection of confidential information towards third parties. QR Ltd's ring-fencing obligations extended to all QR business groups including QR Network to the extent they received confidential information in the execution of an access agreement.

The 2009 DAU also does not include the line diagrams that provide a schematic representation of the rail infrastructure that is and is not covered by the scope of the undertaking. QR Network has argued that it is not necessary for the undertaking to include the line diagrams as they are amended and published regularly and, as a result, they are likely to be redundant by the time the Authority approves a 2009 DAU.

QR Network has also proposed:

(a) deleting the confidentiality deed from the undertaking but it has included in the undertaking the principles that should be included in any such deed; and

(b) extending the inclusion of ring-fencing obligations to staff engaged directly by QR Ltd's board and its insurance management division.

The Authority seeks comments on whether:

- **the structural separation of QR Network within QR Ltd is sufficient to justify QR Network's proposed changes to the ring-fencing arrangements; and**
- **the removal of the line diagrams and the confidentiality deed from the undertaking creates unnecessary uncertainty for stakeholders.**

2.5 Network Management Principles (Part 7)

QR Network has proposed substantial changes to the way it defines and allocates Train Service Entitlements (TSE), which are the fundamental product it provides to above-rail operators and their customers under access agreements. In particular, it has proposed to add System Rules, which for specific parts of the network will modify and in some cases over-ride the Network Management Principles that govern the way schedules are planned and conflicts between train services are managed.

QR Network has submitted that the changes seek to address concerns expressed by stakeholders that the principles governing the interaction of QR Ltd's train services and those of a third-party operator were not sufficiently defined.

QR Network also submitted that it needed to adjust its Network Management Principles to cope with a change in the pattern of operation of the transport chain which brings coal to ports in Queensland. The previous practice of using regularly scheduled 'even railing' to build stockpiles at the port has, at some terminals, been replaced with 'campaign railing' to assemble cargoes for specific ships as they arrive. This conserves scarce stockpile capacity, but places new strains on the rail network, particularly the Goonyella system.

The structure and wording of the Network Management Principles in Schedule G of the 2006 undertaking are in most part carried over to the 2009 DAU. There are, however, some material changes and additions.

First, the concept of System Rules has been introduced into the new Appendix 1 to Schedule G. The rules are to operate under the guidelines of the Network Management Principles, but cover such system-specific issues as supply chain planning arrangements and train control decision-making. QR Network submitted these System Rules would allow trains on each system to

comply with the priorities set by the overall coal chain, particularly the scheduling requirements of the port. The System Rules would include the concept of System Paths, which allocate each below-rail train path to a specific rail unloading pit at an export terminal.

The 2009 DAU does not define the System Rules for each part of the network. Nevertheless, QR Network submitted they would be developed in consultation with users, and be subject to the dispute resolution rules in Clause 10.1 of the undertaking.

Second, QR Network has proposed revising the weekly train plan to an 'intermediate train plan' in order to align with the planning cycle of the coal chain. The effect of this will be that detailed train scheduling will be done two weeks, and not one week, ahead.

Third, QR Network has proposed to amend the Train Management Decision Making Matrix to allow train controllers the flexibility to give priority to a late-running train over an on-time train. This will apply where both trains belong to the same operator, and where the trains belong to different operators. QR Network has argued that this change seeks to improve the operation of the overall system.

Fourth, QR Network has again proposed to define all coal train services in central Queensland as cyclic traffic, which guarantees a certain number of train paths in a set period. QR Network submitted that timetabled services, which guarantee a path at a fixed time on a particular day, consume a disproportionate share of network capacity. The Authority previously rejected a similar proposal, saying the option for timetabled traffic should remain open.

The Authority seeks comments on whether:

- **the proposed changes to Train Service Entitlements, including the development of System Rules and System Paths, are reasonable;**
- **it is reasonable to provide for System Rules in the access undertaking, before the details of the System Rules have been established for each system;**
- **it is reasonable to declare all coal rail services in central Queensland as cyclic traffic; and**
- **the proposed changes to the Train Management Decision Making Matrix to allow priority to late trains provide adequate measures to prevent one operator being unreasonably favoured over another.**

2.6 Public and Regulatory Reporting Requirements (Part 9)

The 2006 access undertaking requires QR to report particular information to the public on a quarterly and annual basis. This provides interested parties with information on, *inter alia*, the reliability of train services, the availability of network services, maintenance and capital expenditure and the regulatory asset base. Some of that information has been accompanied by a responsibility statement from the QR chief executive to ensure that a higher degree of confidence can be attributed to the accuracy of the information supplied.

QR Network has proposed to amend its quarterly public reports, including to:

(a) replace the reporting of healthy and unhealthy train services (as defined in the 2006 undertaking) with reports of train services which reach their destination within an allotted time (i.e. are on-time or not on-time);

(b) present the below-rail transit time for the central Queensland coal region as a percentage index for each system as opposed to an aggregate figure for the entire region; and

(c) present information on complaints on an annual basis due to the small number of complaints received during the current undertaking period regarding billing and the treatment of non-QR train services.

In addition, QR Network has proposed to no longer provide a responsibility statement with its regulatory reports to the Authority. In this regard, QR Network has indicated that it is not aware that this has improved the transparency and accountability of information relative to other information provided to the Authority for which a responsibility statement is not required (QR Network, 2009 DAU, vol. 4: 103-114).

The Authority seeks comments on the reasonableness of QR Network's proposed changes to its public reporting requirements.

3. PRICING RELATED ISSUES

Pricing related issues are included in two separate locations in the 2009 DAU. Chapter 6 of the 2009 DAU focuses on general pricing principles to apply to all train services covered by the scope of the undertaking while Schedule F focuses on pricing principles for coal train services, including reference tariffs for coal train services in central Queensland and on the western system. Given the degree of detail associated with the cost build-up for the reference tariffs for the central Queensland coal train services, those matters are discussed separately in Chapter 4 of this paper.

3.1 Pricing Principles (Part 6)

The majority of changes to Chapter 6 are related to tidying up the wording and transferring some of the clauses to other parts of the undertaking. For example, in the section on establishing reference tariffs for new train services, clauses 6.4.2(o) to 6.4.2(s) have been moved to section 10.2 in the new chapter on dispute resolution.

Nevertheless, QR Network has proposed two material changes to the pricing principles.

First, QR Network has proposed to provide greater flexibility for specific arrangements to breach the pricing principles, in circumstances where QR Network can demonstrate to the Authority's satisfaction they are beneficial to the transport supply chain.

In particular, the pricing principles require access charges to sit between QR Network's incremental and stand-alone costs. However, there may be circumstances where strict adherence to this principle is not warranted. QR Network indicated that changes in the approach to pricing may result in an improvement in the use of, and investment in, infrastructure but might otherwise breach the undertaking's pricing principles. Potential situations where this might apply include:

(a) amalgamating the tariff for electric infrastructure in the Blackwater and Goonyella systems; and

(b) providing incentives for train operators to make investments which are more efficient and less costly than investments the below-rail network would otherwise be obliged to make.

Second, the undertaking includes a number of limitations on the circumstances when QR Network can impose access conditions (e.g. up-front capital contributions) on access holders or customers. These arrangements allow QR Network to obtain capital contributions from the users of a single spur line but limit the circumstances where QR Network can seek such contributions for expansion of the shared mainline network.

As part of its 2009 DAU, QR Network has sought to relax these limitations so it can seek to impose access conditions when the new infrastructure required to deliver an access request is a major project – where a major project is defined as a program of related capital expenditure expected to increase the regulatory asset base in a coal system by at least 30%, or $300 million, or to result in the creation of a new rail corridor.

The Authority seeks comments on whether:

- **QR Network's proposed changes to the undertaking's pricing principles are reasonable; and**
- **it is reasonable for QR Network to impose access conditions in circumstances where it is constructing a major project, given it already receives a regulated return on the project commensurate with its risk and, if so, whether the return received should be lower than that which would apply if access conditions had not been imposed.**

3.2 Reference Tariff Schedules (Schedule F)

Under the current regulatory arrangement, reference tariffs are set for the whole of the regulatory period and any variations to these tariffs can only be brought about through a variation in accordance with the provisions in the undertaking or through a draft amending access undertaking process as per the provisions of the QCA Act.

The main purpose of the reference tariffs is to provide QR Network, access seekers and holders and their customers with a degree of certainty as to what prices will apply to a defined reference train service for the term of the undertaking. To date, the undertaking has only established reference tariffs for coal-carrying train services in central Queensland and on the western system.

This section summarises the pricing principles and structure of reference tariffs proposed by QR Network and identifies the major changes QR Network has proposed to Schedule F of the 2009 DAU.

Structure of Central Queensland Coal Reference Tariffs

At present, there are four different systems in central Queensland: Blackwater, Goonyella, Moura and Newlands. The 2006 undertaking establishes a maximum allowable revenue (or revenue cap) for each of these systems. Prices within each system are set to recover this revenue cap on the basis of a number of a cluster of origins (i.e. loading points) and specified unloading points. For the Blackwater and Goonyella systems, there are four and five clusters respectively, while Moura and Newlands are single cluster systems (i.e. a single reference tariff for each system).

In its 2009 DAU, QR Network has proposed three principal changes to the structure of the central Queensland coal reference tariffs, namely:

(a) combining the multiple tariff clusters within each of the Goonyella (to Dalrymple Bay and Hay Point coal terminals) and Blackwater systems into a single tariff for each of these systems;

(b) replacing the current 'cluster' entry test with a 'system' entry test; and

(c) providing more detailed proposals for the pricing of cross-system traffics.

Combining Blackwater and Goonyella system clusters

QR Network has proposed to combine the multiple tariff clusters within each of the Goonyella and Blackwater systems and, accordingly, to apply a single reference tariff to coal-carrying train services within each system. Further, QR Network has identified circumstances where a service

would attract a premium (e.g. Rolleston) or a discount (e.g. Stanwell) to the system reference tariff.

In support of this proposal, QR Network has submitted that cost-related and operational conditions in both systems have changed since the 2006 undertaking was approved and, as a result, it brings into question the appropriateness of the existing price differentials among clusters in these systems.

Amalgamation of the existing Goonyella clusters into a single system has the effect of increasing the tariffs for the mines in the north Goonyella cluster but reducing the tariffs for the mines elsewhere in the Goonyella system.

QR Network believes this realignment of tariffs is desirable in the context of the proposed link between the Goonyella and Newlands systems (i.e. the Goonyella to Abbot Point (GAP) expansion). The current prices for north Goonyella traffics to DBCT/Hay Point are lower than those that would likely be charged to carry coal from the same mines to Abbot Point, using the new connection. That price differential would provide an incentive for north Goonyella mines to use DBCT/Hay Point, rather than take advantage of the link to Abbot Point. This incentive will be reduced if the Goonyella clusters are amalgamated with the effect of increasing the north Goonyella tariffs.

For the Blackwater system, this issue is relevant in the context of the cheaper price for north Blackwater traffics relative to central Blackwater traffics. While this price differential was initially set on the basis of perceived asset stranding risk in the event north Blackwater mines diverted their traffic to DBCT, QR Network has submitted that capacity constraints on the Goonyella system are now such that this risk has declined substantially.

In further support of its proposal to combine clusters, QR Network has submitted that reducing the complexity of the existing pricing arrangements is consistent with the expected future increase in cross-system traffics and with user preferences.

Accordingly, QR Network has concluded that, taking into account all of these factors, the most appropriate approach is to treat all users within a system consistently (i.e. apply the same reference tariff) unless there is compelling logic to price differentiate.

QR Network has indicated that the impact on individual access charges of adopting a single system reference tariff would be in the order of +/-3% for the Blackwater system, and -7% to +11% for the Goonyella system.

The 'system' entry test

While QR Network has proposed a single system tariff, it recognises that a train service may not cover its incremental cost if charged the system tariff.

The 2006 undertaking addresses the same issue by requiring a train service to pay the higher of:

(a) an existing cluster tariff; or

(b) its incremental cost plus a defined common cost contribution.

QR Network has proposed to replace this current 'cluster' entry test with a similar 'system' entry test. That is, the system entry test parallels the current test in that a train service would pay the higher of:

(a) an existing system tariff; or

(b) its incremental cost plus a common cost contribution.

As a result, mines such as Rolleston and Minerva, will pay a premium on the system tariff, such that they pay the incremental costs plus the common cost contribution.

As part of its review of this matter, QR Network has updated system costs and volumes and has sought to simplify the application of the minimum cost contribution in the 2009 DAU. In the latter regard, QR Network has indicated that it has sought to better align the common cost contribution with the incremental cost of capacity and, accordingly, capital costs. Specifically, QR Network has re-defined the common cost contribution to be equal to the incremental capacity tariff (AT_2) of the relevant system plus 50% of the AT_3 allocative tariff.

QR Network has also proposed that services to Stanwell pay a price that is a discount to the Blackwater system tariff. QR Network has indicated that applying a single tariff to the Blackwater system would result in a 35% increase in the tariff for services to Stanwell and that this increase would be inequitable, as Stanwell traffics do not utilise the capacity-constrained Gladstone area.

Treatment of cross-system traffics

Due to the interconnectedness of the central Queensland coal systems, QR Network has submitted that users may seek to operate cross-system traffics to take advantage of commercial opportunities. As a consequence, QR Network has considered that the 2009 DAU should provide more comprehensive guidance relating to the pricing of cross-system traffic.

In this regard, QR Network has proposed to price cross-system traffics on the basis of applying nominated elements of the relevant reference tariffs applicable to the origin and destination systems, consistent with Schedule F, Part B, 4.2.

Accordingly, QR Network has proposed to remove the Gregory via Goonyella cluster. In doing so, QR Network has proposed that, for revenue cap purposes, that the Blackwater system extend as far north as Gregory mine, and the Goonyella system commence at the junction between the Gregory spur line and common corridor heading toward Coppabella.

In addition, QR Network has proposed that tariffs for train services operating outside the CQCR (e.g. via the North coast line) to be apportioned on a case-by-case basis subject to the Authority's approval.

The Authority seeks comments on whether:

- **the proposed single tariff for the Goonyella and Blackwater systems is appropriate;**
- **QR Network's revised approach to minimum contribution to common cost is appropriate;**
- **QR Network's proposed system test is an appropriate replacement for the cluster entry test and adequately addresses any concerns of stakeholders; and**
- **QR Network's approach to dealing with cross-system tariffs is appropriate.**

Review of Reference Tariffs

To date, the undertaking has provided for the quarterly indexation of reference tariffs based on the latest published Consumer Price Index (CPI) figures. As the reference tariffs are now set

within a revenue cap mechanism, the tariffs are also adjusted for any over- or under-recovery of the system allowable revenues that are determined at the start of the regulatory period.

Over the term of the 2006 undertaking there have been some sizable variances from the forecast volumes which have meant that there have been some sizable under-recoveries of revenue. For instance, for 2007-08 there was a revenue shortfall of around $45 million which QR Network will be seeking to recover through revenue cap adjustments.

To address this concern, QR Network is proposing to limit the size of revenue cap adjustments by annually resetting reference tariffs based on revised volumes.

In addition, QR Network has been concerned that its maintenance costs have not been trending in line with CPI. As a result, during the term of the 2006 undertaking, QR Ltd submitted a draft amending access undertaking to increase its maintenance costs by around 25% and QR Network has proposed a further increase of around 50% as part of its 2009 DAU.

In addition to these changes, QR Network has proposed to:

(a) annually reset its system allowable revenue to reflect cost escalation by indexing:

  (i) maintenance costs using a Maintenance Cost Index (MCI) developed by QR Network and which consists of five key cost drivers (fuel, accommodation, consumables, labour and other expenses); and

  (ii) other system-wide and regional costs by CPI.

(b) reassess maintenance costs through an endorsed variation event linked to a change in maintenance practices subject to a 2.5% threshold;

(c) adjust its maintenance costs on a standard rate-per-kilometre (i.e. $25,000) basis as a part of its annual review to allow for additional maintenance costs associated with the development of new branch (spur) lines; and

(d) include forecast annual connection fees for new electricity feeder stations in estimated costs, then review that forecast as part of the annual assessment of system allowable revenue.

The most significant feature of these changes is that, in combination, they involve a significant move away from incentive regulation and towards a cost of service (actual cost recovery) model.

The Authority seeks comments on whether:

- **QR Network's proposed maintenance cost index is reasonable in principle and, if so, is QR Network's proposed index sufficiently transparent and robust to represent a reasonable estimate of future trends in maintenance costs;**
- **an endorsed variation event is the appropriate mechanism for handling changes in the scope of maintenance practices;**
- **annual resetting of prices unnecessarily adds uncertainty and complexity to the existing process; and**
- **the revenue cap should include maintenance costs for new spurs and connection fees for electricity feeder stations completed during the term of the access undertaking.**

Pricing for Electric Trains

QR Network considers that current pricing for the electric infrastructure (AT_5) is inefficient and inequitable.

Indeed, based on electric gross tonne kilometre (egtk), the electric infrastructure tariff is very similar to an average price. For example, the increased use of the electric infrastructure on the Goonyella system would result in a trend decline in that system's AT_5. Conversely, on the Blackwater system, there has been a decline in the number of electric trains which would result in an increase in that system's AT_5. In these circumstances, the current tariff is not providing the appropriate economic signals for utilisation of the electric infrastructure.

As a result, QR Network has proposed:

(a) to create a single AT_5 reference tariff based on egtk for central Queensland to address asset stranding risks associated with electric rail infrastructure;

(b) the application a single electric infrastructure revenue cap; and

(c) a single regulatory asset base for all electric traction assets owned by QR Network in central Queensland.

The Authority seeks comments on whether adopting a single AT_5 tariff for the Blackwater and Goonyella systems is a reasonable approach to improving the signals for the efficient use of the electric infrastructure in central Queensland.

Form of Regulation (Revenue Cap)

When the Authority approved the revenue cap mechanism in June 2007, the amendments sought to provide QR Ltd with certainty that it could recover its regulated revenues in the event of volume fluctuations. Nevertheless, the revenue cap mechanism did provide for:

(a) QR Ltd to retain 2% over the revenue cap limit if QR Ltd could demonstrate that the higher than anticipated volumes were a result of its activities associated with improving the performance of the whole of the coal supply chain; and

(b) QR Ltd should not be able to fully recover its revenue cap in the event that there had been an under-recovery that was due to the track being unavailable due to QR Network's own negligence or default (albeit subject to a materiality test).

As part of its 2009 DAU, QR Network has proposed to remove these two elements of the revenue cap mechanism as it wants to reduce the uncertainty around the incentive framework which substantially relies on the Authority arbitrating on the extent of the up- or down-side gains or losses. QR Network argued that this was reasonable as its AT_1 revenues remain outside of the revenue cap and are linked to volume changes. Also, that the revenue cap would be adjusted for loss of revenue for QR Network's own breach or negligence.

The Authority approved the introduction of a revenue cap mechanism in the first instance because it included incentives for QR Network to engage in activities to improve the efficiency of the coal supply chain and to be liable for its own breach and negligence. The incentive impact of QR Network being exposed to changes in AT_1 revenues is questionable given they are linked to incremental maintenance costs.

Also, many stakeholders are arguing for a greater focus on improving the performance of the whole of the coal supply chain. This raises the issue of whether removing an incentive to participate in whole of coal chain activities is a move in the right direction. While it might be accepted that the current arrangement may provide only muted incentives, it is not clear that this is a sufficient reason to remove that mechanism and not to replace it with a better incentive.

The Authority seeks comments on whether:

- **QR Network's revenues should be 100% invariant to volumes on the central Queensland coal system; and**
- **QR Network should retain an exposure to revenue variability, in particular to create an incentive to improve the efficiency of the coal supply chain or where QR Network does not provide access due to its own breach and negligence.**

3.3 Other Matters

Variations to Reference Train Service

The undertaking includes a definition of the reference coal train service. This definition has a number of dimensions including: the origin and destination; maximum axle load; maximum train length; and time taken to complete the journey over the defined track sections.

The undertaking provides for reference tariffs to be levied on a reference train. For a non-reference train service, the undertaking provides for QR Network to vary the reference tariff depending on the cost or risk to QR Network of operating the non-reference train in comparison to the reference train.

In relation to the trip duration characteristic, the undertaking includes principles and a formula indicating how the reference tariff is to be varied for trains that are slower/faster than the predominant train on the relevant system. This formula is applied to the AT_2 reference tariff component to signal that a non-standard train consumes more train paths than a standard train.

Both the 2006 undertaking and the 2009 DAU provide a discount for a faster train and a surcharge for a slower train. However, in practice, the increase in the consumption of train paths occurs for all trains that travel at speeds that differ from the predominant train, irrespective of whether that is a faster or slower speed. This raises the issue of whether all trains and not just slower trains should bear a surcharge for travelling at speeds that differ from the predominant train.

The Authority seeks comments on whether:

- **the formula for calculating the reference train path (rtp) multiplier for non-standard trains is appropriate; and**
- **if not, how it should be amended.**

3.4 Western System Reference Tariffs

The western system runs from the Surat Basin to the Port of Brisbane.

In its 2009 DAU, QR Network has proposed a reference tariff for coal-carrying train services on the western system of $22.07/'000gtk, which represents an increase of 89% over the existing tariffs.

QR Network has indicated that the proposed tariff is a proportion of a possible ceiling tariff, which it variously estimates to be in the order of $32.00/'000 gtk[4] or $34.00/'000 gtk[5].

QR Network indicated that the ceiling price has been based on a Depreciated Optimised Replacement Cost (DORC) valuation of the majority of the required infrastructure, as well as estimates of future capital expenditure and maintenance costs.

In addition, QR Network has indicated that the higher tariff will cover the cost of a two million tonne per annum increase in expected annual volumes, a proposed $80 million capital expenditure program to expand network capacity, and a 50% increase in maintenance costs.

In considering the proposed tariffs, the Authority will review QR Network's proposed asset values and its proposed maintenance and capital expenditure costs.

The Authority seeks comments on whether QR Network's proposed reference tariffs for the western system are reasonable, and whether the process QR Network has used for establishing these tariffs is appropriate.

[4] QR Network, 2009 DAU, vol. 1: p. 119.
[5] QR Network, Western System Coal Tariff Development, p. 30.

4. REFERENCE TARIFFS

The undertaking includes reference tariffs for the central Queensland coal region. These tariffs have generally been based on a build-up of the costs required to handle the forecast tonnages of coal. These costs have been estimated on the basis of the infrastructure and costs required to handle a coal-only operation and excluding the infrastructure and costs associated with handling non-coal traffics (e.g. passenger and general freight).

In general, the build up of the system costs is based on the following elements:

(a) *return on capital*: a rate of return (i.e. weighted average cost of capital – WACC) on assets which reflects the risks involved;

(b) *return of capital*: an allowance for depreciation of the assets over time; and

(c) *operating and maintenance costs*: an allowance for the efficient administrative and operating costs required to provide the regulated service, including the expected tax liability.

At the time the Authority approved the 2006 undertaking, the central Queensland coal reference tariffs declined by around 17%. The decrease was partially off-set in 2007 when the Authority approved increases of around 5% as a result of QR Ltd's higher than previously anticipated maintenance costs.

As part of the 2009 DAU, QR Network has proposed a significant increase in its reference tariffs as a result of increases in most of its cost categories. Specifically, QR Network has proposed on average:

(a) a 55% increase in the non-electric tariff components AT_{1-4}; and

(b) a 40% increase in the electric infrastructure tariff (AT_5)

on a $/net tonne basis relative to the 2006 undertaking equivalent tariffs (as at 1 July 2009).[6]

Some of the drivers of these increases are largely non-discretionary.

QR Network's capital expenditure program is significantly higher now than in the past. During the term of the 2006 undertaking, QR Network estimates that its capital expenditure will be around $856 million which it expects to rise to $1.35 billion over the term of the 2009 undertaking. This forecast expenditure is principally based on expansions of the existing network, customer-specific projects and asset replacement and will result in a significant increase in the regulatory asset base.

In addition, a portion of QR Network's operating and maintenance costs have increased markedly as a result of key input prices (e.g. labour rates) trending significantly above the CPI.

On the other hand, other drivers of the proposed tariff increases are more discretionary in nature. For example, QR Network has not sought to simply update the time variant cost of capital parameters (e.g. the risk-free rate). Rather, QR Network has undertaken a 'bottom-up' review of all WACC inputs, the result of which is to provide a WACC with an equity margin significantly above that the Authority approved in 2006 for the rail network and for the Dalrymple Bay Coal Terminal.

[6] The AT_{1-4} and AT_5 increases are calculated on a volume-weighted and egtk-weighted basis respectively.

In addition, QR Network has proposed to constrain asset lives associated with new capital expenditure to twenty years to assist in mitigating asset stranding risk. These claims are largely on the basis of the size of QR Network's 2009 DAU investment program.

In totality, the principal drivers of the proposed tariff increases for the four-year regulatory period, 2009-10 to 2012-13 are:

(a) capital expenditure of about $1.35 billion;

(b) reductions in the asset lives of some existing assets and accelerated depreciation of new capital expenditure over 20 years;

(c) cost of capital of 11.76% that reflects an equity margin of at least 700 basis points (which compares to a 8.43% cost of capital and an equity margin of 540 basis points for the 2006 undertaking); and

(d) operating expenditure of about $280 million (including an allowance of $29.3 million for risk and insurance) and maintenance expenditure of $764 million.

4.1 Capital Expenditure

Capital Indicator

For the term of the 2009 undertaking regulatory period, QR Network has proposed forecast capital expenditure of $1.35 billion. QR Network submitted that this expenditure reflects the significant growth in the demand for system capacity across central Queensland, both to maximise coal tonnage throughput and to align its capacity with that of its mine and port supply chain partners. In this regard, the forecast $1.35 billion compares to $640 million in forecast capital expenditure for the 2006 undertaking. This 110% increase in expenditure is a significant driver of the 2009 DAU tariff increases.

QR Network has submitted that this expenditure excludes $3.8 billion in expected expenditure on the Goonyella to Abbot Point expansion (GAP), as the cost estimates for this project are too uncertain at the time of lodgement of this DAU. The forecast expenditure also excludes other major developments whose costs are also uncertain, such as the Surat Basin Railway (SBR) and rail related infrastructure required to serve the Wiggins Island Coal Terminal (WICT). QR Network has indicated that reference tariffs for services provided by GAP and these other developments will be the subject of later draft amending access undertakings (QR Network, 2009 DAU, vol. 2: 5-6).

As such, QR Network has submitted that the proposed $1.35 billion in the 2009 DAU is principally expenditure for enhancing existing below-rail infrastructure, rather than funding for major new developments. An example is the expenditure required to accommodate the change to a cargo assembly system operating mode in the Goonyella system (QR Network, 2009 DAU, vol. 2: 36).

Consistent with the 2006 undertaking, QR is proposing a capital indicator approach that provides for recovery/repayment of any under/over spending on capital over the term of the undertaking. In adopting this approach, the 2009 DAU has sought to align the allocation of the capital indicator to the expected project activity and expenditure in each system by financial year (QR Network, 2009 DAU, vol. 2: 12-13, Att. A).

A system-by-system break down of forecast expenditure by financial year and the capital indicator are given in Table 1.

Table 1: Proposed Capital Expenditure[a] and Capital Indicator for 2009 DAU($'000)

System	*2009-10*	*2010-11*	*2011-12*	*2012-13*	*Total*
Blackwater Non-Electric	134,174.2	22,373.7	68,499.0[b]	111,049.1	336,096.1
Blackwater Electric	94,646.3	66,947.8	5,435.6	14,093.6	181,123.4
Goonyella Non-Electric	338,220.3	136,537.9	24,455.2	12,981.1	512,194.5
Goonyella Electric	82,190.5[b]	15,357.9	666.0	0.0	98,214.3
Moura	2,204.1	1,993.4	1,970.9	1,305.0	7,473.4
Newlands	13,062.4	185,546.1	19,109.4	1,628.6	219,346.5
Forecast (CQCR Total)	664,497.8	428,756.8	120,136.1	141,057.4	1,354,448.1
Proposed Capital Indicator (CQCR Total)	664,000.0	429,000.0	119,000.0	141,000.0	1,353,000.0

[a] *Forecast expenditures include an allowance for interest during construction and a return on capital for QR Services.*

[b] *QR Network has subsequently advised that vol. 2, Table 7.1 contains two errors: i) the 2009-10 Goonyella electric forecast expenditure should be $82,190,500; and ii) the 2011-12 Blackwater non-electric forecast expenditure should be $68,499,000. Table 1 (above) reflects these corrections, including revised sub-totals and totals.*

The Authority invites comments on the reasonableness of QR Network's proposed 2009 DAU capital indicator.

Review of Discount Rate Applicable to the Capital Expenditure Carry-over Account

In adopting the capital indicator approach with a carry-over for any under- or over-expenditure, QR Network has submitted that it bears interest rate risk over the course of the regulatory period, as the interest rate at the time of drawdown of funds will differ from the cost of debt set at the start of the regulatory period. For this reason, QR Network has proposed to:

(a) apply a specific 'carry-over discount rate' to the annual roll-forward of the capital expenditure carry-over account; and

(b) reset this rate at the beginning of each financial year such that the annual carry-over discount rate = updated risk-free rate + [2009 DAU discount rate - 2009 DAU risk-free rate], where

  (i) updated risk-free rate is the average of the 10 year Commonwealth government bond rate over the 20 business days preceding the end of the financial year,

  (ii) 2009 DAU discount rate is the discount rate set at the start of the 2009 DAU, and

  (iii) 2009 DAU risk-free rate is the 10 year Commonwealth government bond rate set at the start of the 2009 regulatory period (QR Network, 2009 DAU, vol. 2: 104-105).

The Authority seeks comments on:

- **the reasonableness of QR Network's proposed annual update of the discount rate applicable to the capital expenditure carry-over account; and**
- **whether the cost of capital applied more generally should be subject to annual update based on interest rate changes.**

Proposed Allowance for Major Project Feasibility Studies

QR Network has proposed that it be allowed to include the costs of feasibility studies for major projects in the regulatory asset base, as these are an essential input into project decision-making regardless of whether the project actually proceeds. QR Network has submitted that these allowances do not duplicate other allowances that are part of its system-wide and regional cost allowances.

As these investigations would only be made pursuant to the coal master plan, QR Network has proposed to include the costs if customers approve the expenditure in accordance with the customer acceptance process. For example, QR Network has submitted that customers approved $23 million for feasibility studies for WICT.

QR Network has further proposed that any allowances approved be recognised as an intangible asset and depreciated over five years (QR Network, 2009 DAU, vol. 2: 105-107).

The Authority seeks comments on the reasonableness of QR Network's proposal in regard to the inclusion, and regulatory treatment, of allowances for major project feasibility studies.

4.2 Depreciation (Return of Capital)

Asset Lives

When the Authority approved the 2006 undertaking, this was on the basis of an asset value and asset lives proposed by QR.

QR Network has now submitted that it has a number of concerns with the asset lives that the Authority has applied for the central Queensland below-rail assets since 2001. In particular, QR Network's view is that the asset lives for existing assets are, in general, shorter than those applied to date by the Authority.

In addition to undertaking its own review of these asset lives, QR Network commissioned consulting firm WorleyParsons to review the currently applied asset lives. WorleyParsons considered that disparities between asset lives favoured by QR Network and the Authority were minor, except for track assets – QR Network argued that this difference was material given the significance of track assets in the regulatory asset base (QR Network, 2009 DAU, vol. 2: 61-62).

Based on both reviews, QR Network has proposed to revise the Authority-endorsed list of asset lives (QR Network, 2009 DAU, vol. 2, Att. B). In doing so, QR Network has indicated that it has only sought to change asset lives where it believes that current asset lives do not reflect either the economic or physical life of an asset and that the proposed changes respect the

economic constraint of 50 years that the Authority applied to those assets with remaining lives that exceed 50 years.[7]

In addition, QR Network has submitted that its new investments (i.e. UT3 capital expenditure) face significant investment risk given their size and long time horizon. Accordingly, in order to compensate it for asset stranding risk, QR has argued that the lives of UT3 capital expenditure should be capped at 20 years and depreciated over the lesser of the asset's remaining life or 20 years (QR Network, 2009 DAU, vol. 2: 36-43, 62-63).

In summary, QR Network has proposed:

(a) to retain the existing asset lives for all assets in place prior to 1 July 2005;

(b) to revise the asset lives for all capital expenditure since 1 July 2005; and

(c) to place a 20-year cap on asset lives for all capital expenditure from 1 July 2009.

Asset Disposals and Transfers

QR Network also has proposed to review the treatment of asset disposals and transfers in two respects.

First, in the event of an asset disposal, QR Network has proposed to remove the asset from the regulatory asset base at its depreciated regulatory value, and any gain or loss from sale of the asset be recognised through the capital expenditure carry-over mechanism.

Second, in the event an asset is transferred to another part of QR Limited, but remains necessary to providing the declared service, QR Network has proposed that:

(a) the asset be removed from the regulatory asset base at its depreciated regulatory value; and

(b) a charge for using the asset be determined based on an commercial 'arm's length' rate (including contribution toward corporate overheads and a return on capital) and included in the system-wide and regional cost allowance (QR Network, vol. 2: 63).

The Authority seeks comments on the reasonableness of QR Network's proposed:

- **depreciation rates, in particular the proposed reduction in asset lives; and**
- **the treatment of asset disposals and transfers.**

4.3 Weighted Average Cost of Capital

An important element in determining an allowed revenue requirement for QR Network is the rate of return on the below-rail infrastructure assets that form the basis of the central Queensland coal network.

This rate of return, or weighted average cost of capital (WACC), is comprised of three primary components, namely:

(a) *cost of equity* – typically estimated with reference to the Capital Asset Pricing Model (CAPM);

[7] Queensland Competition Authority (2005). *Decision: QR's Draft Access Undertaking* (December).

(b) *cost of debt* – observed or estimated from the current debt rate; and

(c) *gearing (i.e. debt-to-value ratio) of the firm* – determined either by benchmarking or credit rating analysis.

QR Network's 2006 undertaking provides a nominal, post-tax 'vanilla' WACC[8] of 8.43% that is based on a set of point estimates for the WACC inputs. These inputs give a return on debt of 6.71% and a return on equity of 10.58%. Given the risk-free rate of 5.21% set at the commencement of the 2006 regulatory period, these returns provide QR Network with debt and equity margins of 143 and 540 basis points respectively.

QR Network's Proposal

Rather than roll forward the existing WACC parameters, QR Network has proposed a WACC of 11.76% in the 2009 DAU based on a 'bottom up' review of each WACC parameter on the basis that:

(a) its risk profile has changed since the 2006 undertaking (e.g. asset stranding); and

(b) estimating the WACC involves inherent uncertainty.

Moreover, rather than proposing point estimates, QR Network has determined a range for key WACC parameters:

(a) risk-free rate: 6.7% - 7.3%;

(b) asset beta: 0.50 - 0.60;

(c) market risk premium: 6.0% - 7.0%; and

(d) gamma:[9] 0.5 - 0.0 (QR Network, vol. 2: 69-91).

QR Network has updated the risk-free rate for current market information. In addition, it has proposed an uplift of 0.60% for a 'convenience yield', which reflects that investors are willing to pay a higher price (i.e. receive a lower yield) for the benefits of holding sovereign debt – an argument that has emerged since the Authority made its decision on the 2006 undertaking.

As part of its assessment of the 2006 undertaking, the Authority noted that a reasonable range for the:

(a) asset beta – was 0.35 - 0.50, where the upper bound of 0.50 was the asset beta provided to DBCT post-expansion;

(b) market risk premium – was 4% - 7%, noting that most available evidence suggests an estimate lower than 7%; and

(c) gamma – was 0.5 - 1.0, noting that a value of 1.0 is consistent with a domestic version of the CAPM, and therefore the other parameter estimates, but ultimately settled on 0.5 as a matter of compromise on a contentious issue. [10]

[8] In a dividend imputation tax system, the 'vanilla' WACC adjusts for both the interest tax shield and dividend imputation credits in the expected cash flow stream.

[9] The product of two elements, the utilization rate of dividend imputation credits and the ratio of imputation credits to company tax paid.

QR Network has also proposed a range of 0.12 - 0.0 for the debt beta. In doing so, QR Network argued that the Authority's current approach would tend to over-estimate the debt beta and, therefore, under-estimate of the equity beta.

Along with these proposed ranges, QR Network has proposed a constant point estimate for both the gearing level (55%) and the cost of debt (9.66%), with the latter reflecting updated market information.

Given these assumptions and the ranges indicated, QR Network has proposed a WACC of 11.76% from a range from 10.74% to 12.1%.

While QR Network did not provide a point estimate for its proposed cost of equity, an estimate of 14.33% could be deduced given QR Network's proposed WACC (11.76%), cost of debt (9.66%) and the gearing (55%).

This proposed return on equity is somewhere between 703 and 763 basis points above the risk-free rate, depending on how the 0.60% adjustment to the risk-free rate is treated. On this basis, the equity margin is 30% to 40% higher than the equity margin of 540 basis points provided in the 2006 undertaking.

Table 2 summarises key cost of capital elements from QR Network's 2006 access undertaking and 2009 draft access undertaking.

Table 2: Summary of WACCs and Margins

WACC Element	*QCA: 2006 (Approved)*	*QR: 2009 (Proposed)*
Return on Debt	6.64%	9.66%
Return on Equity	10.61%	14.33%
WACC[a]	8.43%	11.76%
Debt Margin (bp)	143	296
Equity Margin (bp)	540	703[b]

[a] *The WACCs are based on 55% debt and 45% equity.*
[b] *The margin is 763 bp if the 0.60% uplift to the risk-free rate is excluded.*

The Authority invites comments on:

- **whether QR Network has sufficiently justified the proposed parameter ranges for its cost of capital parameters and, in particular, the range for the equity beta and market risk premium;**
- **whether the proposed WACC is reasonable taking into account all considerations; and**
- **any other matter that stakeholders consider relevant to the Authority's assessment of QR Network's proposed cost of capital.**

[10] Queensland Competition Authority (2005). *Decision: QR's 2005 Draft Access Undertaking*, December, pp. 15, 34-35.

4.4 Operating and Maintenance Expenditure

Operating Expenditure

Operating expenditures comprise about 10% of QR Network's total costs and have previously included, *inter alia*, the following key components:

(a) system-wide and regional costs; and

(b) an allowance for risk and self-insurance.

System-wide and regional costs

System-wide and regional (SWR) costs relate to costs associated with the day-to-day operation of the network, including costs for train control, infrastructure management, corporate administrative costs and other below-rail costs that are not directly attributable to specific line sections. Region-wide operating expenditure is allocated among the systems based on the relative asset value of each system and the relative number of train paths forecast for each system.

This sub-category is by far the largest component of QR Network's operating expenditure. In its 2006 access undertaking, the Authority approved system-wide and regional operating costs of around $25 million per annum.

QR Network's proposal

In its 2009 DAU, QR Network has proposed substantial increases in its system-wide and regional cost allowances (see Table 3). For example, the 2009-10 allowance is around 75% higher than the 2008-09 allowance.

Table 3: Proposed System-wide and Regional Costs for 2009 DAU ($'000)

System	***2009-10***	***2010-11***	***2011-12***	***2012-13***
Blackwater (incl. Rolleston)	24,200.0	24,800.0	26,600.0	27,500.0
Goonyella (incl. Hail Creek)	24,500.0	25,400.0	27,800.0	28,600.0
Moura	4,600.0	4,700.0	5,100.0	5,300.0
Newlands	5,100.0	4,800.0	5,700.0	6,000.0
Total	58,400.0	59,700.0	65,200.0	67,400.0

In support of these increases, QR Network has submitted that its business environment has changed significantly since the last undertaking, particularly as a result of:

(a) significant growth in network activity;

(b) continued pressures on input costs; and

(c) the continued evolution of QR Network's structure and reporting systems.

QR Network has submitted that the demand for access driven by the current coal boom has required a significant growth in resourcing, in particular to meet customer requirements in a timely manner. For example, a number of tasks have grown substantially since the 2001 undertaking, including planning and managing expenditure to enhance system capacity (including master planning), undertaking increasingly sophisticated capacity analysis and managing regulatory reporting and compliance (QR Network, 2009 DAU, vol. 2: 127).

QR Network has also argued that the current economic environment has placed pressure on input costs, particularly labour where QR Network has found, and expects it to continue to find, it difficult to match market labour rates (QR Network, 2009 DAU, vol. 2: 128).

In addition, QR Network has submitted that the progressive separation of its business from other QR businesses has several implications for its SWR cost assessment.

First, QR Network has submitted that it has lost the benefits of economies of scope as there are no longer any jointly managed functions. As a result, costs have increased as certain functions are duplicated across QR Ltd. For example, QR Network has now assumed responsibility for all below-rail operations management, including train control. However, this area was previously part of a larger operational area, and QR Network was responsible for only a share of the costs.

Second, QR Network continues to have concerns with the application of a hypothetical stand-alone cost methodology, as it sees difficulties in identifying other rail infrastructure providers with a directly comparable business. As its business has evolved from a component of a vertically integrated business into essentially a stand-alone rail infrastructure business, QR Network has argued that its forecast *actual* costs are a highly reliable reference point for establishing forecast operating costs (QR Network, 2009 DAU, vol. 2: 124-125).

As a result, QR Network has argued that the Authority's assessment of its SWR cost allowance should focus on the reasonableness of the proposed costs, rather than on benchmark costs for a hypothetical stand-alone coal below-rail infrastructure operator. QR Network has therefore applied a methodology for building its forecast SWR costs on the basis of its actual costs.

In addition, QR Network has proposed an efficiency target for its SWR costs. However, rather than propose a productivity adjustment (i.e. x-factor) *per se*, QR Network has proposed to index its SWR costs by CPI only. In this regard, QR Network has submitted that, as the majority of its SWR costs are labour costs and these costs tend to track at a margin above the CPI, this approach will result in it bearing costs arising from any growth of labour rates over CPI during the 2009 DAU. Given current differentials between these rates, QR Network expects the efficiency target to be at least 2.5% per annum (QR Network, 2009 DAU, vol. 2: 130).

It is evident that QR Network's claims for SWR costs are significantly greater than in the past. QR Network has also provided a significant amount of material in support of these claims.

The Authority will be reviewing that material, with a particular focus on ensuring that:

(a) QR Network's claims reflect efficient costs of operating the central Queensland coal network; and

(b) in consolidating operations within QR Network, there has not been a transfer of above-rail functions and costs to QR Network.

In this context, the Authority has engaged its own advisers, GHD Pty Ltd, to assess aspects of QR Network's proposed SWR costs, including whether QR's Network's SWR cost claims:

(a) are reasonable and efficient (by category at both system and regional levels);

(b) reflect appropriate allocations of operating costs to QR Network's functions; and

(c) reflect an appropriate adjustment for productivity improvements.

The findings of the consultant will be made available to stakeholders during the course of this investigation.

The Authority seeks comments on whether:

- **QR Network has sufficiently justified its cost increases on the basis of being a stand-alone rail infrastructure provider;**
- **benchmarking QR Network's system-wide and regional costs with reference to QR Network's actual costs is a reliable benchmark for efficient costs; and**
- **on balance, QR Network's proposed system-wide and regional costs are reasonable and appropriate.**

Risk and insurance

One element of QR Network's operating costs relates to risk and insurance. In assessing the 2006 undertaking, the claims for risk and insurance were a particularly contentious matter.

As part of its December 2005 decision, the Authority concluded that, in order to recognise self-insurance costs, it was not just seeking to assess the reasonableness of the claimed costs, it was also seeking to establish that a robust self-insurance program had actually been established. Given its concerns on this latter point, the Authority rejected QR's $9.2 million claim for self-insurance, but it did provide a $4.8 million allowance for the expected cost of events that carry an asymmetric risk.

In its 2009 DAU, QR Network has proposed $6.8 million in risk and insurance costs for 2009-10, which is a 32% increase on the $5.2 million annual risk premium for 2008-09 in the current undertaking. QR Network has also sought an additional provision of around $0.5 million per annum to implement and manage its self-insurance scheme.

It is apparent that QR Network has not, to date, fulfilled the requirements of a self-insurance scheme as set out in the Authority's December 2005 decision. Nevertheless, in submitting its 2009 DAU, QR Network has:

(a) indicated it has based its self-insurance premiums on an actuarial assessment by Finity – even though QR Network itself acknowledges that this assessment has been hampered by data quality and information limitations; and

(b) outlined a series of steps required to implement a self-insurance program, including capturing the 'full and accurate cost' of losses, acquiring or expanding an appropriate claims management system, and changing accounting systems to establish a self-insurance fund.

The Authority seeks comments on whether:

- **QR's risk and insurance proposal has appropriately identified the specific risks and defined the specific events that it proposes to self-insure, and those that are not covered by self-insurance;**
- **QR has appropriately demonstrated that self-insurance is the most efficient and practical approach to addressing these risks;**
- **QR has proposed a structure for self-insurance which will allow it to demonstrate that the proposed premium is reasonable, and claims costs have been appropriately allocated; and**
- **QR has appropriately accounted for past self-insurance allowances, and established a suitable procedure for reporting self-insurance reserves, and the treatment of any claims against those reserves.**

Maintenance Expenditure

Maintenance expenditure covers a range of activities, from routine activities (e.g. manually maintaining the vegetation around easements) to major capital-intensive activities such as rail grinding, mechanised resurfacing and ballast undercutting. The costs associated with most maintenance activities can be directly attributed to line section, as these costs are observable.

For the 2006 access undertaking, the Authority approved QR Network's estimate of maintenance costs for 2005-006 to 2008-09 but made adjustments to account for the costs attributable to non-coal traffic and to reflect the approved volume forecasts. Aside from these two matters, the Authority accepted the reasonableness of the maintenance cost estimates as proposed by QR at that time.

However, soon after the Authority approved the 2006 undertaking, QR identified deficiencies in its maintenance cost allowance. As a result, in May 2007, QR sought the Authority's approval for an increase its annual maintenance allowance of around $21 million per annum; that is about a 26% annual increase.

In support of its proposal, QR submitted that its 2006 maintenance forecasts grossly under-estimated maintenance expenditures incurred to date and that it was not commercially viable for it to continue to absorb the additional costs. At that time, QR also advised that it would give priority to undertaking a 'bottom-up' review of its maintenance forecasts for the 2009 DAU.[11]

Even though the 2007 application was an interim solution only, the Authority was satisfied that the efficient cost of maintenance had increased since QR Network originally developed its maintenance forecasts and that some of these increases were due to events not entirely within QR Network's control. As a result, the Authority approved the vast majority of QR Network's claim, providing an annual average uplift of $19 million, or about 24% per annum, for 2007-08 and 2008-09 relative to the 2006 maintenance allowances.[12] The Authority considered that this uplift provided a reasonable and fair solution, pending QR Network's full-scale review in the context of its 2009 DAU.

[11] Queensland Rail (2007). *Draft Amending Undertaking: Revised Maintenance Cost Forecasts for the 2005 Access Undertaking*, submission to the QCA, May, pp. 1-6.

[12] The Authority required QR to adjust its proposed costs for ballast undercutting downward, as it did not accept aspects of QR's methodology for determining efficient costs for that maintenance task. See Queensland Competition Authority (2007). *Decision: QR's Draft Amending Access Undertaking – Coal System Maintenance Costs*, November.

QR Network's proposal

On the basis of its 'bottom-up' review of its maintenance forecasts, QR Network has proposed further significant increases in its maintenance cost allowances (see Table 4). For example, the proposed 2009-10 allowance reflects an increase of around 60% over the 2008-09 allowance. This increase is in addition to the 24% uplift provided in 2007.

Table 4: Proposed Maintenance Cost Allowances for 2009 DAU ($ million)

System	*2009-10*	*2010-11*	*2011-12*	*2012-13*
Blackwater	66.0	77.0	83.0	86.0
Goonyella	78.0	89.0	101.0	101.0
Moura	13.0	13.0	14.0	15.0
Newlands	10.0	8.0	5.0	5.0
Total	167.0	187.0	203.0	207.0

QR Network has submitted that the principal factors driving these cost increases are:

(a) the service quality or standard, including the quality of rail infrastructure and the amount of track capacity utilised to maintain the infrastructure; and

(b) the associated unit rates for key maintenance activities[13].

QR Network has submitted that there is a trade-off between these two factors. Specifically, if an asset is under-maintained then service quality will be compromised as it increases the risk of asset failure and/or the need for unplanned maintenance. On the other hand, if an asset is over-maintained then users may bear a higher cost of maintenance than necessary to maintain the desired level of quality or that network availability is compromised as maintenance possessions become more frequent (QR Network, 2009 DAU, vol. 2: 108-109).

Current capacity constraints on the network have underscored this trade-off. As a result, QR Network sought input from users in January 2008 regarding the service level required. In this regard, QR Network proposed three new service level measures between QR Network and QR Network Services (as contained in the existing Alliance Agreement):

(a) the number and duration of maintenance possessions (planned and unplanned);

(b) variations in planned track possessions start and end times; and

(c) the net impact of speed restrictions on transit time.

QR Network sought users' views on the appropriateness of the descriptors, how they might be set at the commencement of the 2009 DAU (including mechanisms for industry to provide input into any trade-offs between alternative service levels and cost) and the mechanism for changing service levels during the term of the 2009 DAU (QR Network, 2009 DAU, vol. 2: 114-115).

QR Network has submitted that it has had to fundamentally change its maintenance practices given the capacity constraints on the current network and user requirements to maximise current

[13] QR Network also attributes the increases to the sizeable increase in QR Network's RAB between the 2006 undertaking and the 2009 DAU, from approximately $2.4 billion to $3.2 billion.

throughput while maintaining service quality. This approach coordinates closures in the system to maximise the intensity of the maintenance effort while minimising the impact on throughput. In this regard, QR Network has submitted that this approach impacts the scope, or volume, of activity undertaken and is more expensive than a standard maintenance approach (QR Network, 2009 DAU, vol. 2: 108-110).

QR Network has also submitted that these proposed allowances are significantly higher due to cost increases, namely the:

(a) continued growth in the costs of labour and key consumables (e.g. fuel, accommodation and ballast); and

(b) significant re-capitalisation of QR Services' major maintenance equipment in order to provide for the expanded scope of maintenance without significantly increasing the track possessions required (e.g. purchase of a single pass rail grinding machine, which will do the same task in less time) (QR Network, 2009 DAU, vol. 2: 110, 119).

QR Network has also submitted that a number of productivity improvements are built into the maintenance cost forecasts. For example, the proposed allowances over the regulatory period reflect a 9% reduction in the forecast consumption of indirect consumables, overtime booked by resurfacing crews and plant maintenance costs for the ballast under-cutter and resurfacing operations (QR Network, 2009 DAU, vol. 2: 118).

In support of its proposal, QR Network has submitted confidential reports to the Authority on the reasonableness of the assumptions and methodology applied by QR Network in developing its forecasts.

While it can be easily appreciated that, in the current environment, there are significant pressures on costs, including QR's maintenance costs, the outstanding question relates to whether the proposed maintenance cost claim provided by QR Network reflects efficient costs. For instance, the Authority would be concerned if the extent of QR Network's claim is due to circumstances where:

(a) QR has not undertaken the maintenance tasks it was previously provided funds to undertake but, for whatever reason, it did not undertake;

(b) delays and cancellations due to poorly performing rolling-stock having consumed train paths, unnecessarily creating below-rail capacity constraints which, in turn, have placed pressure on the allocation of train paths for maintenance activities; and/or

(c) the fouling of ballast was an above-rail issue or could have been avoided or abated by earlier remedial action.

To this end, the Authority has engaged consultancy firm GHD Pty Ltd to assist it in assessing QR Network's claims, including:

(a) the reasonableness and efficiency of maintenance costs (by category at both system and regional levels), including unit rates and level of maintenance activities;

(b) whether any forecast increase (decrease) in a specific activity (e.g. ballast undercutting) is the result of under (over) performance of maintenance tasks since 2001;

(c) the extent to which above-rail activities are affecting QR Network's maintenance activity levels;

(d) the extent to which QR Network's maintenance program is satisfactory in achieving long term sustainability of the CQCR network and service quality (e.g. an efficient mix of both preventive and corrective maintenance; and

(e) an appropriate allowance for productivity improvements.

The Authority seeks comments on whether:

- **QR Network has sufficiently justified its proposed maintenance costs;**
- **in the event that stakeholders do <u>not</u> believe QR Network has sufficiently justified its proposed costs, it would be reasonable to approve that claim as long as QR Network was able to manage the network to the level required to deliver contract tonnages; and**
  - **in this regard, are the additional key service level measures sufficiently robust; or**
  - **if not, how should QR Network take into account user requirements in determining an appropriate trade-off between service levels and cost?**

4.5 Impact of Reference Tariffs

As discussed previously, QR Network's proposed costs are significantly higher than those approved in the 2006 undertaking. These claims have resulted in higher proposed revenues for the 2009 regulatory period, even allowing for the proposed volume forecasts.

Accordingly, QR Network has proposed increased reference tariffs for coal-carrying train services in the CQCR to apply from 1 July 2009 until 30 June 2013 (see Table 5).

Table 5: Proposed Reference Tariffs as at 1 July 2009

Tariff Component	*Blackwater*	*Goonyella*	*Moura*	*Newlands*
AT1 ($/'000gtk)	0.54	0.54	0.95	0.78
AT2 ($/train path)	1,831.70	1,160.47	548.59	1,160.47
AT3 ($/'000ntk)	5.56	5.05	8.14	7.41
AT4 ($/nt)	1.82	1.06	1.35	0.95
AT5 ($/'000egtk)	2.37	2.37	-	-
EC	0.61	0.61	-	-

QR Network, 2009 DAU, vol. 2: 149.

The average reference tariff increase from current reference tariffs, on a dollar per net tonne basis, for each system is presented in Table 6.

Table 6: Reference Tariff Increase Relative to 2006 Undertaking Tariffs (1 Jul 2009, $/net tonne basis)

System	*Non-Electric: Average % change*	*Electric: Average % change*
Blackwater	47%	7%
Goonyella	64%	51%
Moura	14%	
Newlands	38%	

QR Network, 2009 DAU, vol. 2: 21-24.

In addition to the proposed reference tariffs, some users may be required to pay a system premium or discount, as the case may be, to reflect the higher (lower) cost of that train service relative to other users within that system. For example, under this proposal, a train service such as Rolleston would attract a system premium for its operations within the Blackwater system.

As part of its 2009 DAU application, QR Network has also reviewed the methodologies for determining the incremental maintenance (AT_1) and incremental capacity (AT_2) reference tariff components. While the outcome of these reviews has potential distributional impacts across the various loading points, the tariff changes are revenue neutral across each system.

While QR Network undertook a detailed review of its incremental capacity charge (AT_2), it did not propose to change the underlying assumptions of the current AT_2 charge. QR Network claimed that, given the system is in a major expansion phase, any attempt to redefine the charge could result in, *inter alia*, it being disproportionately high due to the costs associated with the major expansions.

On this basis, QR Network proposed to retain the current AT_2 reference tariff (approved as at July 2005) and roll it forward to March 2008 using the Rawlinson's building price index and then to July 2009 using a simple average of the quarterly changes in the Rawlinson's index between July 2005 and March 2008 (i.e. 1.68% per quarter). QR Network proposed to revisit the AT_2 charge again in the 2013 regulatory period.

The outcome of this review has resulted in an estimated (average)[14]:

(a) decrease of 40% to 90% in the AT_1 charge (1 Jul 09 dollars) for all CQCR systems except Goonyella, where there was about a 1% increase[15]; and

(b) increase of 15% to 80% in the AT_2 charge (1 Jul 09 dollars) for all CQCR systems[16].

The Authority seeks comments on whether:

- **QR Network's proposed tariff increases are reasonable; and**
- **the proposed changes to the calculation of the reference tariffs (e.g. AT_1, AT_2) are reasonable.**

[14] Authority's preliminary estimates.
[15] Where there are multiple clusters within a system, the AT_1 charge is the same for each cluster.
[16] The 15% average increase for the Goonyella system reflects an average over the different percentage increases in each cluster.