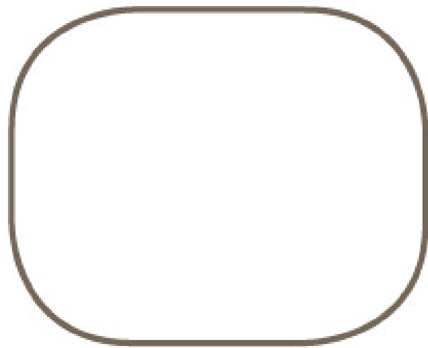
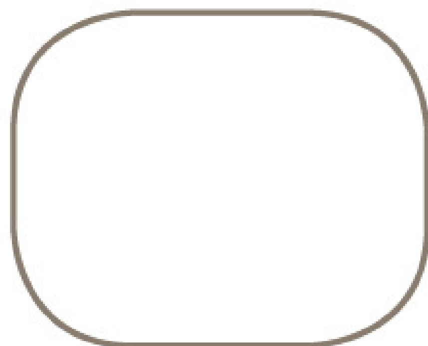


24 December 2010 Draft Amending Access Undertaking

Explanatory Notes

January 2011



QRNetwork

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Executive Summary

Background

The Queensland Competition Authority (QCA) approved QR Network's 2010 Access Undertaking (the undertaking or 2010AU) on 1 October 2010. The undertaking contains the obligation for QR Network to submit to the QCA:

- Proposed Standard User Funding Agreement (SUFA); and
- Draft amending access undertaking (DAAU) containing amendments QR Network reasonably considers necessary to implement the Investment Framework in the Schedule J of the undertaking.

QR Network submitted the proposed SUFA and DAAU on 24 December 2010 in accordance with the deadline of 1 January 2011. The submission did not include explanatory notes. These explanatory notes are contained in this document.

The undertaking requires QR Network to consult with stakeholders regarding the proposed SUFA and the DAAU however QR Network had limited stakeholder consultation prior to making its submission. This was due to the short time between approval of the undertaking and the deadline for the submission. QR Network is committed to working with stakeholders over the coming weeks to understand stakeholder concerns and to attempt to resolve them where possible.

Where matters have been included in the proposed SUFA they have not been addressed in the DAAU. Once User funding arrangements are commercially negotiated any matters arising pursuant to the agreements should be addressed through the commercial and arbitration mechanism within the agreements and not via a process in the undertaking.

In this document:

- References to QR National Network Services are to QR Network Pty Ltd;
- References to the Final Decision are to the QCA's Final Decision on 21 September 2010 not to approve QR Network's draft amending access undertaking submitted in April 2010;
- References to the Investment Framework are to Schedule J of 2010AU;
- Unless otherwise specified, all references to clauses are references to the clauses in the clean version of the DAAU submitted to the QCA on 24 December 2010; and
- Defined terms in this document have the meaning given in Part 11 of the DAAU.

This document is structured as follows:

- Section 1 sets out any relevant background information, discussion and context for the proposed SUFA and amendments to the undertaking;
- Section 2 provides the explanatory notes and discussion on amendments to the undertaking;
- Section 3 provides the explanatory notes on the proposed SUFA; and
- Section 4 provides the explanatory notes on additional amendments to the undertaking necessary to give proper effect to aspects of the QCA's Final Decision.

Attachment A includes a report prepared by Synergies Economic Consulting on compensation for the operation and maintenance of User Funded assets.

DAAU

QR Network has taken a minimalist approach to the amendments to the undertaking noting it is not necessary for the undertaking to be overly prescriptive regarding all the matters which may arise or need to be considered and resolved through the normal course of commercial negotiation. The undertaking and the QCA Act contain sufficient mechanism for arbitration of disputes and remedies to protect the interests of Access Seekers.

The DAAU includes all reasonable amendments QR Network considers necessary to fully implement the Investment Framework principles. However, QR Network has departed from the Investment Framework principles relating to the process for determining the capital related payments to Users in respect of User Funding investments (distribution principles) to better reflect the legitimate business interests of QR Network and Funding Users. QR Network understands from the limited consultation to date there is support from industry for this departure from the relevant Investment Framework principles.

The DAAU also includes a number of minor amendments intended to give proper effect to the Final Decision. Accordingly the DAAU was prepared and submitted to the QCA as a draft amending access undertaking pursuant to section 142 of the Queensland Competition Authority Act 1997. The minor amendments have been proposed as they do not represent additional policy matters that could delay implementation of the Investment Framework principles. They seek to improve operational efficiencies and materially reduce commercial and regulatory uncertainty in certain areas. These amendments involve:

- Extending the approval of confidentiality claims for the disclosure of coal access agreements to new or varied access agreements to reduce regulatory burden;
- Allowing QR Network to offer an Access Seeker the Capacity Notification Register without issuing an Indicative Access Proposal where it has ceased negotiation for similar Access Rights;
- Clarifying that the relaxation of transfer fees for transfer periods less than two years only applies to access agreements executed following the Approval Date or existing agreements which are amended to incorporate the 2010AU transfer and resumption provisions in that agreement;
- Properly aligning the definition of adhoc train services to ensure the network management principles align with the commercial intent of the Access Agreements and regulatory framework; and
- Ensuring the revenue cap adjustments for the variations between the forecast and actual cost of electric traction energy reflect the costs in reference tariffs and the variable nature of those costs.

QR Network has concerns regarding the appropriateness of some of the Investment Framework principles. Specifically, the following may not be consistent with the objectives of the access regime or adequately meet the best interests of Access Seekers or other stakeholders:

- Principles 31, 33, 34 and clause 6.5.4. The undertaking restricts Access Conditions to compensating QR Network for additional financial risks it bears. This is regardless of whether Access Conditions that provide QR Network some economic profit may have been agreed between Access Seekers and QR Network and that these Access Conditions do not compromise the public interest or interests of existing or future Access Seekers and other stakeholders. The consequence of this limitation is that it will become more likely that Users will need to fund Significant Investments.
- Principles 31, 34 and clause 6.5.4(a)(v),(vi) and (vii). The content of the report required to be provided by QR Network outlining the cost or risks associated with the additional returns sought by QR Network, their likelihood and consequences assumes a high

degree of precision is possible, whereas these matters are highly complex and subjective;
- Principle 11. The right of Users to fund extensions even where QR Network is willing to do so results in an adverse selection problem where QR Network is commercially disadvantaged where it provides a voluntary funding commitment.
- Principle 16 and clause 7.5.5(f). QR Network's obligation to fund on behalf of Users who cannot obtain debt financing is not required to promote competition in the relevant market and may create investment uncertainty through gaming and dispute resolution due to the subjectivity of the evidentiary requirements; and
- Principle 15 and clause 6.5.5(c). The prohibition on Access Conditions for Customer Specific Branch Lines (because they are not Significant Investments) may result in Users being required to fund these Extensions even where there is a strong willingness to do otherwise by QR Network and the relevant User and no third party is affected adversely by the commercially negotiated terms.

Proposed SUFA
The proposed SUFA comprises two parts:
- User Funding – Construction Agreement (UF-CA), which is intended to deal with all matters relating to the pre and post construction activities including payments and consultation and reporting requirements; and
- User Funding – Participation Agreement (UF-PA) which relates to the payment of distributions related to incremental revenue from the User Funding investments.

The agreements have been separated to comply with good contracting practice, provide greater commercial flexibility to Funding Users and facilitate their financing arrangements including assignment.

QR Network considered a number of commercial structures to maximise the tax effectiveness to both QR Network and the Funding Users. This analysis indicated that a 'QR Network as contractor' option was preferred whereby QR Network would seek to gain the usual construction contractor treatment with Funding Users obtaining tax deductions in respect of the capital expenditure. This model also greatly simplifies the distribution arrangements as it enables distributions to be based on a proportional claim to pre-tax access revenues.

The 'QR Network as contractor' option also facilitates the separation of User Funding Agreement into a construction agreement and an operational agreement as noted above.

A key element to the tax effectiveness of the 'QR Network as constructor' option is the requirement for QR Network to earn a potential positive profit depending on its performance as the constructor. This model is also amenable to Access Conditions for all Significant Investments and is consistent with the requirements of the access regime that it promotes efficient investment in rail infrastructure by providing incentives to manage the capital development process to achieve the agreed scope, timing and program.

QR Network has amended the Funding User distribution principles to decouple the utilisation of the access rights from the return of the capital component of the access charge attributable to the rail infrastructure enhancements which Users have funded. Decoupling these facilitates the assignment of the funding agreement without impairing the operational flexibility of the access rights. These provisions are expected to be more conducive to Funding Users arranging financing.

Whilst the proposed SUFA is substantially complete some matters currently remain outstanding including:

- details of a process to permit Funding Users to undertake the development at the Funding Users' expense pursuant to clause 7.5.5(k) due to the considerable commercial complexity associated with this requirement; and
- the proposed commercial structure involves a degree of tax risk to be borne by Funding Users.

QR Network is prepared to seek mitigation of Funding Users' tax risk through a transaction specific tax ruling.

In addition QR Network is open to the development and incorporation into the final form of the DAAU of a process for determination of project scope and for project governance and Funding Users' collaboration pursuant to clause 7.5.5(j) prior to execution of the UF-CA and UF-PA.

1. Implementation of the Investment Framework

Introduction

The DAAU is a culmination of the development of the 2010AU which commenced in September 2008 at which time QR Network was a subsidiary of the government owned corporation, QR Limited. Following the State's announcement of intention to privatise a number of publicly owned assets a number of stakeholders expressed concerns that the 2008 Draft Access Undertaking and the QCA's Draft Decision on that Undertaking in December 2009 was not adequate to address the incentives of a privatised access provider.

The general concern expressed by stakeholders was that a privately owned access provider may not be commercially incentivised to expand the capacity of the facility in a timely manner to provide appropriate certainty to coal producers and developers of complementary supply chain infrastructure. Similar concerns have also been expressed by stakeholders in response to the Australian Rail Track Corporation's 2009 Draft Access Undertaking for the Hunter Valley Coal Network in that the access provider in the exercise of its commercial discretion may not find the regulatory settings as a sufficient incentive to invest.

QR Network's revised draft amending access undertaking submitted to the QCA in April 2010 (the April DAU) incorporated the concept of direct user funding. The intent of these provisions was to provide a sufficient and credible alternative for Users when assessing the reasonableness of the proposed terms and conditions of access consistent with QR Network funding. The overarching principle of the April DAU was to place primacy on commercial negotiations in the first instance as envisaged under the Competition Principles Agreement. It also recognised that, unlike consumers of regulated electricity utilities, users of QR Network's rail infrastructure are large, sophisticated and well resourced companies with substantial countervailing market power. The existence of this countervailing market power should facilitate a lighter handed form of regulatory intervention.

It also recognised that the models used by the QCA in determining the Approved WACC are imprecise with a substantial degree of statistical uncertainty. These issues are well documented in regulatory proceedings and QR Network does not intend to reiterate those issues in this document. The framework initially envisaged by QR Network was intended to reflect the following concerns raised by the Infrastructure and Export Taskforce[1]

> *There should be a presumption that issues associated with export oriented infrastructure will be resolved by commercial negotiation between the infrastructure provider and users……A quest for 'first best' solutions, combined with a focus on removing monopoly rents, has distracted from what should be the regulatory task: which is not to determine whether what has been proposed by way of access conditions is optimal, but whether it is reasonable.*

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[1] http://www.abareconomics.com/infrastructure/pdf/Report.pdf pp. 2-4

The taskforce ultimately recommended that the regulatory test should shift from a point estimate to one within a reasonable range. For instance, on the basis of a $1 billion rail infrastructure project the net present value of returns under the 2010AU is $80-$100 million less than could be achieved if returns were modelled using the Australian Energy Regulator's post tax revenue model and the re-levering of the ACCC decision on the asset beta applicable to the Hunter Valley Coal Network (0.45)[2]. These differences do not arise due to any fundamental differences in risk or market parameters but simply two different views by regulators as to the appropriate financial model[3] and formulas. The AER post tax revenue model expresses costs and revenues in end of year dollars but makes no adjustment in the cash flow analysis sheet for the timing of the revenue receipts. This is offset by the exclusion of working capital from the regulatory allowances. In addition the ACCC and other Australian regulators use the Monkhouse formula and a debt beta of 0 for the purpose of de-levering and re-levering asset betas which results in a higher equity beta for a given asset beta.

This is relevant in the context of the implications of previous regulatory determinations by the QCA that QR Network has a comparable 'systematic' risk profile to regulated electricity utilities even though QR Network is allowed by the QCA a materially inferior expected return than these utilities for a comparable scale of investment.

Investments in rail infrastructure by QR Network are long term commitments and when forming a view as to the commercial viability of a Significant Investment QR Network must consider the potential regulatory returns over the economic life. The most reliable predictor for this assessment is represented by the equity margin. On the basis of comparable rail infrastructure investments the current regulatory settings do not provide an incentive to invest. To illustrate this point further the equity margins above the 10 year risk free rate for regulated railway decisions are shown in Table 1 (a 10 year rate has been selected to facilitate direct comparison with the other decisions, which are not based on a 5 year risk-free rate).

Table 1. Comparable Equity Margins

Annualised Return %	QCA Draft Decision – June 2010	ACCC – Position Paper December 2010	ERA – 2008 WACC Determination[4]	US Surface Transportation Board[5]

[2] Australian Competition and Consumer Commission (2010) Position Paper in Relation to ARTC's proposed Hunter Valley Coal Network Access Undertaking, p.112 http://www.accc.gov.au/content/item.phtml?itemId=963813&nodeId=7c2b2f631983b53db17634e69d088e80&fn=Position%20Paper%20-%20ARTC%202010%20HVAU%20-%2021%20December%202010.pdf

[3]. Australian Energy Regulator (2010) Final Decision - Amendments to the Post Tax Revenue Model. http://www.aer.gov.au/content/index.phtml/itemId/741806.

[4] Western Australian Economic Regulation Authority (2008) Final Determination – 2008 Weighted Average Cost of Capital for the Freight (WestNet Rail) and Urban (Public Transport Authority) Railway Networks, p. 2. http://www.erawa.com.au/cproot/6671/2/20080623%20Final%20Determination%20-%202008%20Weighted%20Average%20Cost%20of%20Capital%20for%20the%20Freight%20and%20Urban%20Railway%20Networks.pdf

Railway	QR Network – CQCR	ARTC – Hunter Valley	WestNet – Western Australia	Powder River Basin and other coal carrying railways
Cost of equity	9.99	11.00	12.37	12.37
Risk free rate	5.58#	5.36	6.37	4.11
Equity margin	**4.41**	**5.64**	**6.00**	**8.26**

#The risk free rate as determined by the 10 year government bond rate for the UT3 averaging period

By providing informed Access Seekers the discretion to accept QR Network's proposed commercial terms or fund the supporting investment on the basis of the regulatory determined parameters this framework would likely promote outcomes more closely aligned to normal commercial terms and conditions. In other words, the User would make a rational value judgement as to whether the proposed terms fall within the reasonable range.

This process introduces a degree of contestability in the funding of the network investment (due to ownership and control the market will not be perfectly competitive). However, the principles in the Investment Framework shift the negotiation framework from establishing User Funding as a credible alternative to more of a safety net due to the high degree or regulatory intervention.

The principal basis for this intervention is the QCA's view that 'as owner and operator of the existing network there is much that QR Network could do to frustrate or delay the expansion of the network even when users have opted to fund the expansion. Its ability to do this could allow it to secure rates of return for funding expansions that are in excess of the coal industry's cost of capital'[6].

QR Network does not understand how it would be feasible to secure rates of return in excess of the coal industry's cost of capital. The user funding provisions ensure that QR Network cannot obtain a cost of capital which is inconsistent with that relevant to rail infrastructure.

Even where QR Network negotiates appropriate commercial terms which provide on an expectation basis an internal rate of return in excess of the cost of capital for rail infrastructure this is not inconsistent with the objects clause or the pricing principles. The pricing principles in s.168A(c) require access prices to be set so as to generate expected revenue which is at least sufficient to meet the efficient costs of providing access. The explanatory notes to the Trade Practices Amendment (National Access Regime) Bill 2005 in relation to the pricing

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[5] United States Surface Transportation Board (2010) Decision Number 40788 – Railroad Cost of Capital 2009, http://www.stb.dot.gov/decisions/readingroom.nsf/WebDecisionID/40788?OpenDocument

[6] http://www.qca.org.au/files/R-2010-DAU-QCA-FinalDec-QRN2010DAU-0910.pdf p.26

principle in s.44AA(a) note that the legislative intent of this principle is to provide a revenue floor without necessarily constraining individual prices[7].

Similarly, ensuring the integrated service provider is adequately compensated for the provision of the below service substantially mitigates any incentives to engage in non-price discrimination. This premise underpins the concept of the Efficient Component Pricing Rule[8] (in conjunction with regulatory accounting) and the Competitive Imputation Pricing Rule approved by the NCC in the certification of the AustralAsia Railway Access Regime[9] that as long as the below rail service provider maintains an appropriate commercial return it is indifferent to whether it provides the above rail service with any capacity expansions. These principles were emphasised by Asciano's consultant, Castalia, whose report on the effectiveness of the access regime discussed where QR Network was permitted to earn appropriate commercial returns it would be incentivised to promote above rail competition[10]; therefore QR Network does not consider an investment which yields an expected positive net present value is incompatible with the object of Part 5.

QR Network is committed to actively working with key stakeholders to develop and implement more light-handed and effective frameworks in future access undertakings for the efficient investment in rail infrastructure within Central Queensland.

In response to the Final Decision, QR Network submitted a draft amending undertaking incorporating the QCA's proposed Investment Framework into the Access Undertaking. QR Network accepted the QCA proposed Investment Framework in order to provide sufficient certainty to a range of stakeholders including shareholders, potential investors at a time of publicly listing QR National. It was also necessary to provide some certainty for proposed Users of Significant Investments regarding the negotiation framework.

While QR Network reserved its rights with respect to the Final Decision as communicated to the QCA in the letter which accompanied the 2010 Draft Access Undertaking on 22 September 2010 it was for all practical purposes a voluntary access undertaking given to the QCA pursuant to section 136(1) of the QCA Act. QR Network is legally bound to comply with the requirements of the 2010AU and give full effect to the Investment framework. As a consequence the DAAU does not seek to amend the principles except where there are compelling reasons to do so.

The remainder of this section sets out the following:

- some practical issues associated with the investment framework principles;

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[7] http://parlinfo.aph.gov.au/parlInfo/download/legislation/ems/r2349_ems_bb462812-a6d6-4e44-bdc6-297b7d3ac9ff/upload_word/74081.doc;fileType=application%2Fmsword

[8] For further discussion see Armstrong, M., Doyle, C. and Vickers, J. (1996) The Access Pricing Problem: A Synthesis, Journal of Industrial Economics, 44:2, p. 131-50

[9] National Competition Council (NCC), 2000, AustralAsia Railway Access Regime, Final Recommendation, February 2000, Application for Certification under Section 44M(2) of the Trade Practices Act 1974.

[10] Castalia Strategic Advisors. *Annexure 7: Review of the Queensland Rail Access Regime*. Pg 10-12. http://www.ncc.gov.au/images/uploads/DERaQRAp-006.pdf

- the requirements and intent of the legislation framework; and
- details of the commercial structure and associated issues for User Funding investments.

Practical Implementation of the Investment Framework Principles

QR Network has a number of concerns regarding the efficacy of a number of the investment principles. As discussed, QR Network did not seek to amend these principles at the time of its submission of the voluntary undertaking. In addition, the timeframes required for QR Network to develop the proposed UFA and consequential amendments to the 2010AU are less than the 6 months originally proposed by QR Network and this acceleration has not been conducive to constructive engagement with industry.

The concerns relate primarily to:

- the valuation of risk;
- the symmetry in funding obligations;
- the obligation to fund users who cannot obtain the necessary debt financing;
- efficacy of requiring agreement of all users to proposed access conditions;
- inconsistency in the principles for Customer Specific Branchlines; and
- recognition of operational and performance risks.

To a large extent the uncertainty giving rise to these concerns is related to the brevity of the discussion on these matters in the Final Decision. These concerns are discussed in greater detail in the following sections.

Valuation of Risk

Paragraph 31 of the Investment Framework principles require that the extent that QR Network seeks additional returns to compensate it for additional risks, the risks should be accounted for in the cash flows to which the regulated WACC rate is applied, with the cash flows being determined considering the possible outcomes and the probabilities of the outcomes as a consequence of the additional risks.

This principle implies the risks can be valued on an expectation basis with a reasonable degree of precision. This is not likely to align with normal commercial practice where risks and relevant margins will often be assessed and determined on the basis of commercial judgement.

The process by which the valuation is ultimately arrived is unclear. For each relevant risk there may be a distribution and possible consequences of varying degrees associated with various points within that distribution. This process therefore requires a substantial degree of complex modelling simply to determine what form that distribution might take. Similarly, some risks may be correlated with adverse outcomes from other risks. The economic valuation would then require the covariances of the relevant risks to be included in the assessment.

Even if the distribution can be reasonably determined with reference to the relevant risk it must then be ascertained where within that distribution the value of the risk is to be derived. For example, should it be representative of expected outcome or on a value at risk basis? Given the relative infrequency of Significant Investments valuation on an expectation basis will not adequately compensate QR Network for bearing additional risks in the event of a material

negative outcome. Ultimately, such matters are generally resolved or reconciled through the exercise of commercial judgement as to the reasonableness of the proposed terms.

The difficulties and computational complexities of translating risk into an additional premium or uplift on the WACC have been considered by regulators in various forums, including the Productivity Commission, and the QCA in its Investments made under Extraordinary Circumstances paper. The Productivity Commission's Review of the National Access Regime noted these difficulties with respect to addressing the return truncation problem:

> *a truncation premium arrangement would be information intensive and prone to disputation. Given the imperfect information available to the regulator, they could also be open to 'gaming'. In effect, both approaches would give rise to similar problems as the current arrangements for regulating access prices once facilities are in place.*[11]

The recommendations stemming from these reviews have typically been applied to the valuation of asymmetric risk such as self-insurance premiums. However, insurance is typically supported by reinsurance or the ability to revise premiums where the insured event occurs. The insurer or self insurer will also apply a return/premium for carrying the risk. These issues were addressed with the QCA during the review and approval of the risk premium in the 2010AU. The premium is typically in excess of the Approved WACC. However, the principles require the regulated WACC to be applied to the cash flow adjustments. This would be appropriate where the risks were systematic in nature. If this was correct then they would already be compensated in the Approved WACC and additional risk compensation would be unnecessary. QR Network would welcome further clarification from the QCA as to how additional risk premiums and cash flow adjustments should be modelled.

The Access Conditions that may be sought from QR Network may also include compensation for the opportunity cost or risk that it may forego investments that on an expectation basis earn a higher net present value or achieve a more satisfactory capital return ratio. The principal flaw within regulatory frameworks is the strength of the assumption that all markets, including capital markets, are perfectly competitive. Under this assumption capital rationing would not occur and every marginal dollar of capital would be directed to all NPV positive projects.

The finance literature strongly supports the use of the CAPM pricing model in its use for capital budgeting decisions. However, QR Network is not aware of any empirical evidence which supports the hypothesis that all firms are prepared to allocate capital to projects which earn $1 dollar in net present value. This view is supported by comments by Henry Ergas in relation to recent debate on the mineral resource rent tax[12].

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[11] Productivity Commission (2001) Inquiry Report – Review of the National Access Regime p.XXVII. http://www.pc.gov.au/__data/assets/pdf_file/0020/18173/access.pdf

[12] Ergas, Henry (2010) About the Rent We're Charging, The Australian, 28 May 2010, p. 16 states:

10) But so long as the tax leaves miners earning their cost of capital, won't they keep investing? No. You could fill a room with research showing that (for very good reasons) companies are capital constrained and set hurdle rates for investment well above their cost of

Where a firm is presented with multiple projects which it has the opportunity to fund then the firm, acting rationally in the interests of its shareholders, will rank and allocate capital to projects which generate the most value. Clearly, projects which achieve on an expectation basis no or negative NPV will rank at the low end, not just by the firm but within capital markets more generally, of feasible investment opportunities under capital rationing. Any additional returns sought by the access provider will reflect the real option value not of the investment in the regulated asset but the ability to defer that investment to undertake higher valued projects.

Ultimately the most efficient approach to the valuation of additional costs and risks will be Users' willingness to accept priced terms from QR Network instead of adopting the credible and viable alternative of funding the necessary Extensions directly.

QR Network supports the concept of User Funding to ensure that where a coal producer requires complementary supply chain expansion for its mining projects and it can procure the marginal capital then it will have certainty that the project is able to proceed (provided it and other peer companies are prepared to contract on a scale consistent with what is needed for project viability).

Symmetry of Funding Obligations

Paragraph 11 of the Investment Framework permits Users to fund Extensions even where QR Network is willing to do so. This paragraph is aligned to the QCA's foundation premise that a User should have the right to fund Extensions at its own option. While the Final Decision discusses how the Investment Framework gives effect to the foundation premises there is no rationalisation or discussion as to the validity of the foundation premises.

The Final Decision does not demonstrate how a User's right to fund an extension even where QR Network is willing to do so is consistent with the matters to be considered under section 138(2) or the objects clause of the Act. QR Network would welcome further discussion and analysis by the QCA in subsequent determinations as to how this right to fund is commensurate with the legitimate business interests of the service provider where that provider has included a voluntary commitment to fund investments at regulatory WACC.

Presumably, the QCA is of the view that where the financial markets are such that a User is able to achieve a cost of funds on more favourable terms than QR Network and the regulatory settings are reasonable then this represents more efficient investment in rail infrastructure. .

The practical effect of the foundation premise is simply to provide for temporal cherry picking where a User can achieve positive NPV outcomes from investments where the economic cycle is favourable relative to the regulatory settings and require the Access Provider to fund all other rail infrastructure investments within the voluntary funding commitment at the regulatory WACC under less favourable funding conditions.

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capital. So if miners can use what capital they have to earn rents in Canada but not here, our projects won't go ahead.

The Investment Framework creates and promotes adverse selection by ensuring that any favourable investment opportunity is able to be captured by a party that is not the owner or operator of the declared service and that a User who would otherwise not be able to enter a market due to its own financial circumstances and creditworthiness may do so through the transfer of mine development risk to QR Network who would only be compensated by the regulatory WACC for those risks.

QR Network therefore cannot see how the QCA foundation premise adequately protects the legitimate business interests of QR Network where a User's right to fund under any circumstances is not counterbalanced by the service provider's rights not to fund an Extension where it does not believe it is in its commercial interests to do so. In other words, the foundation premise is incongruent with the voluntary funding commitment.

In addition, where a User elects to fund an Extension, even where QR Network is willing to do so, this must be accompanied by a stronger obligation that the User must bear all costs and risks associated with the funded infrastructure. While QR Network maintains it should be adequately compensated for all regulatory and commercial risks associated with a User Funded investment in circumstances where the User elects to fund investments then the QCA must ensure that this condition is met with certainty. This may require the Funder to meet all costs associated with the funded assets including losses from derailments and weather events (except where QR Network is negligent) and actual costs of maintenance (efficient or otherwise). This is not unreasonable and is reflected in Part IIIA of the Trade Practices Act 1974 regarding the restrictions on the ACCC making an access determination under section 44W which require that a determination cannot have the following effect:

- requiring the provider to bear some or all of the costs of extending the facility or maintaining extensions of the facility.

QR Network also notes that a likely consequence of allowing a User to fund Extensions in a situation where QR Network is prepared to fund is that the other Users, which are willing to proceed on the basis of QR Network investment, may be delayed by the additional complexity of 'hybrid' funding, as discussed in greater detail below.

QR Network funding on behalf of users who cannot obtain financing

The Investment Framework includes funding obligations on QR Network where access seekers have difficulty obtaining funding. The requirements are stipulated in paragraphs 16-18 of the Investment Framework and incorporated into clauses 7.5.5(f)(i), 7.5.5(g) and 7.5.5(h) of the 2010AU.

In summary, these obligations require that QR Network will provide funding on behalf of Access Seekers who are unable to raise finance from a reputable financial institution on reasonable terms up to an aggregate amount of $300 million over the regulatory term. The onus of proof rests with the Access Seeker that it cannot meet these requirements.

QR Network has material concerns regarding both the efficacy of these obligations and reasonableness of requiring QR Network to fulfil these obligations. The concerns relate to:

- the consistency of the obligations with the objects of Part 5 of the QCA Act;
- the potential to incentivise gaming by potential project participants;
- the implications of exhausting all reasonable means of obtaining financing and the role of the QCA to arbitrate on certain aspects of the principles; and

- the adverse implications on project development and uncertainty associated with the dispute resolution procedures.

These issues are addressed in turn in the following sections.

Objectives of Part 5 of the QCA Act

In formulating the Investment Framework principles the QCA had regard to concerns expressed by some users regarding their ability to fund their proportion of rail infrastructure enhancements. In constructing paragraphs 16-18 of Schedule J the QCA made reference to the decision being consistent with the objects clause in section 69 of the QCA Act. Specifically, the QCA reasoning was based on establishing a safety net.

The QCA is particularly concerned that that there may be no safety net for such companies given the investment framework of the QCA Act, where QR Network is not obliged to fund expansions. This is despite the objective of part 5 of the QCA Act that includes promoting economically efficient investment to promote effective competition in upstream and downstream markets, which include the market for the extraction, supply and sale of coal.

QR Network does not believe the obligation in paragraphs 16-18 is consistent with the objective of part 5. National Competition Policy and the various access regimes are a means to an end (the promotion of competition) and must have some reasonable prospect of achieving their objectives. The objects clause in part 5 explicitly recognises this point by requiring that the object is to give effect to promoting effective competition in upstream and downstream markets.

The object of this part is to promote the economically efficient operation of, use of and investment in, significant infrastructure by which services are provided, **with the effect** of promoting effective competition in upstream and downstream markets.

The Final Decision identifies the market for extraction, supply and sale of coal as the relevant market. However, this market is already subject to effective competition which is not impacted by the requirements for QR Network to fund infrastructure enhancements on behalf of users who cannot obtain finance. In the event that the Central Queensland Coal Region was not subject to an existing declaration the QCA would be required to consider an application for declaration and apply the criteria under section 76. On the basis of precedents set in other applications for declaration under Part IIIA of the Trade Practices Act the QCA would not be able to find that access would promote a material increase in competition in the markets for the sale of coking or thermal coal or the market for coal mining tenements.

For example, as part of its assessment under criterion (a) of Part IIIA, section 44H(2) of the TPA, the Australian Competition Tribunal (ACT) considered the argument put forward by Fortescue Metals Group (FMG) that access to the Pilbara rail networks would promote a material increase in competition in the iron ore tenements market.

While the ACT acknowledged that there would be a greater incentive to spend on exploration and an increase in tenement prices for those tenements close to rail access it rejected the

argument on numerous grounds including that competition in the iron ore tenements market is already effectively competitive[13]. An analysis of the geographical scope of the tenements market in the Pilbara region showed that tenements were not solely purchased around a specific railway line[14]. Also there is a significant amount of competition between sellers in the tenement market, including FMG and other junior players, preventing any one seller exercising monopoly power[15].

Further evidence of the effectiveness of competition in the relevant market includes the Australian Competition and Consumer Commission consideration of the proposed merger between RIO Tinto and BHP. In relation to coal markets the ACCC considered 'that the proposed acquisition appears unlikely to raise competition concerns in relation to the supply of metallurgical coal. Market inquiries indicated that although the merged firm would account for a large proportion of the supply of metallurgical coal, it would continue to face competition from significant alternative suppliers with access to transport infrastructure, both in Australia and overseas. As a result, the merged firm is unlikely to have the ability and incentive to profitably withhold metallurgical coal capacity.'[16]

The coal market is characterised by multiple producers and parties with interests in mining tenements. Accordingly, there are numerous buyers and sellers which would enable a proponent of a mining project seeking access to rail transport infrastructure to sell its interest and realise its market value in a highly competitive environment. The Final Decision did not make a sufficiently robust case as to why QR Network's obligation to fund on behalf of specific users serves the public interest better than credible alternatives available to those users, such as selling mining interests to an entity with adequate financial capacity to meet the funding commitments.

Incentive for gaming

The obligation to fund on behalf of a specific user will also encourage behaviours such as the use of corporate structures, legally enforceable restrictions such as debt covenants and other forms of financial engineering which would facilitate that party satisfying the burden of proof that it is unable to obtain debt financing.

In order to circumvent perverse incentives the onus of proof should be extended to also require the party to demonstrate that it has exhausted all reasonable means in order to obtain the necessary financing commitments. For example, could the party obtain a parent company guarantee, raise additional equity through a seasoned equity offering or sell an interest in its project in exchange for a form of security?

In the absence of such an obligation it is not clear how the QCA would be sufficiently empowered to assess the veracity of the User's claim that it is unable to obtain finance from a reputable financial institution as the User is not required to disclose the circumstances as to how it could obtain finance; only that it cannot.

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[13] ACT Determination on the Declaration of the Pilbara Rail Lines. Page 258, paragraph 1120.
[14] ACT Determination on the Declaration of the Pilbara Rail Lines. Page 258, paragraph 1118.
[15] ACT Determination on the Declaration of the Pilbara Rail Lines. Page 258, paragraph 1120.
[16] Insert reference to statement of issues.

These incentives for gaming may also result in uncertainty regarding the potential for a project to proceed as discussed in the section covering dispute resolution. Also the mechanism by which QR Network rations the $300 million funding obligation across 'unable to obtain Users' seeking aggregate funding in excess of $300 million is unclear.

Lack of clarity regarding when the obligation is triggered

Two key aspects of QR Network's obligation to fund a proportion of a Significant Investment on behalf of a User requires that the User is unable to obtain debt financing:

- from a reputable financial institution; and
- on reasonable terms.

The QCA did not provide any specific guidelines as to what standards are to be applied to determine when these thresholds are met. For example, it is not clear what represents a reputable financial institution. Similarly, how are reasonable terms to be assessed? The terms may very well be appropriate to the credit risk of the party seeking to obtain the finance.

The QCA is also unlikely to have sufficient capacity and expertise on such matters and will need to refer the matter to an appropriate expert. This may extend the timeframe with which the matter can be effectively arbitrated and result in consequential delays on project delivery. As the thresholds are not based on objective criteria the potential for dispute would appear to be material. This may have adverse consequences as to the timing and cost outcomes of the project.

Implications of protracted dispute resolution and appeals

The prospect of a dispute as to whether a party has exhausted all reasonable means of obtaining debt financing will have material implications for the timeframes for project delivery and certainty for other stakeholders not involved in the dispute.

Two feasible scenarios may emerge. First, the dispute is found in favour of the relevant user but other users have been delayed in finalising the necessary financing commitments due to the uncertainty as to the quantum of the commitment required. Second, the dispute is found in QR Network's favour and the project could be significantly delayed while the user makes further efforts to obtain debt financing or the remaining users need to fund the relevant shortfall, or the project will need to be re-scoped to provide only the minimum efficient scale.

There are also implications as to when the user may seek relief from its funding obligations. For example, a user may indicate an ability to fund during the negotiation period but due to unforeseen circumstances may not be able to obtain the requisite bank guarantee following execution of the construction agreement. This may add further delays to the project while the claims are validated.

Summary

Best practice regulation provides an appropriate balance between providing sufficient regulatory and commercial certainty while retaining sufficient flexibility to respond to changing economic conditions. Stakeholders should have a clear and certain pathway to access to rail transport infrastructure such that their obligations are known ex-ante and they are able to undertake the necessary planning and financial arrangements.

The Investment Framework principles in paragraphs 16-18 do not satisfy this objective due to the prospects for gaming and dispute resolution.

The original policy intent of the Final Decision on these matters was that it would promote competition in the market for extraction, supply and sale of coal. When the relevant principles are examined in greater detail for their potential impacts it can only be concluded that the principles will not only fail to increase competition in an already effectively competitive market but also may be detrimental to competition in that market should they result in project delivery delays.

QR Network considers that implementation of principles 16-18 is not in the legitimate business interests of QR Network or Access Seekers and is also not in the public interest.

Acceptance of Access Conditions by Access Seekers

Paragraph 33 of the Investment Framework provides that parties will first have the opportunity to commercially negotiate the terms of Access. The QCA will approve Access Conditions that are commercially agreed between QR Network and all relevant Users unless those conditions are inconsistent with the prescribed criteria.

The requirement to obtain the support of all Users is an extremely onerous requirement and may in most instances be an unattainable objective even where the proposed conditions are commercially reasonable. Circumstances may arise where a participant in the negotiations is predisposed to fund the investment, perhaps for strategic reasons, rather than negotiate access conditions. The remaining participants may then have no genuine intent to commercially negotiate an outcome as they can defer consideration of these conditions to wait the QCA views on the reasonableness of the proposed terms.

The restrictions on Access Conditions also fetter the rights of parties to a negotiation to reach mutually agreeable terms. The Western Australian Rail Access Regime provides for parties to agree to terms outside of the Access Code. The National Competition Council's draft recommendation to certify the Western Australian rail access regime as an effective acess regime raised no concerns as to the effectiveness of the regime regarding this process even though the regime applies to a vertically integrated service provider[17]. The rights of parties to negotiate and agree terms do not circumvent the responsibilities or functions of the QCA under the QCA Act. The QCA will retain the power to establish reference tariffs for coal carrying train services. Therefore, it is not clear how an Access Seeker or Access Holder who is not a party to that agreement can be disadvantaged.

Application of the Investment Framework to Customer Specific Branchlines

The Investment Framework and the drafting in Parts 6 and 7 of the 2010AU contain a number of inconsistencies in relation to Customer Specific Branchlines. The Investment Framework principles acknowledge that QR Network will have an incentive to undertake investments in

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[17] National Competition Council (2010) Draft Recommendation – Application for Certification of the Western Australian Rail Access Regime as an effective regime under s.44M of the Trade Practices Act 1974. http://www.ncc.gov.au/images/uploads/CERaWADR-001.pdf

Customer Specific Branchlines where it is in its commercial interests to do so. Users are also permitted under the Undertaking and the Act to undertake those expansions directly.

The restrictions on Access Conditions as given effect through clause 6.5.4(c) of the 2010AU apply to all Extensions, including Customer Specific Branchlines yet there is no mechanism for QR Network to obtain the QCA's approval of those conditions.

QR Network does not believe that the QCA's approval of those conditions should be required as the negotiations involve only two parties to the negotiation and mutually agreeable terms can be reached by negotiation. In the event that mutually agreeable terms cannot be reached QR Network is under no obligation to undertake the investment and the User would be required to fund the development of the rail infrastructure enhancements.

Regulatory reform in the electricity industry has acknowledged the market contestability of connections to the network. Fundamentally it is difficult to see how QR Network possesses any market power in market for network extensions. While QR Network acknowledges that the process for owning and managing connecting rail infrastructure involves considerable commercial complexities this does not constitute market failure. These issues were considered by the Australian Energy Market Commission on a proposed rule change which sought to require owners of the monopoly facilities to provide information to potential competitors for contestable infrastructure:

> *An important part of the competitive process is buyers searching and competitors undertaking marketing and similar activities to attract custom. The mere fact that it may be more difficult for alternative service providers to identify prospective customers (and vice versa), or that customers are not well versed in matters relating to applications for network connections does not in itself justify a Rule change – there must be evidence that this difficulty is inhibiting effective competition. For the reasons outlined above, the Commission is not convinced that there is evidence of an ostensible market failure in this regard[18].*

In other words, simply because there is no obvious competitors in the market does not support the view the market is not contestable.

In addition it is not clear how an extension which does not currently exist cannot be considered economic to duplicate. The declaration itself acknowledges this issue by retaining the entity based coverage. Even where a branchline may have many potential users a User can bypass the regulatory framework by funding and owning the rail infrastructure directly. To the extent that Customer Specific Branchlines are not economic to duplicate the declaration should be drafted to require all extensions that connect customer facilities to the existing real infrastructure to be a declared service.

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[18] Australian Energy Market Commission (2007) Final Rule Determination – Obligations of Network Service Providers (Connection Applications), p.11.
http://www.aemc.gov.au/Media/docs/007Final%20Rule%20Determination-24089c71-52b6-4afc-a7f1-42d93b996339-0.pdf

As a consequence, in order for QR Network to negotiate commercial terms for the construction and management of the Customer Specific Branchline it would be necessary to pursue an administratively costly and timely application for revocation in each instance.

Therefore, the likely default proposition for Customer Specific Branchlines will be for Users to undertake their own Extensions even when the parties have a clear preference for QR Network to fund and be the economic owner of the Customer Specific Branchline.

Similar to the issues discussed on Access Conditions above, the QCA retains capacity to approve both private infrastructure costs and QR Network infrastructure costs independently of commercial negotiations in order to ensure that no other party is disadvantaged.

QR Network has sought to address this issue by restricting the prohibitions on Access Conditions without the QCA's approval to Expansions.

Operational and Performance Risks

Paragraph 43 of the Investment Framework provided that the User Funder will be returned the depreciation profile associated with the capital expenditure, together with the Regulated or Varied WACC (as applicable) on the unrefunded balance, subject to QR Network receiving Reference Tariffs in respect of the user funded Capacity that are sufficient to cover the amount of the refund after meeting approved operating and maintenance costs.

Paragraph 46 also enables QR Network to charge with respect to a User Funded investment additional amounts which reflect the cost or risk of providing the service. This is consistent with the requirements of the access regime under Part 5 of the QCA which seeks to ensure the access provider is not commercially disadvantaged by an access determination as provided for in section 118 and 119 of the QCA Act regarding expansion of the network to create additional access rights.

Where the approved access charges include only compensation for systematic risk and, to a limited extent, asymmetric risks, the access provider should also be compensated for non-systematic risks it bears in relation to the User Funded infrastructure. The QCA in past determinations has opined that the approved WACC is sufficient to compensate QR Network for the commercial and regulatory risks it bears. However, where infrastructure is funded by a User and is subsequently compensated by refunding the investment amount through the depreciation and return on capital, the access provider is required to bear all residual regulatory and commercial risks without compensation.

Even where the risk profile for User Funded infrastructure is symmetric and on an expectation basis would not alter the expected net present value of QR Network's own investments, the access provider is still subject to expected negative outcomes which it could otherwise have avoided by not undertaking the Extension. The principle of risk and reward recognise that it is the distribution of the return which establishes the required premium and resultant willingness of a party to assume those risks.

As discussed earlier in this section regarding the symmetry of the funding obligations where a User elects to fund even where QR Network is willing to do so, that User should also bear the proportional responsibility for all ongoing costs or risks associated with that investment. Failure to do so will result in reallocation and transfer of risk and wealth from QR National shareholders to the User Funder.

Two mechanisms are available for addressing these residual commercial and regulatory risks and involve either:

- the deduction of all actual costs associated with the funded infrastructure (maintenance, unplanned maintenance from derailments and weather events and other losses); or
- the deduction of a risk premium from the amounts returned to the User Funder to compensate the service provider for bearing these risks.

To assist in explaining the nature of the commercial and regulatory risks and the issues associated with their treatment QR Network has engaged Synergies to prepare a discussion paper. A copy of this paper is provided at Attachment A to this document. The issues raised in this paper demonstrate the complexity in assessing how the risks should be valued, allocated or transferred.

QR Network is currently exposed to a number of potential risks which are not compensated in a User Funding framework. These include without limitation:

- regulatory error;
- forecast and scope error;
- derailment and weather related impacts;
- asset stranding risk; and
- performance risks.

Regulatory Error

The predominant source of risk relates to the consequences of regulatory error in the approval of maintenance costs. The maintenance task in the Central Queensland Coal Region is based on a number of key characteristics which are not readily comparable to other railway networks. QR Network has previously articulated these matters in previous submissions and will not discuss these in detail in this document. However, they can be listed as follows:

- geographical network size and density impact on possession availability without disrupting traffic;
- brownfield expansion of a network which is operating substantially in excess of the original formation design;
- heavy haul operations on a narrow gauge network;
- significant rainfall intensity concentrated in the monsoonal season (for example annual average rainfall is similar to that of the Hunter Valley but falls predominantly in a single quarter);
- world class safety management system which significantly reduces the risk of death and injury (people and plant separation); and
- electrified network for heavy haul with significant loads which materially exceed those experienced on passenger networks.

The absence of direct and reasonable comparators imposes severe limitations on effective benchmarking and the application of yardstick principles to assess the efficiency of QR Network's maintenance costs. These constraints increase the possibility of regulatory error in how the QCA exercises its discretion regarding whether the approved maintenance and operating cost allowances are at least sufficient to meet the efficient costs.

The QCA's Final Decision implicitly recognises these issues. When rejecting QR Network proposed margin for profit and direct and indirect overheads the QCA noted:

> *… the Authority decided to remove QR Network's proposed 15% margin largely on the basis that the maintenance contract had not been tendered and was with a related party – that is, the Authority was not confident that the proposed costs, with the margin, were efficient costs.*

The QCA did not reject the margin on the basis that it had access to market based evidence or analysis by its expert consultant that the costs proposed by QR Network were inefficient but only that it was not confident the proposed costs were efficient. QR Network acknowledges the limitations and difficulties the QCA Board faces in its decision making but the pricing principles are drafted so that any benefit of doubt should be exercised in a manner which overcompensates rather than under compensates the service provider to ensure that the approved costs are least sufficient to meet the efficient costs.

In approving the maintenance cost allowance for the UT3 period the QCA accepted the advice of its expert consultant that an arbitrary X-factor of 25% be applied based on a similar regulatory precedent by the Western Australian Economic Regulatory Authority. The application of subjective efficiency dividends without a comprehensive analysis of the inherent inefficiencies in the proposed costs and the relativity between an appropriate productivity measure and the assumed cost escalator may manifest in a material degree of regulatory error.

The maintenance cost allowance is also determined through escalation of the base year costs by the maintenance cost index. While this index provides a more reasonable proxy for the underlying cost drivers of maintenance activities than the consumer price index, it is not a perfect proxy and maintenance cost escalation may vary from the maintenance cost index.

The practical consequence of implementing User Funding without appropriate compensation for the non-systematic commercial and regulatory risks is that the service provider is strongly incentivised to outsource or market test the maintenance task.

As an example of the consequence of systematic regulatory error the following table demonstrates the economic value of an asymmetric 5% error in the approved regulatory allowances. As demonstrated in the example the 5% regulatory error increases the size of the reduction in the expected return on QR Network's assets. Assuming maintenance and operating costs represent 25% of the allowable revenues, where actual costs exceed the maintenance cost allowance by 5% this increment is equivalent to loss of return in the order of 25 basis points. Where the network is expanded through user funding the same 5% opex error of $11.22 million when applied to the value of QR Network's assets ($3.5 billion) increased the loss of return to 32 basis points.

Table 2 Worked Example of Asymmetric Regulatory Error.

	QRN	User	Total
Asset Value	3500	1000	4500
Asset Life	20	20	20
Inflation	2.50%	2.50%	2.50%
WACC	9.96%	9.96%	9.96%
Return on Asset	348.60	99.60	448.20
Net Depreciation	88	25	113
Capital Charge	436.10	124.60	560.70
Opex (25%)	174.53	49.87	224.40
Access Revenue	698.13	199.47	897.60
Actual Opex (+5%)	183.26	52.36	235.62
Opex Error	8.73		11.22
Basis Point on QRN Assets	0.25%		0.32%

Forecast or Scope Error

The forecasting of maintenance costs and scope of maintenance activities is subject to the risk that the required maintenance scope is materially different from that originally assumed due to the dynamic operation of the rail network. For example, the Review Event provision will allow QR Network to recover the efficient and prudent costs associated with responding to recent flood events; there is also likely to be additional and interrelated maintenance issues arising from the event that result in variation of the original maintenance scope. This might include premature failure of electrical and hydraulic components from water ingression and silt ingression and capture in ballast which leads to addition ballast cleaning requirements.
The 2010AU includes provisions for QR Network to 'reopen' the maintenance cost allowance to incorporate these additional costs in the maintenance budget. However, these provisions include a 2.5% trigger before the QCA will consider an adjustment to the allowances. Where an adjustment is feasible it is also not clear how the assumed efficiency dividend will be factored into any such assessment of the revised maintenance costs.

Derailment and Weather Related Impacts

The operating cost allowances include a risk premium for asymmetric risk such as self insurance for damage to rail infrastructure. As the QCA would be aware the size of the risk premium for weather related events and the review event threshold of $1 million potentially exposes QR Network to losses where the size of the event is less than the $1 million threshold or where the events in aggregate exceed the risk premium allowance.

Where QR Network does not believe the approved regulatory allowances are sufficient to compensate it for the additional risks or potential losses associated with the funded infrastructure it is reasonable to require the party to the funding agreement to assume those risks. Therefore, it is necessary for QR Network to deduct an amount which is commensurate with those risks. However, this could result in the User Funder underwriting lower cost expansions for future users. Where it is possible to undertake such valuation of risk it would be possible to include such amounts in the regulatory revenues. The alternative therefore is the User to obtain the necessary insurance policy for the funded infrastructure which would be included in the regulatory revenues or incidents involving user funded infrastructure are subject to direct pass through provisions.

Asset Stranding Risk

The commercial risk to the Funding User and QR Network associated with Extension and growth of the network may be biased in favour of the User. Where QR Network funds all infrastructure enhancements it is likely to have regard to the long term demand for coal carrying train services due to the sunk nature of the existing regulatory asset base. A User on the other hand may be prepared to inefficiently expand the rail network as it may be prepared to underwrite the stranding risk through the resource rents accruing to the mining project. Where assets become stranded the User may recover the economic costs of the infrastructure enhancement through the mining project and the transfer of the portion of that risk to QR Network's existing assets.

QR Network notes that asset stranding risk and optimisation are material concerns to both QR Network and some stakeholders. However, as discussed in section 2 on optimisation the principles to be applied in optimisation should be dependent on the circumstances associated with the economic risk of declining demand.

Performance Risk

QR Network may be exposed to performance risk which is not compensated for in the approved WACC. The 2010AU includes a requirement for QR Network develop an incentive framework which provides appropriate incentives for QR Network to improve the efficiency of the supply chain. Stakeholders have also expressed views which would support the incentive mechanism including accountability for QR Network management's contribution to shortfalls in system throughput.

The framework to be developed may potentially place up to 5% of revenue at risk. Where the network is expanded through user funding if the incentive framework is applied to total contracted capacity levels, including Access Rights created by User Funded rail infrastructure then QR Network's revenue at risk will exceed 5%.

Similarly, even if the incentive framework is exclusive of User Funded revenue the exclusion has consequential effects on the funding neutrality between QR Network and Users. Accordingly, it is necessary that the distributions of the User Funding extensions bear the proportional outcomes in relation to performance risks (both positive and negative).

Legislative Framework

This section sets out the relevant legislative principles and how those principles should be considered and applied to the implementation of the investment framework.

The factors relevant to the approval of an Access Undertaking are prescribed in section 138(2) of the QCA Act. The QCA Act also prescribes examples of access determinations (s.118) and the restrictions on making that determination (s.119). While s.138(2) does not refer to matters in s.119 as factors to consider when approving an access undertaking this is not to say that the matters prescribed in s.119 are not relevant.

The foundation premise in paragraph 1 of the Investment Framework principles is consistent with this view. In exercising its powers under the QCA Act the QCA must have regard to Part 5 as a whole as well as other matters the QCA consider to be relevant. It would be internally inconsistent within the access regime for the QCA to approve or require a provision in an access undertaking which it could not require through an access determination.

In this context, when considering the DAAU and stakeholder submissions to the DAAU the QCA should not make a determination which would be inconsistent with the matters

prescribed in s.119. In particular s.119(4) requires that the QCA may only require the access provider to extend or permit the extension of the facility if it is consistent with an approved undertaking and the access provider's legitimate business interests are protected as required by s.119(5).

While 138(2) requires the QCA to have regard to interests listed in subsections 138(2)(d)-(e) the drafting in section 119 would suggest that in relation to extensions or the requirement to extend these interests should be secondary to the legitimate business interests of the access provider.

This is particularly relevant where the obligation to extend or permit the extension is an unconstrained obligation to expand as presently drafted in Part 7 of the 2010AU. To address this concern QR Network has included the objective requirement that the QR Network will undertake all expansions where its legitimate business interests are protected. QR Network has not sought to prescribe the specific circumstances which might not be in QR Network's legitimate business interests. However, the circumstances may include matters such as:

- a risk that the QCA may not accept the scope of the investment into the Regulatory Asset Base;
- the Extension is not supported by the long term demand for use of the network;
- the Extension of the overhead capacity in one system is not supported by appropriate arrangements which would impact on the commercial viability of the overhead system in another system; and
- the extension would result in a loss of expected revenue associated with the preserved train path requirements under s.266A of the Transport Infrastructure Act.

QR Network has sought to provide a check and balance on the circumstances where QR Network reasonably considers an Extension is not in its legitimate business interests by requiring QR Network provide the Access Holder or Access Seeker reasons for QR Network's opinion to that effect. Where a party disagrees with QR Network's opinion they may refer the matter to the QCA for dispute resolution under Part 10.

The QCA Act also includes significant enforcement provisions under s.158A. These provisions are particularly relevant to matters such as unnecessary and unreasonable delays in the construction of extensions and are likely to provide a more effective and efficient means of addressing any failure by QR Network to undertaking expansions in a timely manner than the provision of management control to Users for completion of the project.

Specifically, the provisions under s.158A(3) explicitly provide for the courts to make orders which:

- direct the responsible person to comply with the term of the undertaking;
- direct the responsible person to compensate anyone who has suffered loss or damage because of the breach;
- the court considers appropriate.

To the extent that a Party considers that QR Network has unreasonably and unnecessarily delayed the construction they can seek damages from the courts as remedy for that breach. QR Network considers the QCA and stakeholders have understated the material behavioural incentive these provisions place on the access provider.

QR Network has incorporated provision for the transfer of project control in the User Funding Agreement but as indicated in the accompanying letter with the submission of the DAAU on 24 December 2010 the process and mechanics of how that change in control is to be achieved need to be developed following further detailed consultation with industry representatives.

Commercial Structuring & Tax Issues

Principle 43 of the Investment Framework stated that:

"The [user funding] arrangements should be such that QR Network receives no benefit (tax or cash flow) from wholly User Funded Extensions."

(Since QR Network is a member of a tax group, for the purpose of this section each reference to QR Network should be read as a reference to the tax group of which QR Network forms part.)

Although the principles require only that QR Network not obtain any tax advantage, QR Network has undertaken a thorough option selection analysis to identify the optimal commercial structure, suitable for QR Network and the user funders, that, among other things, does not results in tax inefficiency. This option analysis considered existing QR Network structuring options for single user mine specific assets and also took into account the additional complexities that would result from contracting with multiple users.

Most of these options result in QR Network being able to depreciate the user funded assets in its tax books ('QR Network Taxpayer Options') and the value of the associated tax depreciation benefits need to be passed on to the user funders. The value of these deductions to QR Network over the tax lives of the user funded assets is not capable of being determined in advance as it depends on the tax-paying status of QR Network in each tax year. If, for example, QR Network is not in a tax payable position in any given year, then the economic value of these tax depreciation deductions would only arise when QR Network returns to tax-paying status.

In respect of QR Network Taxpayer Options (other than in relation to the participation model which is discussed below), QR Network considers that the documentation of any contractual mechanism for QR Network to pay user funders the value of the tax depreciation for each year of the assets' tax lives would be complex, and the implementation of that mechanism would require considerable administration over the life of the user funding agreements by QR Network and each user funder. These are material drawbacks of all such options.

The two options shortlisted by QR Network were a 'participation model', which is one of the QR Network Taxpayer Options, and 'QR Network as contractor', under which option QR Network will be contracted by the user funders to construct the user funded assets and the user funders may be able to depreciate for tax purposes those assets (under the transport capital expenditure provision in Division 40-I of the Income Tax Assessment Act 1997).

Under the 'participation model' user funders would be entitled to receive from QR Network a payment stream of distributions equal to QR Network's notional after-tax returns from the user funded asset, after allowing for QR Network's tax depreciation on that asset. Each distribution would be divided by QR Network into dividend and return of capital elements, and each dividend in any tax year would be franked in accordance with QR Network's general dividend franking policy for that tax year. Under Australian income tax law QR Network would generally be required to frank any dividends paid (i.e. to user funders) at the same franking percentage as other dividends paid by the QR National tax group of which QR Network forms part (eg dividends paid to QR National's public shareholders).

If and to the extent that QR Network either

(i) cannot, or
(ii) can, but elects not to

frank dividends to the extent necessary to keep user funders whole in each year of the tax life of the user funded assets, QR Network will receive a tax benefit under this structuring option since it will be paying an "after tax" return to the user funders which will be "pre tax" in their hands. Although it is theoretically possible to develop a contractual mechanism that would ensure a transfer of value from QR Network to user funders when QR Network's shareholders receives value for franking credits attributable to the user funders, this mechanism would be formidably complex to develop, document, negotiate and implement.

For this and other reasons, the 'QR Network as contractor' option was preferred. Under this option QR Network (as contractor) enters into a construction agreement with the user funders (as principals) for the delivery of the user funded assets. QR Network would seek to gain the usual construction contractor tax treatment for its outgoings in respect of user funded assets and the payments it receives from user funders, so both cashflow streams would be on a cash and tax "flow through" basis.

Around the time of completion of the works under the construction agreement, QR Network will commence to pay user funders (under another agreement, the 'participation agreement', linked to the construction agreement) distributions calculated on the basis of each user funder's share of the revenue received from the upgraded mainline system. This share is to be determined by reference to the proportion that the capital component of each user funder's system allowable revenue bears to the total system allowable revenue for the relevant mainline system, subject to revenue cap and other adjustments as required. This distribution method results in each user funder having an indirect economic interest in the mainline system it upgrades.

This structuring option results in QR Network assuming a tax risk over the application of the usual construction contractor tax treatment of its receipts and outgoings under the construction agreement and the participation agreement. In order to address this tax risk, QR Network requires the user funders to provide an indemnity in relation to the tax treatment of these amounts. In order to mitigate the direct tax risk to QR Network and the indirect tax risk (as a result of the tax indemnity) to the user funders, QR Network is prepared to consult in good faith with relevant user funders on the tax ruling process for any user funder transaction. QR Network will require the tax indemnity to be in place regardless of whether a favourable tax ruling has been received before execution or not, and will require it to remain in place notwithstanding receipt of such a ruling, since QR Network is not compensated for taking any tax risk under the user funding agreement.

The commercial viability of the current form of the construction agreement is dependent on confirmation from the ATO of construction contractor tax treatment of QR Network's outgoings and receipts from user funders. .

A key element to the structure is QR Network's entitlement to a construction incentive payment in respect of its services as a construction contractor. The construction agreement needs to be a commercial arrangement, ie an arrangement under which a profit may be achieved, in order to validate QR Network's role as contractor.

The proposed structure of the incentive fee payments in the construction agreement are also consistent with the intent of the objects clause, the regulatory framework and particularly the pricing principles that the access provider have sufficient incentive to reduce costs or

otherwise improve productivity. While this framework is not necessarily suitable for Extensions which are not Significant Investments due to the difficulty in coordinating agreement on scope, budgets and program for minor capital expenditure, it may also provide an effective capital efficiency mechanism for all Significant Investments (whether that investment is funded by QR Network or Users). Where Users support this mechanism as part of the commercial negotiation, it may be included in the Access Conditions being sought by QR Network.

The construction incentive payments are discussed further in Section 3.

The proposed structure also has the advantage that as the user funders can amortise their expenditure for tax purposes the distributions can be made by QR Network from pre-tax revenues.

In conclusion, this structure provides for substantial simplification of the documentation, development, negotiation and implementation of the tax aspects of the user funding agreements and avoids the requirement for QR Network to transfer any tax benefit to the users.

2. Consequential Amendments to Access Undertaking

Introduction

This section of the document provides the explanatory notes supporting the amendments incorporated into the DAAU which QR Network reasonable considers necessary to fully implement the Investment Framework.

This section is structured in a way which reviews the amendments as they appear in the DAAU or, where the amendments interact with other amendments elsewhere in the DAAU, they are discussed under the relevant topical heading. The section also includes discussion of ancillary matters which have not been incorporated as amendments.

Amendments to the Access Undertaking

Audits of Payments to Funding Users

As discussed in Section 3 the UF-PA will provide for a party to that agreement to request an audit of payments made under that agreement. In addition to the provisions in the UF-PA QR Network has extended the list of matters that may be audited under clause 3.7(a)(ii) to include payments made to Funding Users pursuant to a User Funding Agreement.

Variations to Reference Tariffs for Significant Investments

Paragraph 40 of the Investment Framework requires that the QCA will revise Reference Tariffs when a Significant Investment occurs, based initially on forecasts and subsequently on actual costs.

The 2010AU gave effect to this principle by including a relevant provision as a defined Review Event. Specifically, the Review Event included:

- where QR Network has committed to developing a Significant Investment.

By including reference to Significant Investments, QR Network would be required to submit a variation to a Reference Tariff within sixty days of the event occurring. There are two aspects of this requirement which are administratively unworkable. First, the timeframes associated with committing to a Significant Investment and the commissioning of the infrastructure may be substantive and will often exceed 36 months. Second, the provision relate only to the variation of an existing reference tariff and do not address circumstances where a new reference tariff is required.

In relation to the first of these issues QR Network has included a new clause 2.2.1(b)(iii) of Schedule F Part A that requires QR Network to submit the variation to the Reference Tariff at least 90 days prior to QR Network expecting to commission the Rail Infrastructure created by the Significant Investment. This timeframe ensures that any interim reference tariff variation approved by the QCA will be based on the reliable cost information available at that point in the construction process. It also ensures that QR Network is provided sufficient opportunity to assess and evaluate any consequential increases in operating costs.

Where the QCA's approval of the varied Reference Tariff occurs later than the date of first railings, Adjustment Charges would be calculated to address any retrospective application of the approved tariff.

An additional amendment has been made to clause 2.2.7 of Schedule F Part A to include this process in the existing consultation process for Review Events.

In relation to the second point it is our understanding through consultation with some industry participants that there are some concerns regarding the degree and scope of socialisation of incremental costs with existing users. This is particularly relevant where the additional capacity may be allocated to a new Access Seeker who has substantial private infrastructure cost and may only be required to pay the minimum contribution to the system common costs where the incremental mainline capital expenditure from the Significant Investment is also increasing the average system price for some users.

QR Network understands this position and considers there is merit in providing further clarity and boundaries on the degree of socialisation. In part doing so will ensure that those parties who wish to expand the capacity of the network have a strong price signal of the costs of doing so. However, any such change also needs to be counterbalanced against the benefit existing users have through the RAB lock-in principle and the rights to renew where other parties may be willing to make a higher contribution to obtain those rights.

The National Electricity Rules include specific provisions in chapter 6 which relate the socialised pricing of common use infrastructure. Specifically clause 6A.22.3 states:

(a) For a Transmission Network Service Provider for a category of prescribed transmission services, the attributable cost share for that provider for that category of services must, subject to any adjustment required under the principles in clause 6A.23.2, substantially reflect the ratio of:

    (1) the costs of the transmission system assets directly attributable to the provision of that category of prescribed transmission services; to

    (2) the total costs of all the Transmission Network Service Provider's transmission system assets directly attributable to the provision of prescribed transmission services.

(b) The costs of the transmission system assets referred to in paragraph (a) refers to optimised replacement cost or to an accepted equivalent to optimised replacement cost that is referable to values contained in the accounts of the Transmission Network Service Provider.

These provisions effectively allocate the allowable revenues within relevant asset classes (i.e. exit services) on the basis of the proportion of replacement costs. This ensures that no particular party is competitively disadvantaged simply on the basis of the timing of their entry into the market and ensure existing users are priced on the basis of current replacement cost of the total asset category.

QR Network has previously considered similar issues in a pricing paper prepared for expansion of the Moura system as part of the interconnection of the Surat Basin Railway. Use of either the Rawlinson Brisbane Construction Index or the ABS Bridge and Road Construction index as a proxy for changes in replacement cost since approval of the regulatory asset base results in a DORC estimate up to 20% greater than the value of the current regulatory asset base. This implies that current users obtain a price discount on competitive depreciation due to the RAB lock-in principles in the regulatory framework.

In order to avoid introducing substantial and further complexity into the pricing framework QR Network has selected a subjective 20% boundary for requiring a new tariff. QR Network also notes that producers have accepted this degree of symmetrical price movement in previous

regulatory resets. A higher threshold is also necessary to ensure new reference tariffs are not unnecessarily developed.

Accordingly QR Network has included a new requirement under clause 6.4.2 that where the inclusion of a Significant Investment in the Regulatory Asset Base would increase the Reference Tariff for the relevant individual coal system by more than 20% QR Network will submit to the QCA a new Reference Tariff for those Access Rights.

The assessment is required to be based on full utilisation rather than being triggered through asset underutilisation in the ramp-up period.

Access Conditions (6.5.2)

QR Network has amended clause 6.5.2(d) to:

- improving clarity regarding the operation of these provisions;
- ensure consistency with the User Funding Provisions; and
- ensure QR Network's legitimate business interests are protected.

The provisions in 6.5.2(d) of the 2010AU and previous access undertakings approved by the QCA have been drafted to ensure that where QR Network receives financial contributions from a party then QR Network is obliged either to:

- not include those contributed assets into the Regulatory Asset Base; or
- where they are included in the Regulatory Asset Base, enter into an agreement with the party who made the contribution to provide for the return of the additional revenue earned from access charges

to ensure QR Network does not earn the same revenue twice and the party who made the contribution obtains the full benefit of the contribution.

Clauses 6.5.2(d) and 6.5.2(d)(i) have been amended to improve clarity regarding the operation of the provisions and their alignment with the intent. In addition, references to the 'depreciation and return of the non-diversifiable component of the return on assets included in access revenue' have been replaced with references to the capital charge component of the access charge to align with terms in the User Funding provisions.

Clause 6.5.2(d)(ii) as been amended to require that QR Network will enter an agreement for the payment of the rebate to the contributor commensurate with the term which QR Network continues to earn revenue from that asset while it maintains a positive value in the regulatory asset base.

The drafting in the 2010AU required QR Network to return to the Contributor the balance of the original contribution where the Access Seekers Access Agreement expires before the full amount has been returned and QR Network continues to earn access charges from other Access Holders for the use of the relevant Rail Infrastructure.

QR Network has removed this obligation as it is incompatible with the purpose of the Access Condition in the first instance. The purpose of the Access Condition is to mitigate QR Network's financial risk, including the prospect of asset stranding of the User's assets. Requiring QR Network to return the unexpired costs in the RAB has the same effect as requiring QR Network to fund the Extension. It simply exposes QR Network to a future call on capital and fails to address the risks which gave rise to the need for the Access Condition. Where an Access Seeker seeks to recover the unexpired contribution at the expiry of the Access Agreement it can do so be assigning to a third party and realising the economic value of the future rebates.

Similarly, where such obligations applied to User funded investments under clause 7.5.5, this would materially distort the cost of funds in favour of users as the User Funder faces a materially reduced asset stranding risk as it is transferred to QR Network. Therefore, the provisions in the 2010AU do not protect QR Network's legitimate business interests.

A new subclause 6.5.2(d)(iii) provides clarity that the provisions and requirements under clause 6.5.2 do not apply to Infrastructure Enhancements funded through a User Funding Agreement pursuant to clause 7.5.5 as the terms relevant to return are governed by the terms of the UF-PA.

Approval of Access Conditions (Clause 6.5.4)

Paragraph 31 of the Investment Framework requires that where QR Network intends into impose Access Conditions in respect of the provision of access which is dependent on a Significant Investment it must seek approval from the QCA for such Access Conditions.

This principle was incorporated into the 2010AU through the relevant provisions in clauses 6.5.4(a)-(g). However, the drafting required QR Network issue to the QCA a report on Access Condition under all circumstances where a Significant Investment is required. However, QR Network may not seek Access Conditions and may exercise its commercial discretion not to fund the Extension with or without Access Conditions. In other words it may elect to only undertake the expansion subject to User Funding.

Accordingly, QR Network has amended clause 6.5.4(ii) to exclude the requirement to prepare an Access Condition report in circumstances where QR Network is not seeking Access Conditions.

An additional subclause has also been added to clause 6.5.4 to also include in the Access Condition approval process Access Conditions which may be specific and relevant to where a User has reasonably satisfied the requisite onus of proof that it is unable to obtain financing from a reputable financial institution. As an example, this may include change of control obligations which require the User to return to QR Network the amount that would be owed had they entered into a User Funding Agreement. It is not reasonable to require QR Network to fund the investment on behalf of a User in preference to other forms or sources of financing if the User subsequently sells the economic interest in the mine for financial gain.

QR Network understands that there is some uncertainty among stakeholders as to whether the Access Conditions agreed with the relevant Users and subsequently approved by the QCA would be reflected in the reference tariff. The DAAU does not include specific provisions to address this certainty as it will be resolved by the QCA at the time it considers the building blocks and the particular circumstances relevant to the Access Conditions. The following two examples illustrate this point:

- Where QR Network negotiates Access Conditions which include a construction incentive fee (similar to that in the User Funding Agreement) it is expected that for the same reasons parties who enter a User Funding Agreement would seek to include the construction incentive fees in the relevant Access Charges these would be capitalised into the RAB; or

- Alternatively, where the Access Conditions require the party to make payments to QR Network in addition to the ongoing access charge then these payments would not be included in the building blocks as is currently the case. This also ensures a party who has the benefit of Access Rights, but is not a party to the commercial agreement, is not disadvantaged by that agreement.

Prohibited Access Conditions

QR Network has amended the prohibition on Access Conditions under clause 6.5.5(c) to apply only to Expansions. The rationale for this amendment was discussed in greater detail in section 1 regarding investment in Customer Specific Branchlines.

General Extension Principles

Paragraph 26 of the Investment Framework requires QR Network to expeditiously construct all Extensions. This principle was also reflected in clause 7.5.1(d) of the 2010AU.

QR Network considers the use of the term expeditious and its positive obligation is potentially incompatible with other elements of the access regime such as the need to only incur prudent costs. The obligation to construct all extensions expeditiously involves an unreasonable degree of regulatory uncertainty.

As an example, it may be prudent for QR Network to suspend or slow down construction activity in order to reduce the total project costs where construction timetable of another element of the supply chain has been delayed due to unforeseen circumstances. A recent example of this would be the deferment of target date for investment in the 7x expansion of the Dalrymple Bay Coal Terminal.

Under these circumstances QR Network may acting prudently and reasonably be in breach of its undertaking for not expeditiously constructing the infrastructure enhancements.

Clause 7.5.1(d) has been amended to require that QR Network must not unreasonably and unnecessarily delay the construction of any Extension. As discussed in section 1 regarding legislative framework this provides an enforceable obligation through the provisions in s.158A of the QCA Act and a more effective remedy to Users concerns regarding unreasonable delays than what can be achieved through commercially complex reassignment of construction management responsibilities.

The ACCC considered stakeholder concerns regarding the non-performance of ARTC to deliver committed capacity. The ACCC appropriately formed the view that it is not the role of the regulatory framework to impose consequential loss on ARTC (i.e. liquidated damages) as 'parties could seek remedies such as performance or declaration from a court. In deciding whether to grant such remedies the court could take into account the specific circumstances of the matter'.[19]

QR Network has also included two additional provisions in clauses 7.5.1(d)-(e) regarding general extension principles which align more generally to the requirements of the QCA Act in relation to access determinations requiring Extensions to the facility providing the declared service. These issues were discussed in Section 1 in relation to the legislative framework

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[19] ACCC (2010) Position Paper in relation to ARTC's proposed Hunter Valley Rail Network Access Undertaking, p.326

Expansion Process

QR Network has incorporated minor amendments to the expansion process outlined in clause 7.5.2.

Clause 7.5.2(a) relating to scoping and planning and studies has reordered to logically follow the process of developing and undertaking an expansion.

Clause 7.5.2(b) includes the triggers which require QR Network to commence the commercial development of an expansion through the issue of a Request for Proposal (RFP). QR Network has some concerns regarding the breadth of the triggers that require a RFP to be prepared and the implications for the timing with which the RFP must be prepared and issued.

The timeframes must reasonably be guided by the level of progression of the studies and the commercial terms at the time QR Network is requested to make the request for the RFP. As the RFP is required to include the information listed in clause 7.5.2(d) it will not unreasonably take additional time to prepare where the project is at the very early stage of development (prior to or early in concept) relative to a project which is progressing through pre-feasibility.

QR Network has therefore not included binding timeframes for the preparation and issue of the RFP in the DAAU. Where either the Funding Users or the QCA believe that QR Network is unreasonably delaying the preparation and issue of the RFP a party may seek appropriate orders from the court on the basis that QR Network is failing to meet its obligation to not unreasonably and unnecessarily delay the construction of an expansion.

A new clause 7.5.2(d)(iii) has been added to the list of information to be provided in the RFP to include details of how the key aspects of the project are to be negotiated by the parties prior to entering an Agreement for Access Conditions for the planned capacity or a User Funding Agreement.

QR Network understands some stakeholders will consider these requirements do not fully address any underlying concerns that where the negotiation involves multiple parties the Expansion may be delayed through the conduct of one or more parties to the negotiation.

Key areas of dispute may involve matters relating to agreement on the project scope and procurement arrangements. Where a party to the negotiations does not consider the proposed scope or procurement arrangements are reasonable this would and should give rise to the dispute resolution procedures in section 10.1.

Some parties may harbour concerns that individual parties may rely on dispute resolution to obtain some commercial gain. In order to mitigate those concerns it would be necessary for the negotiation framework to prescribe matters relating to the rights of the parties to the negotiation and how matters are to be agreed such the outcomes are binding on all participants.

This model may take numerous forms including:

- Specifying matters which require agreement by a majority or all the participants;
- Establishing a representative negotiating body with the power to make binding decisions on behalf of all Access Seekers.

These type of models are difficult and complex to prescribe on an ex-ante basis as they may involve other stakeholders and regulators where the negotiation process has the capacity to result in anti-competitive outcomes. For example, the Wiggins Island Coal Expert Terminal (WICET) User Group has sought and obtained collective bargaining authorisation from the ACCC for negotiations with QR Network over the provision of incremental rail infrastructure.

However, neither the QCA nor the ACCC has the power to compel a party to participate in a collective bargaining authorisation or curtail the rights of the access seeker to pursue dispute resolution where that party legitimately believes the outcomes from the negotiation are not in its legitimate interests.

As the QCA and stakeholders would be aware, QR Network's 2009 Draft Access Undertaking included a 40% threshold for triggering dispute resolution to ensure a project would not be disrupted on the basis of the views of one or a few proponents with a collective interest of less than 40%. However, the QCA did not support the imposition of such rules as evident in the following statements from the Draft Decision on the QR Network 2009 Draft Access Undertaking[20]:

> *If an access seeker wishes to dispute QR Network's decision, the matter can be referred to the Authority. The Authority will take into account the 'prescribed factors' and the allocation process when arbitrating any dispute referred to it. However, the Authority does not support QR Network's 40% materiality threshold for the lodgement of a dispute application. The Authority considers that every access seeker responding to QR Network's expression of interest should have the right to dispute why it was unable to obtain the capacity it requested.*

This is an inherent complexity in the negotiation of access to multi-user infrastructure and requires all parties to a negotiation to conduct those negotiations in good faith. Potential Users of a terminal development will need to resolve how negotiations for the complementary rail infrastructure are coordinated among all potential users of the Major External Development. QR Network is prepared to negotiate in good faith with an individual user, their representative, combination of users who seek to enter into a collective bargaining group (i.e. alliance or joint venture) or any combination of the collective and individuals.

QR Network would welcome further engagement with Users and the QCA as to how the regulatory framework can be further developed to address these coordination issues where negotiations involve multiple parties. In the interim, QR Network considers it premature to prescribe such matters in the DAAU but will consider a specific negotiation model relevant to a Significant Investment which has the unanimous support of all parties who respond to the RFP.

It is anticipated that some stakeholders may express a preference for QR Network to also be bound by the decisions of any collective decision-making body or rules. This may be particularly relevant where QR Network is also funding any proportion of the significant investment and the project is proceeding on the basis of a hybrid funding model.

Under all negotiations QR Network must reserve its right not to accept matters which it believes are not in its legitimate commercial interests. The decision making by the participants to the negotiation cannot be binding on QR Network. The regulator has the necessary power under the Access Undertaking and the QCA Act to arbitrate and make binding determinations on the access provider.

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[20] QCA (2009), Draft Decision – QR Network 2009 Draft Access Undertaking, p. 117 http://www.qca.org.au/files/R-2009DAU-QCA-QRN09DAU-DraftDec-1209.pdf

QR Network does not accept that it is incentivised to frustrate a project development for its own commercial benefit. The users' rights both to fund and make the election to fund at any stage of the commercial negotiation process ensures it is not feasible for QR Network to extract 'rents'. QR Network would expect that where a stakeholder to the consultation process does not support this proposition it should be necessary for the stakeholder to include explicit examples in their submissions of how QR Network could frustrate a project development and the commercial benefit which is expected to be obtained from that conduct.

Planning Studies

Paragraph 49 of the Investment Framework requires that Access Seekers seeking Access that is dependent on such Infrastructure Enhancements can be requested to underwrite the studies and all prudent costs of the studies will be considered as User Funding in respect of determining how planned capacity to be developed by an Extension and in respect of return of capital.

There is some uncertainty as to the interpretation and application of this clause with regard to the funding of planning studies. QR Network considers that it might reasonably undertake and fund the relevant concept studies and in some instances the pre-feasibility studies also in order to ensure a project is not unreasonably delayed while the relevant commercial negotiations proceed. This is the course of action which QR Network has undertake with the rail infrastructure enhancements supporting WICET Phase 1 while QR Network prepares the relevant commercial terms to commence negotiation with the prospective Users.

As paragraph 49 assumes that a User who enters a User Funding Agreement is deemed to have funded those studies QR Network has included a new clause 7.5.2(e) which provides for QR Network to recover from Users who enter into a User Funding Agreement all costs previously incurred in relation to those studies.

Where a User is not prepared to enter into the appropriate underwriting or funding of the relevant planning studies QR Network is under no obligation to negotiate with that party for the Access Rights to be created by the relevant infrastructure enhancements.

As clause 7.5.2(a) requires QR Network to undertake all planning studies where the need for an Expansion is reasonably anticipated clause 7.5.2(e) has been amended to require that these studies are deemed to be prudent in scope for the purpose of QCA's consideration of the inclusion of those costs in the regulatory asset base. The QCA will still be able to exclude all costs which are imprudently incurred.

Incremental Investments

Paragraph 14 of the Investment Framework outlines the nature of the investments which must be fully funded by QR Network. These requirements were incorporated into the 2010AU in clause 7.5.4.

The 2010AU and the Standard Access Agreement included additional matters relating to the compression of an Access Holder's conditional access rights where the planned infrastructure enhancements provide insufficient capacity to meet increase in committed capacity. In approving the 2010AU the QCA excluded the operation of conditional access rights by included the limitation in clause 11.3(b) that it not apply to User Funded investments.

The exclusion of the operation of clause 11.3(b) to User Funded investment creates a strong incentive for User to pursue User Funding in order to bypass these provisions. Such an outcome may distort the financing decision by creating a bias towards User Funding.

Where a User is not subject to 'compression' it will be strongly motivated to reduce the scope of the project as this would partially transfer any funding obligations to QR Network and socialise any capacity losses with incumbent Access Holders.

Users should be sufficiently exposed to the scope of works negotiated and agreed to ensure other parties are not adversely affected by the incremental investment. Access Seekers or their Customers have sufficient opportunity to review and undertake their own independent assessment of capacity needs and associated infrastructure enhancements and as provided for in clause 11.2.2(d).

In order to ensure a User Funder is sufficiently accountable and bears an appropriate degree of risk for the scope of works it has reviewed and accepted, it should be subject to the compression requirements in clause 11.3(b) as amended and be required to make further funding contributions to address any incremental capacity shortfall not related to a change in Supply Chain Operating Assumptions. Therefore, the DAAU also amends clause 7.5.4(a)(ii) to remove the funding obligations for capacity shortfalls arising from User Funded investments.

Funding Obligations for Scope Reductions

A Significant Investment is defined with respect to two primary characteristics:

- The value of all related rail infrastructure enhancements will on an expectations basis will exceed $300 million; and
- The rail infrastructure enhancements are required to support a major external development.

Paragraph 20(d) requires that in the event of a shortfall in funding the project QR Network must design the level of Planned Capacity to the smallest efficient scale to meet the level of Committed Funding.

However, the Investment Framework includes a gap as to the funding obligations regarding subsequent infrastructure enhancements. It may be expected that a party could seek to contract for the access rights at the unloading facility and refuse to fund the relevant proportion of the rail infrastructure enhancements on the basis that it need only wait for the port and rail infrastructure systems to be expanded and then procure the necessary rail access rights that will be enabled by the incremental expansion funded by QR Network. Due to the operation of the queue reordering and capacity allocation provisions associated with demonstration of an ability to utilise the access rights being sought, the User has a reasonable degree of certainty regarding securing the access rights.

For example, a major external development might have a minimum incremental scale of 25 million tonnes per annum but the rail infrastructure enhancements are scalable in substantially smaller increments. This may be 16, 19 and 25 million tonnes respectively. Under these circumstances a User may have sufficient incentive to either:

- transfer the funding obligation to another User who would be required to fully fund in order to ensure the project proceeds and not be able to utilise the access rights as the port rights are already secured by the gaming User; or
- wait and see whether the scale of the subsequent expansion is less than the $300 million dollar funding commitment.

Game theory would also suggest that where the Users are not coordinated and are acting commercially independent of each other then the project would not proceed as all parties would rationally elect to defer any funding commitment. This would also then increase the

timeframe for reaching financial close as additional rounds of the game must play out to obtain funding commitment for the minimum efficient scale.

By ensuring that all rail infrastructure enhancements associated with the major external development, irrespective of the timing of the development of those enhancements, are subject to User Funding, then the incentive to 'free ride' is removed.

To address these types of behaviours QR Network has added two additional clauses 7.5.4(a)(v)-(vi) to ensure that all rail infrastructure enhancements which in aggregate exceed $300 million, a necessary condition for a major external development, are subject to Access Conditions or User Funding.

User Funded Expansions

As discussed in Section 1 the Investment Framework includes the foundation premise that a User has the intrinsic right to fund extensions even where QR Network is willing to do so.

Where a User elects to make this decision for Extensions which are the type described in 7.5.4(a) the User must issue the relevant notice to QR Network very early in the negotiation framework. QR Network considers that requiring the communication of the decision to be made at the time the Access Seeker responds to the IAP with a notification of intent to negotiate access rights is not unreasonable.

This also ensures that a party who may also be seeking to obtain Access Rights from the same rail infrastructure enhancements is not disadvantaged due to any delays which might arise from another User's election.

It may also be the case that QR Network has incurred costs in relation to the project which have not been included in the existing reference tariffs. In order to ensure that QR Network's legitimate business interests are protected where a User makes an election to fund investments of the type listed in clause 7.5.4(a), then the User must compensate QR Network for all the costs associated with that project that have been incurred prior to the election.

For example, QR Network may undertake active debt management policies which involve forward borrowing or hedging for its expected capital expenditure profile. Regulators have yet to include these costs in the regulatory allowances within the building blocks. As a consequence of a User's election to fund QR Network may be required to unwind any interest rate risk management position in relation to those investments.

The DAAU has included minor redrafting and reordering of clauses in clause 7.5.5. In particular, the requirement to collaborate with Users in the key matters relating to the project has been placed prior to dispute resolution to reflect the procedural sequencing of the negotiation.

The dispute resolution clauses have been amended to have regard only to a dispute relating to terms prior to entering a User Funding agreement. Where a User seeks to raise a dispute on an issue arising under a User Funding Agreement then the dispute resolution procedures should be addressed through the dispute resolution framework in the relevant agreements.

Similarly, where a User believes that QR Network has been unreasonably and unnecessarily delaying construction of an extension this would be a dispute arising under the UFA-CA. Construction will not have commenced and a commitment to construct will not be required until parties have entered into a User Funding Agreement. Therefore, the provision relating to disputes regarding unnecessary delays in construction have been removed in the DAAU.

Appropriate provisions have been incorporated into the UF-CA as discussed in section 3 of this document.

Return of Invested Capital

Paragraphs 43 and 44 of the Investment Framework outline the obligations with respect to the payments to Funding Users.

The obligations as drafted in the Investment Framework would require:

- the deduction of the approved operating and maintenance costs from the revenue earned in that year; and
- where the balance of the earned revenue is not sufficient to make the relevant payments to User funders any shortfalls will be met relative to the users' utilisation.

QR Network understands the rationale behind these principles. The QCA has sought to ensure QR Network is not disadvantaged as a consequence of a User Funded investment by ensuring that it is able to recover its operating and maintenance costs in the year they are incurred. However, the model has several unfavourable characteristics which warrant consideration as to its efficacy. More specifically, the model:

- assumes that a User's Access Charge can be precisely assessed as to the proportions relating to QR Network assets, the User Funded assets and the operating and maintenance costs;
- operates as an effective revenue cap on the basis of individual users within a broader system revenue cap;
- assumes that allowable and therefore earned revenues are consistent with the relevant annual building blocks (no revenue or price smoothing); and
- links disbursements with utilisation which will bring with it restrictions on the flexibility on managing access rights as transfers will also need to be aligned with the transfer distributions through the relevant UF-PA.

QR Network does not believe the additional administration costs or commercial complexity are warranted and is not prepared to accept the operating and maintenance cost timing risk for user funded assets inherent in the revenue cap process.

The distribution methodology in the UF-PA separates the returns to users funders from the utilisation of the Access Rights created by the user funded infrastructure. Distributions are made from the earned access revenue based on the relative proportion of the allowable revenue comprised by QR Network and User Funded assets through the building blocks for the relevant year. This introduces significant simplicity in the UF-PA and makes each such agreement more amenable to assignment.

Further discussion on the distribution methodology is included in section 3 on the participation agreement.

Distribution Amounts

Paragraph 43 of the Investment Framework requires that User Funders will have their capital investment refunded to them in accordance with the depreciation profile associated with the capital expenditure, together with the Regulated or Varied WACC (as applicable) on the unrefunded balance. Paragraph 45 also requires that no additional fees or on-costs may be charged by QR Network in respect of User Funded Extensions, unless there are additional costs or risks assumed.

The drafting in clause 7.5.5(m) of the 2010AU did not specifically include matters relating to additional cost or risks. These risks and the need for sufficient compensation for bear these risks was discussed in section 1 in relation to operation and performance risks.

QR Network notes that there are two potential models in relation to addressing any additional and uncompensated risks arising from User Funding. One option is to include the appropriate compensation in the building blocks and pass-through the full amount of the capital charges to the User Funder. Alternatively, the valuation of the cost or risk can be deducted from the capital charges and recovered directly from the User Funders through the appropriate withholding of the risk margin from the distributions under the UF-PA. Alternatively a combination of both options may be adopted to depending on the nature of the risks.

QR Network does not have a particular preference for either model and has incorporated appropriate provisions in clause 7.5.5(l) and the UF-PA to provide for the recovery of any just compensation where the QCA elects not to include the requisite margins in the building blocks.

It is also necessary to ensure the UF-PA includes the appropriate provisions to address any future change in the cost or risk of managing funded rail infrastructure for future and unknown regulatory risks. For example, the outcomes from the review of the Incentive Framework may include additional business risks which are not systematic and may need to be addressed in User Funder distributions.

In determining the pre-tax revenue amounts to be included in the distribution QR Network acknowledges that different user funders will have different tax positions – some user funders may be in a tax payable position and others may not be. QR Network does not propose to submit reference tariffs and allowable revenues for approval by the QCA which reflect the tax circumstances of individual user funders. Rather QR Network proposes in respect of user funded assets to submit tax depreciation estimates that are consistent with the tax assumptions made by the QCA in the applicable undertaking from to time. QR Network will maintain the notional tax base as part of the regulatory financial model.

Connecting Infrastructure

The provisions in section 8.3 of the 2010AU outline the obligations in respect of the connection of private rail infrastructure. The drafting within this section is highly uncertain as to the obligations of the parties with respect to a connection agreement and includes material inconsistencies. Specifically, as drafted section 8.3 has the following anomalies:

- Clause 8.3(a) provides for an Access Seeker or an Access Holder to construct connecting infrastructure provided that party meets the initial and ongoing costs associated with constructing and maintaining. However, clause 8.3(f) required that QR Network is not able to enter an agreement for the recovery of these costs as all operating and maintenance costs are to be included in the cost build-up for the reference tariffs:
- The right to construct connecting infrastructure is also subject to QR Network exercising its rights to design, project manage, construct, maintain, upgrade the Connecting Infrastructure. However, it is not clear how the provisions also provide for QR Network to recover the reasonable and ongoing initial costs associated with those activities; and
- It is not clear what mechanism enables QR Network to recover all reasonable costs associated with connecting infrastructure not relating to train services included in a reference tariff.

QR Network has made minor amendments to the commercial requirements for connecting infrastructure to provide greater clarity regarding these issues.

A new subclause 8.3(c)(ii)(C) has been included to allow QR Network to enter into an agreement for connecting infrastructure which provides for the recovery of all reasonable costs associated for connecting infrastructure which is not related to assets included in a regulatory asset base and therefore a reference tariff.

For the avoidance of doubt, clause 8.3(f) has been amended to require that only connections relating to the connection of a loading or unloading point is included in reference tariffs. This ensures a consistent approach is maintained between current Customer Specific Branchlines and future Customer Specific Branchlines which may or may not be owned by QR Network.

Connecting Infrastructure associated with the connection of other rail infrastructure as defined in the Transport Infrastructure Act, above rail facilities and rail infrastructure not related to coal carrying train services will not be included in the regulatory asset base and the owner of the rail infrastructure connecting to the existing network is responsible for meeting all reasonable costs associated with that Connecting Infrastructure.

Where an Access Seeker or Access Holder does not believe the costs are reasonable the party may seek to resolve the dispute in accordance with clause 10.1 as provided for by clause 8.3(e)(v).

Prudency of Capital Costs

Paragraph 25 requires that QR Network will absorb cost overruns which are not prudent. QR Network notes the circumstances for a User Funded investment are substantially different from those investments QR Network undertakes independently from the constructive dialogue and engagement with the individual Users seeking the Access Rights as has typically occurred in the past (with the exception of Customer Specific Branchlines).

As the Users subject to a User Funding agreement will also agree to the target cost and the procurement methodology in the context of the agreed scope, target cost and program. QR Network considers that it should not be responsible for imprudent cost over-runs which the QCA later determine to be attributable to the agreed procurement methodology. These issues are addressed in section 3 in relation to the UF-CA.

However, the allocation of costs excluded from the regulatory asset base under the UF-CA requires an understanding of the basis of the QCA's exclusion from the regulatory asset base. To assist in this allocation, QR Network has added an additional provision to Schedule A, ie clause 2.7, which requires the QCA to provide QR Network a statement of reasons as to why costs are not accepted into the regulatory asset base.

Ancillary Matters not included in consequential amendments

Discretion not to Fund

Paragraph 15 requires that where QR Network elects not to fund a Significant Investment it must provide the QCA with a statement setting out the reasons for this. The Final Decision does not articulate the purpose behind this report or why such a report is necessary.

The Draft Decision on the QR Network 2009 Draft Access Undertaking stated that such an obligation was not unreasonable. However, this decision predates the inclusion of User Funding in the 2010AU. Similar issues where considered by the ACCC in relation to similar

concerns regarding the requirement to provide explanation as to how such commercial discretion is exercised. The ACCC concludes[21]:

> *…ARTC should be entitled to subjectively assess whether a particular investment project, recommended or sought by another party, is commercially viable to ARTC. Where a dispute is raised in relation to a decision made under this provision, it would effectively require the regulator to step into the shoes of the Board of ARTC and decide whether or not a future investment is commercially viable to ARTC. ….a subjective discretion … is only likely to be appropriate where there is an effective User Funding option for investments in Additional Capacity.*

The requirement to prepare a statement setting out the reasons for QR Network not agreeing to fund and investment it does not consider to be commercially viable to it would necessitate disclosing what other commercial opportunities are available to the Board of the ultimate holding company.

QR Network supports the premise of the ACCC that such a statement is not required where Users have the option of User Funding. Notwithstanding this view the 2010AU is a voluntary access undertaking and QR Network has retained the provisions in clause 7.5.4(c). However, any statement will not include matters of a commercially sensitive nature and its content will ultimately be of little value or consequence to the reader.

User Funding and Free-riding

It is QR Network's understanding that some industry participants have concerns that the User Funding obligations may give rise to free riding issues where the costs of the next incremental expansion facilitate or enable future lower cost expansions which subsequent Users are not required to make a capital contribution.

These concerns suggest that where the next incremental expansion has a lower average incremental cost than the previous user funded expansion the subsequent user should be required to make a capital contribution which would be used to return the funded capital to the first party who funded the higher cost expansion.

QR Network understands this position and the perceived inequitable reconciliation (or free riding) of the capital expansion costs depending on the timing of a participant's entry into the relevant system.

In sharing these concerns QR Network is informed by comment from BHP Billiton which noted:

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[21] Australian Competition and Consumer Commission (2010) Position Paper in Relation to ARTC's proposed Hunter Valley Coal Network Access Undertaking, p.350 http://www.accc.gov.au/content/item.phtml?itemId=963813&nodeId=7c2b2f631983b53db17634e69d088e80&fn=Position%20Paper%20-%20ARTC%202010%20HVAU%20-%2021%20December%202010.pdf.

To the extent the Regulator systematically underestimates the required rate of return the Infrastructure Provider needs to invest in new infrastructure it will discourage investment in new infrastructure, as it will be better to be a free-riding access seeker.[22]

As stated in section 1 of this document QR Network does not consider the current regulatory settings provide sufficient compensation for investment in rail infrastructure. As the User Funder Agreement provides for:

- the return of the invested capital from all Users for the funded infrastructure:
- the party to the agreement to assign all future disbursements to another party such as the original financier; and
- the distributions to be made independently of the determination of access charges for the additional capacity;

QR Network considers the only relevant explanation for free riding concerns is an underlying concern that the regulatory settings do not provide for an appropriate return on the invested capital. In other words the investment returns are less than the hurdle rates typically applied to investments for comparable assets by the potential User Funder.

Where it is considered necessary to provide for a capital contribution from a subsequent user then the contribution should reflect the total investment of the previous expansions independently of the identity of the funder. For example, if QR Network has been required to fund a portion of a Significant Investment then any capital reconciliation with subsequent Access Seekers should also return capital amounts to QR Network for previous investments.

Optimisation Principles

The Investment Framework does not include details as to how optimisation of the regulatory asset base will address QR Network and User Funded assets. QR Network has not sought to address this issue in the DAAU as in the absence of 'fixed principles' it is not possible to bind future regulatory decisions. Accordingly, the inclusion of specific provisions will not mitigate any regulatory risk associated with future optimisation considerations.

It is also anticipated that it would not be possible to prescribe all the circumstances and matters which would need to be considered when a decision to optimise is undertaken. Therefore, it is assumed the QCA would prefer to retain the regulatory discretion to review those matters at the time the decision is made.

QR Network considers that the QCA will wish to consider issues such as:

- the level of asset utilisation and the basis for the reduction in demand which has triggered the need for optimisation (i.e. it specific to a Customer Specific Branchline);
- the relativity of the depreciation profile for new and existing assets (it would be inappropriate to optimise on a pro-rata basis where the new (accelerated) and existing

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[22] Monkhouse, P. (2007) '*The Costs and Benefits of Part IIIA*" 2007 ACCC Regulatory Conference, p.9
http://www.bhpbilliton.com/bbContentRepository/acccSpeech.pdf

assets (straight line over economic life) have been depreciated under materially different profiles); and

- the risk of asset stranding is only increased by the expansion and growth in the network (which suggest a ‘last in, first out’ approach would be optimal).

QR Network reserves its right to consider the implications of any optimisation guidelines proposed by the QCA in subsequent determinations.

3. Structure of User Funding Agreements

The following section addresses key issues on the structure of the user funding agreements.

The construction aspects of user funding, which will typically last for 2 to 3 years from execution, have been documented in a separate agreement from the operational aspects of user funding, which will typically commence 2 or 3 years from execution and terminate several decades later. It is good contracting practice to document separately activities of fundamentally different natures and lives. Also the separate documentation will facilitate assignment by user funders of the operations agreement to external investors once the user funded infrastructure becomes available, and provide commercial flexibility to the user funders.

The two agreements are linked to one another at execution and may only to be assigned jointly (ie to the same entity) once QR Network declares the user funded infrastructure available for use (see elsewhere for the discussion of assignment of the construction agreement).

The user funding agreements have been developed on the basis of 100% user funding, ie all of a project is funded by user funders under these agreements. QR Network notes that if a project has 'hybrid funding', ie some users adopt user funding for a project and QR Network funds the balance of the project in respect of other users, consequential changes to the user funding agreements would be required. For example, the change in management control provisions would be inappropriate if user funding accounted for (say) 20% of a project. Hybrid funding will also require changes to the commercial structuring of the project.

Construction Agreement

Project Management

The construction agreement requires QR Network to deliver an agreed scope, to be specified in a contract schedule, and to implement an agreed procurement methodology, also to be specified as a contract schedule. The construction agreement also requires QR Network to use its reasonable endeavours to ensure that the works are delivered by specified target availability dates and for costs not to exceed specified levels.

The project management features of the construction agreement is framed on the assumption that there has been a significant level of technical and commercial discourse between QR Network and each user funder prior to execution, which has resulted in the user funders reaching satisfaction on project scope, cost, dates for availability (analogous to completion) and procurement methodology.

For proposed discretionary variations to scope to be approved, the unanimous consent of QR Network and all affected user funders is required. If a scope change is agreed by all affected user funders and QR Network but not all user funders agree to the associated target cost or time consequences (if any) proposed by QR Network, the scope change will proceed and these consequences will be referred to an independent expert for resolution. For proposed non-discretionary changes of scope (eg latent conditions) to be approved, QR Network will in the first instance seek the unanimous consent of all affected user funders. If this consent is not granted, QR Network may refer the proposed change of scope (as well as any associated cost and time consequences) to an independent expert for resolution.

These scope change procedures protect the business interests of both affected user funders and QR Network as (economic) owner, operator and railway manager (for rail safety purposes) of both

(i) the user funded infrastructure, and
(ii) the existing rail infrastructure that is to be modified and operationally disrupted by the user funding project,

as well as project developer.

The construction agreement establishes an extension committee of all user funders for the project in question, and a monthly reporting regime.

Financial Security

Once the construction agreement with a user funder is executed by QR Network, QR Network will, provided the necessary financial security is provided soon afterwards by the user funders (as discussed further below), be contractually obliged to deliver the user funded project to that user funder. The financial failure of one user funder will not provide QR Network with an excusal from its delivery obligations to other user funders.

In the context of the principle that user funding should entail minimal, if any, uncompensated risks for QR Network, QR Network needs to have a high level of certainty that each user funder will meet its financial obligations over the term of the construction agreement. For this reason the construction agreement requires each user funder to provide a bank guarantee for the amount of its outstanding financial obligations for the user funded project.

The construction agreement features a mechanism requiring each user funder to provide its bank guarantee shortly after execution of its user funding agreement by both parties. A user funder that fails to do so is required to pay an early termination payment, which amount is to be applied to the project budget. The continuing user funders will be notified of the exiting user funder and requested to increase their share of the project and provide a bank guarantee for a corresponding additional amount. If not all of the remaining user funders fail to provide the additional bank guarantee, QR Network may terminate all user funding agreements, with each user funder that failed to provide additional financial security liable to make an early termination payment. If the project then does not proceed, QR Network will apply all early termination fees to a reduction in the regulatory asset base.

This termination fee arrangement favours continuing user funders over exiting user funders, which is considered an appropriate balance of business interests following the point of each user funder's execution of the applicable user funding agreement. Any arrangement that permits a user funder to exit from its user funding arrangement without any adverse financial consequence would be against the business interests of the continuing user funders that the user funding project should go ahead as contracted.

The amount of the bank guarantee will be reduced over the life of the construction agreement to reflect the declining balance of projected payments by the user funders to QR Network.

An alternative to this financial security mechanism is to 'socialise' QR Network's credit risk. Under this arrangement continuing user funders would be liable to QR Network for payments that defaulting user funders failed to make. After taking into account the limited degree of user consultation conducted by QR Network about user funding, QR Network considers that most potential user funders would prefer a several liability arrangement, ie each user funder is liable only for its own obligations, to a socialised arrangement. Accordingly QR Network has developed its user funding agreements on the basis of un-socialised credit risk.

Funding Obligations

The funding obligation of the user funders is made up of the payment of an initial mobilisation fee, followed by payments to QR Network in respect of the balance of its costs incurred under the construction agreement. The purpose of the mobilisation fee, which is a common feature of construction contracts, is to ensure that QR Network does not provide free working capital to the user funders, when considering the user funders' payments averaged over the term of the construction agreement as a whole. The mobilisation fee therefore is not an additional payment requirement, and under the construction agreement is 'backed out' in the months that precede the expected availability of the user funded assets.

To the extent that QR Network has incurred project costs (without reimbursement) prior to the execution of the construction agreement, the user funders will be required to make payments to QR Network in respect of those costs.

Assignment

As stated above, the construction aspects and the operational aspects of the user funding arrangement have been documented separately in accordance with good contracting practice. QR Network considers that, until the user funded assets have become available to the user funder, the project management provisions, eg change of scope, will function better for all parties if the same non-QR Network party is the holder of both the construction agreement and the participation agreement, ie the two agreements are 'stapled'. Separate assignment prior to availability of the new infrastructure could lead to undesirable outcomes for QR Network and non-assigning user funders. For example, the holder of a construction agreement following a separate assignment in the midst of the construction phase would have no interest in approving a modest addition to scope, even if it was strongly supported by other user funders, because the assignee would incur additional cost and gain no additional benefit from the scope change.

Any proposed assignment of the construction agreement would require the consent of the other party, which may only be withheld in defined circumstances.

Change in management control

The construction agreement defines 'unnecessary delay', being the event that allows user funders to trigger a change in management control of the user funded project, in terms of the expected date for availability of the user funded infrastructure being later for each user funder by specified periods than each of

(i) the contracted date for availability, and
(ii) the expected date of availability of the associated coal terminal.

QR Network considers that it is in the interest of user funders as well as QR Network that an objective definition of 'unnecessary delay' be documented contractually rather than relying on the uncertain outcome of a user funder reaching the view that 'unnecessary delay' has occurred on whatever grounds it considers appropriate and seeking to arrange assumption of management control of the project by user funders. Also QR Network considers that, following execution of the construction agreements, any dispute over 'unnecessary delay' between QR Network and user funders should be addressed in accordance with the provisions of those agreements, and not by reference to the QCA (see elsewhere for the discussion of dispute resolution for the construction agreement).

In the event of 'unnecessary delay' as defined in the construction agreement, a change in management control will be triggered upon all user funders notifying QR Network of their election for it to appoint a managing contractor and nominating the same managing contractor. That managing contractor need not be a user funder (or a business combination of user funders). The construction agreement requires the consent of all parties (excluding

QR Network) to assume management control as the decision may involve additional costs that must be met by the parties to the linked agreements. Accordingly, it is appropriate that all parties rights are sufficiently protected when a decision on the exercising management control is made.

As discussed in section 1, there is an effective remedy through the courts where it believes it has been disadvantaged by QR Network unnecessarily and unreasonably delaying the construction. The inclusion of the capital incentive payments also provides a strong commercial driver to expeditiously construct the rail infrastructure enhancements by placing revenue at risk.

QR Network will enter into an agreement with the managing contractor that addresses the matters specified in Principle 26 of the Investment Framework. In developing that agreement QR Network shall have regard to its legitimate business interests as (economic) owner, operator and railway manager (for rail safety purposes) of the existing rail infrastructure that is to be modified and operationally disrupted by the user funding project and the operator and railway manager of the user funded infrastructure.

QR Network is not prepared to enter into a standard 'step-in' arrangement for a standalone 'greenfield' asset, as is common for PPP or other project financed projects. Such an arrangement does not fit the business circumstances of a 'brownfield' development of an operational railway operated, managed and owned (for economic purposes) by a company responsible for safety on that railway and providing access under existing agreements to its current customers.

QR Network notes and acknowledges that the provisions addressing change in management control are not fully developed in the form of the tabled construction agreement. QR Network has provided a drafting note that sets out its intentions in this regard. Notwithstanding the incomplete nature of the proposed treatment of change of management control, for which QR Network is unaware of any precedent in a comparable context in any industry anywhere, QR Network considers that it has provided sufficient information to explain its position to potential user funders and to enable effective consultation with them both directly and as part of the QCA's consultation process over user funding. QR Network intends to hold a workshop with potential user funders by February 2011 on this complex topic.

Prudency of capital works

Principle 25 of the Investment Framework provides that QR Network shall take cost prudency risk, ie the risk of the QCA not allowing on cost prudency grounds the inclusion of QR Network's incurred costs in its regulatory asset base. Under the construction agreement QR Network assumes certain cost prudency risk, notwithstanding its inability under the user funding arrangements to receive any compensation for assuming this risk.

The construction agreement provides that QR Network will assume cost prudency risk where the actual project cost exceeds the target cost, as varied in accordance with the construction agreement. QR Network considers that in the event of the actual project cost being lower than the target cost, the user funders should assume this risk.

QR Network's assumption of cost prudency risk does not apply in respect of the construction incentive fee or that portion of costs disallowed by the QCA on account of the procurement methodology adopted, since it is agreed with user funders prior to entry of the user funding agreements (and specified as a schedule to the construction agreement).

If the cost prudency risk mechanism of the construction agreement is triggered, QR Network shall pay to each user funder the amount of disallowed costs applicable to that user funder as a refund.

Construction Incentive Payment

As previously stated, the construction agreement has been developed on the basis of the principle that user funding should entail minimal, if any, uncompensated risks for QR Network. From the perspective of the user funders, in the absence of a construction incentive fee the construction agreement would be a cost reimbursement arrangement with no alignment of the economic interests of the user funders and QR Network.

QR Network considers that these commercial terms would not be optimal for user funders or itself. In QR Network's view considers that few, if any, major Australian enterprises would enter into significant construction contracts on either a cost reimbursement basis or a 'cost plus a fixed margin' basis.
QR Network has considered the structure of a construction incentive fee in order to bring about a greater degree of alignment between the parties' economic interests. The option proposed in the tabled form of the construction agreement is the payment of a construction fee the magnitude of which fully depends on the project outcomes. The floor level of the construction incentive fee band is always zero; in other words, regardless of the project outcomes QR Network will never have to pay a (negative) construction incentive fee.

Incentive fees would fall within a band that has
- 8% of target cost as its upper level, and
- 0% of target cost as its lower level.

An incentive fee of 8% would be payable if it turns out after the project is delivered that QR Network has achieved project outcomes that correspond to that fee level in a project outcomes/fee matrix specified in the construction agreement. The matrix would also define the project outcomes consistent with an incentive fee of 0%, as well as all intermediate points. The closer the project outcomes are to the level that matches the top of the construction fee band, the more the corresponding fee approaches 8%; the same applies in reverse to project outcomes as they approach the level that matches the bottom of the construction fee band.

In the form of the construction agreement, QR Network has included a project outcomes/fee matrix for which the project outcomes are time (ie actual availability date in relation to target availability date) and money (ie actual cost in relation to target cost). QR Network is open to consideration of alternative or additional project outcomes in order to achieve alignment with user funders' objectives. Some user funders may wish to set ambitious cost and time targets, in which case the upper level of the band would be higher than would otherwise apply and intermediate points in the matrix would be modified accordingly. QR Network considers that the precise pricing of the matrix should be addressed on a transaction-by-transaction basis on the basis of transaction specifics, many of which will be addressed in project schedules on matters such as scope, time and procurement methodology, and the objectives of the user funders in each such transaction. Doing so will allow QR Network to be flexible to meet its customers' needs for user funding on a case-by-case basis.

The proposed 'cost plus fee dependent on project outcomes' arrangement is similar to the remuneration basis commonly adopted in the Australian market for operational and maintenance services contractors in long-term service contracts with asset operators. The floor on the proposed fee is consistent with the usual approach adopted in Australian alliance contracts where the non-owner participants (ie contractors), which typically share projects' 'pain' (cost overrun) and 'gain' (cost underrun) outcomes on a 50/50 painshare/gainshare mechanism, cap their maximum 'pain' at their fee.

Due to the highly competitive nature of the construction and services contracting market, it is standard practice for both principals and contractors not to place contract margins or fees in the public domain. Even for government contracts, where there is a public interest in publication of contract terms, typically margins and fees are redacted. For example, a $70m rail contract on a managing contractor basis with the Victorian government has the pricing terms deleted:
http://www.old.tenders.vic.gov.au/Restore/21.12.10/etdrPublishing.nsf/bcb291d6f5b30eb74a256a790017d84e/d4429388587e9de1ca2575a5000104f1/Body/M2/Westall%20Rail%20Upgrade%20Project%20-%20Managing%20Contractor%20Agreement%20FINAL.pdf!OpenElement

QR Network notes that many of the potential user funders are significant enterprises that are active in construction and industrial services markets, and that it too is active in the same markets, often with the same contractors. QR Network also notes that a potential user funder without corporate experience in these markets is able to engage as its adviser a construction industry consultancy with extensive and up-to-date experience in contracting within construction and industrial services markets. This experience of user funders, their advisers (if applicable) and QR Network will facilitate the negotiation of a mutually acceptable construction fee/project outcomes matrix on a transaction-by-transaction basis.

Dispute resolution

QR Network has incorporated into the construction agreement a version of the staged dispute mechanism of QR Network's QCA-approved access agreements that is appropriate for a construction agreement. This version provides initially for referral to chief executives, and if they do not resolve the dispute, it must or may (depending on the issue at stake) be referred to an expert for binding determination, in the absence of manifest error. Disputes that are not determined by experts may be referred to a court. The dispute resolution mechanism permits QR Network to join user funders in a dispute between QR Network and another user funder (for the same user funding project).

Although Principle 52 states that disputes in respect of existing user funding agreements may be referred to the QCA for determination, QR Network does not consider that such a referral would be in the best interests of user funders or QR Network.

In the construction industry the contractual parties typically engage, for the purpose of dispute resolution, construction industry advisory consultancies who have the necessary specialist knowledge and experience to address the particular issue at stake. For example, for a dispute about a variation's effect on completion date, a specialist construction programming consultant would be a suitable expert. For a dispute about the suitability of a contractor's proposed scope for a non-discretionary variation, an experienced design and construction industry executive would be an appropriate expert.

Given the tightly-defined subject matter of the construction agreement, QR Network takes the view that its parties should directly select and engage any expert required for the purpose of dispute resolution, as doing so will allow the parties to select and engage promptly a construction industry advisory consultancy with the most appropriate skills and experience. If the QCA were to perform the role of expert, QR Network considers that the QCA would almost certainly need to engage such a construction consultancy, which would result in a slower and less efficient dispute resolution mechanism than the direct engagement of a construction consultancy by the parties to the dispute.

Participation Agreement

The participation agreement sets the key aspects of how the revenue attributable to the funding of the relevant rail infrastructure is provided to the user funder or the relevant party to which the user funders assigns its rights.

The principal objective of the distribution methodology is to ensure the user funders' distributions do not transfer cash flow or other business risks such as default to QR Network.

Monthly Distributions

As discussed in section 1 in relation to the proposed tax structure and tax effectiveness, the distribution methodology has been designed to align with the regulatory financial modelling.

As QR Network will not be depreciating the user funded assets in its tax books the distribution is made from QR Network's pre-tax revenues.

As the regulatory financial modelling determines the allowable revenues using a discounting of free cash flows by (1 + WACC)^0.5 to reflect an assumed uniform revenue profile over the year (allowable revenues are less than maximum allowable revenue) the distributions are made monthly in order to avoid any distortion or bias in favour of user funding.

The approved annual revenue requirement for the relevant year will be an aggregate of the capital charges for various assets including both QR Network funded and User funded assets. As the AT_1 and EC charges relate to operating and or maintenance costs the participation agreement provides a claim on the Total Actual Revenue (as represented by the AT_{2-4} and AT_5 tariff components) as invoiced on a monthly basis in direct proportion to the System Allowable Revenue. There will be retrospective adjustments to the extent that the amounts actually received by QR Network from access customers fall short of the invoiced amounts.

Volume Risk

Volume risk is mitigated under the regulatory framework through the revenue cap process. As the distributions are made from access revenue in the month it is earned a user funder is also subject to volume risk within a given year and the user funder will have

- in the event of a revenue shortfall for that year, a right to an additional corresponding distribution, and
- in the event of a revenue overrun for that year, an obligation to accept a corresponding reduction in its distribution

in the second subsequent year.

In order to avoid the potential for compounding effects of revenue caps and the increased complexity of determining the relative proportion of System Allowable Revenue attributable to relevant parties the distribution methodology requires that all claims (liabilities) associated with Revenue Cap Adjustment Amounts are cleared (recovered) prior to the allocation of the Total Actual Revenue associated with the System Allowable Revenue for that year.

As an example, where there is a revenue shortfall in year 1 of $6 million which gives rise to a positive revenue cap adjustment amount to be recovered in year 3 then an amount of $0.5 million per month will be deducted (and distributed) from access revenue in each month of year 3 prior to determining other distribution amounts for year 3.

Other Adjustments

The revenue cap adjustment process also includes adjustments to the approved system allowable revenue. As these adjustment amounts relate to operating and maintenance costs the Users distribution are determined independently of these amounts.

The Investment Framework may result in the access charges being based on a notional capital expenditure amount for a Significant Investment prior to the QCA's approval of the final access charge. Where the final access charge differs from the transitional access charge and the final charge has retrospective effect then the User Funders will receive the relevant Adjustment Charge amounts.

Worked Distribution Example

The following tables provide a worked example of the distribution methodology. The example shows the distributions and allocations of access revenue for the system allowable revenue and revenue cap adjustment amounts for both positive and negative revenue cap adjustments.

Table 3. Allocation of Allowable Revenues

Regulatory Cash Flows	Year 1			Year 3		
	Total	Allocators		Total	Allocators	
QR Network						
AT1	28,000	100%		28,560	1	
AT2	34,000			34,850		
AT3	79000			80,580		
AT4	79000			80,580		
Sub-Total SAR	192,000	76.19%	(A)	195,840	76.01%	(H)
AT5						
Sub-Total SAR	45000	100.00%		45900	100.00%	
EC	15,000	100.00%		15,300	100.00%	
Total Allowable Revenue	**280,000**			**285,600**		
User Funded						
AT2	9300			9532.5		
AT3	25350			26110.5		
AT4	25350			26110.5		
Sub-Total SAR	60,000	23.81%	(B)	61,800	23.99%	(I)
AT5						
Sub-Total SAR	0	0.00%		0	0.00%	
Total Allowable Revenue	**60,000**			**61,800**		
Allowable Revenue Summary						
Total SAR non-elec	252,000		(C)	257,640		
Total SAR elec	45,000			45,900		
Non SAR Revenue	43,000			43,860		
Individual Coal System Allowable Revenue	**340,000**			**347,400**		

Table 4. Distributions and Revenue Cap Adjustments

Volume Adjustments for Year 1	Positive Revenue Cap			Negative Revenue Cap	
Total Actual Revenue (Non-elec)	246,000		(D)	260,000	
Disbursements in year 1					
QR Network (D x A)	187,429	76.19%		198,095	76.19%
User Funding (D x B)	58,571	23.81%		61,905	23.81%
Revenue Cap Adjustment Amount (C - D)	**6,000**			**-8,000**	
Revenue Cap Credit (Debit) Amounts	Total	Monthly			
QR Network (monthly)	4,571	381	(E)	- 6,095	- 508
User Funding (monthly	1,429	119	(F)	- 1,905	- 159
Disbursements in Year 3	**July**	**August**		**July**	**August**
Total AT2-4 Access Revenue	29,653	33,520		32,940	34,600
less debits and credits					
QR Network (E)	381	381		- 508	- 508
User Funding (F)	119	119		- 159	- 159
Disbursement Balance (J)	**29,153**	**33,020**		**33,607**	**35,267**
less Disbursements					
QR Network (H + J)	22,160	25,100		25,545	26,807
User Funding (I x J)	6,993	7,920		8,061	8,459
Net Payments					
QR Network	22,541	25,480		25,038	26,299
User Funding	7,112	8,040		7,902	8,301
Total Payments	**29,653**	**33,520**		**32,940**	**34,600**
Balance	-	-		-	-

Variations to the Distribution Methodology

As the term of the participation agreement exceeds the length of the regulatory term the participation agreement includes appropriate review provisions to ensure the distribution methodology remains aligned to the regulatory framework over multiple regulatory control periods.

The objective of the participation agreement, ie the basis of its holder's entitlement to payment from QR Network on account of the user funding over the life of that agreement, has been defined to guide the determination of disputes and, if necessary, the development of a new distribution mechanism entailed by any future and as yet unknown changes in QR Network's regulatory regime.

Set off (and similar payment offsetting arrangements)

The construction agreement provides for the financial security from user funders to be phased out as expected future construction outgoings of QR Network diminish and the user funded infrastructure becomes available to user funders for the purpose of taking access. However, by the nature of the construction process, there may be unanticipated future outgoings, for example for defects rectification not covered by a contract with a QR Network subcontractor or a greater than expected payment for project land.
In order to ensure that QR Network has contractual certainty of receiving payment in respect of these construction outgoings,
the participation agreement includes an offset provision that allows for QR Network to deduct or withhold payments where there are outstanding amounts payable under the particular construction agreement that was originally linked to that participation arrangement.

Several industry participants during QR Network's user funding consultation to date have suggested that QR Network's revenues attributable to user funded assets should be

‘segregated’ from its other revenues, so that in the event of QR Network’s corporate distress the user funders’ right to revenues would not be adversely affected.

QR Network has considered this suggestion. Its starting point is the 2010AU, which states (in clause 7.5.5(h)(i)) that:

“Where [a user funder] intends to provide the funding required under its User Funding Agreement by way of debt financing QR Network remains entitled to provide its financiers with security over the Rail Infrastructure (including the funded Extension) and related cash flows….”

In the context of a user funder gaining, in return for its user funding, an entitlement to a portion of revenue from the upgraded coal system, as distinct from a revenue stream solely due to the user funded infrastructure, QR Network considers that such ‘segregation’ could not be achieved without materially prejudicing QR Network’s legitimate business interests. For example, typically project financiers seek a lien over revenue-producing contracts – QR Network is not prepared to grant a lien over all its revenue-producing contracts in favour of user funders. QR Network also is not prepared to place all of its revenues in an escrow account from which disbursements would be made to user funders and QR Network.
Both of these ‘segregation’ measures would be restrictive and may adversely affect the ability of QR Network and QR National to raise debt finance economically and on favourable terms. The user funding arrangements provide no offsetting compensation for this restriction and potential adverse effect. Accordingly QR Network has adopted a position on set off (and similar payment offsetting arrangements) consistent with the 2010AU.

Auditing and dispute resolution

The participation agreement includes provisions for the audit of QR Network’s calculation and payment of amounts pursuant to the agreement.

The proposed treatment of disputes under the participation agreement depends on the nature of the dispute. For disputes not related to the basis of payment to the holder of the participation agreement, QR Network proposes a dispute resolution mechanism similar to that proposed for the construction agreement. Given the straightforward nature of the participation agreement, QR Network expects that few such disputes will occur. For disputes related to the basis of payment to the holder of the participation agreement, QR Network considers that the QCA is the most suitable expert.

Assignment

As discussed in sections 1 and 2 of this document, the contractual separation of the entitlement to distributions under the participation agreement from the access agreement provides user funders with flexibility to manage their commercial positions. . The commercial structuring also permits a third party financier or investor to gain a direct contractual relationship with QR Network over the payment of distributions once the user funded infrastructure becomes available for use. That third party is not required to receive distributions indirectly through an intermediate relationship with the user funder.

The assignment provisions in the participation agreement are consistent with these intended outcomes.

4. Amendments not related to Investment Framework

This section of the document sets out additional amendments which have been included in the DAAU which are not directly related to the Investment Framework.

QR Network as elected to incorporate these limited number of amendments as they do not represent changes to or new policy positions. They have been identified as necessary to give proper effect to elements of the Final Decision which were not correctly addressed in the drafting or involve considerable administrative costs in the implementation.

While QR Network and other users may have other concerns regarding elements of the 2010AU which could be addressed or the drafting improved upon QR Network has not sought to address these issues as they may have the unintended consequence of delaying the implementation of the Investment Framework.

In addition to the matters discussed below, a number of grammatical and cross-referencing errors have been corrected.

Disclosure of Coal Access Agreements

Clause 5.4 of the 2010AU requires QR Network to publicly disclose access agreements for coal carrying train services excluding a predefined list of confidential matters and any additional matters which the Access Holder seeks to claim confidentiality and which the QCA subsequently approves.

The timeframes and processes to obtain these approvals are quite lengthy. In addition, QR Network is required to repeat the approval process for the exclusions for each new agreement or varied agreement. This is particularly relevant where an Access Holder enters new access agreements for new access rights rather than adding those rights to the Train Service Entitlement schedule in an existing access agreement.

To improve the efficiency of the process the DAAU includes additional requirements in 5.4(c) which provides for QR Network to obtain a standing exemption for additional matters which may be excluded from disclosed access agreements which could be applied to all access agreements entered into with that party.

Application of the Capacity Notification Register

Clause 4.7(a) of the 2010AU allows QR Network to offer an Access Seeker entry onto the Capacity Notification Register (CNR) where it has ceased negotiation due to a reduction in Available Capacity.

The most relevant example of where this might occur would be for all current access applications in excess of 85 million tonnes per annum at the Dalrymple Bay Coal Terminal once the rail capacity is contracted to align with terminal capacity and capacity ceases to be available.

Under the terms of 4.7(a) QR Network can only offer an Access Seeker entry onto the CNR where it has ceased negotiation. Therefore, in order to cease negotiation it is first necessary to commence negotiation through the issue of an Indicative Access Proposal and the necessary receipt of Notification of Intent to negotiate access.

This process involves significant and unnecessary administrative cost to QR Network in the handling of subsequent access requests where QR Network has already ceased negotiations with other Access Seekers for similar access rights.

To address these inefficiencies the DAAU includes and additional clause in 4.2(i) which enables QR Network to offer the CNR to an Access Seeker where QR Network has already ceased negotiations for similar access rights. This would permit subsequent access applications for DBCT would be immediately offered the CNR.

Transfer Fees

The 2010AU introduced a relaxation of transfer fees for transfers less than a period of two years to provide the coal industry greater flexibility in aligning entitlements across the supply chain by removing what was largely considered to be a barrier to transfers. The resultant cost transfer to access holders or their Customers who are not participants to transfer through the revenue cap was deemed to be a reasonable degree of socialisation to reflect the net benefits of the policy.

The policy intent of the relaxation was that it would apply to all new access agreements entered into after the approval date and within any agreements entered into prior to the approval date which are subsequently amended to include the UT3 transfer and resumption provisions.

To improve the clarity and give proper effect to the policy intent agreed in the Final Decision clause 7.3.6(l) has been amended to prescribe that the relaxation does not apply to transfers under an agreement prior to the approval date.

In relation to the not applying the relaxation of transfer fees to short term transfers without variation to the relevant access agreement the QCA noted in the Final Decision (p.138):

> *the Authority is reluctant to include this as a direct obligation in the undertaking as, on its own, it would be insufficient to give effect to the overall objective. This is because achieving the desired outcome would require an amendment to existing access agreements and may also require amendments to haulage agreements. The undertaking does not have the ability to require these agreements to be renegotiated.*

Clause 7.3.6(a) requires that the provisions in section 7.3.6 only apply where there are inconsistencies with an access agreement. The section also includes how the transfer fee for a UT1 agreement is to be determined for those agreements.

The drafting of 7.3.6(l) which gives effect to the relaxation of transfer fees for transfers includes reference to transfers determined under a pre-June2006 agreement. This has created commercial and regulatory uncertainty as to whether the relaxation could be interpreted to applying to these agreements even though the policy intent was clearly not to.

Ad-Hoc Train Services

The 2010AU included the defined term ‘Adhoc Train Services’. However during the implementation review of the network management principles and discussions with stakeholders regarding the development of an Alternate Operating Regime for the Dalrymple Bay Coal Chain it became evident that the definition does not align with the commercial and operational objectives.

The contested train path decision making process (CTPDP) is intended to provide a hierarchy of principles to guide train path allocation. During consultation on the AOR there appeared to be a general level of confusion and misunderstanding as to how adhoc train services where considered in the scheduling decisions.

While these amendments are not essential for the purpose of this DAAU, QR Network has modified the definition to provide Access Holders and Customer greater certainty as to how the CTPDP is applied and to materially reduce QR Network's regulatory compliance risk.

The revised definition is intended to reflect the following principles:

- where an access agreement does not include a train service for that origin to destination in the train order it is an adhoc service. This aligns to the common understanding of the spot market for above rail operations; and

- where an Access Holder has consumed its annual train service entitlement for an origin to destination all subsequent train orders for the that origin to destination are adhoc train services. This ensures that QR Network and other Access Holders (and their Customers) are afforded a reasonable opportunity to fulfil the annual contractual obligation for both the below rail entitlement and complimentary port entitlements.

An adhoc train service will obtain the lowest priority in train path scheduling decisions.

Wash-up of Electricity Traction Costs

The 2010AU included a pass-through approach to electricity traction costs as the prices are subject to competitive tendering and the volume and subsequent costs risks are not with the control of QR Network management.

The pass-through is given effect through the revenue cap process on AT_5 via an adjustment to the system allowable revenue.

The drafting in Schedule F, Part B clause 3.2.2(b) in the 2010AU requires the System Allowable Revenue to be adjusted to reflect the difference between the actual costs for the relevant year for providing electric energy and forecast costs used for the purpose of determining the Reference Tariff for the relevant year.

The EC charge is a function of the total energy cost forecast (egtk * mhwr/egkt * $/mhr) divided by the forecast egtk. It is essentially linear with volume subject to variance for loads and peak/off peak consumption. The forecast cost used for the purpose of the determining the Reference Tariff is also variable with volume or is assumed to be a constant rate per egtk. The actual cost is also a function of the actual volume.

In preparing the 2009-10 Revenue Cap submission QR Network noted that the provisions were not sufficiently clear. Accordingly, for the purpose of the submission it was assumed that the "forecast cost" was actual electric gross-tonne-kilometres (egtks) applied to the EC Reference Tariff component (i.e. egtk * $/egtk).

Also, the EC rate for both the Blackwater and Goonyella system is calculated with reference to the total forecast energy cost for the Central Queensland Coal Region and the combined egtk forecast. This involves a minor cost allocation from the Blackwater to the Goonyella system in recognition of the economies of scale reflected in the supplies prices by tendering for the total consumption in a single electricity retail agreement. However, by including reference to an individual coal system in the adjustment to system allowable revenues the resultant adjustments are not consistent with the methodology used to derive the Reference Tariff.

To improve clarity of the adjustments and to align with the basis of the reference tariff determination the DAAU has included amendments correct for these issues.

Attachment A – Synergies Report on Compensation for Operation and Maintenance of User-Funded Assets

Compensation for Operation and Maintenance of User Funded Assets

Report Prepared for QR National Network Services

January 2011

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Executive Summary

The Queensland Competition Authority (the Authority) approved QR National Network Services (QRNN's) September 2010 draft access undertaking[1] in October 2010 (the 2010AU). One of the most significant changes that was made to the 2010AU is the Investment Framework. A key feature of the Investment Framework is that it provides users with an option to fund expansions "if QRNN is unwilling to do so on terms that the Authority is prepared to approve" (User Funding).

If User Funding is invoked, the only revenue that QRNN will be able to receive in relation to this infrastructure is the approved operating and maintenance cost allowance. QRNN has requested Synergies Economic Consulting to consider the extent to which the proposed funding arrangements will provide it with sufficient compensation for the risks that it still bears in relation to user funded assets, once the infrastructure has been commissioned.

The report concludes the following:

1. The residual risks borne by QRNN in relation to user funded assets are as follows:
   (a) regulatory risk: that allowances for operating costs, maintenance costs and risk and insurance are under-estimated;
   (b) cost risk: that operating and/or maintenance costs increase relative to forecast due to factors beyond QRNN's control, including changes in volumes, with the exception of costs explicitly covered by self-insurance, being property damage from derailments or weather events and public liability;
   (c) performance risk: the risk that factors beyond QRNN's control impede its ability to effectively fulfil its responsibilities in operating and maintaining the assets (including providing access).
2. To the extent that it is not entitled to earn a return on capital on the user-funded assets, it is reasonable for QRNN to be compensated for these risks.
3. Compensation could be determined based on the standard risk management framework, which involves the following steps:
   (a) Estimation of the 'base case' efficient operating and maintenance cash flows, that is, the share of the approved regulatory allowances for operating and maintenance costs that are attributable to the user funded assets.

[1] QR Network 2010 Access Undertaking given by QR Network Pty Ltd

(b) Identification of the possible causes that could increase costs above the approved allowance. This should be limited to causes that are not within the control of QRNN but on the presumption that the reasonable and efficient costs of mitigating risks that are within QRNN's control are covered by the approved allowances. It should also exclude causes that are already assumed to be addressed via self-insurance.

(c) For each cause, establish a plausible range for the possible increases in costs and assign probabilities.

(d) A probability-adjusted impact can then be determined, which forms the basis for the margin or fee.

4. A profit component could be included consistent with the self-insurance allowance as approved by the Authority. EBIT margins for similar infrastructure services firms could be examined as a reasonableness check.

5. The costs of mitigating risks that remain within QRNN's control may still be compensated, based on the efficient costs of mitigation as approved by the Authority.

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Introduction

The Queensland Competition Authority (the Authority) approved QR National Network Services (QRNN's) September 2010 draft access undertaking[2] in October 2010 (the 2010AU). One of the most significant changes that was made to the 2010AU is the Investment Framework, which was proposed by the Authority in its Final Decision published in September 2010.[3] A key feature of the Investment Framework is that it provides users with an option to fund expansions "if QRNN is unwilling to do so on terms that the Authority is prepared to approve" (User Funding).[4]

If the User Funding option is invoked, the user-funded infrastructure will be owned and operated by QRNN. It is intended that the users' capital investment will be refunded to them based on the depreciation profile. They will also receive a return on capital on the outstanding balance of the funding. In effect, the only revenue that QRNN will be able to receive in relation to this infrastructure is the approved operating and maintenance cost allowance.

There are a limited number of potential implications of the User Funding framework that have not been considered in detail. At this stage, QRNN has requested Synergies Economic Consulting to consider the extent to which the proposed funding arrangements will provide it with sufficient compensation for the risks that it still bears in relation to user funded assets, once the infrastructure has been commissioned.

QRNN has already made reference to this issue in its April 2010 submission to the Authority in the context of the User Funding framework.[5] However, the Authority did not respond to this matter in the Final Decision.

This response will consider the following:

- the relevant provisions in the 2010AU;
- the residual risks borne by QRNN in relation to assets that have been fully or partially funded by users;
- QRNN's existing compensation mechanisms;
- QRNN's entitlements in relation to compensation for risk;

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[2] QR Network 2010 Access Undertaking given by QR Network Pty Ltd

[3] Queensland Competition Authority (2010a). Final Decision: QR Network's 2010 DAU, September.

[4] Queensland Competition Authority (2010a). p.ii.

[5] QR Network (2010). QR Network's 2010 Draft Access Undertaking, Volume 1 – Policy Issues, 14 April, pp.38-40.

- how compensation could be provided; and
- next steps.

Overview of relevant provisions

Clause 7.5.5(a) of the 2010 AU provides that all Access Seekers (or their customers) can choose to fund the costs of an Extension[6] even if QRNN is willing to do so (replacement capital expenditure is excluded). Any Extension that has been partially or fully funded by users will be owned and operated by QRNN and will form part of the Rail Infrastructure. As a consequence, QRNN will continue to bear the obligations and risks associated with the ownership, operation and maintenance of those assets.

User funding relates to the capital costs of the project only. Operating and maintenance costs will continue to be borne by QRNN and it will continue to recover an allowance approved by the Authority via the Reference Tariff. Clause 7.5.5(n) provides that unless a User Funding agreement specifies otherwise, funding users will:

> (i) have their capital investment refunded to them by QR Network in accordance with the depreciation profile associated with the capital expenditure;
>
> (ii) receive from QR Network a return at the varied WACC or Approved WACC (as applicable to the Extension being funded) on the un-refunded balance of the funding provided; and
>
> (iii) receive from QR Network compensation for any tax or other financial benefits accruing to QR Network as legal owner of the Rail Infrastructure created by such funding,
>
> subject to QR Network receiving Access Charges in respect of the Capacity developed by User Funding that are sufficient to make such payments after meeting approved operating and maintenance costs in respect of utilisation of such Capacity.

The practical effect of these provisions is that in relation to any assets that have been fully or partially funded by users, QRNN will only be entitled to receive revenue that is sufficient to cover the approved allowance for operating and maintaining those assets. It will not be entitled to recover a return on capital. The question is whether as a consequence, QRNN will be adequately compensated for the risks that it still bears in relation to user funded assets. In order to address this we will first consider:

[6] An Extension "includes an enhancement, expansion, augmentation, duplication or replacement of all or part of the Rail Infrastructure. An Extension may include a number of related Infrastructure Enhancements on different parts of the Rail Infrastructure".

- the nature of the risks that QRNN continues to bear
- the extent to which it is compensated for these risks.

The scope of our review is the risks of ownership once the assets have been commissioned. There will be issues in relation to the allocation of risks during the construction phase that QRNN has advised are addressed as part of the Standard User Funding Agreement – Construction Agreement.

Risks borne by QRNN

Risks that have been transferred to users

The specifics of the Standard User Funding Agreement(s) require that users will be either fully or partially contributing the upfront capital cost of the infrastructure.

Users will receive a return of that capital based on the agreed depreciation profile. Users will also be entitled to receive a return on the unfunded balance of the capital they have provided (at the regulated WACC). QRNN must also remit any tax or other financial benefits that accrue to it as legal owner of the assets.

QRNN retains full responsibility for operation and maintenance of the infrastructure based on its obligations under the undertaking. It would appear that the main risk that it has transferred to the funding users is the risk of asset stranding (only in relation to the portion of the asset that has been funded by users). This risk is not compensated by the Weighted Average Cost of Capital (WACC) because it is asymmetric in nature. The Authority has recently stated that:[7]

> The Authority agrees with QR Network and Synergies that the CAPM does not compensate the firm for asymmetric risk.

Funding users will receive a return on or of capital to the extent that access charges received are sufficient to provide the distribution. As a consequence the User Funder will be fully exposed to volume risk subject to any mitigation of that risk via the revenue cap. This in turn means that users already bear the risk that the actual revenue received by QRNN from access charges is less than its System Allowable Revenue (unless that shortfall is due to breach or negligence by QRNN).

Users are in fundamentally the same situation here. Where the assets are funded by QRNN, users will fund any revenue shortfalls via an increase in Reference Tariffs

[7] Queensland Competition Authority (2010b). Draft Decision, QR Network's 2010 DAU – Tariffs and Schedule F, June, p.48.

(excluding shortfalls that are attributed to QRNN's breach or negligence). Where the assets are funded by users, any revenue shortfall will result in a deferral of the return on and/or return of capital that the funding users would have otherwise been entitled to.

Risks retained by QRNN

QRNN has transferred the risks that arise as a consequence of having to fund investment in network infrastructure (the most significant of which is asset stranding). However, it still has responsibility for the ownership, operation and maintenance of the assets and in so doing has retained the associated risks.

One such risk is regulatory risk, which is the risk that the operating and maintenance cost allowances approved by the Authority do not provide QRNN with sufficient compensation based on the reasonable and efficient costs of operating and maintaining the assets. As an efficiency factor is also built into these costs via the X factor adjustment there is a further risk that the X factor is over-estimated (which will further exacerbate the impact on the business if the costs themselves have been under-estimated). There is also a risk that the allowance approved by the Authority for risk and insurance is under-estimated.

There is also a risk that QRNN's own estimate of the reasonable and efficient costs of operating and maintaining the network have been under-estimated, noting the inherent difficulties in forecasting the scope and cost of the maintenance task for the horizon of the regulatory period. One of the main uncertainties here is volume growth and the impact that material deviations between forecast and actual volumes could have on the scope and cost of the maintenance task.

If QRNN is required to expand the network where it does not consider that it is commercially justified to do so – regardless of whether it is required to fund the investment or it is funded by users - it may also be required to bear incremental costs that are not considered efficient (and hence also may not be compensated as part of the approved allowance). QRNN cannot avoid these avoid these costs. They must therefore ultimately be borne by its shareholders.

The revenue cap did transfer a significant proportion of QRNN's volume risk to users. In the 2010 AU, a provision has also been made for QRNN to update System Forecasts at the beginning of each year and propose any consequent adjustments to System Allowable Revenue and Reference Tariffs. However, this does not extend to reviewing the impact of the revised volumes on the operating and maintenance cost allowances.

The main purpose of this change was to reduce the potential magnitude of revenue cap adjustments that flow through to users via changes to the Reference Tariff. Once approved by the Authority the operating and maintenance cost allowances are set for the duration of the regulatory period. As noted above, an incentive to improve efficiency has also been built into the allowances by the X factor adjustment that is applied to Reference Tariffs.

QRNN also bears the risk of other issues arising that are beyond its control, such as significant weather events. This could increase its actual operating and/or maintenance costs above the approved allowance. It could also impede it from effectively fulfilling its responsibilities in operating and maintaining the assets, including providing access (noting that some events may constitute a Force Majeure). Depending on the extent to which the issue is deemed an act of breach or negligence, this will also affect QRNN's ability to recover amounts under the revenue cap. (We note that while breach or negligence has not been clearly defined in this context, we would expect that any such acts could only be deemed to be such if they were directly within the control of QRNN.)

It has also been proposed that QRNN develops a revised incentive mechanism.[8] This mechanism will be based on symmetric incentives (that is, positive and negative) and is to be capped at 5% of System Allowable Revenue. Depending on how this is to be reflected in any distributions made to users in relation to user funded assets, QRNN may be unable to retain any benefits of outperformance while continuing to bear the consequences of underperformance (that is, its risk could be asymmetric). Further, if the revenue at risk is 5% the expansion of the network via user funding could change the relativity of this risk to be greater than 5% of QRNN's revenues compared to total revenues.

Another risk that QRNN bears is liability for damage, loss, injury or death arising as a consequence of the operation of a train service on the network or from a failure or defect in the infrastructure. Under the Standard Access Agreement (SAA), QRNN will be liable if this occurs as a consequence of its own breach or negligence. Similarly, an operator or end user could also be liable if it was a consequence of its breach or negligence.

In practice, the causes of network incidents can be complex and responsibility may not be able to be attributed to one party. The SAA does not specifically deal with the consequences of events where the responsibility cannot be clearly attributed. By default, QRNN will bear this risk.

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[8] Queensland Competition Authority (2010b).

Finally, QRNN will still retain responsibility for the ongoing integrity and performance of the network infrastructure, once constructed. It is also noted that funding users have the right to seek approval from the Authority to develop the Extension themselves if QRNN is seen to be unnecessarily delaying construction. This could impose some additional risks on QRNN to the extent that it has not been able to fully control the design and construction of infrastructure that it must subsequently assume responsibility for.

Implications

In conclusion, it would appear that the main impact that User Funding has in relation to the allocation of risk for Extensions is that it transfers the risks that arise as a consequence of funding the asset from QRNN to users (depending on the portion of the Extension has been user-funded). The most significant of these risks is asset stranding.

Where User Funding is invoked, QRNN has no choice in relation to the ownership of the assets (recognising the practical difficulties that would arise if parts of the same network were owned by different entities). It is obligated to own, operate and maintain the infrastructure in accordance with the provisions of the undertaking. This in turn requires that it still bears all of the risks associated with these obligations, as set out above.

We will now consider the extent to which QRNN is compensated for these risks.

Existing compensation mechanisms

Operating costs

QRNN's system-wide and regional cost allowance provides compensation for the costs incurred in planning, operating and managing the network, including the provision of access. This includes the costs associated with:

- train control, safeworking and operations
- infrastructure management
- business management (including rail access services).

The cost build-up includes the direct costs incurred at a regional and system-wide level, plus an allocation of corporate overheads. QRNN is also provided with an allowance for risk and insurance, which is considered separately below.

Maintenance costs

QRNN's maintenance cost allowance provides compensation for what the Authority has deemed to be the efficient costs of maintaining the rail network infrastructure. QRNN estimated its proposed allowance based on a build-up of the direct costs incurred in each of the maintenance activities, based on the assumed scope of each maintenance task.[9]

QRNN had also proposed the inclusion of a margin which was intended to provide a return on the assets used for maintenance activities (noting that these assets are not included in the Regulated Asset Base), as well as corporate overheads, working capital and an incentive/contingency margin. This was also seen as being compatible with a typical maintenance alliance structure, with maintenance activities undertaken by a related party (QR Services).

The QCA reduced QRNN's proposed margin in its June 2010 pricing decision.[10] It determined that it would allow a 5.75% margin for corporate overhead and working capital, but that it should only apply to direct labour costs. It rejected the 5%incentive/contingency margin:[11]

> ...because, even though it might be reasonable for such a margin to be in a commercially negotiated alliance contract, the Authority does not consider it is a reasonable to have such a margin in a non-negotiated contract with a related party...

It considered that it was reasonable to include a "profit margin" to provide a return on capital equipment, but that this must be based on the regulated WACC. It also noted that:[12]

> In reaching these conclusions, the Authority considers that non-tendered arrangements with related parties should be costed on the same basis as if QR Network had undertaken the work itself. Were this the case, QR Network would receive only its normal WACC and it would not receive any additional margin for risk/profit in addition to estimated efficient costs. It would however incur an increased share of QR Ltd's overhead costs, as its cost base would be larger with the inclusion of the costs now being incurred by QR Services on its behalf.

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9 QR Network (2008). QR Network's Access Undertaking (2009), Volume 2- Central Queensland Coal Region Reference Tariffs, September.

10 Queensland Competition Authority (2010b).

11 Queensland Competition Authority (2010b). p.76.

12 Queensland Competition Authority (2010b). p.76.

In other words, if QRNN had undertaken the work itself, the regulated WACC would be deemed sufficient compensation for risks and profit by the Authority.

Risk and insurance

In 2010 the Authority also approved an allowance of $26.7 million for risk and insurance (QRNN had submitted a claim for $29.3 million). This allowance is intended to compensate for the costs of necessary insurance policies, including industrial special risks and liability. It also included an allowance for the cost of risks that are self-insured, which includes property damage and public liability. The categories of property damage considered include:

- derailments (noting that derailment rectification costs were excluded from the maintenance cost allowance);
- weather events (noting that restoration works for flood events were also excluded from maintenance costs);
- dewirements (the labour costs associated with these events were included as part of maintenance costs);
- earthquake and other perils (which will be treated as a pass-through).

A 15% allowance was also provided for profits and the net cost of reinsurance.

The estimate of the cost of risk covered by the self-insurance allowance was based on an actuarial assessment. This in turn relies on historical data to inform estimates of the probability and impact of key events, noting that the available data is limited. This is particularly the case in relation to accessing information prior to the commencement of economic regulation as there was no requirement to capture data for those purposes.

For example, we understand that based on the flood events experienced in Queensland in 2008 and at the end of 2010, the allowance for the cost of weather events is likely to have been materially underestimated. While the Undertaking includes a Review Event for Force Majeure events with a cost in excess of $ 1 million, QRNN bears all losses for events which exceed the implicit premium of approximately $100,000 per annum for events in aggregate and the $1 million review event threshold.

Weighted average cost of capital

WACC is intended to compensate the providers of capital (lenders and equity holders) for the risks they bear as a consequence of committing funds to an 'efficient

benchmark' business based on the risk profile of that business and the industry it operates in.

The cost of debt reflects the cost of obtaining debt funding for an 'efficient benchmark firm' based on the assumed notional credit rating. The cost of equity compensates equity investors for the non-diversifiable risks associated with their investment. These non-diversifiable risks include economy-wide factors that impact on the returns of the firm (via revenues and/or costs).

If User Funding is invoked users will be raising the necessary capital from lenders and equity holders, rather than QRNN (based on the same regulated risk profile). For this reason, it has been proposed that the return on capital is passed through to users who elect to fully or partially fund Extensions as these users will be required to earn a return on the capital that has been provided.

Implications: is existing compensation adequate

The key question that remains is the extent to which QRNN (and its shareholders) continues to be exposed to risks for which it is not compensated as a consequence of having an obligation to own, operate and maintain a user-funded Extension. The risks associated with funding the infrastructure have been transferred to users. However, QRNN is still responsible for bearing all of the costs associated with operating and maintaining the infrastructure, including providing access. It can also be liable for loss or damage arising from its own breach or negligence but could also bear costs where responsibility cannot be clearly attributed. It will also bear the risks associated with the ongoing integrity and performance of the infrastructure.

QRNN will be entitled to recover the approved operating and maintenance cost allowance that relates to the user funded Extension, including an allowance for risk and insurance. The return on capital that it would have otherwise earned on the infrastructure must be remitted to the funding users.

An assessment of extent to which the existing compensation mechanisms will compensate QRNN for these risks is provided in the following table.

Table 1 Assessment of risks and compensation

Risk	Compensation under User Funding	Assessment
That the regulator approved allowance under-compensates QRNN for the reasonable and efficient costs of operating and maintaining the network (including risk and insurance), whether that be due to the fact that QRNN has under-estimated the allowance or the Authority approves a lower amount compared to what was sought.	No compensation	QRNN will not be compensated for the regulatory risk it continues to bear in relation to user funded assets.
That actual operating and maintenance costs increase above forecast for reasons beyond QRNN's control, such as changes in volumes or weather events.	There is no compensation for the extent to which changes in volumes impact the scope and cost of the maintenance program within the regulatory period. The self-insurance allowance funds the cost of the risks associated with: • property damage from derailments and weather events • public liability.	QRNN is not compensated for the risk that operating and maintenance costs increase due to changes in volumes relative to forecast during the course of the regulatory period. It is compensated for the risk of property damage from derailments and weather events, but only to the extent that the allowance is based on a reasonable estimate of the costs of self-insuring against these events. It is understood that based on recent weather events, these costs may have been under-estimated. There is no compensation for other issues beyond QRNN's control that could result in an increase in its operating and maintenance costs above forecasts.
That QRNN is impeded from effectively fulfilling its responsibilities in operating and maintaining the assets, including providing access.	No compensation, other than provisions for self-insurance as described above. Self-insurance allowance is based on the costs of rectifying the network after an event. It will not capture the full impact of these events on the business or QRNN's inability to provide access.	Depending on what is seen to constitute 'breach or negligence', QRNN could be liable under the revenue cap. It is not compensated for this risk (whether the risk creates a specific liability to customers or has some other business impact). This risk could be exacerbated depending on how distributions that must be made to users in relation to user funded assets are determined in view of the revised incentive framework.
QRNN is liable for loss, damage, injury of death.	To the extent that this risk is within QRNN's control, it would implement mitigation strategies to reduce the risk (as any business would), provided they were cost effective (noting that QRNN does not have an option to avoid the risk). The efficient costs of these strategies should be part of its allowable revenue. We have not examined whether these costs are currently compensated.	Self-insurance allowance intended to address public liability. For the balance of risks relating to liability, QRNN should be entitled to recover the efficient costs of taking reasonable, commercial steps to mitigate its exposure to this risk.
Risks associated with the integrity and performance of the network infrastructure.	Should be addressed via design, construction, ongoing maintenance, and response to network incidents.	QRNN's exposure depends on the extent to which any of these potential causes are beyond its control. Ability to retain sufficient control over design and construction will need to be addressed in Standard User Funding Agreement. Once the infrastructure is commissioned, the ongoing risks

Risk	Compensation under User Funding	Assessment
		associated with its integrity and performance have been addressed above.
Risks associated with funding, owning and operating capital equipment used in the maintenance program.	Return on capital equipment provided at the regulated WACC.	Risk is compensated provided regulated WACC does not under-estimate the return required by investors for this risk profile in the current market environment.

In conclusion, there are some risks that are compensated but there are others that are not. The main risks that are not compensated in relation to user funded assets are as follows:

- regulatory risk, in particular, the risk that the allowances approved for operating and maintenance costs, including risk and self-insurance, are under-estimated;
- the risk that operating and maintenance costs increase due to changes in volumes relative to forecast during the course of the regulatory period;
- the risk that operating and maintenance costs increase based on other reasons beyond QRNN's control, where those factors are not currently addressed as part of self-insurance;
- the risk that the allowance approved for self-insurance proves inadequate relative to actual costs, based on more recent data that was not reflected in the actuarial assessment that informed the UT3 approval;
- the risk that factors beyond QRNN's control impede its ability to effectively fulfil its responsibilities in operating and maintaining the assets (including providing access) and this has an adverse impact on the business (whether that be via the revenue cap or otherwise).

It may have been presumed that these risks are compensated via the WACC. Indeed, as outlined above, in considering whether an allowance for risk and profit should be included as part of the contractor margin included in its maintenance costs, the Authority stated that if QRNN had undertaken the work itself:[13]

> QR Network would receive only its normal WACC and it would not receive any additional margin for risk/profit in addition to estimated efficient costs.

[13] Queensland Competition Authority (2010b). p.76.

QRNN must remit the full amount of the WACC that would be earned on the user-funded assets to the funding users. The only extent to which a rate of return can be recovered is on the capital equipment used in the maintenance program.

The following section will consider whether it is reasonable that QRNN should be compensated for these risks and how it might be compensated.

Entitlement to compensation for risk

Section 168A of the *Queensland Competition Authority Act 1994* provides that in pricing access to a service that price should, amongst other things:

> (a) 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...

In accordance with economic theory, and what we would observe in commercial practice, if a business is faced with risk – and that risk is material – it has a couple of options. First, it can accept the risk and implement measures that either:

- reduce the probability of occurrence (meaning it must have some ability to control the risk); or
- reduce the impact on the business.

Risk mitigation activities will typically involve a cost which will be factored into the cash flows.

If the impact of the risk cannot be mitigated, it is only likely to bear the risk if it is seen as being adequately compensated for it (via the risk-adjusted rate of return). If it is not compensated, the rational response would be to avoid the activity. Even if the expected outcome from the probabilities of the relevant risk is zero, where the firm does accept the risk it will still require compensation for exposure to 'bad' states.

The only circumstances under which it would accept uncompensated risk is where the impact of the risk is seen as being reasonably immaterial (and hence able to be absorbed by the business).

QRNN has no choice but to accept responsibility for these risks. QRNN should therefore be entitled to reasonable compensation for those risks that are not already compensated, as discussed above. If it is not compensated and the risks are material, the value of the business will be eroded and the extension of the network would not be in the service provider's legitimate business interests.

How can compensation be provided

Recognising that QRNN will not be entitled to earn its regulated WACC on user-funded Extensions, there are a number of options that could be considered as alternative ways of providing compensation for the risks borne. These risks can categorised into three main areas.

1. regulatory risk: that the approved allowances for operating costs, maintenance costs and risk and insurance are under-estimated;

2. cost risk: that even if the allowance approved at the beginning of the regulatory period are considered reasonable based on the expected scope and cost of work, operating and/or maintenance costs increase relative to forecast due to factors beyond QRNN's control, including changes in volumes, with the exception of costs explicitly covered by self-insurance, being property damage from derailments or weather events and public liability;

3. performance risk: the risk that factors beyond QRNN's control impede its ability to effectively fulfil its responsibilities in operating and maintaining the assets (including providing access).

Another risk identified previously was the risk that the self-insurance allowance has been under-estimated, based on more recent data that was not reflected in the actuarial assessment that informed the UT3 approval. This is better addressed by seeking an increase in that allowance (although this is not likely to occur before UT4). The risk that would then remain is the regulatory risk associated with this allowance.

As a general principle we consider that the most efficient and effective way of addressing risks that are within QRNN's control is via mitigation, provided this is cost-effective. Mitigation includes strategies such as insurance but could also include a number of other activities, such the implementing risk management frameworks, staff training, monitoring and audits etc. The reasonable and efficient costs of implementing mitigation strategies should then be compensated via the operating and maintenance cost allowance. We have not examined the extent to which this currently occurs.

If this principle holds in practice, the focus of compensation will be those risks that are beyond the organisation's control. However, if QRNN is not able to recover the reasonable and efficient costs of activities that mitigate risks that are within its control, this becomes an additional source of regulatory risk.

Options

1. Cost pass-through

Regulatory and cost risk could be addressed by a cost pass-through. That is, rather than being based on a benchmark allowance, the costs relating to the operation and maintenance of user-funded assets are passed through based on actual costs. This would not necessarily address performance risk.

One of the main difficulties with this approach is isolating the costs of operating and maintaining user-funded extensions from other costs. One simple and transparent way of doing this would be to apportion the costs to user-funded assets based on their proportion of the total asset base. It could also be managed via an adjustment to the return on and return of capital that is remitted to users.

This approach could be seen to give rise to inconsistencies between the treatment of user-funded assets and assets that have been funded by QRNN. It may also be seen to be inconsistent with the design of an incentive-based regulatory regime, including the provision of incentives to improve efficiency.

2. Review event

Under this option QRNN would still receive a regulator-approved operating and maintenance cost allowance, however could seek to recover unanticipated increases in costs via a review event. Such an adjustment would be more suited to cost increases resulting from one-off events. It would not, for example, necessarily address more general increases in costs through time. This option would only partially address regulatory risk (as the increase would still need to be approved by the regulator) and is not likely to address all cost risks. It would not address performance risk.

This could be a more effective means of addressing increases in costs due to specific one-off events. Otherwise, similar issues arise to Option 1.

3. Operation and maintenance of user-funded assets can be outsourced to a third party

As outlined above, if a business is not willing to accept the risks associated with a particular activity, one option that may be available to it is to outsource that activity. QRNN could outsource the maintenance of user-funded assets to a third party (noting that it already 'outsources' many of these activities to a related party). However, it only removes the risk if QRNN can be effectively removed from the arrangement, that is, the contract for maintenance is between users and the third party (which is not what the 2010 AU currently contemplates). If not, QRNN will still bear the risks associated with recovery of the costs of the contract, although if it has been awarded on a fully

contestable basis, it is presumed that obtaining the Authority's approval for these costs should be more straightforward.

The main problem with this approach is that QRNN is maintaining responsibility for more than just maintenance, as outlined above. It also has responsibilities as owner and operator of the infrastructure than cannot be easily outsourced.

This option is therefore unlikely to be viable.

4. Risk margin

Instead of the full regulated return on capital (which the Authority has already determined cannot be earned by QR Network), it could receive a margin for the residual risk it bears. This is the same concept as the payment of an operator margin or management fee, where an asset owner outsources operations and maintenance of its assets. The exception is that in this case, QRNN is still the owner of the asset although it is not entitled to the benefits of ownership that have been remitted to the funding users (including the ability to earn a risk-adjusted return). For the reasons outlined above, QRNN should still be entitled to compensation for the risks that it continues to bear, including a 'profit' component.

The rationale for the inclusion of the profit component is that without it, there is no incentive for the business to undertake these activities as it is not generating any value for its shareholders (noting that QRNN has no choice but to own and operate the assets). Exposure to uncompensated risks could also reduce the value of the business given they will usually have a direct cash flow impact. If QRNN outsources any of it operating and maintenance activities there is an expectation that the contractor would receive reasonable compensation for the risks borne, as well as an appropriate profit margin.

There is some regulatory precedent for the payments of margins or fees to third parties for the delivery of services. The key issue will how the margin will be determined. This is explored further below.

Risk margin: regulatory precedent

Victorian Rail Access Regime

There have been few examples of this issue in rail. The Victorian Freight Pricing Order made in 2001 approved the recovery of an Allowable Margin, which in addition to covering overheads and administration costs, provided for:[14]

[14] Rail Corporations Act 1996, Dynon Terminals Pricing Order 2001, Schedule 6.

> ...a reasonable return on Operating and Maintenance Costs, having regard to the risks involved in incurring the Operations and Maintenance Costs.

The margin was set at either 10% or another amount that was considered to provide a reasonable return for the risks involved. A return on capital or WACC was not otherwise provided for in the cost base as it was understood that the businesses were required to value the assets at zero.

The Essential Services Commission (ESC) examined the ongoing application of this margin as part of its review of the Rail Access Pricing Guideline in 2006. A key consideration in this context was that the regulatory regime had subsequently allowed for a return on capital, but only on investments made after 1999. The ESC therefore determined that the Allowable Margin could no longer be charged on post-1999 investments, but could be charged on pre-April 1999 assets given access providers were precluded from earning a return on these assets. The ESC therefore concluded that:[15]

> ...the access provider should receive an appropriate incentive for performing its role as manager and operator of pre 30 April 1999 assets, as well as compensation for specific costs and risks not otherwise factored into the cost benchmarks, or where these risks are not reduced or offset by the incentive mechanisms within the pricing framework.

This treatment remains the case in the current Rail Access Pricing Guideline.[16]

Energy sector

Most of the regulatory precedent in relation to operating margins or management fees, (especially more recently) has been in the energy sector. The issue has been contentious but because in the most part, the margin or fee was paid to a related party.

As part of the 2006 gas distribution access review concluded by the Authority in 2006, Envestra submitted a claim for a 3%[17] management fee for activities undertaken by a related party as part of its non-capital costs forecast. The Authority's consultant commented that related party transactions had been a contentious issue (however did

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[15] Essential Services Commission (2006). Victorian Rail Access Regime, Rail Access Pricing Guideline, Version 1.0, January, p.45.

[16] Essential Services Commission (2009). Rail Access Pricing Guideline, Version 2.0, June.

[17] 3% is applied to total network revenue.

not discuss the management fee in detail). Otherwise, there was very little discussion of the fee in the Authority's determination. The Authority concluded:[18]

> The Authority is concerned that outsourcing arrangements can reduce transparency, particularly where there is not a high degree of independence between the parties. However, the Authority has not removed the management fee and has assumed that this fee and the related incentive payment to OEAM will, over time, result in lower costs to consumers.

It therefore accepted the management fee.

The ESC also examined this issue as part of its gas access arrangement review concluded in 2008, with a number of access providers submitting claims for an operator margin or management fee. This included Envestra, which again submitted a proposed management fee of 3% (which was applied to both capital and non-capital costs). The ESC noted its support in principle for such compensation:[19]

> The Commission accepts that any third party contractor will require compensation for its endeavours over and above the actual cost of undertaking the contracted activities. A third party contractor would expect to be able to recover all of the economic costs that it incurs to provide the outsourced activity and would expect to benefit from superior performance. Otherwise it would not contract to undertake those activities. Such compensation is not necessarily inconsistent with an efficient level of costs, particularly where the contractor has the ability to provide the service at a lower cost than the distributor could do so itself or obtain elsewhere.

However, it also noted that it was difficult to benchmark these margins against comparable companies.

In Envestra's case, the ESC was not convinced that its proposed contractor costs, including the 3% management fee, were lower than the costs that would be incurred by Envestra if it operated the network itself. It therefore only allowed 50% of the management fee. This amount was assumed to represent the efficiencies achievable by the contractor that may not be able to be achieved by Envestra itself.

Envestra subsequently appealed this decision, which was heard by the Essential Services Commission Appeal Panel (the ESC Panel).[20] The ESC Panel noted that a key

[18] Queensland Competition Authority (2006). Revised Access Arrangement for Gas Distribution Networks: Envestra, p.119.

[19] Essential Services Commission (2008). Gas Access Arrangement Review 2008-2012, Final Decision – Public Version, March, p.76.

[20] Essential Services Commission Appeal Panel (2008). Reasons for Decision – Appeal by the Albury Gas Company Ltd (Envestra Albury), E2/2008, November.

rationale provided by the ESC for reducing the management fee claim was because upon privatisation in 1999, Envestra had failed to fully evaluate the costs of outsourcing its operating activities versus retaining them in-house. It determined that this was unreasonable grounds to reduce the claim. Accordingly, it determined that the full 3% management fee payable to Envestra's contractor (Origin Energy Asset Management) should be included.

The Australian Energy Regulator has also had to consider this issue on a number of occasions. Jemena Gas Networks (JGN) has 'outsourced' its operating and maintenance to a related party, Jemena Asset Management (JAM).[21] As part of the review of its access arrangements considered earlier this year, JGN submitted a claim for the fee it pays to JAM, which is based on the costs incurred in delivering the services plus a margin. The margin consists of a base margin plus a smaller performance margin. JAM outsources some of the activities it undertakes to other parties. The margin is levied regardless of whether JAM undertakes the activity or it is outsourced.

The AER considered that compensation of such a margin is not necessarily incompatible with the National Gas Rules, provided the total costs proposed by the business (including the margin), deliver the lowest sustainable cost of providing the service. The AER approved the payment of a margin but only on activities directly undertaken by JAM. The approved rate was not published in the decision.

The AER also considered this matter in the Victorian electricity distribution network determination (where outsourcing of activities is also a common practice, particularly to related parties).[22] Again, much of the focus of this review was third party outsourcing arrangements and the extent to which parties were incentivised to enter into these arrangements on commercial, arms-length terms.

The AER had stated that the regulatory regime does not explicitly provide a profit allowance per se, but instead, allows service providers to earn a return on capital as part of its building blocks revenue. The AER stated that compensation of a margin (above direct costs) was considered legitimate:[23]

- to compensate for a share of the contractor's corporate and other indirect costs

[21] Australian Energy Regulator (2010a). Final Decision – Public, Jemena Gas Networks, Access Arrangement Proposal for the NSW Gas Network, June.

[22] Australian Energy Regulator (2010b). Final Decision, Victorian Electricity Distribution Network Service Providers, Distribution Determination 2011-2015, October.

[23] Australian Energy Regulator (2010b). p.299.

- to provide a return on and return of assets owned and utilised by the contractor, but only where those assets are not already contained in the service provider's regulatory asset base (RAB)
- to compensate for asymmetric risks faced by the contractor, but only where the service provider's proposed self insurance allowance has been reduced commensurately with the risks passed on to the contractor that it no longer faces, and
- to retain the benefit of historical efficiencies for a period of time.

The AER had also previously examined this issue as part of its review of Advanced Metering Infrastructure (AMI) charges.[24] In that decision, it rejected the inclusion of related party margins submitted by four of the five service providers on the basis that the margins did not relate to activities associated with the provision of the regulated services. The AER also asserted that the revised Victorian Government AMI Order in Council (the AMI Order) did not permit it to undertake an efficient cost review of these margins.

Two of the service providers, Jemena and United Energy, subsequently appealed this decision. Both applications were heard by the Australian Competition Tribunal (the Tribunal) in late 2009. Both parties had used JAM[25], a related party, to provide installation services as part of the AMI rollout. One component of the consideration paid to JAM was a management fee, which was designed to recover certain management and overhead costs and also included an amount for profit. Jemena and United Energy appealed the AER's conclusions that the management fee was outside of scope and that the costs associated with the fee were not within the scope of the regulated services.

The Tribunal rejected the AER's conclusion that to the management fee was simply a profit margin paid to a related party, it was outside scope. It stated:[26]

> If a distributor outsources activities, the operating expenditure of the distributor will necessarily incorporate a margin it pays to the party providing the outsourced services. So long as the third party is performing activities within scope, then the profit margin payable to the third party is a cost for those activities within scope. It

[24] Australian Energy Regulator (2009). Final Determination, Victorian Advanced Metering Infrastructure Review, 2009-11 AMI Budget and Charges Applications, October.

[25] At the time, this was Alinta Asset Management.

[26] Australian Competition Tribunal (2009). Application by United Energy Distribution Pty Ltd [2009] ACompT 10 (23 December 2009) para.55.

> may be that the profit margin payable is not prudent, but that is a separate matter. In this case, the AER did not establish that the management fee was not prudent.

It upheld the appeal and determined that the management fee should be added back in.

Conclusions and implications

The Victorian Rail Access Pricing Guideline is particularly pertinent to this situation (we note that QRNN has already made reference to this precedent in its April 2010 submission to the Authority). When the Allowable Margin was approved in the 2001 pricing order there was no provision of a return on capital. When a return on capital was subsequently incorporated into prices for post-1999 assets, this was seen to replace the need for the Allowable Margin. That margin can only continue to be charged on pre-1999 assets, which do not earn a return on capital.

A key premise of QRNN's case for compensation is that it will not be able to earn a return on capital for those assets that will be funded by users. The extent to which that return on capital would adequately compensate QRNN for the risks identified above is another question (which also depends on the extent to which those risks are systematic in nature). However, if QRNN continued to earn the full regulated WACC on these assets this question would not necessarily have arisen. As outlined above, in the context of reviewing the operator margin proposed as part of QRNN's maintenance cost allowance, the Authority acknowledged that the WACC may be deemed to be sufficient if the work was undertaken in-house.

In saying this, we are not proposing that QRNN should be earning the full regulated WACC on infrastructure has been funded by users. What we are saying is that there is a legitimate basis to review the case for compensation over and above its direct costs of operating and maintaining the assets.

While QRNN will retain ownership of the user-funded assets, based on the provisions contained in the Authority's Investment Framework QRNN's role is more akin to one of a contractor who manages the operation and maintenance of the assets on behalf of the funding users. There is precedent for the payment of operator margins or management fees (including a profit component), although much of the discussion (including in QRNN's case) has focussed on assessing the appropriateness of margins paid to related parties where the work has not been competitively tendered.

While QRNN would be undertaking these activities for the funding users on an arms-length basis, the determination of what the margin should be remains a difficult question. This is considered below.

How should the margin be determined

This situation is a unique one. There is no precedent for the situation where an asset owner is required to own, operate and maintain the assets but not earn a return on capital (because it has not funded the assets). The closest example we have is the Victorian case in relation to assets constructed prior to 1999, which we understand were required to be valued at zero.

One starting point is benchmarking studies but they tend to be treated with considerable caution by both regulators and service providers. For example, in a report commissioned by the AER as part of the recent Victorian electricity distribution network review, Impaq Consulting noted that EBIT margins of between 3% and 8% are common in similar service industries.[27]

The key difficulty with benchmarking is comparability, both in terms of the activities undertaken by the comparators and the costs incurred. For example, QRNN is already provided with a return on capital on the equipment that is used in maintenance activities (which is passed through to the contractor).

A possible approach is to 'build up' the margin based on a standard risk management framework. This is similar to the approach that is used to determine the self-insurance allowance. This would involve the following steps:

1. Estimation of the 'base case' efficient operating and maintenance cash flows, that is, the share of the approved regulatory allowances for operating and maintenance costs that are attributable to the user funded assets.
2. Identification of the possible causes that could increase costs above the approved allowance. This should be limited to causes that are not within the control of QRNN but on the presumption that the reasonable and efficient costs of mitigating risks that are within QRNN's control are covered by the approved allowances. It should also exclude factors that are already assumed to be addressed by the self-insurance allowance.
3. For each cause, establish a plausible range for the possible increases in costs and assign probabilities:
    - for risks such as regulatory risk, this could be at least partly informed by a review of approved allowances relative to actual costs incurred historically across all regulated industries in Australia;

[27] Impaq Consulting (2010). Australian Energy Regulator, Victorian Electricity Distribution Determination 2011, Review of Distributors Proposed Rates in ACS Charges, Revision 1.3, 25 May.

- probabilities should also be able to be assigned to different volume scenarios based on the opinions of experts who prepare coal volume forecasts;
- there may be some historical data to inform the assessment of other commercial risks. Otherwise, techniques such as Monte Carlo analysis could be utilised, recognising that the inputs are random.

4. A probability-adjusted impact can then be determined, which forms the basis for the margin or fee.
5. Causes within QRNN's control are still relevant, however can be more effectively addressed through mitigation. The costs of mitigation, provided that they are deemed efficient, should be built into the forecast allowance.

This assessment would arrive at an estimate (or a range of estimates) for the value or dollar cost at risk. This would not, however, include a profit component. Including an allowance for profit could be addressed based on the same approach that has been applied in developing the self-insurance allowance. Reference could also be made to the EBIT margins for similar infrastructure services firms, attempting to take account of the return on capital equipment that may be reflected in these margins, to avoid double counting. This information can also be used as a 'reasonableness check'.

Next steps

The situation that QRNN faces as a consequence of the User Funding arrangements is unique. There is no direct precedent with the Authority or elsewhere (although there is other relevant precedent in relation to support the principle of compensation). The precise details of the risk allocation between QRNN and users have not yet been determined and will be developed via the Standard User Funding Agreement. The revised Incentive Framework could also have implications that will need to be considered.

At this stage, it is therefore not proposed to attempt to quantify the risk or the margin/ management fee. What is recommended is that approval is sought for the overarching principles, and the process that will be used to quantify the margin, as outlined above. QRNN can then work with the Authority (and stakeholders) to develop the details of the framework. Ideally, this should be done following finalisation and approval of the Standard User Funding Agreement and the revised Incentive Framework. This would then be submitted to the Authority for review and consultation.

The key principles are summarised below.

Principles: compensation for residual risks borne by QRNN in relation to user funded assets

1. The residual risks borne by QRNN in relation to user funded assets are as follows:
   (a) regulatory risk: that allowances for operating costs, maintenance costs and risk and insurance are under-estimated;
   (b) cost risk: that operating and/or maintenance costs increase relative to forecast due to factors beyond QRNN's control, including changes in volumes, with the exception of costs explicitly covered by self-insurance, being property damage from derailments or weather events and public liability;
   (c) performance risk: the risk that factors beyond QRNN's control impede its ability to effectively fulfil its responsibilities in operating and maintaining the assets (including providing access).
2. To the extent that it is not entitled to earn a return on capital on the user-funded assets , it is reasonable for QRNN to be compensated for these risks.
3. Compensation could be determined based on the standard risk management framework, which involves the following steps:
   (a) Estimation of the 'base case' efficient operating and maintenance cash flows, that is, the share of the approved regulatory allowances for operating and maintenance costs that are attributable to the user funded assets.
   (b) Identification of the possible causes that could increase costs above the approved allowance. This should be limited to causes that are not within the control of QRNN but on the presumption that the reasonable and efficient costs of mitigating risks that are within QRNN's control are covered by the approved allowances. It should also exclude causes that are already assumed to be addressed via self-insurance.
   (c) For each cause, establish a plausible range for the possible increases in costs and assign probabilities.
   (d) A probability-adjusted impact can then be determined, which forms the basis for the margin or fee.
4. A profit component could be included consistent with the self-insurance allowance as approved by the Authority. EBIT margins for similar infrastructure services firms could be examined as a reasonableness check.
5. The costs of mitigating risks that remain within QRNN's control may still be compensated, based on the efficient costs of mitigation as approved by the Authority.