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Queensland Competition Authority

Review of Queensland Rail Estimated Self-insurance Costs for the 2009 Access Undertaking

Chris Latham

C. Latham

Fellow of the Institute of Actuaries of Australia

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1 Introduction and Summary of Advice

1.1 Introduction

This report has been requested by Mr John Hall, Chief Executive of the Queensland Competition Authority ("QCA"). The Terms of Reference are set out in a document titled *"QR Network Access Undertaking. Assessment of QR Network's Self-insurance Costs"* dated 20 June 2008. Briefly, the tasks required comprise;

- Formulation of an assessment framework for QR Network's application for self-insurance costs for the Central Queensland Coal Rail System (CQCR).
- Review QR Network's self insurance submission and identify any deficiencies in the information provided in order to assess the self-insurance cost proposal, and
- Provide an assessment of the cost-effectiveness and reasonableness of QR Network's self-insurance claim.

This is the first time we have advised QCA on these matters.

The specific terms and conditions of our engagement are documented in the Consultancy Agreement returned to QCA on 27 January 2009.

We consider parts but not all of the advice in this report to represent *Actuarial Advice* as defined in the Code of Professional Conduct of the Institute of Actuaries of Australia. We have applied the requirements for Actuarial Advice to all relevant advice in this report.

1.2 Summary of Advice

The most important advice given in this report can be summarised as follows:

- The framework for assessment of QR Network's proposed claim for risk and insurance follows as far as possible, a relevant professional standard of the Institute of Actuaries of Australia.

  (Section 5)

- The proposed claim comprises a self-insurance component largely calculated by Finity Consulting, together with allocations of insurance premiums derived by QR Network.

  (Section 6.1)

- Finity has noted a number of data issues, and have indicated that these issues will have resulted in a likely understatement of their estimate.

  In this context I have concluded that the methodology adopted and the assumptions underlying the risk premium are in my view reasonable.

  However I have suggested that the 20% allowance added to the risk premium for the cost of capital and profit is reduced to 10%. This reduces the Finity component of the claim, and hence the overall claim, by $1.320m over the 4 year period.

  (Section 6.2)

- The allocation of QR Network's ISR premium for CQCR's liability risks seems reasonable.

  (Section 6.3)

- QR Network has derived a premium for potential claims for failure to perform its contractual obligations. This represents some 26% of the proposed claim.

QR Network has explained the derivation of the amount and, while it is not possible for me to be definitive about the reasonableness of the amount, it does not seem implausible. However the estimate is, necessarily, highly uncertain.

(Section 6.4).

- After the adjustment made in Section 6.2, and noted above, I consider that the total of the proposed claim seems reasonable.

  (Section 6.6).

- I strongly support the Finity recommendations for a formal self-insurance program.

  Such a program will encourage greater discipline in the identification and management of losses, and facilitate the preparation of future Access Undertakings.

  (Section 7.1).

- Certain costs of implementation of a self-insurance program have been identified in the QR proposed claim.

  I note here that the ongoing costs of 10% of premium have **already** been included in the major part of the claim, and should not represent an additional claim.

  Other costs seem reasonable.

  (Section 2).

  Notwithstanding the relatively small amounts involved in my view, it would represent good corporate governance for the QR Board to acknowledge the self-insurance of the risk covered in the DAU.

  (Section 7.3).

2 Background to the advice

The background to the advice given in this report is as follows:

i. The Queensland Rail Network ("QR Network") comprises a number of lines throughout Queensland and incorporates the entire rail infrastructure (known as "below rail")

ii. The Central Queensland Coal Rail network ("CQCR") is that part of the QR Network which provides freight services to coal mines in Queensland

iii. QR Network insures some of CQCR's below rail risks, and self-insures other parts

iv. CQCR is regulated by the QCA and from time to time QR Network must prepare an *Access Undertaking* which will , inter alia, identify the self-insurance costs to be passed on to customers

v. QR Network has prepared its Draft Access Undertaking and PwC Actuarial has been asked to review the relevant parts with respect to CQCR's self-insurance costs and other related matters, as described in Section 1 above

Further background is needed to understand exactly which costs are to be identified as "self-insurance" costs for the purpose of this report.

Firstly, it is clear that risks which are insured directly are **not** included where the premiums paid are clearly identifiable. Such premiums are already included in expenses passed on to CQCR customers.

However, there are some instances where only **part** of a total insurance premium is attributable to CQCR In this case an allocation is required to identify that part of the premium which can be passed on to CQCR customers. This allocation does form part of the costs reviewed in this report.

Some of the costs of self-insurance may be paid as routine maintenance expenses, and are already passed on to customers indirectly. Here it is important that such costs are **not** included in the self-insurance costs i.e. that there is no "double-counting". This is an administrative/accounting issue to be considered by QR Network.

Finally, the reference to "costs" of self-insurance has been interpreted as meaning the premium which would be paid were the risks insured externally with an insurer. This means that an allowance is made for QR Network's expenses of administering and managing the risks, and, notionally, for the cost of servicing the capital supporting the risks. This issue is discussed further in Section 6.2.

3 Appropriateness of self-insurance

As noted in Section 2 the costs discussed in this report comprise both insured and self-insured costs. It may be useful to briefly consider the issues underlying the choice of whether to insure or self-insure.

One of the main purposes of insurance is to minimise the volatility of annual profit results. An annual premium is paid to the insurer which is expected to be reasonably predictable and can be budgeted for with some degree of confidence. There is a transfer of risk/variability from the insured to the insurer.

Accordingly, insurance is particularly useful for infrequent, high cost risks. However there is a price to be paid for the risk transfer above and beyond the cost of claims i.e. for expenses, insurer's profit etc. The decision to be made by the insured is whether the price paid is considered worthwhile in terms of reduced variability.

An entity may self-insure:

i. Where the variability in the risks is low (i.e. high frequency, low average size).

ii. Where the price of insurance is too high, in that the value of the risk transfer is not considered worth the price. This may be due to the particular characteristics of the risk or merely the state of the insurance market at the time.

    The financial position of the entity at the time is relevant in this consideration i.e. access to capital, level of profitability.

iii. Where insurance is unavailable. This can occur where the insurer cannot reinsure the risks.

iv. By default, in that some risks thought to be covered by insurance are in fact not covered.

The decision whether or not to self-insure is therefore a complex one, and depends on the circumstances at the time. A degree of self-insurance considered to be "optimal" at a particular point in time, may not be so at another time.

QR Network is likely to self-insure for some or all of the reasons outlined above.

4 Information provided

I have been provided with the following documents:

- That part of QR Network's Draft Access Undertaking (DAU 2009) which relates to risk and insurance (Attachment K), dated August 2008

- A copy of a report prepared by Finity Consulting, a firm of consulting actuaries, dated 20 August 2008 (the "Finity Report"). Advice in this report has been used to support part of the claim included in the Access Undertaking

Other information has been provided in discussions with;

- The authors of the Finity Report

- Employees of QR Network

- Stephen Wisenthal of the QCA

5 Assessment framework

A significant part of QR Network's proposed claim for risk and insurance derives from the report by Finity Consulting. However, because actuarial advice in this case is not prescribed by legislation, and because the advice is of a non-routine actuarial nature, it does not fall directly under any of the professional standards of the Institute of Actuaries of Australia (IAA).

However the IAA does have a professional standard for an actuary who is reviewing the work of another actuary. While this was developed in the context of a review of actuarial work required for the insurance regulator, APRA, many aspects of the standard are general in nature and can be applied in the circumstances of our review of the advice in the Finity Report.

As such I have attempted to follow the principles of the IAA standard as far as is realistic in the circumstances. In particular I have considered the review under the following general headings:

a) Data: Consideration of the sources of data, whether appropriate and sufficient data inputs have been used, and that the quality of these have been checked;

b) Methodology: Consideration of whether the methodologies chosen are suitable in the circumstances, and whether their application has been appropriate;

c) Assumptions: Consideration of whether the assumptions are consistent with experience investigations, industry trends and reasonable judgement;

d) Analysis of the results: Consideration of whether the results of the calculations have been developed following a reasonable sequence of steps and of consistency within the results;

e) Specified results: Consideration of whether the results are supported by the experience and reasonableness tests ; that key risks, sensitivities and uncertainties, and their implications, have been identified ,the matters on which the actuary has relied; and any limitations of their advice.

A similar, but less formal approach has been taken to those parts of the claims for which the QR Network has derived the amounts.

6 Review of QR Network submission

6.1 Proposed claim for Risk and Insurance

The proposed claim is summarised in Table 7 of QR Network's submission (*Attachment K: Risk and Insurance*), which is reproduced below.

Table 6-1: Summary of proposed QR Network claim

Component	Proposed claim for the year ending 30 June					
	2010	2011	2012	2013	Total	
					Amount	%
	$m	$m	$m	$m	$m	
Self-insurance premium	3.980	4.166	4.398	4.563	17.107	58%
Premium allocations	0.965	0.992	1.132	1.173	4.262	15%
ISR allocation	1.815	1.866	1.918	1.972	7.571	26%
Dewirements	0.073	0.076	0.092	0.096	0.337	1%
Total	6.833	7.100	7.540	7.804	29.277	100%

The major component, the self-insurance premium, is derived from advice in the Finity Report. The other components have been estimated directly by QR Network.

All amounts are in dollar values consistent with the year the cost is incurred i.e. they include future inflation.

In the sections which follow I consider each component separately.

6.2 Self-insurance premium ($17.1m - 58% of the total)

The derivation of the self-insurance premium is comprehensively documented in the Finity Report.

The following table summarises the various amounts in the Finity Report. I note here that the estimates made by Finity for derailments have been done on two bases, namely with and without an allowances for the effect of the proposed rail link between Goonyella and Newlands (GAEP).

I understand this proposed link has now been deferred and hence no allowance has been made in QR Network submission.

I have reworked the total Finity numbers to exclude GAEP, and this results in slightly different amounts than those in the QR Network submission ($17.154m below compared to $17.107m in Table 1 above). However, the difference is trivial and is likely to be due to rounding differences only.

Table 2: Summary of self-insurance premium

Component	Proposed claim for the year ending 30 June				
	2009	2010	2011	2012	Total
	$m	$m	$m	$m	$m
Derailments	2.650	2.764	2.922	3.030	11.365
Weather-related losses	0.320	0.340	0.360	0.380	1.400
PI-below deductible	0.100	0.110	0.110	0.110	0.430
Total losses	3.070	3.214	3.392	3.520	13.195
Expenses	0.307	0.321	0.339	0.352	1.320
Cost of capital, profit	0.614	0.643	0.678	0.704	2.639
Notional premium	3.991	4.178	4.410	4.575	17.154

Before discussing the quantum of the various components of the above premium there are a number of qualifications/issues which must be noted, as follows;

Exclusions

In Section 1.2 of their report Finity note a number of types of losses which are **not** included in their advice. Those of particular note include:

- Losses arising from risks not typically considered as insurable, and in particular the risk to revenue of losing customers. Such risks are considered as normal business risks and not regarded as within the scope of insurance

- Losses for which there is no historical loss history or where the data is insufficient of considered to be unreliable

The exclusion of the second group of losses is significant. In their report Finity make several references to lack of reliable data. The losses which they have not quantified comprise;

- Dewirements
- Earthquakes below the pass-through limit
- Other extreme events

Allocation of costs

Finity has endeavoured to avoid the “double-counting” referred to in Section 2 by the inclusion of costs relating to losses that;

- are not covered by an insurance policy
- they would not expect to be included in maintenance budgets, or
- are currently part of maintenance but can be separately identified and excluded

Approach to Assessing Derailment Losses

Finity has valued the derailment losses on a party-party basis, where costs for below rail and above rail are assessed separately on a no fault basis with each party bearing their own costs.

This means that they have only estimated the cost of below rail losses, thereby implicitly assuming that any above rail exposure is covered by the liability insurance.

This is important in the ISR allocation discussed in Section 5.4.

Pass- through, NDRRA

Key assumptions in the advice from Finity are that

i. Any self-insured claim in excess of $8m (1% of revenue) will be subject to “pass-through” in that such unanticipated losses can be passed through to customers separately

ii. QR Network will not seek funding from the Natural disaster Relief and Recovery Arrangements (NDRRA).

With these points in mind I discuss below the various components of the self-insurance premium advised in the Finity report

Derailments

The approach adopted to estimate these costs can be summarised as follows:

i. The available data was analysed separately by large (over $1m) and small losses and, subsequently, according to whether the derailment occurred on track or in a yard or siding

ii. The frequency of losses in past years was calculated using gross tonne kilometres (GTK) as a measure of exposure. Other measures of exposure were tested, and resulted in similar trends

iii. A frequency was assumed for future years, derived from experience in the three years 2005 to 2007. This was applied to estimates of future GTK as advised by QR Network to obtain future numbers of large and small derailments, and whether track or yard/siding.

    I note that the frequency of losses reduced quite significantly in 2005, and has remained around that level in subsequent years.

iv. Corresponding analyses were made of the average sizes of past losses. There were a variety of data sources, with some inconsistencies between them. Average sizes of losses were derived and assumed for future losses

v. Benchmark data was obtained from US experience, and compared with CQCR past experience. While there are a number of qualifications in making such comparisons, they did not indicate any obvious anomalies in the CQCR experience, which was used unadjusted for the calculations

vi. The amounts of future losses were obtained by multiplying estimated numbers of losses by their assumed average size.

The above methodology is standard actuarial methodology and one which I would adopt. I have studied the data and analyses in Appendix D of the Finity Report, and consider the assumptions derived to be reasonable. The adopted estimates are not obviously under-or over-stated.

However, and as with all statistical estimates, there is a degree of uncertainty in the estimates. The statistical uncertainty is exacerbated by the uncertainty from inconsistent data sources.

I note that estimates have been made using GTK both including and excluding the effect of the proposed rail link between Goonyella and Newlands (GAEP).

Weather related losses

Estimates for weather-related losses have been made as follows:

i. The data used related only to those losses for which QR made claims for Natural Disaster Relief Funding in the years 2000 to 2007. This comprised some 20 disasters including bushfires, flooding, cyclones and wind storms. Finity note that such data will exclude many losses incurred by QR and CQCR and hence that their estimate will be understated

ii. Past losses were adjusted to current day values and related to an exposure measure of track kilometres. An assumption for future loss per track kilometre was derived from this experience

iii. The assumed loss per track kilometre was applied to CQCR estimates of future track kilometres, and including an allowance for future inflation over the regulatory period

The approach described and the future assumption adopted is in my view reasonable. However the estimate suffers the problem of incomplete data. Unless the amounts not included in the data are included in maintenance expenses, then the estimate of self-insured losses for CQCR will be understated.

Below-deductible losses

These losses relate to externally insured public liability claims but which are below the current $100,000 deductible which applies to each and every loss.

It has been assumed that the current deductible will apply throughout the regulatory period.

Separate analyses have been made for:

- Claims which are less than $100,000 for which the total losses are self-insured, and

- Claims which exceed $100,000 and for which $100,000 is self insured

Past experience was related to an exposure measure of the amount of turnover. Assumptions drawn from this experience were applied to estimates of future turnover.

The methodology and assumptions seem reasonable. The amounts involved are small.

Allowances for expenses and cost of capital

The amounts advised in the Finity report and discussed above relate to the *physical cost* of losses only. In insurance terms this is referred to as the *risk premium.*

If QR Network were to externally insure these CQCR losses then the premium they would pay would include allowances for the insurer's expenses, the cost of servicing the capital to support the risk/uncertainty in the estimates and for the insurer's profit. This *gross premium* would be passed on to customers as part of CQCR's overall expenses.

In the case of self-insurance it seems reasonable that QR Network should recover the cost of administering and managing the losses which arise. However, and as noted earlier, this is appropriate **only if** such amounts are not already included in other expenses which are passed on to customers.

Similarly, QR Network is bearing the risk of the insurance and, notionally, has capital in the business to support this risk. It should be compensated for this.

This can be seen in the context of comments made by QR Network in their submission. They refer to the fact that the Finity calculations use *mean values* of the claims distributions, and that the losses could be much higher. This is of course true, and is why capital is needed to support the potential variation from the mean values. As long as QR Network is compensated for use of this capital, then the situation is the same as that which applies to an external insurer.

The addition of loadings for expenses and cost of capital and profit adds a significant amount ($3.9m over the 4 years) to the QR Network claim.

On the question of expenses of administration and management the allowance suggested by Finity is 10% of the risk premium. My own observations confirm this to be reasonable.

Finity has also suggested an allowance of 20% of the risk premium to cover the cost of capital and profit. For a private insurer such an allowance is likely to include the net costs of reinsurance, which in turn would include the reinsurer's profit margin. A 20% allowance would therefore incorporate the risk of very large claims.

In the case of QRail very large claims would be subject to "pass-through" and, accordingly, would not be borne directly. QRail therefore has less need to effect reinsurance.

In these circumstances I believe that the 20% allowance for the cost of capital and profit is too high for QRail, and that a more appropriate allowance would be closer to 10% of risk premium. This conclusion is based upon a continuation of the current pass-through arrangements.

Adoption of a 10% allowance would reduce the "notional premium" in Table 2 by $**1.320m** over the 4 year period.

Summary

In the context of the assessment framework described in Section 5, I make the following observations of the advice in the Finity Report:

Data: Finity appear to have spent some considerable effort in ensuring that the data used in their analyses is sufficiently reliable to form a basis for their advice.

Where the data has been unreliable they have commented to this effect, and have in some cases not offered advice. They have commented on inconsistencies between different sources of data.

Methodology and assumptions: Where they have proceeded to quantify the costs/risk premium, Finity has, in my view, adopted appropriate methodologies and adopted assumptions which are consistent with the experience.

However I have suggested that the allowance included in the notional premium for the cost of capital and profit be reduced.

Analysis of the results: The derivation of the results of the calculations follows a logical sequence of steps.

Specified results: The key risks and sensitivities have been noted qualitatively. However where such risks (i.e. uncertainties in the assumptions) occur I would have preferred to have these quantified by illustrating the effect of alternative, plausible assumptions.

6.3 Premium allocation ($4.3m - 15% of the total)

The background to this amount is as follows:

a) QR Network insures its Industrial Special Risks (ISR) and Liability risks through On-Track Insurance Pty. Ltd. (OTI), a captive insurer.

b) This insurance provides coverage for a limited number of assets. Rail infrastructure is a specific exclusion, and is hence self-insured (and forms the advice in the Finity Report).

c) However there are a number of liability risks of QR Network which are insured (mainly professional indemnity). A proportion of the premium to insure these risks is attributable to CQCR.

The QR Network has estimated that part of its future insurance premiums which might be attributable to CQCR. Details are given in the QR Network submission.

I make the following comments:

i. A letter written in 2005 by OTI to QR Network described in some detail the manner in which premiums for QR Network were set, and appears to have been written in the context of the previous Access Undertaking.

   The description was comprehensive and certainly suggested to me that premiums are set on an “arms length” basis.

ii. Future premiums have been estimated from the 2007/08 premium increased by assumed CPI inflation of 2.8% p.a.

In practice, of course, premiums are likely to be subject to market conditions at the time. In the wider professional indemnity market, I would expect premiums in the next 3 to 4 years to increase significantly **more than** changes in CPI. The global economic downturn is likely to result in a significant increase in professional indemnity claims and this experience will flow on to premiums.

iii. I understand that the allocator used to identify the CQCR proportion is one which is applied generally to allocate system-wide and regional costs. I have been provided with a description of the parameters used to allocate the various parts of the premium, and these seem to me reasonable.

Over the 4 year period the proportion of premiums allocated to CQCR averages 47% of the total.

While I have not verified the initial premium in an audit sense, the calculation process and adopted estimates seem to me reasonable.

6.4 ISR allocation ($7.6m - 26% of the total)

The background to this amount is as follows:

a) To the extent that QR Network is responsible for above-rail damage, then such damage is a legitimate cost of providing below-rail insurance.

b) The Standard Access Agreement incorporates certain limitations on indemnity. However to the extent that loss, damage, injury or costs to another party results from the failure of QR to perform its contractual obligations, then any indemnities are void and QR Network will have to make compensation to the aggrieved party.

c) Such costs are not externally insured, and hence are implicitly self-insured.

In their report Finity noted the presence of these risks, but that the absence of a claims history and unavailability of external benchmarks meant that a formal actuarial assessment was not possible.

At present there is a single operator using the CQCR tracks, being QR's own QR National. In theory, there may have been instances whereby QR National could have sought damages from QR. However this would have been an example of QR suing itself, with a net loss to the organisation due to legal costs.

This situation will change with the addition of a new external provider, Asciano, during 2009. As such, the prospect of QR Network being sued for failure to perform its contractual obligations becomes more real than theoretical.

In this regard I am advised by QRail that the $8m pass-through threshold discussed earlier does **not** apply to these risks, and hence there is the potential for very large claims.

QR Network has made some calculations of the potential cost of such claims.

The single key assumption which is the basis of the calculation is that a reasonable premium for these risks is 25% of the Rollingstock premium allocated to CQCR, as paid to On-Track Insurance for above-rail ISR cover (see Section 6.3 above).

Inferences from external sources have been used to support this assumption, and reasons given as to why it may be on the low side.

It is clear that some allowance in the cost of self-insurance should be made for these risks. However any estimate will necessarily be highly uncertain, and an external insurer would incorporate a significant loading for the cost of capital and profit.

It is not possible for me to be definitive about the reasonableness of the QR Network allocation. However on the information provided the estimate does not seem implausible.

6.5 Dewirements ($0.3m - 1% of the total)

This is a small amount. Finity noted that the data available would be likely to understate the actual expected costs, and did not proceed to a calculation.

QR Network has made an estimate using the same data and hence which is likely to be understated.

The methodology seems reasonable.

6.6 Overall Summary

Comments on the Finity estimate of the total claim are given earlier in Section 6.2. Their advice has been formally developed and comprehensively documented. However they note that their advice does not cover **all** losses and that some of the estimates that have been made are likely to be understated

The estimates made separately by QR Network represent 42% of the total claim (i.e. the Finity estimate comprises 58%). Of this the ISR allocation is the most uncertain (26% of the total).

Taken in its entirety (but after allowing for the reduction in the allowance for the cost of capital and profit discussed in Section 6.2), and noting that the Finity estimate is otherwise likely to be understated, I consider that the total of the proposed claim seems reasonable.

7 Other matters

7.1 The need for a self-insurance program

It is clear from the documents with which I have been provided, and from various discussions, that there is no formal self-insurance framework within QR Network, or at least as it applies to the losses considered in this report.

The total claim for self-insurance for the 2009/10 year is less than $7m i.e. less than 1% of CQCR's projected revenue. In this sense it might be argued that the costs of a formal framework would not justify the benefits.

Countering this, however I note that the Finity Report identifies a number of data issues (Section 3) which have in some cases resulted in estimates which they can identify as being too low, and in other cases have meant that they have been unable to make estimates of the losses.

This may result in lower costs being passed on to customers and, hence, reduced profits to QR Network.

I note also that QR is a self-insurer of workers' compensation liabilities. Here there are comprehensive and formal requirements of a self-insurer, as regulated by Q Comp. The QR Structure for workers compensation self-insurance could facilitate the establishment of a similar internal framework for other self-insured risks.

In Section 5.6 of their report, Finity outline the features of such a program, repeated below:

- Establishing a self insurance fund from which all self insurance losses are paid

- Budgeting and accounting for self insurance losses separately from other expenses (especially maintenance expenses and capital costs). This may include annual actuarial estimates of the provisions in accordance with accounting standard AASB 137.

- Ensuring that claims against the self insured fund are subject to appropriate scrutiny (i.e. a formal claims process including appropriate assessment of the claims to determine liability, to assess the loss and to pursue recoveries where appropriate).

- All claims should be recorded in an electronic claims data base to support the management of the program and with sufficient details to enable the monitoring and review of the program and to estimate and project self insured liabilities.
- Integration of the management of the self insurance program with the insurance program to ensure minimal leakage and friction between the two programs – as self insured claims exceed the deductible an insured claim is automatically lodged.
- Formal consideration and adoption of the program by QR's Board.

The creation of such a self-insurance fund should encourage greater discipline in the identification and management of losses. Trends in experience can be monitored and formal models established to estimate future costs. Actual costs can be compared with those expected according to the models. All this will facilitate the preparation of future Access Undertakings.

7.2 Implementation of a self-insurance program

Finity has noted that implementation of a self-insurance program will require the following:

- Changing procedures to ensure self insured (together with insured) losses are identified and claimed by operational units, and particularly ensuring full accurate cost of those losses are captured.
- Acquiring an appropriate claims management system (or expanding an existing one) to record all losses
- Expanding the current claims management team to provide sufficient capacity to assess and manage the additional claims including the pursuit of recoveries against third parties where appropriate.
- Establishing policies, processes and procedures for the management of these claims.
- Changing accounting systems to establish a self insurance fund and separate expense items for self insurance costs and also to prevent operational units from continuing to account for self insurance costs as they do currently.

Implementation will involve significant operational and procedural changes. These have been incorporated into the QR Network submission.

In this context QR Network have in their submission included the additional costs expected to be incurred over the regulatory period, as follows

Implementation	$000
Actuarial services	$150
Systems development	$150
Program management	$120
Total	$420
Ongoing	10% of premium

I make the following comments on these amounts

i. From my experience the implementation costs do not look unreasonable. However, and as with other "claimable" costs, it is important that they be identified apart from maintenance costs.

ii. The on-going administration costs identified by Finity were 10% of "premium", where this is the risk-premium.

   As noted in Section 6.2, these costs have **already** been incorporated into the self-insurance premium calculated by Finity, and no further allowance is needed.

   Similarly, these costs are implicitly included in the premium allocation components of the claim (Sections 6.2 and 6.3).

QR Network in their submission acknowledge the need for a formal self-insurance program. It is clear that such a program would significantly facilitate future Access Undertakings, and reduce the costs of actuarial reports and reviews.

Given the comments in the Finity Report such a program is likely to result in an increased claim for self-insurance.

There are therefore substantial financial incentives for QR Network to encourange the adoption of a formal self-insurance program.

From QCA's point of view it is reasonable to develop a realistic timetable for implementation. While I do not have a compete understanding of QR Network's internal operations, my experience with other self-insurers suggests that full implementation should be possible by 30 June 2010.

7.3 Board resolution to self-insure

I have read the section in the QR Network submission headed *Resolution to self-insure.*

While I cannot comment upon the legal situation of the Board I make the following observations on the question of QR Network's financial capacity to self-insure:

1) For employers who self-insure their workers' compensation risks in Queensland the regulator, QComp, requires a bank guarantee to support the risks.

   To allow for variations in the estimated costs the amount of the bank guarantee is set at 150% of the mean value/central estimate of the costs

2) The situation is similar in all other States for self-insurance of workers' compensation liabilities

3) In theory such a condition could apply to QR Network's self-insured risks covered in this report. It would apply only to those parts not covered by external insurance (i.e. excluding the premium allocation discussed in Section 6.3)

4) However the comment made in the QR Network submission regarding estimates of both the mean value and the standard deviation is correct.

   The quantification of the standard deviation for these risks would be problematical to say the least and, in some cases, would necessarily be somewhat arbitrary.

5) Given the availability of pass-through for large losses the estimate for self-insured costs , and as noted above, is less than 1% of CQCR's revenue

6) I also note that workers' compensation is a compulsory class of insurance for all employers, and involves personal injuries. Where employers self-insure their public liability risks there are no regulators , and no conditions regarding the financial security of the claims.

Notwithstanding the relatively small amounts involved, in my view it would represent good corporate governance for the Board to acknowledge the self-insurance of the risks covered in the DAU.

8 Reliances and Limitations

Our advice has been prepared solely for the use of the QCA in assessing the QR Draft Access Undertaking.

We accept no liability for loss or damage howsoever arising in the use of this report by the QCA or third parties for other than the purpose stated above, or for any use of this report, without full understanding of the reliances and limitations noted herein, or for errors or omissions arising from the provision of inaccurate or incomplete information to us.

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