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NETWORK

Annex AE

**[REDACTED] Deloitte Access Economics –
Estimate of QR Network Maintenance Services
Overheads, 1 November 2012**

**Estimate of QR Network
Maintenance Services
Overheads**

01 November 2012

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1 Background

Part of the Queensland Competition Authority's (QCA's) determination of reference tariffs for the Central Queensland Coal Network (CQCEN) involves determining the allowance for maintenance costs. Maintenance on the CQCEN is undertaken by QR National (QRN) Network's in-house maintenance business. Historically, an allowance of 5.75%¹ on direct labour costs has been allowed for corporate overheads and working capital.

QRN Network has argued that the maintenance costs should include an allowance for corporate overheads as an allowance for these costs is included in any maintenance contract.

Corporate overhead costs involve the provision of services such as finance, employee relations, information technology and the activities of the Chief Executive. The main corporate functions which have not been included in the direct cost build-up of QRN Network's maintenance costs are:

- Office of the Chief Executive and Board
- Human Resources
- Finance
- Information Systems
- Capital projects expensed
- Systems development (particularly safety standards)
- Legal
- Audit
- Procurement costs.

We have undertaken a bottom-up analysis of overhead costs for QRN Network's maintenance division under the assumption that the business is a standalone maintenance provider with ■■■ staff and \$200m expenditure. This is supplemented with a top-down approach comparing our results with industry benchmarks.

1.1 Purpose of this report

This report has been prepared to assist QRN Network prepare its submission to the QCA in relation to its 2013 Access Undertaking. In particular, the report provides QRN Network with an indication of the likely maintenance overhead costs allowance should it proceed with a bottom up analysis to estimate the overhead costs for its below rail maintenance business.

¹ QR Network's 2010 DAU – Tariffs and Schedule F, June 2010

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2 Approach

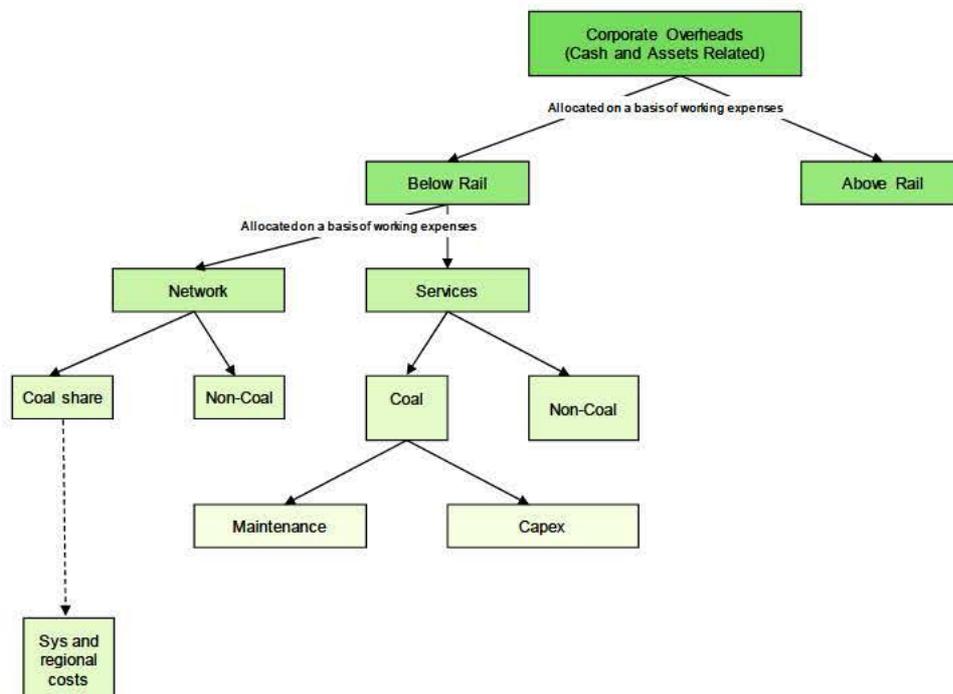
Overhead costs for the maintenance business may be estimated using several different approaches, namely a:

- Top-down approach
- Bottom-up approach
- Benchmarking with comparable companies.

2.1 Top-down approach

The top-down approach involves taking QR National's corporate overhead costs and allocating to the respective parts of the business to determine the proportion that can be attributed to the maintenance business. In the diagram below the allocation has been based on the proportion of working expenses.

It should be noted that this approach may result in maintenance overheads that underestimate the overhead costs for a standalone equivalent sized maintenance business as there are some costs that will reduce on a unit cost basis as the size of the entity increase. Accordingly, overhead costs estimated using this approach should be considered at the lower end of the reasonable range.



It is important that the corporate overheads that are included in the operating cost component of QRN's submission are clearly developed using a methodology that is consistent with this approach to avoid the potential (or perception) of double counting.

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2.2 Bottom-up approach

The bottom-up approach involves estimating the costs associated with the different activities that constitute overhead costs. The costs are estimated by considering the characteristics of a standalone maintenance business.

This approach is based on a hypothetical business and presents a better representation of overhead costs for a standalone business with similar characteristics to QRN Network's maintenance business. However, this approach requires the use of a number of assumptions to estimate the costs for the different activities.

2.3 Benchmarking

Finally, the overheads could be estimated using benchmarks from other similar businesses. Publicly available information tends to be centred on regulated businesses – accordingly those overhead allowances have been approved by the regulator as efficient.

2.4 Selection of approach

Each of these approaches have advantages and disadvantages, accordingly it is not recommended that a single approach be relied upon. Rather, multiple approaches should be used to ensure the results of any approach appear reasonable. For the purposes of this analysis we have used a bottom-up approach and performed a sense check by benchmarking it against comparable firms.

2.5 Additional considerations

While there are options in terms of the approach to determine the overhead costs for the maintenance businesses, consideration needs to be given to how overheads are being dealt with as part of the wider access undertaking process. That is, how are overheads being calculated for the remainder of QRN Network's business?

To the extent that overheads for the remainder of the business are being estimated using a top-down approach the portion of those costs that would normally be attributed to the maintenance business must be isolated and removed to ensure the business is not being compensated for these costs twice.

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3 Bottom-Up Cost Analysis

We have used a bottom-up approach to estimate the corporate overhead costs to QRN Networks maintenance activities. We have looked at eight departments, the estimate of overheads for each is shown in the following table.

Department	Total Overhead Cost (\$M)
Office of the CEO & Board	█
Legal Services	█
Finance Services	█
Human Resources	█
Business Strategy & Planning	█
Information Systems	█
Corporate Services	█
Office Overheads	█
Total	\$12.09

3.1 Methodology

Our approach firstly involved compiling a detailed list of overhead costs that would be incurred by a firm with similar characteristics in terms of activities and staff levels of a maintenance services firm. We conducted the build-up of costs under the assumption that the maintenance firm would be a standalone provider with █ staff and \$200m expenditure.

We conducted desktop research on each of the overhead costs. The largest contributors of overhead costs were estimated from the following sources:

1. We have compiled information from 20 publicly listed mining services companies' annual reports for 2011 and 2012 to use as estimates of the CEO's salary, audit fees, accounting and taxation fees and non-executive director fees. Mining services companies are seen as a good indicator of the level of expenses as they have a similar structure to rail maintenance companies, which have a large workforce and low asset base.
2. With the exception of the CEO, salary costs have been estimated using values as reported in the KPMG report *Assessment of Capital and Operating Expenditure, Grid Service Provider: Linkwater*, which includes information from the following studies²
 - i. AIM National Salary Survey – provides Total Base Salary, Total Remuneration and Performance Pay;
 - ii. Hays Salary Survey – provides Total Base Salary;
 - iii. AIRA Investor Relations Remuneration Study – provides Total Remuneration; and Performance Pay.

The QCA engaged SKM to review the adequacy of the data provided by LinkWater and the prudence and efficiency of the proposed fixed operating costs, including corporate overheads³.

² Queensland Bulk Water Transport Authority, Corporate Cost Benchmarking, LinkWater, KPMG, March 2011

³ Assessment of Capital and Operating Expenditure, Grid Service Provider: Linkwater, SKM, May 2011

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SKM recommended that LinkWater's proposed fixed operating expenditure is both prudent and efficient. The QCA in its final decision⁴ accepted this recommendation, therefore we have applied these same salary costs.

For items not covered above, desktop research was undertaken to estimate the appropriate cost.

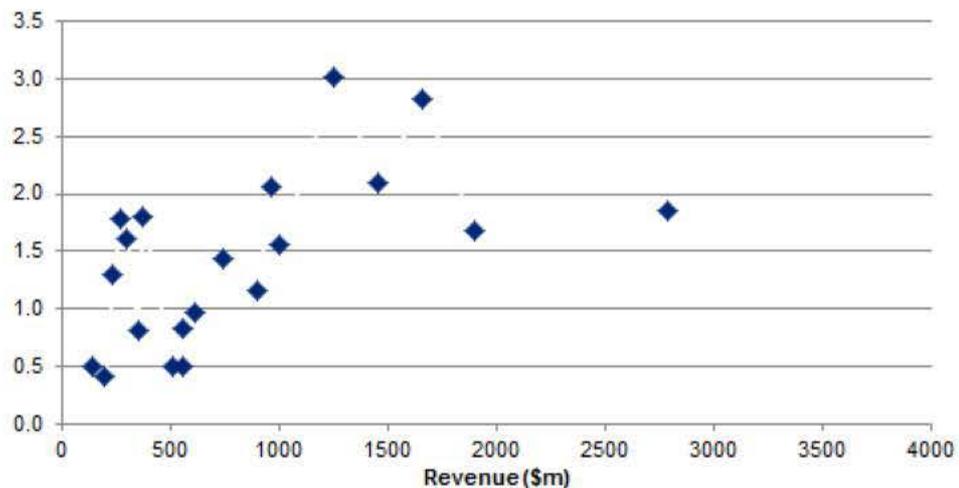
There is potential for considerable variability in the estimates of each of the components of corporate overheads. We have selected to use an averaging approach in this analysis, any results must be viewed on the premise that there is a range of possible outcomes. Further details on the approach for each of the components of corporate overheads are provided in the following sections.

3.2 Office of the CEO and Board

The office of the CEO and board includes the salary of the CEO, an executive assistant to the CEO and an administrative assistant, non-executive board member fees and consultancy fees.

The CEO salary and non-executive directors fees were estimated using the annual reports of the mining services companies. The following graph shows the CEO's salary versus revenues for each of the companies. This shows an upward trend of increasing salary with increasing revenue. We have assumed the revenue for the QRN Network maintenance division is relatively low, and it would therefore be appropriate to only take into consideration the salaries of CEOs toward the lower end of the revenue scale. We have therefore taken the average salary for companies with revenues under \$1b, the average CEO salary for these companies was ██████.

CEO Salary (\$m)



No clear relationships between non-executive board members fees and revenue levels were identified, we have therefore taken the average of the fees for all mining services companies. The average non-executive board member fee was ██████. We have assumed there are five non-executive board members, where this number is based on the number of non-executives for mining services companies of a similar size.

The office of the CEO would be supported by an executive assistant and an administrative assistant. These roles have an average salary of ██████ per employee, as was defined in the KPMG corporate cost benchmarking report for LinkWater⁵.

In addition to the salary costs, it was assumed the office of the CEO would require ██████ days of consultant time on advice relating to organisational, industry, policy and economic matters at a cost of \$█████/day.

⁴ Final Report, SEQ Grid Service Charges 2011-12, QCA, July 2011

⁵ Queensland Bulk Water Transport Authority, Corporate Cost Benchmarking, LinkWater, KPMG, March 2011

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Other expenses including travel and deductible entertainment were estimated at [REDACTED]

Total cost for office of the CEO and board is estimated at \$ [REDACTED]

3.3 Legal Services

Legal services include costs in providing legal services such as advice on contractual matters, ensuring the firm meets its regulatory obligations and advising the Board and senior management on other legal matters.

We have assumed there are five staff in legal services including a company secretary, a senior lawyer, a junior lawyer, a compliance officer and an administrative assistant. These roles have an average salary cost of \$ [REDACTED] per employee, as was defined in the KPMG corporate cost benchmarking report for LinkWater⁶.

In addition, it was assumed that the legal department would require 20 days of consultant time with a cost of \$ [REDACTED]/day.

Total cost for legal services is estimated at [REDACTED]

3.4 Finance Services

Finance services include accounts payable, financial accounting, management accounting, statutory reporting, tax compliance, financial planning and internal audit.

We have assumed there are 10 staff in finance services including a chief financial officer, a financial services manager, a financial accounting manager, a taxation manager, a financial planning manager, two senior assistants and three junior assistants. We have assumed these roles have an average salary of \$ [REDACTED] per employee.

In addition, we have estimated the fees for consultants conducting external audit, internal audit and accounting and taxation services. The fees for external audit services were determined using the fees in the annual reports of mining services companies which are of a similar size; we have estimated the fee to be \$ [REDACTED]. We have estimated the internal audit fee to be [REDACTED], based on Deloitte's internal expertise.

Accounting and taxation fees were also estimated using the fees in the annual reports of mining services companies which are of a similar size. However, as only the fees charged by the auditor are reported, this will be an underestimation of the actual cost. We have therefore assumed [REDACTED] % of accounting and taxation advice is provided by the auditor, with the remainder provided by an alternative consultant. The accounting and taxation fees were estimated at \$ [REDACTED]

Total cost for finance services is estimated at \$ [REDACTED]

⁶ Queensland Bulk Water Transport Authority, Corporate Cost Benchmarking, LinkWater, KPMG, March 2011

3.5 Human Resources

We have assumed human resources includes services such as:

- creating and managing HR planning, policies and strategies;
- recruiting, sourcing and selecting employees;
- developing and counselling employees;
- rewarding and retaining employees;
- redeploying and retiring employees; and
- managing employee information.

We have assumed there are six staff in the human resources department including a recruitment manager, an employee relations manager, two senior consultants, a junior consultant and an administrative assistant. We have assumed these roles have an average salary of \$ [REDACTED] per employee.

Total cost for human resources is estimated at \$ [REDACTED]

3.6 Business Strategy and Planning

This department is responsible for forecasting, planning, identifying business opportunities, managing government and commercial stakeholder relationships and strategic planning.

We have assumed five staff are in this department, including a government relations manager, a corporate services manager, a business development manager, an environment/safety manager and an administrative assistant. These roles have an average salary of \$ [REDACTED] per employee, as was defined in the KPMG corporate cost benchmarking report for LinkWater⁷.

Total cost for business strategy and planning is estimated at \$ [REDACTED]

3.7 Information Systems

The information systems department would provide technology, systems and services necessary for the delivery of corporate services and IT support for the network. As a large proportion of information systems costs are from external consultants and systems development, it is not appropriate to build up this cost using employee numbers. The costs will also vary greatly by industry, for example in the banking, insurance and finance industries over 10% of staff are associated with IT, compared with figures of 1-3% more typically found in manufacturing industry⁸. This reflects a clear differentiation between those industries where information systems are used to automate and increase the efficiency of production functions compared to those (such as banking) which provide the company with a strategic competitive advantage.

However, comparisons need to be done with care to take into account the substantial scope for outsourcing in this area. A more complete view can be found by comparing expenditure on IT (operations and capital combined) to total expenditure. Most companies spend from 1% – 4% of their expenditure on IT, generally clustered around 2%. Railtrack lies towards the upper limit of expenditure, spending about 4%. By contrast, one Australian access provider spends no more than about 1%⁸.

The IT requirements for a stand-alone authority should be comparatively modest and [REDACTED] % of expenditure has been adopted for this cost. This includes an allowance for systems development and external IT costs.

Total cost for information systems is estimated at \$ [REDACTED]

⁷ Queensland Bulk Water Transport Authority, Corporate Cost Benchmarking, LinkWater, KPMG, March 2011

⁸ Draft Decision on QR's Draft Undertaking, Volume 3 – Reference Tariffs, 2000

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3.8 Corporate Services

The corporate services department includes the general management, corporate affairs functions and office administration.

The general management will be responsible for reporting to the CEO on corporate services matters, including human resources issues, business strategy and planning issues and corporate affairs issues. We have assumed a general manager and an administrative assistant in this department. The average salary of these roles is \$ [REDACTED], as was defined in the KPMG corporate cost benchmarking report for LinkWater⁹.

The office administration function would provide services that would include reception services, inward and outward mail services, facilities management and document and records management. We have assumed five staff including a facilities manager, an administrative manager, a receptionist, a records manager and a facilities officer. These roles have an average salary cost of [REDACTED] per person, as was defined in the KPMG corporate cost benchmarking report for LinkWater⁹.

We have assumed that a Corporate Affairs function would be responsible for:

- handling inquiries from stakeholders, government departments and Ministerial offices,;
- media relations;
- management of stakeholders; and
- community relations

We have assumed the corporate affairs function would have three staff including an communications manager, a corporate affairs manager and a communications coordinator. These roles have an average salary cost of \$ [REDACTED] per person, as was defined in the KPMG corporate cost benchmarking report for LinkWater⁹.

Total cost for corporate services is estimated at \$ [REDACTED]

3.9 Office Overheads

Office overheads include all general expenses incurred by the corporate office group. These calculations assume there are a total of 45 employees in the corporate office. This includes the following:

- Office rental: The cost is estimated based on current rental price in Brisbane (\$ [REDACTED]/sqm¹⁰) assuming space is allocated based on 15sqm per person. A study on office space used in Australia in 2003 showed the average space per employee was 20sqm¹¹. On the other hand, the Building Code of Australia only requires a minimum of 10sqm per person, however this is just the minimum required to ensure safe means to access and escape in the event of an emergency. Given the current trend in office space is to reduce the space per employee in order to reduce costs we have therefore assumed the midway point of these two figures (15sqm per person). The total cost of office rental is estimated as \$ [REDACTED]
- Printing and stationary: Includes printing, photocopying and scanning and the associated costs of the machines. We have assumed the cost is \$ [REDACTED]/person, with a total for all corporate office employees of \$ [REDACTED]
- Phones and mobiles: We have assumed the cost is \$ [REDACTED]/person, with a total for all corporate office employees of \$ [REDACTED]

⁹ Queensland Bulk Water Transport Authority, Corporate Cost Benchmarking, LinkWater, KPMG, March 2011

¹⁰ www.realcommercial.com.au, 30 August 2012

¹¹ Room for Thought: a study of office use in Australia (2003) gives an average space usage of 20sqm per person.

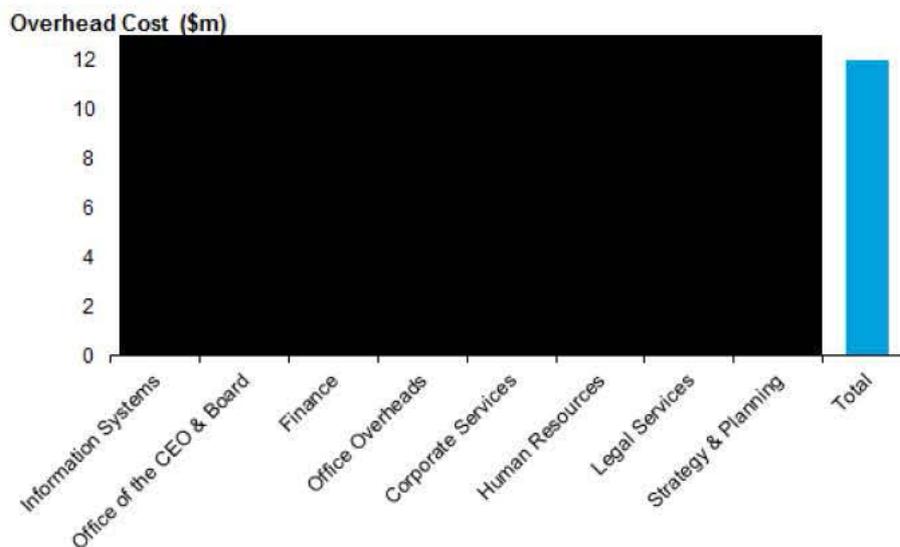
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- **Cleaning:** We have assumed the cleaning costs are \$█/sqm based on desktop research on current charges¹², with a total cost of \$█
- **ASX fees, share registry charges and associated expenses:** The total cost for these services is estimated at \$█
- **Annual report:** The cost of the annual report includes both the cost of development and distribution. We have estimated this cost based on a US benchmarking study¹³ which estimates the cost at approximately \$█
- **AGM:** The AGM cost includes the cost of a video of the AGM, mail out of the notice of the meeting and other professional services relating to coordination and execution of the meeting. The cost of these services is estimated at \$█¹⁴.
- **Miscellaneous expenses:** This includes staff training costs, seminars, staff amenities, entertainment and gifts & donations. We have assumed a total of \$█ for these expenses.

Total cost for office overheads is estimated at \$█

3.10 Summary

The following waterfall chart shows the build-up of total overhead cost by department. Three departments make up █% of the total costs, these include information systems, the office of the CEO & board and the finance department. We recommend further analysis into the cost components of these three departments.



¹² <http://smallbusiness.costhelper.com/office-cleaning.html>

¹³ GEMI Benchmarking Survey on EHS Annual Reports, Richard J. Guimond, Motorola, Inc. and George Nagle, Bristol-Myers Squibb Company Portland, Oregon June 28, 2001

¹⁴ The Ernst & Young report Prime Infrastructure – Review of Corporate Overheads, 2004, shows the actual costs in relation to the execution of the AGM were \$█

4 Benchmark Comparison

A “bottom-up” approach is highly subjective and assumes intimate knowledge of the operations and management of the maintenance activities of QRN Network. We have therefore supplemented this analysis by comparing our overall bottom-up cost with that in other regulatory decisions.

Total overhead costs for QRN Network maintenance services are estimated to be \$12.09m as is shown in the following table. Assuming total maintenance cost of \$200m, this equates to 6.0% of total costs.

Department	Total Overhead Cost (\$)
Office of the CEO & Board	█
Legal Services	█
Finance Services	█
Human Resources	█
Business Strategy & Planning	█
Information Systems	█
Corporate Services	█
Office Overheads	█
Total	\$12.09

The recent regulatory decisions shown below have overhead costs on average of 7.0% of total cost, which aligns well with our estimate.

Overhead costs as % of costs	
ARTC (2005) - % of operating costs	12.0%
TPI (2011) - % of total cost	5.3%
WestNet (2009) - % of total cost	5.1%
Envestra (2011) - % of operating costs	5.5%
Average	7.0%

5 Limitation of our work

General use restriction

This report is prepared solely for the internal use of QRN Network. This report is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity. The report has been prepared for the purpose set out in the Consultancy Services Agreement dated 22 May 2012. You should not refer to or use our name or the advice for any other purpose.