Appendix 1 – Terms of Reference

Terms of Reference

Aurizon Network 2013 Draft Access Undertaking Financial Assessment of Operating Expenditure

13 August 2013

1. PROJECT BACKGROUND

The Queensland Competition Authority (the Authority) is an independent statutory body responsible for assisting with the implementation of competition policy in Queensland.

Aurizon Holdings Limited (formerly known as QR National Limited) is a vertically integrated rail business which provides both above-rail and below-rail services. That is, it operates train services and provides access to its tracks for its own and third-party operators.

Aurizon Network Pty Ltd (Aurizon Network) operates the below-rail network serving coal mines in central Queensland and is a wholly owned subsidiary of Aurizon Holdings Limited. The services of Aurizon Network's below-rail coal network are a declared service for third party access under the *Queensland Competition Authority Act 1997* (the QCA Act). The declaration excludes the infrastructure associated with train operations (e.g. freight centres and maintenance facilities).

1.1 Aurizon Network Access Undertaking

Aurizon Network is subject to an access undertaking, approved by the Authority, that sets out the terms and conditions under which Aurizon Network will provide access to rail infrastructure covered by the undertaking. These include reference tariffs for coal-carrying train services for central Queensland and processes to establish access charges for new train services. The undertaking also sets out the process required for an access seeker to negotiate access to the infrastructure and how any disputes in relation to access are to be resolved.

Aurizon Network's current access undertaking (UT3) was originally due to terminate on 30 June 2013, but has been extended, including transitional tariffs for 2013-14, to 30 June 2014. Aurizon Network submitted a replacement undertaking (UT4) to the Authority on 30 April 2013, which is anticipated to apply for a four-year regulatory period (2013-14 to 2016-17).

The central Queensland coal region (CQCR) comprises four systems, namely, Moura, Blackwater, Goonyella and Newlands. Aurizon Network also operates the Goonyella to Abbot Point Expansion (GAPE) system which connects the Goonyella and Newlands systems. (Further information on these systems is available at http://www.aurizon.com.au/network/systems/Pages/Network/Services.aspx)

A significant component of the reference tariffs for each system is an allowance for maintenance, operating and capital expenditure. The Authority has already appointed a rail engineering consultant to perform a technical assessment of the capital, maintenance and operating expenditure forecasts, for reasonableness, under a separate arrangement.

The Authority is now seeking to engage a consultant to assist with the assessment that relates to the finance, insurance and tax aspects of operating and capital expenditure forecasts.

This analysis will inform the Authority's decision on Aurizon Network's replacement access undertaking.

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2. PURPOSE/OUTLINE OF CONSULTANCY

The purpose of this consultancy is to assist the Authority in assessing specific aspects of Aurizon Network's forecast operating and capital expenditure for the UT4 regulatory period.

In summary, the principal tasks for the consultant are to:

- (a) review specific aspects of Aunzon Network's forecast operating and capital expenditure, and assist the Authority to identify any additional miomration required;
- (b) assess the reasonableness and efficiency specific aspects of Aurizon Network's forecast operating and capital expenditure particularly the allocation of Aurizon Network's corporate overhead costs; and
- (c) advise the Authority on matters raised by stakeholders during the UT4 public consultation process.

As noted above, the Authonity is also seeking technical engineering advice on the reasonableness of Aurizon Network's maintenance, operating and capital expenditure forecasts, through a separate consultancy. Sinclair Knight Merz (SKM) has been appointed to this consultancy.

This request for proposals relates only to financial aspects of Aurizon Network's operating and capital expenditure forecasts in UT4. However, consultants may wish to review the terms of reference for SKM's review to form an understanding of the overall scope of tasks on which the Authority is seeking advice.

- 3. CONSULTANCY TASKS
- 3.1 Information Review and Request

In order to perform its assessment, the consultant is required to review Aurzon Network's forecast operating and capital expenditure contained in the relevant sections of UT4, along with any supporting material, by:

- (a) ensuring that the data and material provided by Aurizon Network are in a form (and format) to enable the consultant to complete tasks in 3.2-3.3 below;
- (b) identifying any additional data or information that the consultant requires to complete tasks in 3.2-3.3;
- (c) preparing an information request that the Authority will submit to Aurizon Network on the basis of the reviews in 3.1(a) and (b); and
- (d) keeping a register of the consultant's requests for information, including the status of Aurizon Network's responses.

The proposed operating expenditure for 2013-14 is higher by 44% than the allowance approved by the Authority in 2012-13 under the 2010 undertaking.

Part of the increase in operating expenditure can be attributed to Aur.zon Network's new methodology to calculate corporate overhead costs – i.e. to quantify the corporate overhead costs that would be attributable to the provision of services in the CQCR if Aurizon Network operated on a stand-aloue basis (Aurizon Network, sub. 3, p.229, available here: http://www.qca.org.au/files/R-Aurizon-QR2013DAU-Ex/MatBB-0513.pdf)

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3.2 Assessment of Forecast Operating Expenditure

Aurizon Network's forecast operating expenditure is presented in Chapter 10 of Submission 3 of the UT4 materials (available here: http://www.qca.org.au/files/R-Aurizon-OR2013DAU-ExMatBB-0513.pdf) and comprises of a number of categories. Each of these categories contains elements of direct costs (i.e. which can be attributed to a specific system) and elements of common costs (i.e. which cannot be attributed to a specific system). Key operating expenditure includes:

- corporate;
- infrastructure management;
- train control, safeworking and operations administration.
- telecommunications;
- transmission connection costs associated with electric traction trains; and
- environmental charges.

Sub-task 3.2.1: Review of cost allocation methodology for corporate overhead costs to Aurizon Network

Aurizon Network has a commissioned report from Ernst & Young to determine the appropriate cost allocation methodology for corporate (Aurizon Holdings') overhead costs to Aurizon Network. Ernst & Young's report is Annex G of UT4 (available here: http://www.qca.org.au/files/R-AurizonG-Submissions-DAU13-513.pdf). The description of the allocation methodology and rationale are highlighted in section 10.2 of Submission 3 of the UT4 materials.

This sub-task requires the consultant to review Ernst & Young's report, and any more information Aurizon Network can provide on this matter, and provide an opinion on the validity of the cost allocation methodology used by Aurizon Network.

Sub-task 3.2.2: Benchmarking of cost of insurance premiums

Aurizon Network has a commissioned report from Willis that provides an opinion on the cost of insurance for stand-alone insurance policies covering Aurizon Network in relation to its network in the CQCR. Willis' report is presented as Annex I of UT4 (available here http://www.qca.org.au/files/R-AurizonI-Submissions-DAUI3-513.pdf).

This sub-task requires the consultant to review Willis' report, benchmark the insurance costs against comparable companies and provide an opinion on the validity of the cost of insurance proposed in the context of the assumption that Aurizon Network operates as a stand-alone business.

Sub-task 3.2.3: Review of Calculation of Mine Depreciation Profile

This sub-task requires the consultant to provide an opinion on the proposed change in calculation of mine depreciation profiles as discussed in section 6.4 of Submission 3 of the UT4 materials, including whether this change would have any tax implication. Queensland Competition Authority

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Sub-task 3.2.4: Benchmarking of forecast audit costs

Aurizon Network has forecast annual cost for compliance audits as presented in table 65 (Submission 3, p. 226).

This sub-task requires the consultant to provide an opinion on the reasonableness of the audit fees forecast.

Sub-task 3.2.5: High Level Review of Forecast Operating Expenditure

This sub-task involves conducting a high level review of Aurizon Network's forecast operating expenditure by benchmarking the forecast operating expenditure for the CQCR with relevant industry comparators and comparing the forecast operating expenditure to current operating expenditure at both the regional and system levels. Accordingly, the consultant is required to

- (a) benchmark Aurizon Network's forecast total operating expenditure for the CQCR to that of relevant below-rail network infrastructure operators (especially heavy haul networks such as coal) on the basis of:
 - (1) total absolute dollars; and
 - (ii) dollars / train path
- (b) compare Aurizon Network's forecast operating expenditure to its current operating expenditure on an annual basis at the regional level (i.e. all four systems in aggregate) by:
 - (1) total absolute dollars and dollars/train path; and
 - (ii) total absolute dollars for each major cost category.
- (c) compare Aurizon Network's forecast operating expenditure to its current operating expenditure on an annual basis at the system level (i.e. for each of the four CQCR systems) by:
 - (i) total absolute dollars and dollars / train path; and
 - (ii) total absolute dollars for each major cost category.
- (d) explain the reasons for any differences between operating expenditure identified in (a)-(c), (e.g. changes in administrative and/or labour costs).

Sub-task 3.2.4: Total Cost Benchmarking

Total cost benchmarking relates to assessing the total cost of providing the cost of the service (operating costs, as well as a measure of capital costs which can differ depending on the methodological approach adopted). The objective of total cost benchmarking is to develop a view of overall productivity by measuring the rate of change of total cost to the rate of change of outputs through time. It can be done based on the trends of a single company or across companies or with respect to the economy as a whole.

This task requires the consultant to benchmark Aurizon Network's total costs against its historic performance and its future forecast performance and, if practicable, similar companies, as well as providing an opinion on their general efficiency in comparison to the Queensland economy.

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Appendix 1 – Terms of Reference



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Sub-task 3.2.5: Detailed Review of Forecast Operating Expenditure

This sub-task requires the consultant to assess each of the operating expenditure categories for reasonableness and efficiency. For each category, the consultant will:

- (a) assess Aurizon Network's forecast operating expenditure to ensure that the forecast cost does not reflect;
 - costs that are also included in other operating expenditure categories (i.e. there is no 'double-counting');
 - (ii) operating expenditure associated with Aurizon Holdings Limited's above-rail activities;
 - (iii) other costs (e.g. overheads) associated with specific capital works projects, which are the subject of separate applications to the Authority, or
 - (iv) any other source of double-counting the consultant may identify.
- (b) adjust Aunzon Network's forecast cost to remove any double-counting (if applicable), as identified in (a),
- (c) benchmark Aurizon Network's forecast operating expenditure (using the adjusted forecast cost in (b) if applicable) against the operating expenditure of relevant industry comparators for efficiency.
- (d) identify and explain the difference between the (adjusted) forecast cost and the benchmark cost;
- (e) determine whether or not Aurizon Network's (adjusted) forecast cost is reasonable and
 - if reasonable, the consultant should confirm its acceptance of Aurizon Network's (adjusted) forecast and provide its reasoning, or
 - (ii) if not reasonable, the consultant should determine a reasonable forecast for the cost category with reference to the analysis in (c) and provide its reasoning.
- determine whether Aurizon Network's forecast operating expenditure includes an adjustment to reflect productivity improvements over the regulatory period (e.g. x-factor or other adjustment);
 - (i) if Aurizon Network has not proposed an adjustment to reflect productivity improvements, assess whether or not this assumption is reasonable based on relevant factors (e.g. forecast volumes / capital expenditure), or
 - (ii) if Aurizon Network has proposed an adjustment to reflect productivity improvements, assess the reasonableness of that adjustment taking into account relevant factors (e.g. forecast volumes / capital expenditure); and
 - (iii) in either case, the consultant should confirm its acceptance or not, of Aurizon Network's proposal. If Aurizon Network's proposal is unacceptable, the consultant should determine an appropriate adjustment to Aurizon Network's forecast operating expenditure to reflect productivity improvements. The consultant should provide its reasoning.

The consultant will undertake tasks (a) to (e) for Aurizon Network's forecast operating expenditure categories for each CQCR system and for each year of the UT4 period (expected to be 2013-14 to 2016-17).

Task (f) need only be undertaken at a regional level (i.e. total forecast operating expenditure for the CQCR) over the UT4 period.

3.3 Assessment of Capital Expenditure Proposal

Aurizon Network's proposed Capital Indicator includes forecast capital expenditure of \$1.95 billion over four years for each CQCR system and the GAPE, as described in Chapter 8 of Volume 3 of the UT4 materials (available here: http://www.qca.org.au/files/R-Aurizon-QR2013DAU-ExMatBB-0513.pdf). "Capital Indicator" is defined in UT4 as 'the annual capital expenditure allowance approved by the QCA, from time to time, for the purpose of assessing the relevant Reference Tariffs'.

The Authority requires the consultant to provide an opinion on specific aspects of Aurizon Network's forecast capital expenditure.

Sub-task 3.3.1 Tax Advice on Interest during Construction (IDC)

The Authority requires the consultant to provide an opinion on one specific aspect of Aurizon Network's forecast capital expenditure.

This task requires the consultant to provide the Authority with tax advice on the reasonableness of section 8.6 of Submission 3 of the UT4 materials, which is Interest During Construction.

Sub-task 3.3.2: Review Capital Cost Build-Up

The consultant is to review the capital cost build-up and its relationship to risk management. Whenever a project or set of projects is constructed, the cost, time and scope associated with them is assessed based on the risk management framework. The cost build-up, and particularly the contingency funds, should bear some relationship with the risk associated with Aurizon Network not meeting the targets associated with that project.

The consultant is to review Aurizon Network's methodology to calculate capital cost build-up, and how it links to the investment framework and risk contingency measures.

3.4 Expert Opinion on Further Aspects of UT4

The Authority may request further advice from the consultant on other matters related to the proposed UT4. It is therefore important that the consultant quotes their standard fee rates for any ad hoc tasks or contract variations.

3.5 Advice on Public Consultation

Following Aurizon Network's formal lodgement of UT4, the Authority has published the undertaking on its website, and invited public comments by 10 October 2013.

The consultant will provide the Authority with technical advice in assessing matters raised in submissions relating to Aurizon Network's operating and capital expenditure proposals.

4. RESOURCES/DATA PROVIDED

The Authority will provide the consultant with information on Aurizon Network's:

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- forecast total operating expenditure (2013-14 to 2016-17);
- forecast demand (railings) (2013-14 to 2016-17);
- total actual operating expenditure (2009-10 to 2012-13);
- actual demand (railings) (2009-10 to 2012-13).

The Authority will also be able to provide the consultant with information pertaining to the next regulatory period provided by Aurizon Network.

The consultant will be required to source additional information required to undertake the consultancy from Aurizon Network and other stakeholders as appropriate. Of particular relevance are the Authority's decisions, working papers and consultancy reports related to Aurizon Network's 2001, 2006 and 2010 access undertakings. These documents are available from the Authority or for downloading from its website at <u>www.qca.org au</u>.

The Authority will facilitate the acquisition of all necessary information, including providing an introduction and contacts with Aurizon Network representatives to enable the consultant to complete this consultancy.

5. PROJECT TIME FRAME

The consultant should be available to commence work on 2 September 2013. Dates for completion will be determined at the time of appointment.

6. PROPOSAL SPECIFICATIONS AND FEES

The proposal should

- include the name, address and legal status of the tenderer;
- provide the proposed methods and approach to be applied;
- provide a fixed price quote for the provision of the services detailed herein; and
- nominate the key personnel who will be engaged on the assignment, together with the following information.
 - name;
 - professional qualifications;
 - general experience and experience which is directly relevant to this assignment;
 - expected time each consultant will work on the project, and
 - standard fee rates for any contract variations.

The fee quoted is to be inclusive of all expenses and disbursements. A full breakdown of consultancy costs is required with staff costs reconciled to the consultancy work-plan.

Total payment will be made within 28 days of receiving an invoice at the conclusion of the consultancy.

Queensland Competition Authority

7. CONTRACTUAL ARRANGEMENTS

This consultancy will be offered in accordance with the Authority's standard contractual agreement.

This agreement can be viewed at http://www.gca.org.au/about/consultancyagreement.php

8. REPORTING

In carrying out this project, consulting services will involve completing the consultancy tasks described in section 3. The primary deliverables required are

- (a) a detailed information request (as detailed in section 3.1 of this terms of reference);
- (b) a draft report including the consultant's:
 - assessment of Aurizon Network's forecast operating expenditure for the UT4 regulatory period (as detailed in section 3.2 of these terms of reference).
 - (ii) if necessary, the consultant's independent forecast of elements of Aurizon Network's operating expenditure over the UT4 regulatory period (as detailed in section 3.2.2(e), of these terms of reference); and
- (c) a final report that reflects the Authority's feedback on the draft report and stakeholder comments arising from the public consultation process (as detailed in section 3.5 of these terms of reference).

The consultant will be required to provide the Authority with progress reports on an "as required", and at least weekly, basis.

Project deliverables will be required by the due date agreed between the Authority and the successful consultant. All reports must be finalised prior to project completion.

If necessary, the consultant should advise at earliest opportunity any critical issues that may impede progress of the consultancy, particularly issues that impact on the successful delivery of the consultancy tasks in section 3.

At the conclusion of the consultancy, the consultant will be required to provide the Authority with a personal presentation on the findings of the analysis in addition to presenting three (3) copies of a written report. An electronic version of the final report is also required, saved in Microsoft© Word with any numeric data in Microsoft© Excel.

9. CONFIDENTIALITY

Under no circumstance is the selected consultant to divulge any information obtained from Aurizon Network or the Authority for the purposes of this consultancy to any party other than with the explicit permission of Aurizon Network and the Authority.

10. CONFLICTS OF INTEREST

For the purpose of this consultancy, the consultant is required to affirm that there is no, and will not be any, conflict of interest as a result of this consultancy.

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11. AUTHORITY ASSESSMENT OF PROPOSAL

The Authority uses the following format to assess tenders:



and Competiti	non Authority	Terms of Reference
Weight	Criteria	Description
Binding	Conflict of interest	Identification of actual conflict perceived conflict current or past work for any of the stakeholders involved
40%	Technical expertise of Proposed Team	Do the proposed individuals have experience in the types of projects required by this consultancy? What skill sets experience makes them particularly appropriate for this consultancy?
20%	Firm Experience	Previous experience that the firm can bring to bear on the project. Track record of the firm in undertaking the same, or similar, types of projects. Does the firm have any special resources that give it an advantage over other firms in undertaking this project?
30%	Proposed Methodology and Approach	The proposal clearly identifies the methodology the consultant intends to use to undertake the task. The consultant has structured the proposal such that it is clear there is a comprehensive understanding of the tasks, issues and the outcomes required.
10%	Resourcing	 (i) the proposal itemises the resources that will be used and provides a breakdown of how, when and where they will be used (7%); (ii) the firm appears able to provide backup expertise in the event it is needed (3%).
	Value for Money	Consideration will be given for: • hourly rates; • total number of hours proposed, and • scope of works proposed in the methodology in relation to the total cost quoted.

In making its assessment against the criteria, the Authority will place most weight on relevant experience of the team members involved and the proposed method for the completion of the task.

12. INSURANCE

The consultant must hold all necessary workcover and professional indemnity insurance.

13. QUALITY ASSURANCE

The consultant is required to include details of quality assurance procedures to be applied to all information and outputs provided to the Authority.

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14. GRIEVANCES

If during the course of your engagement you wish to raise any grievances or make a complaint, please contact Mrs Robyn Farley-Sutton, Director Corporate Services, on (07) 3222 0505 or robyn.farley-sutton@qca.org.au.

15. LODGEMENT OF PROPOSALS

Proposals are to be lodged with the Authority by 11:59 p.m. Wednesday 28 August 2013.

For further information concerning this consultancy, please contact Ms. Clotilde Belanger on 07 3222 0587 or Ms. Farhana Chowdhury on 07 3222 0554.

Proposals should be submitted to:

Paul Bilyk, Director

Queensland Competition Authority GPO Box 2257 Brisbane Qld 4001

 Phone:
 (07) 3222 0555

 Fax:
 (07) 3222 0599

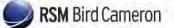
 Email
 rail@qca.org.au

RSM Bird Cameron

Appendix 2 - Sources of Information

- 2013 Draft Access Undertaking Volume 3: Maximum Allowable Revenue and Reference Tariffs ("Volume 3 of Aurizon Network's 2013 Draft Undertaking")
- UT4 Maintenance Submission
- Aurizon Network excel based corporate cost allocation model
- Ernst & Young report Benchmarking of Corporate Overhead Costs for Aurizon Network Operations
- Energex cost allocation methodology February 2009
- Energex audited annual report 30 June 2013
- Aurora Energy cost allocation methodology issue 6.3 May 2011
- Aurizon Network audited annual report 30 June 2013
- Aurizon Holdings audited annual report 30 June 2013
- Aurizon Holdings Historical Corporate Costs Spread sheet
- Aurizon Holdings Corporate Fixed Asset Register and Depreciation Calculation Spread sheet
- Aurizon Holdings detailed breakdowns of historical and forecast costs for selected cost centres
- Deloitte Access Economics Estimate of QR Network Maintenance Services Overheads – 1 November 2012
- Thomson Reuters 2013 Boardroom Remuneration Review
- Discussions with Aurizon Network management
- Willis Expert Opinion on the cost of insurance premiums for the purposes of the Aurizon Network Access Undertaking 2013
- Aurizon Holdings Insurance premium information for FY13/14

- Comparable insurance information provided on a no names basis
- Excel spreadsheet '13090 RINGFENCED Weighted Average Mine Life'
- Wood Mackenzie Coal Supply Service Australia Production and Reserves Report – November 2012
- E-mail from Aurizon Holdings Tax Manager 1 October 2013
- Listing of Aurizon Network's historical compliance audit costs for the years ended 30 June 2011, 2012 and 2013
- Aurizon Network Compliance audit invoices for the year ended 30 June 2013
- Aurizon Network Regulatory Compliance audit plan for the year ended 30 June 2013
- Comparable benchmark information held by RSM Bird Cameron
- Discussions with QCA
- PwC review of Westnet Rail's 2009 Floor and Ceiling Costs report
- ARTC Application HVAU 2010 Hunter Valley Forecast 2011-2019 (public version)
- ARTC Hunter Valley business presentation dated March 2012
- Aurizon Holdings' historical and budgeted corporate cost breakdown summaries
- Aurizon Network's historical and forecast system wide direct cost summary
- Aurizon Network's historical and forecast train path number statistics
- Excel spreadsheet 131009 In Confidence Calculating IDC for UT4 Model (FINAL)



- E-mail from Aurizon Holdings Tax Manager 8 October 2013
- Cost Estimating Procedure (T 1137 Version 1.0 Date 2/08/2007)
- Project Management Manual (PMM 1312, Version 1.0 Date 14/06/2013)
- Enterprise Risk Management Framework (Version 6.0 Date 8/07/2013)
- Project Governance Framework
- Investment Framework Manual Version 3.1 dated 1/11/2012
- Project Summary sheets for the above three projects and updated summary estimates for Project HPX 3 (APR 11007) and WIRP – Stage 1 Packages
- Risk Register for North Coast Line Aldoga triplication and Wiggins Island balloon loop (A02976)
- Aurizon UT4 Maintenance Submission 30 April 2013
- Excel spread sheet ROA STS July 2012 -16112012 BCD Track lifter LK v1.8 (WACC 6.93%).xls
- Excel Spread sheet ROA AM Assets July 2012 15112012 FY17 duplication out v1.4 (WACC 6.83).xls
- Excel spreadsheet Capex cashflow Resurfacing Feas Nov 13.xlsx
- Stage Gate Process: Capital expenditure Feasibility Investment Approval Request – Procurement of 2 high production switch tampers and 2 high production ballast regulators – 7 March 2012
- Stage Gate Process: Capital expenditure Feasibility Investment Approval Request – Ballast Fouling Removal Project – Ballast Cleaning Fleet Tranche 2 – November 2013

- Aurizon Network UT4 return on inventory and working capital base calculation methodology explanation
- Aurizon Network Excel Spreadsheet Inventory Values all plant and stores 18042013

RSM Bird Cameron

Appendix 3 – Glossary of Terms and Abbreviations

ACCC – the Australian Competition and Consumer Commission	GRV - Gross Replacement Value	
AM - The Asset Maintenance division of Aurizon Network	GTK – Gross Tonne Kilometre	
APQC - American Productivity and Quality Centre	HVCCC - Hunter Valley Coal Cha	in Coordinator
ASX – Australian Securities Exchange	IDC – Interest During Construction	1
ARTC – Australian Rail Track Corporation Limited	IPO – Initial Public Offering	
Asciano – Asciano Limited	Km - Kilometre	
Aurizon Holdings – Aurizon Holdings Limited	MAR – Maximum Allowable Reve	nue
Aurizon Network – Aurizon Network Pty Ltd	MEA - Modern Equivalent Asset	
BMA – BHP Billiton Mitsubishi Alliance	Mt - megatonne	
BMC – BHP Billioton Mitsui Coal	Post-tax nominal classic WACC -	a measure of the post-tax return required to be applied to nominal cash flows that
Brookfield Rail – Brookfield Rail Pty Ltd		do not take into account the tax deductibility of interest.
CPI – Consumer Price Indexation	D. 1.1	Manual Science and Science and Science
CQCN – Central Queensland Coal Network	Post-tax nominal vanilla vvACC -	a measure of post-tax return required to be applied to nominal cash flows that take into account the tax deductibility of
CQCN Systems – The Blackwater, Goonyella, Newlands, Moura and GAPE rail systems.		interest.
CQCR – Central Queensland Coal Region	QCA – the Queensland Competition	on Authority
Deloitte – Deloitte Touche Tohmatsu	QRC – the Queensland Resource	Council
FTE – Full Time Equivalents	RAB – Regulatory Asset Base	
FY – the Financial Year ended 30 June	ROA - Return on Assets	



RSMBC – RSM Bird Cameron

RTCA - Rio Tinto Coal Australia

STS - The Specialised Track Services division of Aurizon Network

UT3 – the period from 2010 to 2013 being the term of the 2010 Access Undertaking, being the third access undertaking covering the CQCR

UT4 – the four year period from 1 July 2013, being the proposed term of the 2013 Access Undertaking which will be the further access undertaking covering the CQCR

WACC - Weighted Average Cost of Capital

Willis - Willis Australia Limited

Appendix 4 – Regulatory Cost Allocation Precedents

Summary of precedents

	Company	Regulator	Allocation basis
Blended	Energex	Australian Energy Regulator (AER)	 Energex's corporate overhead cost allocation is based on a blended allocation method: For regulated services - Total direct spend (reg services) For non regulated services: Assets (proportion of non regulated assets versus total assets) Headcount (proportion of non regulated headcount versus total headcount) Revenue (proportion of non regulated revenue versus total revenue) The average of the three basis forms the basis of the overhead cost allocation to non regulated services
	CitiPower/Powercor	Australian Energy Regulator (AER)	For shared costs, a blended allocation method is used where a three factor formula is applied to the function categories to allocate the costs recorded in these functions between CitiPower and Powercor. The three factor formula is based on an equal weighting of: Value of the Regulated Asset Base Distribution revenue Customer numbers Shared costs are allocated between categories of Distribution Services using an appropriate causal allocator.
Various Causal	Aurora	Australian Energy Regulator (AER)	The overhead cost allocators vary depending on the shared cost. Various Causal Allocators Include: Number of PCs (e.g., IT Management) Occupied floor space (e.g. Facilities Management) Dollar value of contracts (e.g. Procurement) FTE employees (e.g. People and Culture Business Systems) Total number of light and heavy vehicles per division (e.g. Fleet Management Systems) Aurora uses just one non-causal allocator, being the weighted average of the total cost allocations that have a causality driver (e.g., Corporate affairs).
Cost	Jemena	Australian Energy Regulator (AER)	Jemena's corporate overhead cost allocation method is based on Direct Costs: The proportion of direct costs for each service category to total direct costs

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Summary of precedents

	Company	Regulator	Allocation basis	
-	Victorian Rail Track Corporation (VicTrack)	Essential Services Commission (ESC)	VicTrack uses a Direct Cost Allocation Method. VicTrack's indirect costs, includin corporate costs, are allocated in proportion to: Pro-rata basis of total direct cost by business unit. Where costs are incurred that cannot be directly attributed to a particular activity VicTrack's rail business (e.g. the management of the rail business), the costs will business of a reasonable estimate of the causation of those costs.	
Cost	Dalrymple Bay Coal Terminal (DBCT) (operated by Prime Infrastructure)	Queensland Competition Authority (QCA)	 DBCT uses a Direct Cost Allocation Method. The QCA commissioned consultants to evaluate the DBCT's overhead costs as compared to a notional stand alone operator: Using a bottom up approach dividing overhead costs into non-contested costs; type contested costs; size contested costs; and excluded costs. Using a top down approach by comparing the level of overhead costs as a percentage of total terminal costs or operating revenue compared to other terminals (i.e. benchmarking). 	
Revenue	APA Group	Australian Energy Regulator (AER)	APA Group corporate overheads are allocated to each asset based on the forecast revenues received for each asset.	
Tonnes/Kms	Australian Rail Track Corporation Ltd (ARTC)	Australian Competition and Consumer Commission (ACCC)	ARTC Non-Segment Specific Costs for the Hunter Valley Coal Network are allocated in proportion to: Gtkm (Gross tonnes multiplied by kilometres) for Non-Segment Specific Costs associated with track maintenance Train kilometres for Non-Segment Specific Costs not associated with track maintenance.	

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Appendix 5 – Ernst & Young – Corporate Cost Benchmarking – Process Overview

Aurizon Network - Operations

Corporate Cost Benchmarking - Process Overview Rell Company 1 and 2

s to request participation in benchmarking st categories to be benchmarked (i.e. finance, nat of data request (Excel template). d business process taxonomy mpanies. Data to include breakdown of venue for 3 year period up to 2012. alies, e.g. Incomplete data or high/low value e year period to assess suitability of data. Cost
nat of data request (Excel template). I business process taxonomy mpanies. Data to include breakdown of venue for 3 year period up to 2012. alies, e.g. incomplete data or high/low value
nat of data request (Excel template). I business process taxonomy mpanies. Data to include breakdown of venue for 3 year period up to 2012. alies, e.g. incomplete data or high/low value
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venue for 3 year period up to 2012. alies, e.g. incomplete data or high/low value
e year period to assess suitability of data. Cost
ing
and/or resolve discrepancies.
ations to ensure meaningful comparison, e.g. ning) or identifying areas with limited and "operational excellence"),
normalised" benchmarks for each cost category as % of revenue".
vel of expenditure as a percentage of total
Aurizon Network's total revenue figure to derive for each category of cost.
any 1 & 2 plus other sources) together with ation exercise and produce results graphs for
enchmark data was evaluated to ensure
rate cost allocations and benchmarks were auses, e.g. one-off costs, divergent business ording costs.
into a single report



Our one-firm structure enables us to provide strong connections and a focus on client relationships. Clients can readily connect to our national and international expertise and networks, our extensive understanding of Australian business and to our senior advisors. With RSM Bird Cameron you really are... Connected for Success

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