Aurizon Network 2013 Draft Access Undertaking
Financial Assessment of Operating Expenditure
Response to Aurizon Network’s Submission
dated 7 March 2014
Addendum Report April 2014
# Table of Contents

1. Disclaimer and Scope .................................................. 2
2. Responses to Aurizon Network's Comments on the RSMBC Report ........................................... 3
Appendix 1 – Terms of Reference ........................................ 12
1. Disclaimer and Scope

Disclaimers

1.1 This addendum has been prepared for the Queensland Competition Authority (“QCA” or “the Authority”) solely for the purpose of assisting the Authority in its assessment of specific aspects of Aurizon Network Pty Ltd’s (“Aurizon Network”) forecast operating and capital expenditure for the UT4 regulatory period and is not to be used for any other purpose without our written consent nor should any other party seek to rely on the opinions, advices of other information contained within this report without prior written consent.

1.2 The addendum has been prepared in response to Aurizon Network’s Response to QCA Consultants’ Cost Reports dated 7 March 2014.

1.3 We disclaim all liability to any party other than QCA in respect of or in consequence of anything done, or omitted to be done, by any party in reliance, whether whole or partial, upon any information contained in this report. Any party, other than QCA, who chooses to rely, in any way, on the contents of this report, does so at their own risk.

1.4 The information in this report and in any related oral presentation made by us is confidential between us and the QCA, and should not be disclosed in whole or in part for any purpose except with our prior written consent.

Authorisations

1.5 Other than for the purpose outlined above, this report should not be released to any other third party without the prior written consent of RSM Bird Cameron.

Scope

1.6 We have previously performed the procedures outlined in the Authority Terms of Reference “Aurizon Network 2013 Draft Access Undertaking Financial Assessment of Operating Expenditure” dated 13 August 2013 (as set out in Appendix 1 of our report dated January 2014).

1.7 The terms and abbreviations used in this addendum are consistent with those used in our report dated January 2014.
2. Responses to Aurizon Network’s Comments on the RSMBC Report

Shadow Company and Benchmarking

2.1 We adopted the following methodology to undertake the benchmarking exercise:

- compared the final year UT3 actual operating costs to the first year UT4 operating forecast costs;
- benchmarked the operating costs against the two comparable Australian rail access providers based on publicly available information; and
- established an indicative “Shadow” benchmark company using a bottom up cost approach, based on information not publicly available and based on the experience in operating railway networks of rail industry experts engaged by RSMBC as part of our review.

2.2 The benchmarking analysis has been undertaken on the basis of:

- total absolute dollars;
- $/track km
- $/train path (where information is available);
- $/GTK (forecast); and
- $/GTK (contracted);

2.3 Whilst information already disclosed in the public arena can be attributed, this is not the case for information provided on a confidential basis to develop benchmarks. Sources of information provided to develop the Shadow Benchmarks remain confidential and will not be disclosed.

2.4 The track km used in the calculation of comparable costs for ARTC Hunter Valley has been reviewed following the provision of track map information. A revised track distance of 740km has been used to adjust the costs / track km to those in the table below. The calculations of GTK, however, remain unchanged.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Cost ($ million)</td>
<td>57.579</td>
<td>14.330</td>
<td>29.730</td>
</tr>
<tr>
<td>Overhead Cost ($ million)</td>
<td>65.973</td>
<td>20.854</td>
<td>16.671</td>
</tr>
<tr>
<td>Total cost ($ million)</td>
<td>123.552</td>
<td>35.184</td>
<td>46.401</td>
</tr>
<tr>
<td>Track Km (estimated)</td>
<td>2,667</td>
<td>1,997</td>
<td>740</td>
</tr>
<tr>
<td>Total Cost / Track Km</td>
<td>$46.326</td>
<td>$17.618</td>
<td>$62.704</td>
</tr>
<tr>
<td>Forecast GTK (million)</td>
<td>80.513</td>
<td>23.532</td>
<td>43.309</td>
</tr>
<tr>
<td>Total Cost / Forecast GTK (cents)</td>
<td>0.153</td>
<td>0.150</td>
<td>0.107</td>
</tr>
<tr>
<td>Contract GTK (million)</td>
<td>107.138</td>
<td>N/a</td>
<td>43.309</td>
</tr>
<tr>
<td>Total Cost / Contracted GTK (cents)</td>
<td>0.115</td>
<td>N/a</td>
<td>0.107</td>
</tr>
</tbody>
</table>

2.5 We note Aurizon Network’s comments on page 27 of its response to our report and agree that track km is not necessarily a prudent measure for allocating and benchmarking total operating and corporate overhead allowances. This metric was, in part, used as it...
was part of the terms of reference issued. We consider operating cost / GTK to be a more prudent metric.

2.6 We note Aurizon Network’s comments in relation to the benchmarking undertaken and acknowledge that it is difficult to review specific system complexities in a desktop benchmarking exercise, however, we recognise that all rail networks face individual operational challenges.

2.7 A more in depth review of Aurizon Network’s operations and other operations in Australia would undoubtedly allow a more detailed view to be reached.

Use of the blended allocator

2.8 The work undertaken by RSMBC comprised the following procedures:

- obtaining an understanding of how the 226 cost centres have been determined and how the costs have been allocated to each cost centre;
- reviewing the cost centre determination and assessed the allocation of direct costs and shared costs across the various cost centres for reasonableness;
- obtaining an understanding of how Aurizon Network determined the cost driver to be utilised in allocating the overheads of each cost centre;
- reviewing the cost driver allocation methodology for reasonableness; and
- reviewing the Ernst & Young benchmarking report utilised by Aurizon Network to substantiate of the allocated costs for reasonableness.

2.9 RSMBC also, as part of sub-task 3.2.6 (section 10 of our report dated January 2014), undertook a benchmarking exercise to independently benchmark the proposed operating costs.

2.10 In its submission, Aurizon Network has noted that “In the 2013 DAU, Aurizon Network outlines that its corporate overhead costs have been calculated using a cost allocation methodology based on both causal and blended allocation bases. Research undertaken by EY (presented in their report) indicates that the use of a blended allocator in the absence of a clear causal driver of costs is supported by regulatory precedent, particularly for regulated firms with similar characteristics.”

2.11 Whilst noting the comment above, we also note that EY’s research (Appendix 4 of our report dated January 2014) indicates that the most commonly used cost allocation method is the direct cost methodology:

2.12 The direct cost methodology has been applied by:

- Energex (as discussed above);
- Aurora Energy (for a large number of its cost centres)\(^1\);
- Jemena;
- Victorian Rail Track Corporation; and
- Dalrymple Bay Coal Terminal (“DBCT”).

2.13 A blended allocator, as proposed by Aurizon Network has been utilised by:

- Energex – for a relatively small proportion of its business; and
- CitiPower & Powercor in allocating shared costs.

\(^1\) Aurora Energy cost allocation methodology issue 6.3 – May 2011
2.14 RSMBC also, as part of sub-task 3.2.6 undertook a benchmarking exercise to independently benchmark the proposed operating costs.

2.15 Whilst acknowledging the limitations of RSMBC’s benchmarking that was prepared on a desktop basis, we note that the Direct Cost Allocation methodology is broadly consistent with EY’s Cumulative Industry Benchmark (as set out on page 55 of our report).

2.16 We further note that the Alternative Blended Rate (as set out on page 55 of our report) is circa 17% higher than EY’s Cumulative Industry Benchmark and 11.7% below Rail Company 2 which included an allocation of $11.8 million for general counsel and company risk and $8.7 million for strategy.

2.17 We further note that, as highlighted in paragraphs 3.73 to 3.75 of our report dated January 2014, the benchmarking undertaken by EY benchmarked the allocated corporate costs on the basis that Aurizon Network was a stand-alone entity. This basis of benchmarking ignores the fact that Aurizon Network is part of a larger group with a centralised functional overhead structure. The costs used to benchmark the corporate overhead allocation do not incorporate the savings that Aurizon Network should share from the centralisation of its corporate functions. This would indicate that, the outcome of the corporate allocation methodology adopted is likely to overstate the allocation of corporate overheads to Aurizon Network.

2.18 We acknowledge that, due to the subjective nature of corporate allocation methodologies, and in the absence of the implementation of a full activity based costing system, we are not able to conclusively demonstrate that the blended allocator is not appropriate. However, we consider there is also insufficient information provided by Aurizon Network to conclusively demonstrate that other proposed corporate allocation methodologies are not also appropriate.

2.19 Furthermore, we consider that, as set out in our report dated January 2014, the issues identified in EY’s benchmarking report would indicate that Aurizon Network’s proposed corporate allocation methodology results in an over allocation of corporate overhead costs to Aurizon Network.

**Exclusion of capital costs from direct costs**

2.20 Aurizon Network’s comments are noted.

2.21 As stated in our report, in calculating the proportion of direct costs, we consider that the direct costs attributed to Aurizon Network should:

- exclude maintenance costs, on the basis that Aurizon Network has proposed a separate corporate overhead component in relation to maintenance costs; and
- exclude capitalised costs, on the basis that Aurizon Network capitalises a separate corporate overhead component into its capitalised expenditure.

2.22 After receiving Aurizon Network’s Submission, we were advised that a component of overhead costs incurred by Aurizon Network in relation to capital expenditure is not capitalised and therefore not included in the RAB asset values.

2.23 We have not been provided with an assessment of the quantum of this expenditure, however, we acknowledge that, to the extent this expenditure is not capitalised, the direct cost methodology will result in an under allocation of these costs.

2.24 However, we consider that the inclusion of capital costs within the direct costs allocation percentage would result in a duplication of the allocation of costs to below-rail activities.

2.25 We consider that it would be most appropriate for Aurizon Network to ensure that all overhead costs incurred in relation to capital expenditure be capitalised as part of the RAB asset values.
Benchmarking analysis

2.26 We adopted the following methodology to undertake the benchmarking exercise:

- compared the final year UT3 actual operating costs to the first year UT4 operating forecast costs;
- benchmarked the operating costs against the two comparable Australian rail access providers based on publicly available information; and
- established an indicative “Shadow” benchmark company using a bottom up cost approach, based on information not publicly available and based on the experience in operating railway networks of rail industry experts engaged by RSMBC as part of our review.

2.27 The benchmarking analysis has been undertaken on the basis of:

- total absolute dollars;
- $/track km
- $/train path (where information is available);
- $/GTK (forecast); and
- $/GTK (contracted).

2.28 Whilst information already disclosed in the public arena can be attributed, this is not the case for information provided on a confidential basis to develop benchmarks. Sources of information provided to develop the Shadow Benchmarks remain confidential and will not be disclosed.

2.29 The track km used in the calculation of comparable costs for ARTC Hunter Valley has been reviewed following the provision of track map information. A revised track distance of 740km has been used to adjust the ARTC costs / track km to those in the table below. The calculations of GTK, however, remain unchanged.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Cost ($ million)</td>
<td>57.579</td>
<td>14.330</td>
<td>29.730</td>
</tr>
<tr>
<td>Overhead Cost ($ million)</td>
<td>65.973</td>
<td>20.854</td>
<td>16.671</td>
</tr>
<tr>
<td><strong>Total cost ($ million)</strong></td>
<td><strong>123.552</strong></td>
<td><strong>35.184</strong></td>
<td><strong>46.401</strong></td>
</tr>
<tr>
<td>Track Km (estimated)</td>
<td>2,667</td>
<td>1,997</td>
<td>740</td>
</tr>
<tr>
<td>Total Cost / Track Km</td>
<td>$46,326</td>
<td>$17,618</td>
<td>$62,704</td>
</tr>
<tr>
<td>Forecast GTK (million)</td>
<td>80,513</td>
<td>23,532</td>
<td>43,309</td>
</tr>
<tr>
<td>Total Cost / Forecast GTK (cents)</td>
<td>0.153</td>
<td>0.150</td>
<td>0.107</td>
</tr>
<tr>
<td>Contract GTK (million)</td>
<td>107,138</td>
<td>N/a</td>
<td>43,309</td>
</tr>
<tr>
<td>Total Cost / Contracted GTK (cents)</td>
<td>0.115</td>
<td>N/a</td>
<td>0.107</td>
</tr>
</tbody>
</table>

2.30 We note Aurizon Network’s comments on page 27 of its response to our report and agree that track km is not necessarily a prudent measure for allocating and benchmarking total operating and corporate overhead allowances. This metric was, in part, used as it was part of the terms of reference issued. We consider operating cost / GTK to be a more prudent metric.

2.31 We acknowledge that it is difficult to review specific system complexities in a desktop benchmarking exercise, however, we recognise that all rail networks face individual operational challenges.
2.32 A more in depth review of Aurizon Network’s operations and other operations in Australia would undoubtedly allow a more detailed view to be reached.

**Review of Corporate Overhead Cost Allocation – Maintenance Costs**

2.33 Aurizon Network’s comments are noted.

2.34 As part of our review, we assessed the reasonableness of the costs set out in the Deloitte Access Economics Report that formed part of the supporting documentation for the 2013 Draft Access Undertaking.

2.35 We did not, in undertaking our review, assess the completeness of the Deloitte Access Economics Report.

**Review of Calculation of Mine Depreciation Profile**

2.36 RSMBC was requested by QCA to provide an opinion on the proposed change in the calculation of RAB depreciation based on the analysis of CQCN mine lives as discussed in section 6.4 of Volume 3 of the 2013 Draft Access Undertaking.

2.37 As part of the above process, RSMBC was requested by QCA to consider relevant submissions from QRC, Asciano, BMA and BMC and RTCA.

2.38 We note Aurizon Network’s comments.

2.39 We also draw your attention to our conclusion in paragraphs 6.51 to 6.53 of our report dated January 2014 which stated

- “On the basis of the analysis above, RSMBC is of the opinion that the adoption of an amended maximum economic life of assets based on the mid-point of the average mine lives weighted by marketable reserves and production rates does not appear unreasonable.
  - The amended maximum economic life of assets for each economic region would therefore be (rounded):
    - Northern Bowen Basin – 27 years;
    - Blackwater – 25 years; and
    - Moura – 27 years.
  - We note that Aurizon Network has proposed a maximum economic life of assets for all regions of 25 years which is inconsistent with the mid-point for the Northern Bowen Basin and Moura economic regions, as set out above.”

**High Level Review of Forecast Operating Expenditure**

2.40 RSMBC was requested by QCA to:

- benchmark Aurizon Network’s forecast operating expenditure for the CQCN with relevant industry comparators; and
- compare the forecast operating expenditure to historical operating expenditure at both the regional and system levels.

2.41 Aurizon Network’s comments are noted.

2.42 A more in depth review of the Aurizon operation and other operations in Australia would undoubtedly allow a more detailed view to be reached.
Comparison of corporate costs to historical and forecast expenditure

2.43 In undertaking a comparison of forecast operating expenditure to historical and forecast expenditure, we:

- obtained from Aurizon Network historical financial information in a format consistent with the classification and presentation of the UT4 forecast operating expenditure;
- prepared an annual summary, for both the total operating costs and for each cost category, comparing the historical costs of UT3 and the forecast costs of UT4 both on the basis of absolute dollars and dollars per train path;
- where there was a significant variance in costs, either in terms of an agreed materiality level, or in terms of a movement of +/- 5%, we requested an explanation for the variance from Aurizon Network; and
- assessed the responses from Aurizon Network for reasonableness and requested further supporting documentation where considered necessary.

2.44 As set out in paragraph 8.117 of our report, we consider it would be reasonable for a proportion of this overall stretch target to be allocated to below rail activities.

2.45 The table in paragraph 8.123 demonstrates the impact of an adjustment of 100% of the FY2014 stretch target.

2.46 We have not been provided with further information in relation to branding costs and consider our comments in paragraphs 8.105 and 8.108 of our report to be of relevance.

Revisions to operating expenses

Adjustments regarding non-coal traffic

2.47 In the costing estimates submitted for the 2013 Draft Access Undertaking, a 9.0% reduction was applied against the Rockhampton Train Control Centre as an allowance for non-coal traffic.

2.48 Upon further analysis Aurizon Network has revised its assessment and considers a “2% reduction across the entire train control function to be more appropriate and representative of the costs of train control function that should be reasonably allocated to non-coal services, notwithstanding that there are no incremental costs of these services.”

2.49 The 2% has been calculated by reference to the number of train control employees utilised in the operation of non-coal traffic.

2.50 We have reviewed analysis (and further supporting documentation) provided and, based on the information presented to us, consider that the revised reduction is not unreasonable.

2.51 Adopting the 2% allocation to non-coal services would increase Train Control, Safeworking and Operations costs as set out in the table below.

<table>
<thead>
<tr>
<th>Year ending</th>
<th>Year ending</th>
<th>Year ending</th>
<th>Year ending</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 June 2014</td>
<td>30 June 2015</td>
<td>30 June 2016</td>
<td>30 June 2017</td>
</tr>
<tr>
<td>Increase in allocated Train control costs</td>
<td>1,225</td>
<td>1,288</td>
<td>1,354</td>
</tr>
</tbody>
</table>

Source: RSMBC Calculations
Costs expressed in nominal dollars

2.52 Incorporating the above adjustments, the revised operating expenditure over the UT4 period under the 3 corporate overhead allocation scenarios outlined in our report are as set out in the tables below. References in the tables relate to our report dated January 2014.
## Based on Aurizon Network proposed corporate allocation methodology

<table>
<thead>
<tr>
<th></th>
<th>Year ending 30 June 2014</th>
<th>Year ending 30 June 2015</th>
<th>Year ending 30 June 2016</th>
<th>Year ending 30 June 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amended Forecast Operating expenditure</strong></td>
<td>$100,000</td>
<td>$100,000</td>
<td>$100,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>System wide operating expenditure - Aurizon Network Proposed</td>
<td>$57,578</td>
<td>$60,230</td>
<td>$65,401</td>
<td>$67,220</td>
</tr>
<tr>
<td>Add: Adjustment to allocation of non-coal activities</td>
<td>$1,225</td>
<td>$1,288</td>
<td>$1,354</td>
<td>$1,416</td>
</tr>
<tr>
<td>Less: adjustments based on high level review of operating expenditure - Section 8 - Page 106  *</td>
<td>$446</td>
<td>$437</td>
<td>$403</td>
<td>$460</td>
</tr>
<tr>
<td><strong>Amended system wide operating expenditure</strong></td>
<td>$56,377</td>
<td>$59,051</td>
<td>$61,668</td>
<td>$63,958</td>
</tr>
<tr>
<td>Corporate overheads - amended as set out in Section 3 - Page 55</td>
<td>$44,109</td>
<td>$48,005</td>
<td>$52,867</td>
<td>$56,377</td>
</tr>
<tr>
<td>Less: adjustments based on high level review of operating expenditure - Section 8 - Page 106  *</td>
<td>$9,190</td>
<td>$9,307</td>
<td>$9,510</td>
<td>$9,720</td>
</tr>
<tr>
<td>Less: adjustments based on detailed review of operating expenditure - Section 10 - Page 131  *</td>
<td>$2,091</td>
<td>$2,144</td>
<td>$2,197</td>
<td>$2,252</td>
</tr>
<tr>
<td><strong>Amended corporate overheads</strong></td>
<td>$22,918</td>
<td>$26,754</td>
<td>$27,860</td>
<td>$30,913</td>
</tr>
<tr>
<td>Total amended operating expenditure</td>
<td>$112,270</td>
<td>$117,275</td>
<td>$124,818</td>
<td>$128,913</td>
</tr>
<tr>
<td>UFE proposed costs</td>
<td>$123,051</td>
<td>$128,946</td>
<td>$136,689</td>
<td>$141,064</td>
</tr>
</tbody>
</table>

Source: RSMBC Calculations
Costs expressed in nominal terms
* adjustments have been inflated based on CPI of 2.5% per annum

## Based on the direct costs allocation methodology

<table>
<thead>
<tr>
<th></th>
<th>Year ending 30 June 2014</th>
<th>Year ending 30 June 2015</th>
<th>Year ending 30 June 2016</th>
<th>Year ending 30 June 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amended Forecast Operating expenditure</strong></td>
<td>$100,000</td>
<td>$100,000</td>
<td>$100,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>System wide operating expenditure - Aurizon Network Proposed</td>
<td>$57,578</td>
<td>$60,230</td>
<td>$65,401</td>
<td>$67,220</td>
</tr>
<tr>
<td>Add: Adjustment to allocation of non-coal activities</td>
<td>$1,225</td>
<td>$1,288</td>
<td>$1,354</td>
<td>$1,416</td>
</tr>
<tr>
<td>Less: adjustments based on high level review of operating expenditure - Section 8 - Page 106  *</td>
<td>$446</td>
<td>$437</td>
<td>$403</td>
<td>$460</td>
</tr>
<tr>
<td><strong>Amended system wide operating expenditure</strong></td>
<td>$56,377</td>
<td>$59,051</td>
<td>$61,668</td>
<td>$63,958</td>
</tr>
<tr>
<td>Corporate overheads - amended as set out in Section 3 - Page 55</td>
<td>$44,109</td>
<td>$48,005</td>
<td>$52,867</td>
<td>$56,377</td>
</tr>
<tr>
<td>Less: adjustments based on high level review of operating expenditure - Section 8 - Page 106  *</td>
<td>$9,190</td>
<td>$9,307</td>
<td>$9,510</td>
<td>$9,720</td>
</tr>
<tr>
<td>Less: adjustments based on detailed review of operating expenditure - Section 10 - Page 131  *</td>
<td>$2,091</td>
<td>$2,144</td>
<td>$2,197</td>
<td>$2,252</td>
</tr>
<tr>
<td><strong>Amended corporate overheads</strong></td>
<td>$22,918</td>
<td>$26,754</td>
<td>$27,860</td>
<td>$30,913</td>
</tr>
<tr>
<td>Total amended operating expenditure</td>
<td>$112,270</td>
<td>$117,275</td>
<td>$124,818</td>
<td>$128,913</td>
</tr>
<tr>
<td>UFE proposed costs</td>
<td>$123,051</td>
<td>$128,946</td>
<td>$136,689</td>
<td>$141,064</td>
</tr>
</tbody>
</table>

Source: RSMBC Calculations
Costs expressed in nominal terms
* adjustments have been inflated based on CPI of 2.5% per annum

---

1. **Amended Forecast Operating expenditure - by system**

<table>
<thead>
<tr>
<th></th>
<th>Year ending 30 June 2014</th>
<th>Year ending 30 June 2015</th>
<th>Year ending 30 June 2016</th>
<th>Year ending 30 June 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amended Forecast Operating expenditure - by system</strong></td>
<td>$100,000</td>
<td>$100,000</td>
<td>$100,000</td>
<td>$100,000</td>
</tr>
<tr>
<td>Blackwater</td>
<td>$32,321</td>
<td>$34,378</td>
<td>$37,769</td>
<td>$39,720</td>
</tr>
<tr>
<td>Goonyella</td>
<td>$54,492</td>
<td>$56,022</td>
<td>$59,944</td>
<td>$60,826</td>
</tr>
<tr>
<td>Newlands</td>
<td>$7,932</td>
<td>$8,009</td>
<td>$8,504</td>
<td>$8,792</td>
</tr>
<tr>
<td>Miles</td>
<td>$7,175</td>
<td>$7,358</td>
<td>$7,944</td>
<td>$8,444</td>
</tr>
<tr>
<td>GAFE</td>
<td>$10,351</td>
<td>$11,507</td>
<td>$12,637</td>
<td>$13,100</td>
</tr>
<tr>
<td>Total</td>
<td>$112,270</td>
<td>$117,275</td>
<td>$124,818</td>
<td>$128,913</td>
</tr>
</tbody>
</table>

Source: RSMBC Calculations
Costs expressed in nominal terms
Based on alternative blended rate utilising directs costs instead of revenue

<table>
<thead>
<tr>
<th>Amended Forecast Operating expenditure</th>
<th>Year ending 30 June 2016</th>
<th>Year ending 30 June 2015</th>
<th>Year ending 30 June 2016</th>
<th>Year ending 30 June 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>System wide operating expenditure - Aurizon Network Proposed</td>
<td>$57,578</td>
<td>$60,230</td>
<td>$65,461</td>
<td>$67,230</td>
</tr>
<tr>
<td>Add: Adjustment to allocation of non-coal activities</td>
<td>1,225</td>
<td>1,288</td>
<td>1,354</td>
<td>1,416</td>
</tr>
<tr>
<td>Less: adjustments based on high level review of operating expenditure - Section 8 - Page 120 *</td>
<td>(446)</td>
<td>(457)</td>
<td>(490)</td>
<td>(460)</td>
</tr>
<tr>
<td>Amended system wide operating expenditure</td>
<td>$58,357</td>
<td>$61,061</td>
<td>$66,345</td>
<td>$68,156</td>
</tr>
<tr>
<td>Corporate overheads - amended as set out in Section 3 - Page 55</td>
<td>$58,002</td>
<td>$60,316</td>
<td>$62,651</td>
<td>$64,908</td>
</tr>
<tr>
<td>Less: adjustments based on high level review of operating expenditure - Section 8 - Page 120 *</td>
<td>(7,019)</td>
<td>(7,195)</td>
<td>(7,375)</td>
<td>(7,559)</td>
</tr>
<tr>
<td>Less: adjustments based on detailed review of operating expenditure - Section 10 - Page 131 *</td>
<td>(1,792)</td>
<td>(1,837)</td>
<td>(1,883)</td>
<td>(1,930)</td>
</tr>
<tr>
<td>Amended corporate overheads</td>
<td>$49,190</td>
<td>$51,285</td>
<td>$53,393</td>
<td>$55,419</td>
</tr>
<tr>
<td>Total amended operating expenditure</td>
<td>$107,547</td>
<td>$112,345</td>
<td>$119,680</td>
<td>$123,575</td>
</tr>
</tbody>
</table>

Source: RSMBC Calculations
Costs expressed in nominal terms
* adjustments have been inflated based on CPI of 2.5% per annum

<table>
<thead>
<tr>
<th>Amended Forecast Operating expenditure - by system</th>
<th>Year ending 30 June 2016</th>
<th>Year ending 30 June 2015</th>
<th>Year ending 30 June 2016</th>
<th>Year ending 30 June 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackwater</td>
<td>$31,055</td>
<td>$33,041</td>
<td>$36,317</td>
<td>$38,179</td>
</tr>
<tr>
<td>Goonyella</td>
<td>$52,186</td>
<td>$53,647</td>
<td>$56,617</td>
<td>$57,368</td>
</tr>
<tr>
<td>Newlands</td>
<td>$7,569</td>
<td>$7,643</td>
<td>$7,896</td>
<td>$8,396</td>
</tr>
<tr>
<td>Moura</td>
<td>$6,880</td>
<td>$7,056</td>
<td>$6,802</td>
<td>$7,146</td>
</tr>
<tr>
<td>GAPE</td>
<td>$9,857</td>
<td>$10,958</td>
<td>$12,048</td>
<td>$12,485</td>
</tr>
<tr>
<td>Total</td>
<td>$107,547</td>
<td>$112,345</td>
<td>$119,680</td>
<td>$123,575</td>
</tr>
</tbody>
</table>

Source: RSMBC Calculations
Costs expressed in nominal terms

### Depreciation expenses

2.53 Aurizon Network’s comments are noted.

### CPI-x adjustment

2.54 Aurizon Network’s comments are noted.

2.55 RSMBC considers it comments in paragraphs 10.44 to 10.51 of our report to be relevant. However, we note Aurizon Network’s comment in relation to the Pricing Principles located within the Queensland Competition Authority (QCA) Act 1997 (Aurizon Network Submission - page 33) and consider that the applicability of an x-factor in light of the regulatory framework is a matter for QCA to consider.

#### Advice on Interest during Construction

2.56 Aurizon Network’s comments are noted.

#### Review of Capital cost Build-Up

2.57 Aurizon Network’s comments are noted.

#### Maintenance Submission – Return on Assets

2.58 Aurizon Network’s comments are noted.

2.59 During the course of our review, we requested an estimate of major programmable maintenance (MPM) from Aurizon Network. However, this information was not provided.

2.60 If Aurizon Network is able to provide an estimate, RSMBC will be in a position to review and analyse this information and comment accordingly.

#### Maintenance Submission – Return on Inventory and Working Capital

2.61 Aurizon Network’s comments are noted.

2.62 Should a return on working capital allowance be included within the UT4 costs, we consider that this allowance should be based on the working capital amount that Aurizon Network is required to fund based on the expected provisioning of those services.
2.63 In Table 23, page 113 of the UT4 maintenance submission, Aurizon Network disclosed that 51% (FY 2014) to 52% (FY 2015 onwards) of maintenance costs are expected to be from externally procured resources.

2.64 As noted in paragraph 14.15 of our report dated January 2013, we consider that Aurizon Network’s working capital formula does not appear to take into account consideration of credit terms Aurizon Network has with its external maintenance providers. For maintenance work undertaken by internal labour, the costs related to the work will be paid at approximately the same time as the work is incurred (dependant on the frequency that employees are paid). However, for some externally procured services, we would expect that an entity the size of Aurizon Network, would negotiate credit terms with external suppliers such that there is also a lag between when goods are supplied, or work is undertaken, and when Aurizon Network pays for these supplies or work.

2.65 We therefore consider that the revised return on working capital as set out in paragraph 14.19 of our report dated January 2014 is appropriate.
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 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 declared services for third party access under the Queensland Competition Authority Act 1996 (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 provisions 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 (UT2) 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: 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 https://www.aurizon.com.au/network-systems/rates/NetworkServices.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.

---

2. PURPOSE/OBJECTIVE 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 Aurizon Network’s forecast operating and capital expenditure, and assist the Authority to identify any additional information 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 Authority is also seeking technical engineering advice on the reasonableness of Aurizon Network’s maintenance, operating and capital expenditure forecasts, through a separate consultancy. Infrastructure Mgmt (IHM) 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, consultancies may wish to review the terms of reference for IHM’s request to form an understanding of the overall scope of tasks on which the Authority is seeking advice.

3. CONSULTANCY TASKS

3.1 Information Request and Request

In order to perform its assessment, the consultant is required to review Aurizon 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 is 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 Aurizon 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-alone basis (Aurizon Network, sub 3, p.329, available here: http://www.qca.org.au/files/2/1/2905291207/971171292011.pdf).
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-UR201/DAU-EMAR-MR/0511.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, signalling and operations administration,
- telecommunications,
- transmission connection costs associated with electric traction train; and
- environmental charges.

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


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


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 2.2.3: 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.

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. 306).

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 provides conducting a high level review of Aurizon Network’s forecast operating expenditure by benchmarking the forecast operating expenditure for the QCCR with relevant industry companies 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 QCCR to that of relevant below rail network infrastructure operators (especially heavy haul networks such as cost) on the basis of:
   (i) total absolute dollars; and
   (ii) dollars/tonne-km.

(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:
   (i) total absolute dollars and dollars/tonne-km; 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 QCCR systems) by:
   (i) total absolute dollars and dollars/tonne-km; 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 3.2.6: Total Cost Benchmarking

Total cost benchmarking relates to assessing the total cost of providing 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.
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
   (i) 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 Aurizon 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:
   (i) 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.
(f) 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 2018-19).

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 GASE, as described in Chapter 8 of Volume 3 of the UT4 materials (available here: http://www.qoa.org.au/files/R-Aurizon-QR-D415-DOC-447966-1511.pdf). The 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 Subdivision 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.
### Terms of Reference

<table>
<thead>
<tr>
<th>QLD Competition Authority</th>
<th>Terms of Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7. CONTRACTUAL ARRANGEMENTS</strong></td>
<td>-</td>
</tr>
<tr>
<td>This consultancy will be offered in accordance with the Authority’s standard contractual agreement.</td>
<td></td>
</tr>
<tr>
<td>This agreement can be viewed at <a href="http://www.qca.org.au/about/consultancyagreement.php">http://www.qca.org.au/about/consultancyagreement.php</a></td>
<td></td>
</tr>
<tr>
<td><strong>8. REPORTING</strong></td>
<td>-</td>
</tr>
<tr>
<td>In carrying out this project, consulting services will involve completing the consultancy tasks described in section 5. The primary deliverables required are:</td>
<td></td>
</tr>
<tr>
<td>(a) a detailed information request (as detailed in section 3.1 of these terms of reference),</td>
<td></td>
</tr>
<tr>
<td>(b) a draft report including the consultant’s:</td>
<td></td>
</tr>
<tr>
<td>(i) assessment of Amzyn Network’s forecast operating expenditure for the UT4 regulatory period (as detailed in section 3.2 of these terms of reference),</td>
<td></td>
</tr>
<tr>
<td>(ii) if necessary, the consultant’s independent forecast of elements of Amzyn Network’s operating expenditure over the UT4 regulatory period (as detailed in section 3.2(ii), of these terms of reference), and</td>
<td></td>
</tr>
<tr>
<td>(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).</td>
<td></td>
</tr>
<tr>
<td>The consultant will be required to provide the Authority with progress reports on an “as required” and at least weekly, basis.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>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 as section 3.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>9. CONFIDENTIALITY</strong></td>
<td>-</td>
</tr>
<tr>
<td>Under no circumstance is the selected consultant to divulge any information obtained from Amzyn Network or the Authority for the purposes of this consultancy to any party other than with the explicit permission of Amzyn Network and the Authority.</td>
<td></td>
</tr>
<tr>
<td><strong>10. CONFLICTS OF INTEREST</strong></td>
<td>-</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>11. AUTHORITY ASSESSMENT OF PROPOSAL</strong></td>
<td>-</td>
</tr>
<tr>
<td>The Authority uses the following format to assess tenders:</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>Criteria</td>
</tr>
<tr>
<td>--------</td>
<td>----------</td>
</tr>
</tbody>
</table>
| 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 make 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 work. 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 work proposed as 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.
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

For more information please do not hesitate to contact:

**Glyn Yates**
Director
Level 21, 55 Collins Street
Melbourne Victoria 3000
Tel: +61 3 9286 8167
Glyn.Yates@rsmi.com.au

www.rsmi.com.au

© RSM Bird Cameron 2014
Liability limited by a scheme approved under Professional Standards Legislation.
RSM Bird Cameron is an independent member firm of RSM International, an affiliation of independent accounting and consulting firms. RSM International is the name given to a network of independent accounting and consulting firms each of which practices in its own right. RSM International does not exist in any jurisdiction as a separate legal entity.