

Queensland Competition Authority

Draft Decision

Aurizon Network's 2011–12 Capital Expenditure

August 2013

The Authority wishes to acknowledge the contribution of the following staff to this report:

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SUBMISSIONS

Public involvement is an important element of the decision-making processes of the Queensland Competition Authority (the Authority). Therefore submissions are invited from interested parties concerning its assessment of Aurizon Network's 2011-12 capital expenditure claim. The Authority will take account of all submissions received.

Written submissions should be sent to the address below. While the Authority does not necessarily require submissions in any particular format, it would be appreciated if two printed copies are provided together with an electronic version on disk (Microsoft Word format) or by e-mail. Submissions, comments or inquiries regarding this paper should be directed to:

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The closing date for submissions is **20 September 2013**.

Confidentiality

In the interests of transparency and to promote informed discussion, the Authority would prefer submissions to be made publicly available wherever this is reasonable. However, if a person making a submission does not want that submission to be public, that person should claim confidentiality in respect of the document (or any part of the document). Claims for confidentiality should be clearly noted on the front page of the submission and the relevant sections of the submission should be marked as confidential, so that the remainder of the document can be made publicly available. It would also be appreciated if two copies of each version of these submissions (i.e. the complete version and another excising confidential information) could be provided. Again, it would be appreciated if each version could be provided on disk. Where it is unclear why a submission has been marked "confidential", the status of the submission will be discussed with the person making the submission.

While the Authority will endeavour to identify and protect material claimed as confidential as well as exempt information and information disclosure of which would be contrary to the public interest (within the meaning of the *Right to Information Act 2009* (RTI)), it cannot guarantee that submissions will not be made publicly available. As stated in s 187 of the Queensland Competition Authority Act 1997, the Authority must take all reasonable steps to ensure the information is not disclosed without the person's consent, provided the Authority believes that disclosure of the information would be likely to damage the person's commercial activities and that the disclosure of the information would not be in the public interest. Notwithstanding this, there is a possibility that the Authority may be required to reveal confidential information as a result of a RTI request.

Public access to submissions

Subject to any confidentiality constraints, submissions will be available for public inspection at the Brisbane office of the Authority, or on its website at www.qca.org.au. If you experience any difficulty gaining access to documents please contact the office (07) 3222 0555.

Information about the role and current activities of the Authority, including copies of reports, papers and submissions can also be found on the Authority's website.

AURIZON NETWORK'S 2011-12 CAPITAL EXPENDITURE

1.1 Background

Aurizon Network's 2010 undertaking provides for Aurizon Network¹ to submit an annual claim for capital expenditure to be included in the Regulatory Asset Base (RAB).

In considering the prudence of Aurizon Network's capital expenditure, the Queensland Competition Authority (the Authority) assesses, as per Schedule A of the 2010 undertaking, the prudence of the:

- (a) scope of the works – i.e. whether the works are reasonably required;
- (b) standard of the works – i.e. whether the works are of a reasonable standard to meet the scope requirements and are not over-designed; and
- (c) cost of the works – i.e. whether the costs are reasonable for the scope and standard of the works done.

This draft decision discusses the major aspects in relation to the 2011-12 capital expenditure claim, assessments and other relevant issues pertaining to the claim. This decision will allow the stakeholders to have a clear understanding of the Authority's draft position with respect to the 2011-12 claim. By releasing the draft decision at this time, the Authority is seeking focused responses from stakeholders to the proposals laid out in this decision, the assessments by the Authority's technical advisers (Sinclair Knight Merz (SKM) and RSM Bird Cameron (RSMBC)) and the Authority's assessment criteria as set out in Appendix A of the 2010 undertaking.

1.2 Aurizon Network's 2011-12 capital expenditure submission

Clause 9.3.1 of the 2010 undertaking stipulates that Aurizon Network will, unless otherwise agreed between Aurizon Network and the Authority, provide within four months of the end of the relevant year, details of the capital expenditure for that year that Aurizon Network considers should be included in its RAB.

In October 2012, Aurizon Network requested an extension to the reporting timeline which was approved by the Authority. As a result, Aurizon Network's submission was lodged on 30 November 2012.

Aurizon Network's 2011-12 claim, is, by far, the largest and most complex to date. The claim includes substantial work delivered through alliance contracting, including the Goonyella to Abbot Point Expansion (GAPE) project which was delivered over several years.

Aurizon Network's submission to the Authority included supporting documentation on individual projects designed to demonstrate to the Authority the prudence of the expenditure. These documents included:

- (a) summary sheets containing high level information about each project, such as the name and nature of the project, the location of the project, the commissioning date and the amount of expenditure being claimed; and
- (b) detailed project specific information such as internal business cases, commissioning certificates, and other source documents.

¹ Aurizon Network Pty Ltd, formerly QR Network Pty Ltd, a wholly owned subsidiary of Aurizon Operations Limited, a wholly owned subsidiary of Aurizon Holdings Limited.

1.2.1 Aurizon Network's revised submission

The 2010 undertaking provides for the Authority to consider capital expenditure on projects that have been commissioned or have been formally discontinued (2010 undertaking, Schedule A, cl. 2.5). The Authority's assessment, including that undertaken by SKM and RSMBC, identified that a number of projects (in particular a number of asset renewal projects) had either not been fully completed during 2011-12 or were not capital in nature.

Consequently, on 8 August 2013, Aurizon Network submitted a revised claim whereby Aurizon Network had deferred eight projects to a future year's claim, withdrawn one project and adjusted the value of two other projects. Appendix A details the projects removed by Aurizon Network from its original claim (Table A1), makes a comparison between the November 2012 and the August 2013 claims (Table A2) and details the 99 projects included in the August 2013 submission (Table A3).

The August 2013 claim totals approximately \$1.3 billion (including interest during construction (IDC)), which is approximately \$5.4 million lower than the November 2012 claim value. The majority of this reduction (\$5.1 million) is deferred capital expenditure which can be included in a future year's submission. As the withdrawn project (\$0.3 million) is considered operating expenditure, it cannot be included in future claims.²

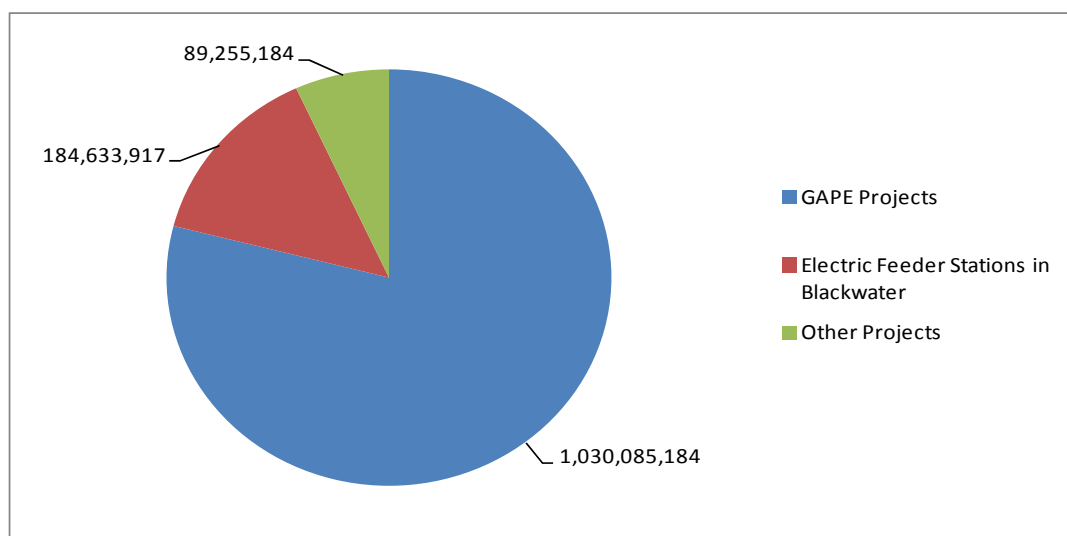
Aurizon Network provided specific documentation for 56 of the 99 projects in the August 2013 claim. The value of the remaining 43, undocumented projects is around \$28.3 million, or 2.2% of the total capital expenditure claim. The Authority's review of these projects was based on RSMBC's reconciliation of the capitalised costs of these projects, as reported in the claim, with Aurizon Network's accounting management system (SAP).

The August 2013 claim of \$1.3 billion consists of (see Chart 1.21):

- (a) nine system enhancement projects:
 - (i) the GAPE project, comprised of five sub-projects (\$1.03 billion)³;
 - (ii) four electric feeder stations in the Blackwater system (\$184.6 million);
- (b) 83 asset replacement projects (\$85.6 million);
- (c) six post-commissioning projects (\$3.6 million); and
- (d) one telecommunication project.

² This draft decision focuses on the August 2013 claim, however by necessity the reports by SKM and RSMBC focus on the November 2012 claim.

³ Note, this is not the entirety of the GAPE project. The Authority has previously accepted \$34.9 million in early works as part of the 2008-09 capital expenditure claim and anticipates further future claims for around \$35 million for other upgrades (e.g. signalling).

Chart 1.1: Major projects, Aurizon Network's 2011-12 capital expenditure claim (\$)

Geographically, 23 projects are located in the Blackwater system (\$201.0 million), 20 projects in Goonyella (\$19.0 million), one in Moura (\$0.4 million), seven in Newlands (\$9.9 million) and five in the GAPE system (\$1.03 billion). The 43 remaining projects are general asset replacements across the central Queensland coal region (CQCR), totalling \$43.6 million (see Table 1.1).

Table 1.1: Geographic distribution of Aurizon Network's 2011-12 capital expenditure

<i>Systems</i>	<i>2011-12 claim (including IDC) (\$)</i>
Blackwater	200,976,743
Goonyella	19,021,017
Moura	405,250
Newlands	9,888,927
GAPE	1,030,085,184
System Wide Asset Renewals	43,597,164
Total expenditure	1,303,974,285

Of the total claim of approximately \$1.3 billion, \$1.19 billion is project costs and \$0.12 billion is interest during construction.

1.3 The Authority's approach

The Authority has considered Aurizon Network's submission in accordance with the requirements of Schedule A of Aurizon Network's 2010 undertaking.

The Authority's assessment criteria in Schedule A of the 2010 undertaking focuses on prudence, which has three aspects: prudence in scope, prudence in standard of works and prudence in cost (2010 undertaking, Schedule A, cl. 2.2). The expenditure needs to be capital in nature and on projects that have either been commissioned, or have been formally discontinued (2010 undertaking, Schedule A, cl. 2.5).

The Authority appointed two consultants to assist in reviewing the prudence of the capital expenditure, namely:

- (a) SKM to conduct an engineering assessment; and
- (b) RSMBC to conduct an accounting (cost) assessment.

Both consultants were required to assess the projects in accordance with schedule A of the 2010 undertaking, focusing on clause 3 (Assessment of Capital Expenditure). SKM considered prudence of scope, standard and cost in their assessment. RSMBC's engagement focused on the prudence of costs. Specifically, RSMBC conducted a reasonable assurance audit on whether the capital expenditure submission is free from material misstatement and the costs were incurred pursuant to the 2010 undertaking

The Authority shared a copy of both SKM's and RSMBC's draft reports with Aurizon Network. Aurizon Network's response to SKM's draft report included providing additional information on specific aspects of the GAPE project: capacity modelling for passing loops and signalling and details of the installed optical fibre network. This additional information was considered by both SKM and RSMBC in preparing their final reports.^{4,5}

Capital expenditure projects and assessments

The Authority conducted a thorough review of a representative sample of the 99 projects, including all major projects (according to cost) and a selection of smaller projects (according to geographical rail systems). The Authority requested that both consultants review all of the GAPE projects and the Blackwater feeder stations. The Authority also selected, with SKM, a sample of asset renewal projects across the various coal rail systems and a combination of small and larger projects, including some telecommunications and signalling projects (see Table 1.3 for details).

For the 82 projects that were not reviewed in detail, Aurizon Network provided a minimum level of documentation for each of these projects, being either a commissioning certificate or an invoice to substantiate that the expenditure had indeed been incurred towards the project.

Rationale for sampling approach

The Authority undertakes a sampling approach as an efficient method to assess Aurizon Network's capital expenditure submission, given the size and range of capital expenditure projects undertaken by Aurizon Network every year. Sampling takes materiality into consideration, and therefore, allows the Authority to assess the sample projects in detail. A minimum level of evidence is required for the remainder of the projects. This allows the Authority to perform a thorough review of material projects in a timely manner.

⁴ SKM, Aurizon Network Pty Ltd Capital Expenditure 2011-12 Engineering Assessment, July 2013.

⁵ RSMBC, Cost Review of Aurizon Network's Capital Expenditure Claim 2011/12, June 2013 & RSMBC, Report of Factual Findings, July 2013.

Table 1.2: List of Projects reviewed by the Authority's consultants

<i>Project Name</i>	<i>Total Amount (including IDC) (\$m)</i>	<i>Projects reviewed by SKM⁶</i>	<i>Projects reviewed by RSMBC</i>
Wycarbah Feeder Station	49.8	√	√
Raglan Feeder Station	49.7	√	√
Duaringa Feeder Station	44.8	√	√
Bluff Feeder Station	40.2	√	√
GAPE (post-GFC)	816.3	√	√
GAPE Expansion (pre-GFC)	148.5	√	√
GAPE Long Lead Items (pre-GFC)	38.0	√	√
GAPE X70 - X100 Early Works (pre-GFC)	17.3	√	√
GAPE Electrification Phase (pre-GFC)	10.0	√	√
Track Circuit and Points Refurbishment	7.0	√	
Blackwater Track & Formation Renewal	4.2	√	
Overheads Renewal Rocklands to Callemondah	3.2	√	
Marmor Bajool Track Upgrade	0.5	√	
Concrete Sleeper Upgrades - Goonyella	4.2	√	
Upgrade of Jilalan Yard Drainage	1.2	√	
Bandwidth Increase for Moranbah North	0.1	√	
Ballast Replacement Newlands Line	4.3	√	

Site visits

As part of the assessment, staff from the Authority's rail team and SKM visited the sites of several projects that were either of high value or involved assessment complexities, including:

- (a) GAPE;
- (b) Wycarbah feeder station;
- (c) Raglan feeder station;
- (d) Duaringa feeder station;
- (e) Bluff feeder station;
- (f) Blackwater track and formation renewal;

6. The initial sample of projects reviewed by SKM also included the *Blackwater: Maximising Electric Trains*, and *Thales Axle Counter Trial* projects which were included in Aurizon Network's November 2012 but not August 2013 claims.

- (g) Marmor to Bajool track upgrade;
- (h) CQCR: control centre consolidation;
- (i) crew change pads;
- (j) level crossing protection system; and,
- (k) renewed culverts.

1.4 Authority's findings

The Authority has received final reports from its consultants and these are available from the Authority's website.

SKM's final report included a prudence assessment of 17 of the projects in the August 2013 claim, all of which were found to be fully prudent in all aspects. RSMBC's final report, that was a reasonable assurance audit of nine projects, provided an unqualified opinion that the costs incurred were prudent.

RSMBC also investigated Aurizon Network's SAP accounting system to assess 43 projects for which less documentation was provided. RSMBC reconciled each project's capital expenditure claim in Aurizon Network's submission with the corresponding project's capital expenditure balance in SAP. RSMBC's report found only one minor error (i.e. a \$300 dollar variance) in the project "Grantleigh Tunnel Duplication".

1.4.1 Goonyella to Abbot Point Expansion

As part of their assessment, SKM noted that the Authority pre-approved \$27 million of pre GFC early works on the Northern Missing Link (NML) on 17 December 2007. However, SKM found that Aurizon Network had not demonstrated that the GAPE (post-GFC) project received regulatory pre-approval of scope (as per the 2010 undertaking, Schedule A, cl. 3.1.1). Therefore, SKM conducted an assessment of prudence of scope for the five GAPE projects, and found them to be prudent in scope. In addition, they were also found to be prudent in standard and cost. The detail of SKM's assessment and findings can be found in appendices L to P of their final report.

1.4.2 Blackwater Feeder Stations

The projects for the construction of feeder stations and associated track section cabins at Raglan, Bluff, Duaringa and Wycarbah have received Customer Group Approval (as per 2010 undertaking, Schedule A, cl. 3.3.2(b)(i)). The Authority confirmed regulatory pre-approval of scope in February 2007 and April 2009. Given this, SKM found the four projects' scopes to be prudent.

Based on SKM's findings, standard and cost of the four Blackwater feeder stations were also considered prudent. In relation to prudence of standard, SKM noted:

In SKM's opinion the FSs and TSCs were not overdesigned and in comparison to the traction substations being installed in other rail networks may be considered a little austere. (SKM, 2013, p.51)

1.4.3 Asset Renewals

SKM reviewed eight of the 83 asset renewal projects in the claim and found them to be prudent. Authority staff satisfactorily reviewed the documentation provided by Aurizon Network for the 75 other projects. Aurizon Network kept its traditional work program of

turnout renewals, culvert replacements and track upgrades in 2011-12, and is also investing in new detection and protective systems, such as the level crossing protection system.

1.5 Authority's draft decision

The Authority's draft decision is to approve Aurizon Network's 2011-12 August 2013 capital expenditure claim, comprised of 99 projects, totalling \$1.30 billion (including IDC).

In arriving at this decision, the Authority has considered Aurizon Network's submissions, supporting documents and the assessments undertaken by SKM and RSMBC, in light of the assessment criteria contained in Schedule A of the 2010 undertaking.

1.6 Feedback sought from stakeholders

The Authority considers it appropriate that stakeholders have an opportunity to be consulted in relation to the Authority's assessment of the claim.

Given this, the Authority has chosen to release a draft decision on the claim and contemporaneously publish its consultants' reports. This has not been the usual practice with capital expenditure claims in the past. However, given the:

- (a) size of the claim (over \$1 billion dollars); and
- (b) resulting impact on reference tariffs;

the Authority is requesting stakeholder feedback on any aspect of its draft decision and the consultants' reports. Submissions, comments or inquiries regarding this paper should be directed to:

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Brisbane QLD 4001

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APPENDIX A

Table A1: Projects removed from the 2011-12 claim by Aurizon Network

<i>Project Name</i>	<i>2011-12 Total Claim Value (including IDC) (\$)</i>
Blackwater: Crew change Pads	1,872,597
Upgrade Four Culverts – Newlands	446,976
26.5tal Newlands Upgrade	259,941
Newlands Bridge & Culvert Assessment	146,943
Private / QRN Occupational Crossings	1,728,782
Thales Axle Counter Trial	365,833
Network Sleeper Upgrade Strategy	173,721
Renew Distributed Traction Assets	134,321
Blackwater: Maximising Electric Train Capacity	295,217

Table A2: Comparison, Aurizon Network's initial and revised 2011-12 capital expenditure claim

<i>System</i>	<i>November 2012 Claim</i>			<i>August 2013 Claim</i>			<i>Variance</i>		
	11/12 Claim (\$)	IDC (\$)	Total Claim (\$)	11/12 Claim (\$)	IDC (\$)	Total Claim (\$)	11/12 Claim (\$)	IDC (\$)	Total Claim (\$)
Blackwater	188,699,755	14,400,089	203,099,844	186,566,372	14,410,371	200,976,743	2,133,384	- 10,283	2,123,101
Goonyella	19,375,354	- 341,773	19,033,581	19,362,376	- 341,359	19,021,017	12,979	- 414	12,565
Moura	408,202	- 2,952	405,250	408,202	- 2,952	405,250	-	-	-
Newlands	10,912,407	- 169,619	10,742,788	10,034,606	- 145,678	9,888,927	877,801	- 23,940	853,861
GAPE	928,415,603	101,669,581	1,030,085,184	928,415,603	101,669,581	1,030,085,184	-	-	-
CQCR Wide	45,995,149	4,673	45,999,822	43,614,661	- 17,497	43,597,164	2,380,488	22,170	2,402,658
Total expenditure	1,193,806,470	115,559,999	1,309,366,469	1,188,401,819	115,572,466	1,303,974,285	5,404,651	- 12,467	5,392,184

Table A3: Aurizon Network's revised 2011-12 capital expenditure claim

<i>Project Number</i>	<i>Project Name</i>	<i>2011-12 Total Claim Value (including IDC) (\$)</i>
A.02604	Wycarbah Feeder Station	49,837,070
A.02222	Raglan Feeder Station	49,724,060
A.02603	Duaringa Feeder Station	44,834,953
A.02602	Bluff Feeder Station	40,237,834
A.03959	Blackwater Track & Formation Renewal	4,238,612
A.04084	Fist Fastener Sleeper Upgrade - Callemondah	3,352,056
A.03896	Overheads Renewal Rocklands to Callemondah	3,175,748
A.01933	Callemondah 3rd Spur	1,009,251
A.03708	Blackwater: Upgrade Culverts at 33.091km	878,293
A.04136	Upgrade Culverts on Central Line and NCL	818,467
A.04137	Marmor Bajool Track Upgrade	523,404
A.04135	Tunnel Curve Realignment	445,171
A.01573	Grantleigh Tunnel Duplication	356,983
A.02100	Callemondah Pan Cam	296,210
A.02471	Callemondah Yard Upgrade (Arrival Roads)	261,634
A.03879	Access Road Upgrade Goowarra-Dingo-Umolo	220,142
A.04120	Bluff Yard Angle Upgrade	169,667
A.03810	Blackwater to Koorilgah Mine - Timber Resleepering	163,851
A.03925	Upgrade Drain at 1166.890km Durraburra	160,707
A.02745	Blackwater Sys: Switchroller Proc & Inst	130,139
A.01897	Blackwater: TEMPL Axle Counter Upgrade	81,843
A.03830	Aldoga Axle Counter Renewal	54,547
A.03701	Blackwater: Battery Bank Upgrade 4 Sites	6,101
A.03952	Hay Point Departure Roads 1 & 2-Track	4,230,150
A.04040	Concrete Sleeper Upgrades - Goonyella	4,160,557
A.03886	MacKenzie River Overflow Bridge	2,435,922
A.04122	Track Upgrade Braeside to Mindi	1,285,731

A.04008	Upgrade of Jilalan Yard Drainage	1,204,769
A.02194	Coppabella to Ingsdon Duplication	1,142,818
A.04123	Goonyella Balloon Loop - Track Renewal	980,731
A.03448	Goonyella: Harmonic Filter Secondary System Replacement	812,474
A.03884	Culvert Upgrades Hatfield to Bolingbroke	579,696
A.00893	Jilalan Yard Upgrade	548,597
A.02117	Goonyella: Switchrollers	405,744
A.01505	DBCT 3rd Loop - Feeder Station	279,774
A.01689	Broadlea - Mallowa - Wotonga Duplication	264,662
A.03872	Nebo Cattle Yards	227,477
A.04025	Pan Cam Upgrade at Jilalan	130,846
A.03845	Replacement of Failed Harmonic Filter at Oonooie	119,538
A.03885	Access Road to Mount Sarina Microwave Tower	109,829
A.03949	Bandwidth Increase for Moranbah North	50,259
A.03862	Rock Slope Upgrade C'bella-Broadlea & C'mo	49,286
A.03794	Grasstree Beach Access Road Drainage Upgrade	2,157
A.00953	Byellee Angle	405,250
A.04055	Ballast Replacement Newlands Line	4,323,080
A.02263	Newlands: Scour Remediation at 100.93km	2,342,869
A.03882	Sleeper Replacements - Newlands	1,311,134
A.03803	Newlands: 53 to 60kg Rail Upgrade	976,346
A.04035	Bowen River Bridge Track Upgrade	828,068
A.03826	Collinsville LV Power and Comms Upgrade	54,304
A.03795	Newlands: Cutting Widening	53,126
A.03473	GAPE	816,317,422
A.01541	GAPE Expansion	148,507,708
A.02559	GAPE Long Lead Items	37,968,709
A.02523	GAPE X70 - X100 Early Works	17,293,440
A.02648	GAPE Electrification Phase	9,997,905

A.03372	Fist Fastened Sleeper Upgrade	7,648,807
A.03831	Track Circuit and Points Refurbishment	6,969,267
A.03856	CQCR: Formation Strengthening Stage 3	5,370,458
A.02273	CQCR: Turnout Replacement Stages 2 & 3	4,889,106
A.03649	CQCR: Control Centre Consolidation	3,184,422
A.01980	CQCR: Formation Strengthening	3,105,657
A.03792	6 Hole Glued Insulation Joint Asset Renewal	1,796,322
A.04134	Network Siding Upgrade Project	1,555,397
A.04023	Level Crossing Protection System	1,454,684
A.03928	Fencing Upgrade Goonyella & Newlands Sys	1,611,468
A.03960	ION Meter Installation Upgrade Final	749,774
A.03761	Track circuit & Traction Bonding Connection Upgrade	618,074
A.03787	Harmonic Filter Protection Relay Replacement	449,479
A.03371	CQCR: ARMCO Pipe Renewals	403,051
A.02183	ViziRail Technology Refresh	349,022
A.03806	PVC Tubes Into Masts - Nest Deterrent	343,616
A.03760	Insulation of feeder Wire	257,664
A.02936	UTC Monitor Upgrade Project	255,201
A.03807	Turnout Detection - Rod Knuckle Upgrade	239,120
A.03677	Replacement of Radome covers	212,462
A.01048	LED Signal Replacement	204,210
A.02628	CQCR: Coal Loss Management	202,006
A.02870	CQCR: Weighbridge Replacement Strategy (Stage 2)	190,481
A.03805	Critical Neutral Section Replacement	153,040
A.03302	Rockhampton Network Control Centre Boundary Changes	149,266
A.03721	UTC Stop board SPAD Suppression	117,692
A.03829	Traction Fault Locator Upgrade	116,325
A.03927	Traction SCADA Remote Terminal Unit (RTU)	116,288
A.03800	Signal Gantry Ladders Upgrade	113,249

A.02613	Rockhampton Yard: Control Instrument and Reference Wagons	102,677
A.02969	QRFL (Queensland Rail Fault Locator) Replacement	101,854
A.03809	VAE Turnout Bonding Upgrade	92,306
A.02276	CQCR: Weighbridge Replacement Strategy (Stage 1)	89,800
A.02575	ViziRail Coal Network Paths	71,221
A.03812	Slope Upgrades Newlands and Moura	64,674
A.03099	CQCR: Weather Monitoring Stations & Devises	57,995
A.03673	UTC Enhancements: Supervisor Console Alarms	50,992
A.03786	Network Services GPS Trial (Rockhampton)	49,201
A.03947	WIM (Wheel Impact Monitor) Alarms to UTC	30,892
A.03678	Derailment Sensors at Loadout	24,218
A.02362	Moura - DMR System Replacement	16,138
A.03324	CQCR: Fencing Renewal Program	9,814
A.03543	CQCR: Renewal of Network Inspection Vehicle	9,774
	TOTAL	1,303,974,285

REFERENCES

SKM, July 2013, Aurizon Network Pty Ltd Capital Expenditure 2011-12 Engineering Assessment.

RSM Bird Cameron, July 2013, Report of Factual Findings.

RSM Bird Cameron, June 2013, Cost Review of Aurizon Network's Capital Expenditure Claim 2011/12.