AURIZON

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23 April 2021

Submitted to QCA's online submissions portal

Aurizon Network – Response to Stakeholder Submissions on the Financial Year 2022 maintenance strategy and budget: Newlands system

Aurizon Network thanks the Queensland Competition Authority (**QCA**) for the opportunity to respond to both Glencore and the Rail Industry Group's (**RIG's**) submissions (**Stakeholder Submissions**) on the Financial Year 2022 Maintenance Strategy and Budget for the Newlands System (**FY22 MSB**) as submitted to the QCA on 3 March 2021 (**March Submission**).

Except for Rail Grinding costs, there were no other issues identified and highlighted within the Stakeholder Submissions on any other items within the FY22 MSB. All other items within the FY22 MSB should therefore be deemed prudent and efficient by the QCA.

The Stakeholder Submissions include several claims and assertions which Aurizon Network strongly disagrees with and references a number of matters that are irrelevant to the QCA's assessment of the prudency and efficiency of the draft FY22 MSB in line with clause 7A.11.3(p) and the *Queensland Competition Authority Act, 1997* (Qld) (**QCA Act**). The QCA assessment is limited to the prudency and efficiency of the FY22 MSB only, which does not extend to ownership and delivery methods as requested by Stakeholders.

Whilst not specifically relevant to the determination of a prudent and efficient allowance, Aurizon Network again confirms that the rail grinding assets have never been owned by Aurizon Network. Aurizon's rail grinding assets have always been owned by Aurizon Operations Limited or its predecessors as confirmed in Appendix 1. Likewise, the Rail Grinding personnel have always been employed by Aurizon Operations. While some assets that were owned by Aurizon Operations were transferred to Aurizon Network over the period [redacted], these assets were effectively Aurizon Network specific[1] whereas the rail grinding assets and employees formed part of a rail grinding services business which serviced both Aurizon Network and other Railway Network Managers. It was not viable to Aurizon Network to "*bring the rail grinding assets into Aurizon Network*", as asserted in the RIG submission. In any event it would be unusual for a Railway Network Manager to seek to internalise its rail grinding services as outsourcing is the predominant procurement approach used worldwide by Railway Network Managers for rail grinding services.

[1] Including Ballast Undercutting and Resurfacing equipment transferred at book value.

As noted in Appendix A of the March Submission, it is typical for rail grinding services to be outsourced by Rail Network Managers,[2] which implies that this is generally considered the optimal procurement methodology. Internalising these activities following the sale of the Aurizon Operations Rail Grinding business (**ARG**), would have required Aurizon Network to acquire new machinery and personnel, thereby incurring fixed costs with no opportunity to redeploy the latent capacity or obtain access to the many benefits of a performance based external services contract. Indeed, during the QCA's UT5 investigation, the QCA's consultant noted that ***"****AN should seriously consider outsourcing their work to realise these benefits.*"[3]. Aurizon Network analysis also identifies that internalising grinding activities would likely be a [redacted] provided under the Rail Grinding Services Agreement with LORAM (**Grinding Agreement**) [redacted]

The Grinding Agreement was executed by Aurizon Network in-line with Aurizon's Procurement Commitments and Delegations of Authority. Further information in relation to these principles is contained within Appendix 2. As outlined in Appendix A of the March Submission, Aurizon Network considered a range of factors in assessing whether the agreement allowed for efficient costs and delivery, including:

- The security and quality of supply;
- The term, conditions and performance benchmarks achievable under the agreement; and
- Relevant competitively tendered pricing benchmarks.

This information was provided on a confidential basis to the Chair of the RIG in accordance with clause 7A.11.3(d) of UT5. However, the Chair of the RIG has noted that "*this information was not used in the development of the RIG submission*."

The Stakeholder Submissions make several references to the increased unit rates under the Grinding Agreement. It should be noted that these comments only relate to the mainline aspect of the grinding task and that the unit rate for turnout grinding actually reduced [redacted] n real FY19$ terms compared to the FY19 rates.

Aurizon Network also notes that the FY20 and FY21 rates under the Grinding Agreement, against which the Stakeholder Submissions compare to the FY22 rates, [redacted]. These implied historic rates did not reflect flexible, market-based, performance-oriented contracts and are therefore not comparable. In fact, the QCA's consultant, GHD, noted that the historic rates were [redacted] [redacted]

The increased flexibility and [redacted] included within the Grinding Agreement, combined with Aurizon Network's focus on innovation through the refining of intervention thresholds, has resulted in a total cost of rail grinding in FY22 for Newlands customers remaining in-line with the QCA approved FY21 allowance.

For the reasons outlined in this document and within the March Submission, Aurizon Network maintains that the proposed FY22 MSB grinding costs are prudent and efficient. Aurizon

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[2] See also Evans and Peck (2012) Operating and Maintenance Costs: Investigation and Benchmarking Final Report, Prepared for Aurizon Network, October (submitted to the QCA as a confidential report in UT4 as Annex N) at Table 11 and American Railway Engineering and Maintenance-of-Way Association (2019) Manual for Railway Engineering, Chapter 4 Rail, p. 4-4-107

[3] B&H Strategic Services (2017) Assessment of AN's UT5 Submission, p. 3

[4] GHD (2017), Review of the Prudency and Efficiency of Aurizon Network's Proposed UT5 Maintenance Expenditure, A report for the Queensland Competition Authority, November, Appendix D – Rail Grinding Mini-Report, p. 7.

Network remains committed to working with its customers and the RIG to embed the mechanisms contained in the UT5 Access Undertaking and improve transparency in relation to procurement decisions.

While not necessarily relevant to the QCA's determination, further information regarding the development of previous allowances for rail grinding is provided in Appendix 3 to this submission given the potential for confusion resulting from the Stakeholder Submissions. Aurizon Network has also provided responses to individual issues identified by the Stakeholder Submissions within Appendix 4 to this submission.

Aurizon Network acknowledges that, with hindsight, previous submissions could have been clearer as to the ownership of the rail grinding assets and the employment status of relevant personnel. At the time this detail may not have been considered sufficiently relevant to the determination of the allowance.

If you have any questions in relation to this correspondence, please do not hesitate to contact myself.

[redacted].

Kind regards,

Jon Windle
Manager – Regulation
Aurizon Network

Appendix 1 – Fixed Asset Register Extracts - Rail Grinding

Below are screenshots of the Fixed Asset Register (**FAR**) at a time prior to the ARG sale (Report date 30 June 2016) and after the ARG sale (Report date 31 December 2019). Importantly these screenshots show that the Rail Grinders were always retained within Aurizon Operations, [redacted] Aurizon Network confirms that there was not change of ownership between these two dates.

Aurizon Network is willing to discuss this further with the QCA, which could include a detailed explanation of the FAR.

[redacted]

[redacted]

Appendix 2 – Procurement Commitments and Delegations of Authority

Aurizon's procurement process is governed by an overarching set of Procurement Commitments. These commitments, contained in Figure 3, are outcome based and seek to ensure that goods and services are sourced at the right price, quality and availability.

Figure 3. Aurizon Procurement Commitments

Commitment | Standard | Procedure | Guidelines & Tools

AURIZON.

Manage Procurement

HOW to read Aurizon's commitments

Scope defines the boundaries of the business process the commitment relates to.

Strategic objective states why we have this business process and what the process is designed to achieve.

Commitment articulates what is most important about the process.

Scope

These commitments guide procurement activities through the 'source to pay' cycle, including source to award, order to pay and inventory management processes.

Strategic objective

To buy goods and services at the right price, quality and availability to support Aurizon's operations, objectives and asset requirements, maximising value through effective engagement with the market.

Commitments

We commit to seek out the best outcome for Aurizon from procurement decisions

- We understand the market, our business requirements and develop go-to-market strategies that provide best value outcomes for Aurizon.
- We consider the risk associated with our procurement contracts using appropriate experts.
- We develop contracts that align vendors to deliver best for Aurizon.
- We do not engage suppliers until we have the correct business approvals.

We commit to manage supplier performance to protect and enhance value

- We develop contract management plans with clear and assigned roles and responsibilities.
- We actively manage supplier and contractor operational and safety performance against contractual commitments and act on any non-compliance.
- We pay our suppliers accurately and on time and for the agreed goods and services.

Document ID HWD-00566

Effective date 27/08/2019 2:00:00 PM

Included within Appendix A of the March Submission were details relating to the analysis that Aurizon undertook prior to entering into the Grinding Agreement. This analysis supported the assessment that the proposed agreement was efficient and was in line with the Procurement Commitments:

I. *We understand the market, our business requirements and develop go-to-market strategies that provide the best value outcomes:*

Aurizon Network considered the market for the supply of Rail Grinding Services, including the requirement for suitable, narrow gauge rail grinding plant and equipment, and appropriately qualified staff.

Aurizon Network assessed comparable competitively tendered market benchmark prices and gave due consideration to insourcing. As outlined in the March Submission, [redacted]. Insourcing was discounted as it did not mitigate the identified risks, it was not in-line with the standard industry approach, it would be unlikely to produce reduced costs for Access Holders and is not the standard practice for railway operators to insource such activities.

Aurizon Network considered the future scope and service level requirements for rail grinding in the CQCN and incorporated into the Grinding Agreement a pricing structure that contained [redacted] than had been achieved under external competitively tendered contracts.

II. We consider the risk associated with our procurement contracts using appropriate experts

Aurizon Network engaged expert staff to assess the capability of the counterparty and develop the terms and conditions of the Grinding Agreement in order to mitigate operational and commercial risks. This included the incorporation of appropriate [redacted].

III. We develop contracts that align vendors to deliver best outcomes for Aurizon

As outlined above and in the March Submission, Aurizon Network included in the Grinding Agreement [redacted], to ensure the alignment of incentives and delivery of outcomes for Aurizon Network, and therefore its customers.

IV. We do not engage suppliers until we have the correct business approvals

The Grinding Agreement was executed in-line with Aurizon Delegations of Authority. The Aurizon Delegations of Authority Matrix is provided below at Figure 4. The terms and conditions of the Grinding Agreement were agreed and approved by the Group Executive - Network independent of Aurizon Operations under delegated authority from the Aurizon Board. [redacted]

[redacted]

[redacted]

Appendix 3 – History of Rail Grinding Cost Allowances – UT1 to UT5

In their submissions, both Glencore and the RIG have raised issues with the way in which maintenance costing, specifically Rail Grinding, have been articulated within relevant Access Undertakings. In the development of those Draft Access Undertakings from UT1 through to UT5, the QCA has assessed (with the assistance of external consultants) and approved respective Rail Grinding allowances that reflect legislative and applicable costing methodology that the QCA has deemed to be appropriate. Aurizon Network has progressively moved towards an external market-based model for its rail grinding activities. The following is a summary of the assessment approach approved by the QCA under those successive Access Undertakings.

Background

Aurizon Network (formerly known as QR Network) has historically submitted either voluntary draft access undertakings or, in the case of UT5, a draft access undertaking in response to an initial undertaking notice, and the QCA has approved an access undertaking that is based on an ex-ante revenue determination. This framework is consistent with a form of incentive-based regulation where the regulated business is incentivised to outperform the approved cost allowances and retain any efficiencies for the remaining term of the applicable regulatory period. Those costs allowances can be established through a range of various approaches and historically have included direct costs, benchmarking and market-based pricing of inputs. The QCA in its approval of these allowances, must only approve those allowances that meet the requirements of section 168A of the QCA Act. Specifically, this should apply the following principles:

– The access provider is entitled to at least recover the efficient costs of providing the service; and

– The relevant approved allowance should provide incentives to reduce costs or otherwise improve productivity.

These principles would necessarily exclude the application of cost-plus regulation that would be associated with Aurizon Network recovering the actual accounting costs of the assets it employs in the provision of maintenance services to the facility providing the declared service. Therefore, under incentive-based regulation the assets employed to undertake maintenance activities are not included in the Regulatory Asset Base (**RAB**) and are not subject to the roll-forward provisions in Schedule E of the relevant Access Undertaking.

The exclusion of assets employed in the provision of maintenance activities from the RAB largely reflects the fungibility and mobility of the capital being utilised. If there is no asset specificity between the maintenance plant and the CQCN then that plant can be redeployed, replaced or substituted in the provision of maintenance services. Similarly, the capacity of individual plant may exceed the needs of the CQCN thereby enabling maintenance activities to be undertaken on rail transport infrastructure outside of the CQCN in order to maximise the use of that plant. For example, in the case of a high-productivity rail grinder, the annual productive capacity of the mainline grinder may materially exceed the CQCN scope of mainline grinding. Where a related party or a third party undertakes maintenance services for Aurizon Network and for other network operators then that party will deploy its maintenance plant efficiently to meet its contractual obligations and its legitimate business interests. It will not quarantine assets to a particular rail network to ensure consistency with prior regulatory decisions.

In circumstances where maintenance services are contestable and typically provided under service-based contracts, establishing maintenance allowances with reference to the book value of plant would not establish the efficient costs of providing those services. Importantly, it would also preclude those costs reflecting the productivity and efficiency improvements obtained from technical progression in the market for those services.

In the determination of efficient maintenance costs, the QCA will have regard to a range of matters including, but not limited to:

- industry norms and procurement practices;
- the contestability of the relevant maintenance services;
- the presence of relevant benchmarks and yardsticks;
- the commercial arrangements associated with the provision of those services; and
- direct costs of service provision.

The above are standard methods used by regulators to evaluate the efficiency of the regulated business' costs. The weighting or application of a particular matter as listed above, will largely depend on the relevant circumstances applicable to that maintenance activity. As an example, for maintenance activities which are largely reactive and are undertaken with plant that is used solely within the CQCN, then more weight would be given to the direct internal costs of providing the service. In respect of some services, such as rail grinding where plant may have the capacity to deliver scope in excess of the requirements of the CQCN, these circumstances will change over successive regulatory periods and the approach to determining the efficient costs of rail grinding for a particular regulatory period will have regard to the circumstances prevailing for that period only.

Aurizon Network notes that in each individual regulatory period the QCA has assessed the maintenance costs allowances, which includes rail grinding services, against the matters the QCA is required to have regard in section 138(2) of the QCA Act. The QCA must approve the efficient costs of providing those services in respect of the specific regulatory period. Below is a history of the QCA draft Access Undertaking assessments

UT1 and UT2 (FY2000 – FY2009)

In determining the efficient maintenance costs (including Rail Grinding costs) in UT1 the QCA adopted a stand-alone cost approach and engaged Rail Maintenance Services (**RMS**) to evaluate the reasonableness and efficiency of those costs. In this regard, the QCA's UT1 Draft Decision notes that consideration was given to relevant external benchmarks:

> *RMS estimated that, on average, QR's infrastructure maintenance efficiency is around 15% more costly than it would have been had it been based on competitively determined contract rates for the maintenance activities that would be performed on a stand-alone coal system*[5].

The approved maintenance costs for UT1 were subsequently reduced by 15% to account for these inefficiencies. RMS also noted that the provision of rail grinding services within the CQCN involved two multi-pass mainline grinders which were less efficient than a single pass

[5] Queensland Competition Authority (2000) Draft Decision on QR's Draft Undertaking, Vol. 3, p.120

grinder[6]. The lower capacity of these less productive multi-pass machines was resulted in use predominantly within the CQCN only.

The proposed UT2 maintenance costs allowances were largely informed by the reported maintenance costs against the UT1 approved allowances.

Shortly after the commencement of UT2, it became apparent that the UT1 actual maintenance costs and the subsequent UT2 maintenance allowance materially understated the efficient costs of providing the maintenance services to the CQCN. This was noted in the 2007 Maintenance Costs Draft Amending Access Undertaking (**DAAU**):

> *It was only after evidence of the significant increase in 2005-06 maintenance costs became available that QR had cause to analyse its original UT2 maintenance forecasts and actual UT1 maintenance costs. At this point it became evident that the UT1 maintenance costs reported to the QCA were fundamentally flawed due to inherent problems in QR's previous business management system which operated up to the end of December 2004.*[7]

A key driver of this understatement within the maintenance allowance, was the exclusion of asset charges for maintenance plant from reported maintenance costs. The DAAU sought to make adjustments to the approved allowances for FY08 and FY09 with reference to the 'efficient base' approved by the QCA for UT1. While the approved DAAU partially corrected the shortfalls in the maintenance allowance, the practical effect was that maintenance cost allowances over the term of UT2 materially undercompensated the direct and indirect cost of service provision, including a return on and of maintenance plant.

UT3 (FY2010 to FY2013)

Given the substantial under-compensation within the prior QCA regulatory determinations, the proposed UT3 maintenance costs were developed on the basis of an Alliance Agreement for maintenance of the Queensland narrow gauge network. This was largely a bottom-up process and included the application of an operating margin applied to the direct costs of providing maintenance services. UT3 also saw the introduction of a new higher productivity 80 stone one-pass mainline grinder and a 24 stone switch grinder, both commissioned in 2009. These machines sought to reduce capacity utilisation and support increased system utilisation. The cost of the capital investments into these new machines, contributed to the increase in the proposed maintenance costs as noted in the 2009 Draft Decision:

> *a significant expected re-capitalisation of QR Services' major maintenance equipment in order to provide for the increased scope of maintenance without significantly increasing the need for track possessions.*[8]

The Alliance Agreement was established between QR Network and QR Services as a separate entity within the QR Limited Group. The proposed costing methodology included asset charges (comprising depreciation and cost of debt) within the direct costs to which a 15% operating margin was applied as being consistent with similar rail maintenance companies benchmarked by KPMG. The direct costs plus margin was considered appropriate

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[6] RMS (2000) Queensland Rail's Infrastructure Maintenance for Central Queensland Coal Services, Working Pape 7, A report prepared for the Queensland Competition Authority, p. 55

[7] QR Network Access (2007) Draft Amending Access Undertaking, Revised Maintenance Cost Forecasts for the 2005 Access Undertaking, May, p. 30

[8] Queensland Competition Authority (2009) Draft Decision on QR Network 2009 Draft Access Undertaking, December, p. 53

for the long-term relationship implicit in the Alliance Agreement which underpins the relationship. The proposed 15% margin on maintenance costs covered costs associated with an appropriate return on assets, corporate overheads, working capital and a margin for profits, incentives and contingencies.

In respect of rail grinding services, the UT3 maintenance cost proposal noted that:

> *The scope delivery will be completed by an 80 stone machine (designated as MMY031) for the Rail Grinding – Mainline product, and a 24 stone machine (designated as MMY030) for the Rail Grinding – Turnouts product. These machines will be* ***utilised across the entire QR network*** *and for costing purposes the aggregate cost of the service delivery has been calculated and this aggregate cost has then been allocated to each system on the basis of the number of kilometres of grinding that is forecast to be undertaken on each system.*[9]

For the purpose of cost allocation, the following mainline grinding scope kilometres were used to establish the rail grinding unit rates and those rates where applied to the forecast total coal grinding kilometres:

Table 2 – Historical Grinding Kilometres

System / Year	2009/10	2010/11	2011/12	2012/13
CQCN	3,247	3,542	3,823	3,811
Non-CQCN	1,394	1,112	1,042	1,199
Total	**4,641**	**4,655**	**4,865**	**5,010**

Source: Table 6.13 of Annex G of 2009 QR Network Draft Access Undertaking.

The QCA's Draft Decision on the 2009 Draft Access Undertaking did not reject establishing efficient costs inclusive of a margin with respect to external service provision, but raised concerns that the proposed service delivery model and associated costings were not an outcome of a competitive tender process:

> *The Authority accepted that, in a competitive environment, maintenance service providers would earn a margin over costs. However, that is in an environment where the provision of maintenance services is acquired through a competitive tender process. In such cases, there can be some confidence that the contract price is efficient. In contrast, QR Network has not subjected its maintenance contract to a tender process. There is, therefore, less confidence that QR Network's proposed costs are efficient.*[10]

The QCA's Draft (Pricing) Decision rejected the costings associated with the Alliance Agreement model on this basis and removed the operating margin from the asset charges and replaced it with the approved WACC to determine the asset charges noting:

> *the Authority considers that non-tendered arrangements with related parties should be costed on the same basis as if QR Network had undertaken the work itself. Where this*

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[9] QR Network (2008) QR Network's Draft Access Undertaking – 2009, Volume 3, Appendix G – Maintenance Costs, p. 149

[10] Queensland Competition Authority (2009) Draft Decision QR Network 2009 Draft Access Undertaking, December, p. 57

> *is the case, QR Network would receive only its normal WACC and it would not receive any additional margin for risk/profit in addition to estimated efficient costs.*[11]

The QCA's position is largely consistent with the costs associated with rail grinding being internalised within the QR Limited Group where there are scale and scope efficiencies obtained from QR Network operating both the coal and non-coal networks. In this regard, the QCA position was indifferent to ownership of the assets where the assets are being utilised solely to provide maintenance services to the QR Network managed coal and non-coal systems.

During the term of UT3, the ownership and operation of the CQCN was separated from the remainder of the Queensland Rail network and the rail grinding plant costed in UT3 continued to provide both internal services (to QR Network) and external services (to Queensland Rail).

UT4 (FY2014 to FY2017)

Following that separation, the historical depreciated cost approach that applied in UT3 was not applicable or prudent where the maintenance assets were used to jointly provide internal and external services. This is largely because the assets were no longer an internalised cost and internal costing methods are not relevant to the pricing of contestable rail maintenance services. In addition, this has the potential to distort the efficient allocation and utilisation of the rail grinder where the prices for rail grinding services are differentiated between networks.

Similarly, access charges would no longer satisfy the requirements of section 168A as it would not be efficient for a benchmark firm to internally provide those services. In short, the depreciated cost approach should only be applicable to maintenance services utilising plant which is specific to, and used solely within, the CQCN. Separation meant that those conditions no longer prevailed in respect of rail grinding services.

The external rail grinding services provided by Specialised Track Services to Queensland Rail were subject to terms and conditions agreed to at the time of separation. As such, the maintenance plant was not providing external rail grinding services on terms and conditions that were the subject of a contestable market process.

In order to approximate the terms and conditions that would prevail within a contestable market, the proposed costing methodology applied in UT4 maintained the direct cost approach method used in UT3 but proposed to apply a Gross Replacement Value (**GRV**) methodology to determine the maintenance plant asset charges. This approach and reasoning were accepted by the QCA's own expert consultant, RSM Bird Cameron who concluded:

> *To the extent that the replacement cost of the assets is accurate, and that the WACC of 6.83% represents an appropriate return to compensate the service provider for the commercial risks involved in providing the maintenance service, we consider that return calculated under the GRV methodology would be commensurate with the market price of the services in a competitive market.*[12]

Aurizon Network's UT4 proposal applied the GRV methodology to all maintenance plant and equipment as it considered there were additional benefits to be realised including:

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[11] Queensland Competition Authority (2010) Draft Decision QR Network 2009 Draft Access Undertaking: Tariffs and Schedule F, June, p. 76.

[12] RSM Bird Cameron (2014) Aurizon Network 2013 Draft Access Undertaking Financial Assessment of Operating Expenditure - Response to Queensland Resources Council's Submission dated 7 March 2014, p.18

- unit rates would be maintained in real terms over time and avoid material shocks in unit rates when large maintenance plant required replacement;
- unit rates would be periodically reset to reflect productivity and efficiency improvements associated with technological progress in the provision rail maintenance services; and
- the business would be incentivised to procure efficient rail maintenance services and where reinvestment in plant and equipment was required the applied unit rates would be consistent with funding that plant and equipment.

The QCA's Draft Decision on the 2014 Draft Access Undertaking refused to accept the application of the GRV methodology to the maintenance assets and noted:

> *In this context, we are not convinced with the relevance of the contestability argument. We acknowledge some of these activities could potentially be outsourced to external parties. Given these assets are highly customised for use in the CQCN, it is unlikely to be efficient for Aurizon Network to sell these assets and outsource the maintenance activity as of now.*[13]*.*

Aurizon Network accepted this position in respect of the maintenance asset base. However, the QCA in making its decision on rail grinding services relied on the prevailing market conditions. If those conditions do not materialise there is the potential for regulatory error to occur due to the timing difference. The assets used to provide rail grinding services are not specific to the CQCN and outsourcing represents an efficient procurement of those services. This is particularly relevant to the likelihood that the loss of the external rail grinding services contract could necessitate the sale of assets by the related service provider and the requirement for Aurizon Network to procure rail grinding services.

Aurizon Network's UT4 proposal noted that "if prices for maintenance activities did not reflect market value it would be more profitable for the regulated firm to either sell the plant to realise market value or redeploy the capital to a profitable purpose and outsource the activity with pass through reflecting an efficient competitive market price".

This conclusion was also supported by RSM Bird Cameron who stated:

> *If Aurizon did not provide the maintenance services, it could employ a contractor to provide the services at a market rate. In this circumstance, the capital currently employed to fund the maintenance equipment could be employed in an alternative use. The GRV methodology seeks to compensate the service provider for the opportunity cost borne by providing the service. The historical cost basis does not necessarily reflect the opportunity cost to Aurizon.*[14]

Aurizon Network notes that the RIG Submission misinterprets both the principle and the above statements, and incorrectly infers that the reference to the strategy 'by a regulated firm' indicates that Aurizon Network was the owner of the rail grinding assets. All statements regarding the GRV methodology are solely in respect of communicating the relevant economic principles noted by RSM Bird Cameron and should not be interpreted as a statement of ownership.

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[13] Queensland Competition Authority (2014) Draft Decision: Aurizon Network 2014 Draft Access Undertaking – Maximum Allowable Revenue, September, p. 118

[14] RSM Bird Cameron (2014) Aurizon Network 2013 Draft Access Undertaking Financial Assessment of Operating Expenditure - Response to Queensland Resources Council's Submission dated 7 March 2014, p.18

The final approved UT4 maintenance costs were determined through internal modelling within the QCA. The QCA's internal modelling was not available for review by Aurizon Network, therefore, the basis of the determination of the rail grinding costs in UT4 cannot be fully verified by Aurizon Network. Notwithstanding, Aurizon Network noted in its UT5 proposal that:

> *In making its UT4 Final Decision in relation to maintenance costs, the QCA incorrectly assumed that rail grinding costs were perfectly correlated with the UT4 volume forecasts (for example, a 5% decrease in forecast volumes would lead to a 5% decrease in rail grinding costs). Due to the nature of plant and equipment required to deliver the task and the number of people required to operate it, a high proportion of rail grinding costs are fixed. As a result of this cost composition the UT4 rail grinding allowance did not compensate Aurizon Network for at least its efficient costs in maintaining the CQCN through its rail grinding program. Aurizon Network has sought to correct this in its UT5 proposal for maintenance expenditure.*[15]

Therefore, the UT4 decision undercompensated Aurizon Network for the recovery of the fixed costs of delivering rail grinding for the CQCN, including costs associated with the rail grinding assets.

UT5 (2018 to present)

During the term of UT4, Queensland Rail tendered its rail grinding services which resulted in Aurizon Operations being the successful bidder. [redacted].

The proposed UT5 rail grinding costs and unit rates were developed having regard to the [redacted] As stated in the 2017 Draft Access Undertaking (**2017DAU**) proposal:

> *Rail grinding is an external provided service procured through Aurizon Operations. Aurizon Operations has successfully tendered (via a competitive market process) to provide rail grinding services for other Rail Infrastructure Managers in Queensland and in the Hunter Valley. Proposed costs of rail grinding services for the CQCN are commensurate (on a unit rate basis) with the costs proposed for other Rail Infrastructure Managers. The efficiency of these costs can therefore be demonstrated by that competitive market process.*[16]

As the information within the above analysis was classed as confidential by Aurizon Operations, to allow for a conclusion that was appropriate for the public submission, Aurizon Network used the term 'commensurate'. As outlined in the above section – 'Efficient rail grinding costs are determined by the market', on a like for like grinding scope, [redacted].

In this regard, the RIG Submission presumption that 'UT5 continued to be priced based on historical asset values', is incorrect. It is also note that the QCA's expert consultant GHD clearly identified that:

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[15] Aurizon Network (2016) 2017 Draft Access Undertaking, Explanatory Submission – November, p. 171.

[16] Ibid, p.172

> [redacted][17]

It is clear from Aurizon Network's submission documentation, the QCA decisions and expert reports that the costing methodology which the QCA accepted as determining efficient costs in UT5 was not established based on historical costs. Overall, the mainline grinding costs approved by the QCA for UT5 (including for FY2021) [redacted].

During the QCA's investigation of the UT5 Draft Access Undertaking, Aurizon Network responded to information requests from the QCA and its consultants, seeking detailed information relating to the contractual arrangements and proposed costs of the rail grinding services.[18] Through the information provided to the QCA during its investigation, Aurizon Network was able to demonstrate the competitive nature of the UT5 rail grinding costs.

The prudency and efficiency of the UT5 rail grinding costs was validated by GHD which noted:

> *Aurizon Operations is also contracted to ARTC in the Hunter Valley and the wider ARTC network, and to Brookfield (Now Arc) and BHP Billiton in Western Australia, all of whom we understand conduct competitive tendering processes for rail grinding services.*
>
> *……we are satisfied that Aurizon Network is receiving value for money in the delivery of rail grinding services from Aurizon Operations over the UT5 period.*[19]

The QCA Final Decision on the 2017DAU accepted Aurizon Network's proposed UT5 Rail Grinding costs as prudent and efficient and stated:

> *Consistent with Aurizon Network's revised maintenance allowance, the QCA has accepted Aurizon Network's 2017 DAU proposed costs for this maintenance category. Aurizon Network stated that its 2017 DAU proposed forecast costs reflect the terms of a new grinding contract that has been negotiated with Aurizon Operations and which commenced on 1 July 2017.*[20]

In assessing the efficiency of the proposed UT5 rail grinding costs, GHD expressed some concerns that a related party contract may not have appropriate incentive or penalty clauses or that the terms may not be enforced noting:

> *In our experience, we would expect the contract to provide for both time and productivity payments, in a manner that would ensure Aurizon Operations would receive compensation if its rail grinding equipment was on site and ready to operate but for reasons within Aurizon Network's control, such as track possessions, the equipment could not actually be used for productive activity. Conversely, if Aurizon Network provides track possession hours, the contract should indicate the minimum*

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[17] GHD (2017) Review of the Prudency and Efficiency of Aurizon Network's Proposed UT5 Maintenance Expenditure, A report for the Queensland Competition Authority, November, Appendix D – Rail Grinding Mini-Report, p. 7.

[18] QCA (2017) UT5 Maintenance Assessment – Information Request 2 - Rail Grinding.

[19] GHD (2017) Review of the Prudency and Efficiency of Aurizon Network's Proposed UT5 Maintenance Expenditure, A report for the Queensland Competition Authority, November, Appendix D – Rail Grinding Mini-Report, p. 8

[20] Queensland Competition Authority (2018) Final Decision, Aurizon Network's 2017 draft access undertaking, December, p. 227

level of productivity and provide for additional payments related to kilometres of grinding completed.[21]

In this regard, following the sale of the ARG the rail grinding services are now undertaken by an independent third-party rail maintenance service provider. The terms and conditions of the Grinding Agreement, including rail grinding rates, are commensurate with the incentives and penalties that GHD would expect to see in a rail grinding services contract.

The QCA approved grinding rates for the UT5 period between 2018 to 2021 that were [redacted] run by Aurizon Operations. GHD in their review were aware of this and outlined this within their report by stating that Aurizon Network is receiving Grinding Rates that were '*value of money*'. This ultimately benefited the Access Holders through their reduced tariffs.

[21] GHD (2017) Review of the Prudency and Efficiency of Aurizon Network's Proposed UT5 Maintenance Expenditure, A report for the Queensland Competition Authority, November, Appendix D – Rail Grinding Mini-Report, p. 25

Appendix 4 – Table response to specific Stakeholders statements

Glencore Submission	
1. Sale of rail grinding business	
Aurizon Network has received a return on and of the grinding assets, the QCA has previously indicated that it would be inefficient to sell the assets.	The application of a return on and of the maintenance assets base was relevant to the circumstances and information relevant to prior regulatory decisions. The QCA comments regarding whether it would be inefficient to sell assets that were in the maintenance asset base was the statement of an overarching principle relevant only to assets where they were highly 'customised' for use within the CQCN. This principle is not applicable to assets which provide rail grinding services within the CQCN and outside of the CQCN.
Glencore is concerned that the contract was entered into with a related party at an inefficient cost under a sole sourcing arrangement	The Grinding Agreement is between Aurizon Network and LORAM. LORAM is not a related party of Aurizon Network and the rail grinding costs, which are on [redacted] with comparable Network Managers, were agreed as part of a competitive tender process. These costs are plainly efficient as demonstrated in Appendix A of Aurizon's March Submission and information provided to the Chair of the RIG and its Expert Adviser.
The principle purpose of entering into the Grinding Agreement was to inflate the value of the rail grinding business.	This allegation is strenuously denied by Aurizon Network. The Grinding Agreement entered into ensures the continuity of supply at a competitive price with performance based terms and conditions while protecting customers from future material price increases.
The rate increase does not reflect a genuine increase in underlying cost.	The rates under the Grinding Agreement are [redacted] by comparable Railway Network Managers as part of a competitive tender process. The pricing reflects improved terms and conditions including [redacted]. As outlined in the March Submission, the FY21 rates [redacted].
The price increase is exacerbated by the forecast increase in future scope.	As outlined in Table 5 of Appendix A of the March Submission, the forecast scope for both mainline and turn out rail grinding in Newlands will remain materially lower than FY19 levels until FY26 enabling customers to benefit from the [redacted] afforded through the

	Grinding Agreement. The ability to reduce scope is provided for through the flexibility of the LORAM contract. This reduced scope is driven by Aurizon Network's continuous improvement initiatives on the rail grinding profile as outlined within the March Submission.
2. Historical Ownership and Returns	
It appears that Aurizon Network has been purposefully vague regarding the legal ownership of assets	Aurizon Network disagrees with this suggestion. While Aurizon Network acknowledges that historic submissions have not expressly stated the legal ownership of the rail grinding assets, legal ownership was not relevant in the context of those submissions. Aurizon Network stood to gain nothing from any 'purposeful vagueness' as to the ownership of the assets and employment status of the employees and it is unlikely to have changed any outcome of the QCA's decisions on those Draft Access Undertakings.
Effective Control of the rail grinding assets and employees was with Aurizon Network under various titles.	While Aurizon Network may have been involved in the day-to-day management of the rail grinding assets at certain times, ownership and effective control has always remained with Aurizon Operations and its predecessors, particularly as it is the party who had the contractual obligations with regard to the provision of rail grinding services to both Aurizon Network and third parties who it provided those services to.
The method for determining the regulatory allowance under UT3 and UT4 is indicative of Aurizon Network asset ownership.	As outlined in Appendix A of the March Submission, ownership of the rail grinding assets has always remained with Aurizon Operations and its predecessors. The basis on which regulatory allowances have been determined has changed over time as outlined within the main body of this submission.

Other mechanised rail maintenance plant was leased to Aurizon Network from [redacted] while rail grinding assets were subject to a services agreement. This is inconsistent with the treatment of regulated and non-regulated revenues.	The mechanised plant leased to Aurizon Network from [redacted], included resurfacing and ballast equipment only. The resurfacing team has undertaken a very minor amount of non-CQCN work [redacted] and the Ballast Undercutting team has not completed any work outside the CQCN. Due to this, both the Ballast and resurfacing assets did not generate any material non-regulated revenue. Therefore, there is no cross-subsidy or use of CQCN specific assets that needs to be considered. In addition, the QCA assessment on the prudency and efficiency of the rail grinding allowance for Aurizon Network does not extend to reviewing the costs of providing rail grinding services to other Railway Network Managers.
Other Mechanised rail maintenance plant assets were transferred to Aurizon Network in [redacted]. Rail grinding assets were not transferred to Aurizon Network and have then been determined to be non-core to Aurizon Operations.	Rail grinding is typically outsourced by Railway Network Managers to specialist grinding providers. The assets in question were part of ARG which had contracts with multiple customers, not just Aurizon Network. The rail grinding business (ARG) was considered to be non-core to Aurizon Operations.
Looking through the legal ownership it would be reasonable to attribute a large portion of the gain on sale to Aurizon Network and therefore this should consequently lead to a reduction in Aurizon Networks regulatory allowance charged to customers	Aurizon Network reiterates that ARG was not solely delivering rail grinding services for the CQCN. ARG had operations in Queensland, New South Wales and Western Australia and any associated proceeds from the sale of ARG (as reported in Aurizon's FY20 Interim Financial Report) relates to the entire ARG, not solely the CQCN operation.
3. QCA Investigation	
Review of the historic legal ownership of assets	Confirmation of the legal ownership of the assets is provided within this submission within Appendix 1. Aurizon Network is prepared to meet with the QCA if this needs clarification.

Review historic construct of regulatory allowances	A review of the historic construct of regulatory allowances is provided within this submission within Appendix 3.
Determine how historical non-CQCN activities were accounted for	Aurizon Network's understanding of ARG's process is that the operating costs for the Railway Network Managers that ARG serviced were booked to different cost centres and provided a clear means of separating CQCN and Non-CQCN work. During the UT5 term, corporate overheads were split between CQCN and non-CQCN using a percentage of FTEs who carried out the work.
Review any other information to determine if Aurizon Network customers were adversely impacted	This is not applicable to the QCA assessment of the Rail Grinding costs within the FY22 MSB.
Determine whether Aurizon Network undertook appropriate market testing	As demonstrated within the March Submission within Appendix B, costs under the Grinding Agreement are [redacted] comparable Railway Network Managers following competitive tender processes.
RIG Submission	
1. Executive Summary	
Aurizon Network failed to take appropriate actions to bring rail grinding assets into Aurizon Network in [redacted]	As demonstrated in this submission, the assets in question were owned by Aurizon Operations, used to service customers other than Aurizon Network and formed part of a broader rail grinding business. It was not considered a viable option for Aurizon Network to take any action to 'bring the assets' into Aurizon Network. Rail grinding is a highly specialised activity that is typically outsourced by Railway Network Managers worldwide.
Aurizon Network assisted Aurizon Operations to dispose of critical assets by entering into a [redacted] contract	Rail grinding is a highly specialised activity that is typically outsourced by Railway Network Managers worldwide. The Grinding Agreement ensures continuity of supply at a competitive price with performance-based terms and conditions while protecting customers from future price increases.

Aurizon Network has reduced competition and created a dominant supplier in the market for rail grinding services	[redacted]
Aurizon Network moved to a sub-optimal procurement methodology	Rail grinding is a highly specialised activity that is typically outsourced by Rail Network Managers. The Grinding Agreement entered into ensures the continuity of supply at a competitive price with performance-based terms and conditions while protecting customers from future price increases.
2. Relevance to all systems	
The current QCA process will inform consideration of future draft MSBs.	The QCA is required to review and approve only the relevant years Maintenance Strategy and Budget in line with 7A.11.3(p).
3. Confidential Information	
The RIG Chairman and Expert Advisor have not used the confidential information provided to them in the development of the submission.	The confidential information provided to the Chair of the RIG and the Expert Advisor, as well as to the QCA in the March Submission within Appendix B, demonstrates the competitiveness of the rail grinding costs and proposed allowance. It seems highly unusual that the Chair of the RIG has chosen not to use the confidential information provided under clause 7A.11.3.d of UT5 in preparing its submission to the QCA.
4. RIG Position	
QCA must consider whether internal or external procurement is the most efficient methodology and benchmarking of costs is only appropriate where external procurement is most efficient	The QCA is only required to assess whether the costs of undertaking rail grinding services within the CQCN are prudent and efficient. Standard industry practice is to externally procure rail grinding services under a performance-based contract.

Aurizon Network held itself out to be the owner of the rail grinding assets prior to the UT5 submission and therefore it cannot rely on the actual ownership of the assets by Aurizon Operations and it is open to the QCA to develop an allowance based on internal costs	All statements made in UT4 regarding the application of a GRV approach and the incentives for 'a regulated firm', not Aurizon Network, to sell the maintenance assets if undercompensated against the market value of providing maintenance services were made with respect of demonstrating an economic principle. This did not constitute a representation by Aurizon Network as to ownership.
5. Rail Grinding Costs	
The FY21 MRSB is misleading as the scope information was not provided at the time and rate increases were justified on the basis of a lower Take-or-Pay pricing structure and reduced future grinding volumes whereas forecast grinding volumes increase in the long term	As outlined in Table 5 of Appendix A of Aurizon Network's March Submission, the forecast scope for both mainline and turn out rail grinding in Newlands remains materially lower than FY19 levels until FY26 enabling customers to benefit from the [redacted] afforded through the Grinding Agreement.
6. Sale to LORAM	
The market value of the assets was increased by the Aurizon Network contract and this was captured by the Aurizon Group	The market value of ARG and the subsequent sale price was a process that was managed by the owner of the business, Aurizon Operations.
7. History of rail grinding issue through successive undertakings	
The provision of the service by Aurizon Operations or internally by Aurizon Network is considered fungible because: - The Evans & Peck report states that due to Aurizon Network maintaining some of their maintenance activities in house, the CQCN have maintained reasonably competitive per kilometre rates for rail grinding - The organisational structure presented in previous submissions demonstrate that Aurizon network was	Aurizon Network acknowledges that historic submissions have not expressly stated the legal ownership of the rail grinding assets. Legal ownership was not relevant in the context of those submissions. With hindsight, some historic references may cause confusion when read in the current context. In particular this may be the case in relation to general references to the assets made in combination with other mechanised production equipment - regardless of whether that equipment was specific to Aurizon Network. However, this is not relevant to the QCAs determination of FY22 rail grinding allowances which is limited to prudency and efficiency of those grinding rates.

responsible for the Specialised Track Services team that managed rail grinding task	
If Aurizon Operations was providing services to Aurizon Network in UT4 under a services agreement, the terms of that agreement were not consistent with the terms expected under an arms-length contract	This is not relevant to the QCAs determination of FY22 rail grinding allowances.
8. Aurizon Networks UT4 proposal and QCA Response	
The QCA stated that it is unlikely to be efficient for Aurizon Network to sell the assets and outsource the maintenance activity for now and that Aurizon Network should only be entitled to recover an appropriate return for its initial investment	Aurizon Network acknowledges the statements made by the QCA in response to the proposal to adopt a GRV approach to determining benchmark maintenance services even though the use of GRV for that purpose was affirmed by the QCA's expert consultant at the time. However, the QCA decision includes no analysis or evidence to support that statement and it was not a specific statement made having regard to the circumstances and market conditions for rail grinding services, including that the rail grinding assets provide a combination of service to Aurizon Network [redacted].
It is inconsistent for Aurizon Network to have executed the contract without customer consultation prior to the sale and then to ask customers to accept that the decision of Aurizon Operations to sell the assets was that of a third party. This inconsistency will lead to inefficient costs	This is not relevant to the QCAs determination of FY22 rail grinding allowances. In any event the Grinding Agreement negotiation process had commenced prior to the RIG being constituted.
9. Changes in approaches can result in overcharging	

Changes in the approach to setting an allowance can result in double-charging	Aurizon Network notes that the QCA is required to assess the efficiency of the rail grinding costs based on the information relevant at the time of making that decision. In this regard the QCA has determined in its assessment of UT5 that a benchmark cost approach is consistent with determining the efficient cost of providing rail grinding services. It would be inappropriate for a regulator to assess the efficiency of those costs against a prior costing methodology where the circumstances relevant to application of that methodology no longer prevail. Aurizon Network also notes that under incentive based regulation, it is the regulated business that bears the risks of both over and under-recovery of costs.
10. Risks following expiration of Loram Contract	
Pricing is likely to increase [redacted]	[redacted]
11. Potential for future gaming	
Customers are concerned that this would set a precedence to allow regulated entities to immediately capture any difference between market value and the Written Down Value achieving a 'windfall' gain on the assets.	The grinding assets were never owned by Aurizon Network and those assets were also used to service other Railway Network Managers. No asset valuation windfall could have been captured by Aurizon Network. The other material assets, such as ballast undercutting and resurfacing, are owned by Aurizon Network and, other than some minor third party resurfacing work, only service the CQCN. They are specifically required for the delivery of maintenance activities within the CQCN only.
12. Conclusion	

Aurizon Network was not prudent in either its procurement process or decision to sign a contract with LORAM	As noted in this submission, the QCA's own consultant[22] has recommended that specialised rail grinding services should be outsourced to a third party and this is in line with the procurement approach typically taken by other Railway Network Managers worldwide. The rates under the Grinding Agreement are [redacted] comparable Railway Network Managers following competitive tender processes. The pricing reflects improved terms and conditions including [redacted].
Aurizon Network deviated from an efficient "in-house" delivery of rail grinding services	As noted in this submission, the assets in question were owned by Aurizon Operations, used to service customers other than Aurizon Network, and formed part of a broader rail grinding services business.
The contract has decreased the competitiveness of the Qld coal industry	The rates under the Grinding Agreement are in line with or better than those agreed by comparable Railway Network Managers following competitive tender processes. The pricing reflects improved terms and conditions [redacted]

[22] B&H Strategic Services (2017) Assessment of AN's UT5 Submission, p. 3