

QR Ref: MCR-24-181

Commercial in Confidence

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Chair
Queensland Competition Authority
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Dear Professor Menezes

Queensland Rail's Draft Access Undertaking 3 (DAU3)

Thank you for the opportunity to provide a response to stakeholder submissions on Queensland Rail's DAU3.

Queensland Rail's submission is attached. Should your officers have any questions in relation to this matter they can contact Queensland Rail's Manager Policy and Regulation Mr Douglas Jasch on 0488 314 741 or by email at douglas.jasch@qr.com.au.

Yours sincerely



Kat Stapleton
Chief Executive Officer

14 March 2024

Queensland Rail's Response to Industry Comments on Queensland Rail's Draft Access Undertaking 3 (DAU3)

14 March 2024

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 QueenslandRail

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1. Background

Queensland Rail submitted its draft access undertaking (**DAU3**) and accompanying explanatory document to the Queensland Competition Authority (**QCA**) in November 2023. DAU3 is intended to replace the current access undertaking (**AU2**) on 1 July 2025 and remain in place until 30 June 2030.

The QCA published DAU3 and called for stakeholder submissions on DAU3 by 2 February 2024. Nine submissions were received being from Aurizon Coal and Bulk, Aurizon Network, Pacific National, New Hope, Yancoal, North West Phosphate, Qube, Granicorp and Centrex. The QCA published these submissions on 5 February 2024.

On 22 February 2024 the QCA sought further submissions on submissions by Thursday 14 March 2024 in relation to new matters raised.¹

In developing DAU3 Queensland Rail consulted with stakeholders through presentations and meetings. Queensland Rail proposed only limited changes against Queensland Rail's AU2, and a substantial capital & maintenance program to meet the forecast coal tonnages on the West Moreton System.

Queensland Rail welcomes stakeholder submissions and has carefully considered the matters that have been raised. Queensland Rail believes that ongoing consultation throughout the QCA process is an essential part of the development of DAU3, seeking further clarification, common ground and a full understanding of the views of all parties.

Queensland Rail is committed to working with our coal customers to ensure sufficient capacity for their growing businesses, our freight customers to encourage the movement of freight from road to rail, and our third party passenger customers to accommodate successful passenger journeys.

2. Harmonised approach to national rail access regulation and interoperability

2.1 Background

Queensland Rail supports the Australian Railway Association (**ARA**) priorities including moving towards a national rail market and national interoperability. That is, Queensland Rail is fully supportive of the national initiatives towards harmonisation between access regimes.

Queensland Rail is participating in the initiatives supporting ARA's Rail Freight Strategy 2023-2025². A consideration of those initiatives demonstrates that it would be counterproductive for the QCA to attempt

¹ Given the available time, this submission does not respond to every issue canvassed by stakeholders or unnecessarily repeat Queensland Rail's initial submissions. It should not be inferred that Queensland Rail accepts or agrees with any item not specifically addressed.

² Australasian Railway Association, Rail Freight Executive Committee Strategy 2023-2025, https://ara.net.au/wp-content/uploads/ARA_RFEC-23-25_v2_Single-Page_23102023.pdf

to achieve national consistency based on submissions from individual operators, cutting across ongoing industry wide initiatives to achieve a national rail market.

For example, the ARA's strategy for national interoperability is the responsibility of an Expanded interoperability Working Group including operators, rail infrastructure managers and relevant supply chain members. The initiatives for that working group include:

“Engage with members to proactively represent industry views to work being progressed by the National Transport Commission and the ACMA on interoperability, chiefly in relation to digital control and signalling systems, and rollingstock access.

Organise a tailored briefing on the Inland Rail project for RFEC members, to inform a revised ARA position on how to best support the future of the project and develop effective messaging for government engagement to maximise interoperability, productivity and resilience benefits.”

The ARA's rail freight productivity strategy will be project managed by the ARA with the ARA/FORG Corporate Affairs Working Group, with initiatives including:

Develop and execute a national campaign on the findings of the ACRI Rail Freight Productivity Report, including government and stakeholder engagement and public launch of the report.

Create a consistent rail freight narrative and key messages for united advocacy to support the campaign activity, share with members and refer to throughout advocacy activities and events

'FORG' (the Freight on Rail Group) is a freight rail industry group established in August 2015 to engage with government and key stakeholders on major public policy issues.

Some freight stakeholders sought that the QCA Final Decision seek to achieve harmonisation and integration of adjoining and interstate rail networks.

For example, Qube has sought that the QCA work with the ACCC, which is reviewing the ARTC draft Interstate Access Undertaking so that access arrangements and frameworks are aligned.

Aurizon Bulk identifies that the approach to rail access regulation in Australia is highly fragmented, with multiple state-based access regimes working alongside a national access regime. Aurizon Bulk has recommended that DAU3 be amended:³

“where this can improve national consistency and harmonisation in access negotiation frameworks, the standard terms and conditions for access, and in access management methods applied. A number of specific amendments are proposed throughout this submission to achieve this.”

As such, Aurizon Bulk has requested several specific amendments to Queensland Rail's DAU3 for harmonisation purposes, including around what it says would be improved consistency of performance metrics through a set of core, common key performance indicators (**KPIs**).⁴ These include KPIs on aggregate system performance, which could be published by Queensland Rail, and on individual service performance, which would be reported under individual agreements.

However, Queensland Rail notes that different below rail regulated rail providers currently have different reporting regimes, not just Queensland Rail. They are largely bespoke. For example, Aurizon Network no longer publishes a quarterly performance report that access seekers and access holders can

³ Aurizon Coal and Bulk submission, p 12.

⁴ Aurizon Coal and Bulk submission, p 40.

evaluate. Rather, Aurizon Network produces a monthly report that only goes to access holders, their customers and the QCA. This is a bespoke arrangement.

An initiative of the ARA's freight rail productivity strategy is to "*investigate opportunities in partnership with members and industry to resolve the lack of high quality data available to governments and decision makers about the Australian rail freight sector*".

Based on the above, it is Queensland Rail's opinion that the QCA should not attempt to embark upon the task of achieving national harmonisation, particularly where that objective requires consideration of issues that should be outside the scope of the QCA's determination, including a range of operational and safety related matters. This matter is discussed further below.

2.2 The access undertaking regime is not the appropriate place to implement harmonisation - Future of Freight Summary Report

Much of Aurizon Bulk's submission seeking the QCA to amend Queensland Rail's access undertaking to achieve industry harmonisation is based upon the future of freight report prepared by the Australasian Railway Association and the Freight on Rail Group.⁵ However, Queensland Rail notes that the recommendations contained in the Report have not at this time been adopted by the Queensland Government. The background to the Report says:⁶

*"Our research has identified practical steps **industry and government can take together** to deliver a more reliable, efficient and sustainable rail freight network to meet growing demand that is to come." [our emphasis]*

Queensland Rail submits that, whilst the future of freight report includes valuable insights, the objective of a harmonised and integrated rail network cannot be achieved through a piecemeal approach by individual economic regulators. Instead, as recommended in the future of freight summary report cited by Aurizon Bulk:⁷

"... an independent coordinating body should be identified to explore improvements to access regimes. Agreement should be sought with Rail Infrastructure Managers and jurisdictional regulators to incorporate shared principles or procedures into existing regulations. These principles and procedures could be mandated within existing regulatory instruments through the agreement of Commonwealth and state ministers."

This summarises the detailed findings in the report of the Australasian Centre for Rail Innovation (ACRI) *Research Report Rail Freight Productivity Review: Establishing an Efficient Freight Transport Network*⁸ which sets out the process by which the rail industry and Governments should promote harmonisation of access regimes by:

- *"identifying an independent national co-ordinating body to assess opportunities for improved harmonisation, with the rail industry involved in the assessment. It is possible that the rail industry may be in a position to present a unified position to such a body on a detailed harmonisation framework;*
- *tasking that body with the role of investigating opportunities for enhanced harmonisation of access regulation and management requirements, and recommending specific harmonisation opportunities by way of common principles and procedures*

⁵ Australasian Railway Association and Freight on Rail Group, *The future of freight*, summary report, October 2023.

⁶ Australasian Railway Association and Freight on Rail Group, *The future of freight*, summary report, October 2023, p 4.

⁷ Australasian Railway Association and Freight on Rail Group, *The future of freight*, summary report, October 2023, p 21.

⁸ Australasian Centre for Rail Innovation, *Research Report, Rail Freight Productivity Review: Establishing an Efficient Freight Transport Network*, p. 4, <https://www.railskillshub.gov.au/sites/default/files/2024-01/The%20Future%20of%20Freight%20-%20ACRI.pdf>

- *providing a process for individual RIMS and jurisdictional regulators to seek agreement on incorporating those principles and procedures into existing regulatory instruments; and*
- *providing a mechanism for the principles and procedures to be mandated for application within the existing regulatory instruments, through agreement of the relevant Commonwealth and State Ministers.”*

Queensland Rail is a member of the ACRI.

There are important steps to be taken before jurisdictional regulators such as the QCA begin incorporating principles and procedures into access undertakings. Principles and procedures proposed by Aurizon Bulk are yet to be the subject of consideration by a national coordinating body, with the whole of industry involved in that consideration, and a subsequent process involving all jurisdictional regulators and individual rail infrastructure managers.

With respect to reporting, Queensland Rail notes that Aurizon Bulk's submission for harmonisation of performance metrics does not consider how the QCA must evaluate access arrangements under the QCA Act.

More broadly, benefits arising from more consistent and harmonised performance reporting would only arise if other Rail Infrastructure Managers (**RIMs**) adopted the same measures, as contemplated by the ARA's strategic initiatives. Queensland Rail unilaterally adopting the ARTC's Hunter Valley Coal Network's (**HVCN**) performance reporting would not itself promote consistent and harmonised performance reporting if other RIMs do not also adopt the same reporting practices. There would also need to be discussion regarding whether the measures proposed by Aurizon Bulk are those that should be adopted nationally among RIMs and users.

2.3 Collective bargaining

Qube submits that the QCA should instruct Queensland Rail to undertake consultation with members of a 'Rail Network Owners Group' (**ROG**) about access requirements and regulation.⁹

The Australian Competition and Consumer Commission (**ACCC**) recently granted authorisation to the ROG to collectively negotiate with nominated below rail operators who are Government owned or operator Government owned rail networks to:

- Discuss and negotiate the non-price terms and conditions on which some or all of the ROG will acquire track access from Queensland Rail.
- Discuss and negotiate the broad pricing principles (including methodologies, inputs and assumptions) that will apply for access to, and use of, their respective networks, but not the actual prices that will apply as between Queensland Rail and individual operators.
- Enter into and give effect to bilateral contracts, arrangements or understandings between the ROG and Queensland Rail which contain common terms and conditions relating to the track access arrangements.

The ROG identified the following issues to be discussed –

- Insurance terms and level of coverage required.
- Security arrangements.

⁹ Qube submission page 5

- General performance criteria and general range of performance-related penalties and circumstances in which they may apply (but noting that any performance penalty imposed would be operator-specific).
- Capacity management approaches, including possession planning.
- Opportunities to address interoperability concerns across multiple rail networks, including standardisation or consistency of operator access conditions such as driver and crew training and qualification requirements, adoption of communication and other technology that interfaces between the operator and network, and the establishment of “through running train paths for major interjurisdictional haulage routes.
- The pricing principles (including methodologies such as 'unders and overs' accounting, inputs and assumptions) that will apply for access to and use of their respective networks, but not the actual prices that will apply as between network owners and operators.

Queensland Rail was not consulted on the application, including by any of the applicants who operate on Queensland Rail's network.

While Queensland Rail supports the objective of achieving consistency between rail operators, the request for the QCA to mandate those discussions is not appropriate. It would be improper for the QCA to impose such a requirement because:

- The regulatory process of DAU3 approval is not a commercial negotiation. Queensland Rail has and intends to continue to consult with stakeholders. It does not need a collective bargaining authorisation or instruction from the QCA to do so.
- The ROG is limited to above-rail operators. The applicants told the ACCC that membership of the ROG is open to any rail operator who agrees to pay their respective share of the ROG's costs. The Applicants did not seek to include producers and end users who themselves hold access rights in the Queensland regime.
- The scope of the Authorisation goes beyond matters that are properly the concern of the QCA, including interoperability concerns across multiple rail networks, or standardisation of crew training requirements.
- In its public benefits analysis, the ACCC took into account that participation in collective bargaining is voluntary. The ACCC says:

“If the Applicants, any other current and future members of the Rail Operators Group and/or current and future Rail Network Owners were to engage in collective negotiation on an involuntary basis where any of the parties could not opt out of that negotiation and negotiate individually, this will likely amount to a material change in circumstances such that it would be grounds for the ACCC to review the proposed authorisation and consider revocation.”¹⁰

The QCA should avoid making prescriptive regulation about matters for which the ROG have indicated a desire for collective discussions, and where the ACCC has found that there is public benefit in allowing those discussions to proceed.

¹⁰ Australian Competition & Consumer Commission Determination, 1 February 2024, page 19.

3. West Moreton System Reference Tariffs

Several stakeholders have raised issues related to the appropriateness and affordability of the proposed coal reference tariff for the West Moreton System for DAU3. Queensland Rail has engaged HoustonKemp to assess stakeholder comments on this topic. HoustonKemp's has prepared a detailed report as part of Queensland Rail's submission. (**Refer Attachment 1** for HoustonKemp's detailed analysis regarding matters raised by stakeholders in relation to the coal reference tariff).

3.1 Summary of key issues raised by stakeholders

Several stakeholders have raised concerns about the appropriateness of the proposed West Moreton System reference tariff for DAU3. Key issues raised are broadly related to the following topics:

- the appropriateness of the proposed weighted average cost of capital (**WACC**) for coal haulage services on the West Moreton System;
- the affordability of the proposed reference tariffs for DAU3;
- the economic implications of having a residual value for the coal regulatory asset base (**RAB**); and
- the economic implications of asset optimisation on the West Moreton System.

Queensland Rail provides further detail on stakeholder submissions and HoustonKemp's analysis in the remainder of this section.

3.2 HoustonKemp analysis – High level summary

Below is a high level summary of HoustonKemp's analysis in its Expert Reference Tariff Paper.

3.2.1 Appropriateness of the WACC

Broadly, the key concerns about Queensland Rail's proposed WACC focused on the appropriateness of:

- the asset beta proposed by Queensland Rail should be lower than those proposed by Queensland Rail; and
- there to be a top-down WACC adjustment through the cost of debt uplift.

HoustonKemp finds that the WACC proposed by Queensland Rail is appropriate, noting that:

- asset beta is appropriate based on the analysis it has undertaken;
- there continues to be short term volume uncertainty, and an adjustment for this risk remains appropriate; and
- other regulatory changes do not compensate Queensland Rail for the significant short term volume uncertainty that it continues to be exposed to.

Further, HoustonKemp responded to a number of other matters in its report in relation to WACC. Based on advice received from HoustonKemp, Queensland Rail's proposed WACC for the West Moreton System remains unchanged for DAU3.

3.2.2 Reference Tariff affordability

In a previous report submitted to the QCA, HoustonKemp assessed the affordability of recovering new capital investment and existing RAB over a 14 year period. HoustonKemp concluded that doing so would be affordable as it would not lead to pre-mature exit of any of the three mines operating on the West Moreton System.

Stakeholders have raised further concerns about the affordability of proposed tariff for DAU3. To this end, HoustonKemp has undertaken additional analysis in the following three areas:

- the profitability of the three mines operating on the West Moreton System over time;
- the implications of lower coal prices on tariff affordability; and
- the implications of higher below rail charges on tariff affordability.

HoustonKemp concluded that mines operating on the West Moreton System are likely to be profitable during AU3 period unless world coal prices are materially lower than expected. Based on this advice, Queensland Rail considers the proposed reference tariff for DAU3 is affordable.

3.2.3 Implications of having a residual value

HoustonKemp assesses stakeholder concerns that amended depreciation methodology from depreciating over technical life of rail assets to the economic life of mines may result in over-recovery of efficient costs and free-riding by non-coal users.

HoustonKemp finds that these concerns will not materialise, as:

- regulatory frameworks prevent over-recovery, as prices charged to non-coal users must lie below the ceiling revenue limits set out in its access arrangement;
- capital costs are allocated to coal and non-coal users based on capacity available to the different users;
- separate RABs are maintained for coal and non-coal users, and so the depreciation profile for coal users does not affect the prices paid by non-coal users; and
- Queensland Rail has no reasonable prospects of recovering any residual value or additional costs from non-coal users, due to their limited capacity to pay and the likely financial viability of the West Moreton network following cessation of coal traffic.

3.2.4 Implications of asset optimisation

HoustonKemp evaluates whether asset optimisation is appropriate for the existing coal RAB on the West Moreton System, given stakeholder concerns about large levels of capital expenditure justified based on the inadequate state of current infrastructure.

HoustonKemp finds significant consequences for the West Moreton System including:

- inconsistency with the pricing principles in the QCA Act, as access prices should generate expected revenues that are sufficient to meet the efficient costs of providing services; and
- Queensland Rail is highly exposed to the market in its ability to recover costs.

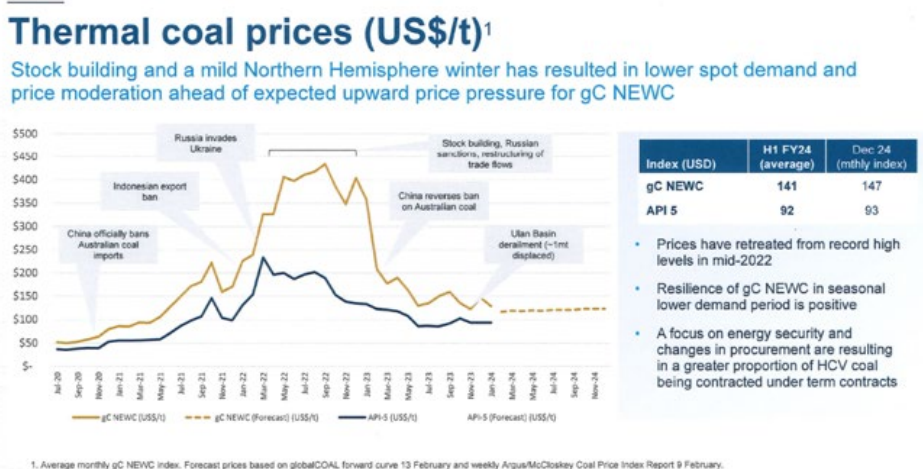
HoustonKemp also notes significant consequences of asset optimisation for the economic efficiency of all sectors regulated by the QCA, i.e. that asset optimisation creates a regulatory precedent for writing off investments that have been assessed as efficient by the QCA, which creates regulatory uncertainty and discourages investment.

3.3 Long term West Moreton System coal mine lives

Queensland Rail notes that the AME data provided to HoustonKemp used a Newcastle 5,500 kcal/kg **spot price**, which has a long term forecast of around \$80 US per tonne. However, Queensland Rail believes that the Newcastle 6000kcal/kg index or gc NEWC index is more appropriate, and which results in a long term forecast of around \$120 US per tonne.

The NEWC Index is the main price reference for physical coal contracts in Asia for significant volumes of index-linked contracts – from Australia and Indonesia to Japan and India.

Both Whitehaven Coal and New Hope¹¹ quote the NEWC index for long term coal forecasts with investor presentations. The graph below is from Whitehaven Coal's FY24 Half Year Results presentation, which aligns more with the coal price assumption of \$120 US per tonne.



3.4 Coal Reference Tariff Comparisons

Queensland Rail considers that in relation to the DAU3 coal reference tariff of **\$32.63/000 gtk** (FY26\$), the comparison should be in relation to the 'actual' (i.e. ceiling) AU2 reference tariff **\$44.82/000 gtk** (FY26\$), which is the reference tariff that Queensland Rail is permitted to charge to recover its efficient costs, rather than the incremental ('affordable') reference tariff of **\$26.42/000 gtk** (FY26\$) which was developed under very different economic circumstances. DAU3 has seen a significant drop in the reference tariff.

¹¹ New Hope Group: 'New Acland Coal Mine: Stage 3 Project Revised Project Overview', https://www.statedevelopment.qld.gov.au/_data/assets/pdf_file/0012/18201/nacp-project-overview.pdf

3.5 West Moreton Reference Tariff - Capital Approval Process

Queensland Rail did not propose changes to the capital approval process contained in Schedule E of AU2 in its DAU3 submission. This is consistent with Queensland Rail's approach to DAU3, which was only to make minor changes to the current undertaking on an exception basis and where improvements can be made.

This approach to DAU3 was presented to access holders and end users at consultation meetings and was supported by Yancoal¹² and New Hope¹³, in their respective QCA submissions.

However, notwithstanding this, both Yancoal and New Hope have proposed significant changes to the annual capital expenditure process.

Yancoal submits that it seeks that¹⁴:

- a. *"an obligation to provide details of capital expenditure projects to West Moreton System users is included in DAU3, with voting from participants as to whether they endorse particular projects (akin to clause 4 of the Schedule E of UT5 – but with changes to the voting regime so that endorsement is not simply a decision for the highest tonnage user given there are only 3 users of the network) that will:*
 - (i) *assist in ensuring that only prudent investments are made;*
 - (ii) *allow proper taking into account of changes to the above rail costs of projects/proposals (which users pay and QR is not exposed to); and*
 - (iii) *allow more fit for purpose capital expenditure planning that is responsive to the issue the network is experiencing, actual volumes (which given the 3 users network may be 'lumpier' in terms of changes from forecast than in other network) and the trade-offs that are involved in the various possible means of addressing such issues;*
- b. *the outcomes of that customer voting to be required to be taken into account in the QCA assessing prudence under clauses 3-5 of Schedule E (acknowledging that a rejection by customers would need to be relevant but not determinative, with the QCA remaining the ultimate arbiter of prudence); and*
- c. *an annual capital expenditure reconciliation (akin to that in clause 5 of Schedule E of UT5 is included in DAU3) to address underspend vs the capital indicator, and providing for a more responsive adjustment to tariffs where that occurs in place of the Capital Expenditure Carryover Account (that currently exists in clause 7 of Schedule E of DAU3) – otherwise there is real potential for users to be paying an inflated tariff during the entirety of the DAU3 period, with the affordability and therefore volume risks that creates, with relief for the lower than proposed capital expenditure only being experienced in the next term. The Capital Expenditure Carryover Account would then only apply in the last two years during the term."*

New Hope submits that for approval of capital expenditure the undertaking should clarify the need for QR to¹⁵:

- *"Consult meaningfully with customers before committing to significant projects, including by conducting a customer vote.*
- *Prepare robust business cases which demonstrate the need for projects and how a particular scope has been selected as the optimal method of addressing that need.*
- *Where customers do not support a proposed project, seek pre-approval from the QCA."*

In its DAU3 submission, Queensland Rail put forward a scope of works for a proposed capital expenditure program to strengthen and increase the resilience of the West Moreton System rail assets. These works include:

¹² Yancoal Submission, p 3

¹³ New Hope Submission, p 3

¹⁴ Yancoal Submission, p.20

¹⁵ New Hope Submission, p.26

- formation strengthening of the remaining black soil sections;
- Toowoomba Range slope stabilisation works for high-risk embankments;
- track reconditioning to 50kg rail on concrete sleepers east of Macalister mine;
- timber pier and bridge eliminations east of Jondaryan mine; and
- Toowoomba Range track strengthening at curve transitions.

The proposed works are required to address asset failure risks and current operational restrictions (e.g. after rainfall events and heat restrictions) and to optimise maintenance interventions to give Queensland Rail the confidence that it can contract record system tonnages of 9.6mtpa required by coal customers.

The capital investment strategy also sought to accelerate capital investment east of Macalister before peak system volumes in FY28 to reduce the risk of taking track possessions for track upgrades at a time when there are maximum railings.

Queensland Rail, as the access provider, is contractually committed to provide the capacity that it contracts with access holders. As the Rail Infrastructure Manager under National Rail Safety Law (Queensland), it is also responsible for the safe operation of the rail network.

Queensland Rail believes that the proposed amendments to DAU3 suggested by Yancoal and New Hope, where individual projects are voted upon by users will introduce uncertainty and timing risk to the delivery of the overall program and reduce the effective control the Queensland Rail has over its network. This will put at risk system capacity, operational efficiency and safety.

The proposed West Moreton DAU3 capital program has been incorporated in Queensland Rail's draft FY25 Investment Plan and draft FY25 Corporate Plan to support coal users requests for capacity on the network. This was on the basis that the assumed access revenue would support investment in projects that Queensland Rail considers necessary for the safe operation of the network at the contracted system tonnage level.

Queensland Rail considers that the existing process of the QCA reviewing, with the assistance of independent experts, the proposed DAU3 capital expenditure program and then approving a capital indicator as part of its Final Decision, provides an appropriate balance of interests of the access provider and access holders. As set out in Schedule E of DAU3 and consistent with DAU2, West Moreton capital projects as they are commissioned in each financial year are then subject to review for prudence of scope, standard and cost before they are approved to be added to the West Moreton Regulated Asset Base. This means only prudent capital is included in the RAB and everyone remains whole.

4. Queensland Rail's performance and support of containerised freight

4.1 Key claims raised by stakeholders

Aurizon Bulk has made several claims regarding Queensland Rail such as stating that Queensland Rail's conduct has led to poor outcomes for users. Specifically, Aurizon Bulk has asserted that:

- Queensland Rail has both the ability and incentive to exercise of market power, and U that Queensland Rail in fact uses its "**market power in order to maximise [Queensland Rail's] share of available rent, even if that did not give rise to the earning of monopoly rents**" (our emphasis);¹⁶
- Queensland Rail exercises its market power in **negotiations** with access seekers and users, which causes access seekers and users difficulty in negotiating pricing terms, terms and conditions of access, and information requirements from access seekers and users;¹⁷
- Queensland Rail's **operational performance** and quality of service provided to access seekers and users has declined, citing declining corridor velocity and availability;¹⁸
- containerised freight opportunities are being stifled because of **high cost** and **the exercise of market power in negotiations** by Queensland Rail;¹⁹ and
- **maintenance costs** are high compared to benchmarks.²⁰

Queensland Rail does not agree with the above points and sets out evidence based assessments in response to these in the following sections of this submission.

4.2 Queensland Rail's financial performance does not support the assertion that it exercises market power

What is market power?

Market power refers to the ability of a business to raise profitability above competitive levels. For example, the ACCC defines market power as:²¹

"... the ability of a business to insulate itself from competition. For example a business with substantial market power may be able to raise prices above competitive levels, or lower the quality of its products without having to worry about losing customers."

Queensland Rail notes that in a competitive market, prices would be set a level where a service provider can recover its efficient costs of providing the service, including a reasonable return on its investment. This is because if prices are at a level where a service provider can earn more than a reasonable return, then other service providers will have an incentive to enter the market until the return on investment

¹⁶ Aurizon, *Queensland Rail 2025 DAU/Aurizon Submission to QCA*, 2 February 2024, p 32.

¹⁷ Aurizon, *Queensland Rail 2025 DAU/Aurizon Submission to QCA*, 2 February 2024, p 12, 13, 32, 33.

¹⁸ Aurizon, *Queensland Rail 2025 DAU/Aurizon Submission to QCA*, 2 February 2024, section 2.1.3.

¹⁹ Aurizon, *Queensland Rail 2025 DAU/Aurizon Submission to QCA*, 2 February 2024, p 13, 32.

²⁰ Aurizon, *Queensland Rail 2025 DAU/Aurizon Submission to QCA*, 2 February 2024, p 17, 18, 73, 75-76.

²¹ See <https://www.accc.gov.au/business/selling-products-and-services/small-business-education-program/misuse-of-market-power/substantial-market-power>

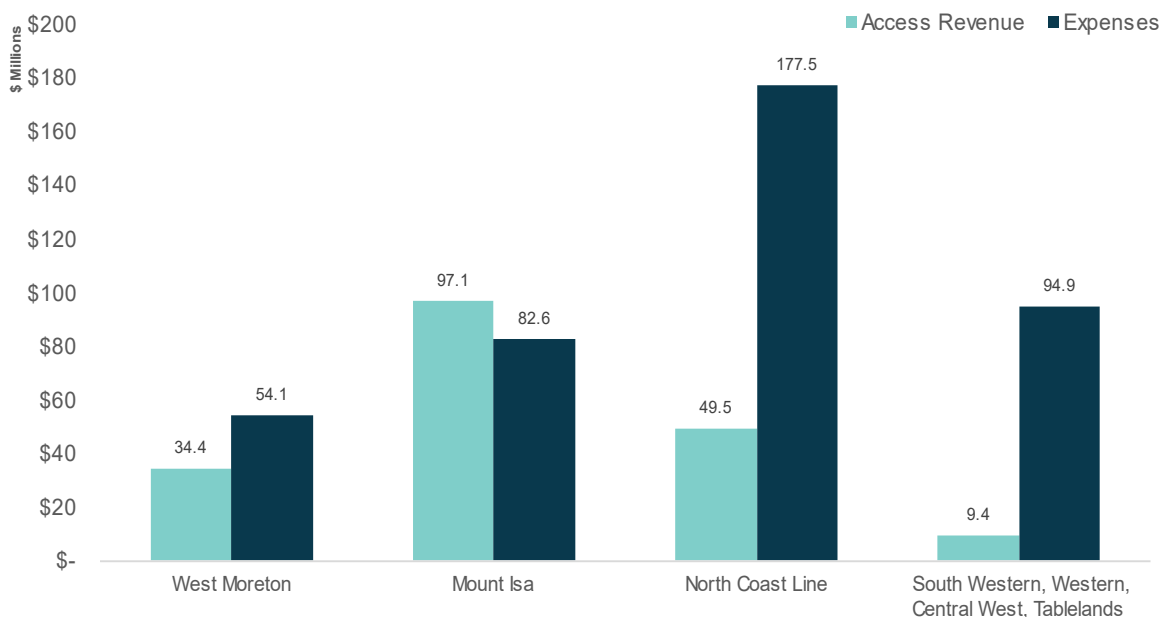
decreases to reasonable levels. Similarly, if prices are a level where a service provider is unable to earn a reasonable return, then a service provider has a financial incentive to cease providing the service.

The above discussion highlights that market power is defined as the ability for a firm to earn a return that is more than those that would be observed in a competitive market.

Queensland Rail relies on government subsidies to remain financially viable.

For example, in 2022-23 Queensland Rail reported \$190 million in total access revenue, against operating expenses of over \$409 million for its regional network. The Department of Transport and Main Roads provides Transport Services Contract (TSC) payments to support Queensland Rail’s provision of rail infrastructure where it would not be financially viable to do so based solely on access revenue. The absence of TSC payments would result in large parts of the rail network becoming commercially unviable, as providing customers with access to the rail network on a commercial basis would not generally be affordable for customers.

Figure 4.1: Third-Party Access Revenue versus Operating Expenses 2022-23 (\$Millions)



Source: Queensland Rail Below Rail Financial Statements 2022-23

The Mount Isa Line is the only system where access revenue exceeds expenses (the West Moreton System – being in a loss-making position in every year since the start of Queensland Rail’s Access Undertaking 1 (AU1) in 2016 except 2018-19, and 2020-21), earning an average equivalent Return on Assets of four per cent over the AU2 period.

Unlike monopolies such as Aurizon Network’s Central Queensland Coal Network, Queensland Rail’s freight access business also faces competition from road transport alternatives. Balancing this with a commercial imperative to reduce TSC payments and increase access revenue where practicable, necessitates a multi-faceted approach to pricing, as Queensland Rail cannot solely rely on high demand and non-competitive alternatives to generate a regulated return on assets.

Stakeholder submissions have implied that the current negotiation framework including the application of the AU2 pricing rules are sub-optimal, leading to imbalances, higher prices, and lower volumes for the

Mount Isa Line²². These claims however are not reflected in Queensland Rail's financial results and the system's performance.

An analysis of reported system data since the start of AU1 (2016-17) evidence the balance in the current approach to asset management and commercial negotiation on the Mount Isa Line. Despite system shocks such as adverse weather events, market fluctuations and high inflation of materials, from AU1 to AU2 the system reports the following key indicators:

- 14% increase in average system gross tonne kilometres;
- 6% decrease in system effective access charges; and
- 4% decrease in the effective return on asset based on accounting book value.

These results are provided in the below table.

Table 4.1: System Effective Access Charges, Volume and Effective Return on Assets AU1 and AU2

	AU1				AU2				AU1	AU2	Change
	FY17	FY18	FY19	FY20	FY21	FY22	FY23	Avg	Avg		
Reported Data (Millions)											
Access Charges	83.5	74.3	71.8	98.1	101.9	85.0	97.1				
Operating Expenses	59.8	59.3	92.0	72.1	78.7	80.3	82.6				
Asset Value	227.8	242.8	254.7	262.8	280.3	315.1	330.9				
Volume (Gtks)*	5,105	4,378	4,369	6,061	6,330	5,097	5,562	4,978	5,663	14%	
System Effective Access Charge \$/'000gk											
Nominal	\$16.4	\$17.0	\$16.4	\$16.2	\$16.1	\$16.7	\$17.5				
Real \$2023-24	\$20.3	\$20.7	\$19.7	\$19.1	\$18.7	\$19.0	\$18.8	\$19.9	\$18.8	(6%)	
Effective Return on Asset											
Return on Assets	10%	6%	(8%)	10%	8%	1%	4%	8%	4%	(50%)	

Source: Queensland Rail Below Rail Financial Statements and QCA Performance Reports 2016-17 to 2022-23.

* Median

As evidenced in the above, access revenues on the Mount Isa Line largely cover incremental operating costs, but do not generate sufficient access revenues to cover the total economic cost of providing the service. The Return on Assets is calculated on an assets value of up \$331 million (as at 30 June 2023) as compared to an economic value of over \$1.4 billion as estimated by a DORC valuation methodology

²² Aurizon Submission to QCA Queensland Rail 2025 DAU; 02 February 2024; p.12; North West Phosphate Submission to QCA on Queensland Rail 2025 DAU; 01 February 2023, p.1

conducted by Queensland Rail which nominally places the system's value closer to some of the larger regulated Queensland coal networks. This evidences that Queensland Rail is not exerting market power.

4.3 Operational Performance on the Mount Isa Line

Queensland Rail is focused on the operational performance of each of its corridors including the Mount Isa Line. Queensland Rail recognises that in the short term, and without capital expenditure, improving rail operational indicators such as on time performance, train cancellations, maintenance scheduling, temporary speed restrictions and rail safety is the best way to enhance supply chain performance.

Queensland Rail voluntarily proposed the inclusion of the Productivity and Operational Improvements provisions in AU2 (i.e. clause 4.4) including the establishment of Rail Network User Groups. Queensland Rail has been criticised by Aurizon Bulk for the delay in establishing User Groups for the North Coast Line and the Mount Isa Line, however, Queensland Rail's obligation to establish such groups was dependent to there being active and ongoing support for the group from relevant rail operators and/or access holders. In the initial period of AU2, there was not support from all rail operators to establish Mount Isa Line and North Coast Line Regional Network User Groups, as there was reluctance to meet with competitors in such forums. However, Queensland Rail has established and maintained numerous other operational performance forums during the AU2 period with rail operators and access holders including:

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

Aurizon Bulk, in their DAU3 submission to the QCA²³ assert that Queensland Rail exercises market power on the Mount Isa Line as evidenced by declining operation performance. Figure 6 in Aurizon Bulk's submission states that there has been a 50 per cent increase in the total track distance on the Mount Isa Line under temporary speed restrictions between September 2019 and September 2023. The increase in temporary speed restrictions may be the case between these two discrete periods but is misleading due to the start and finish periods chosen.

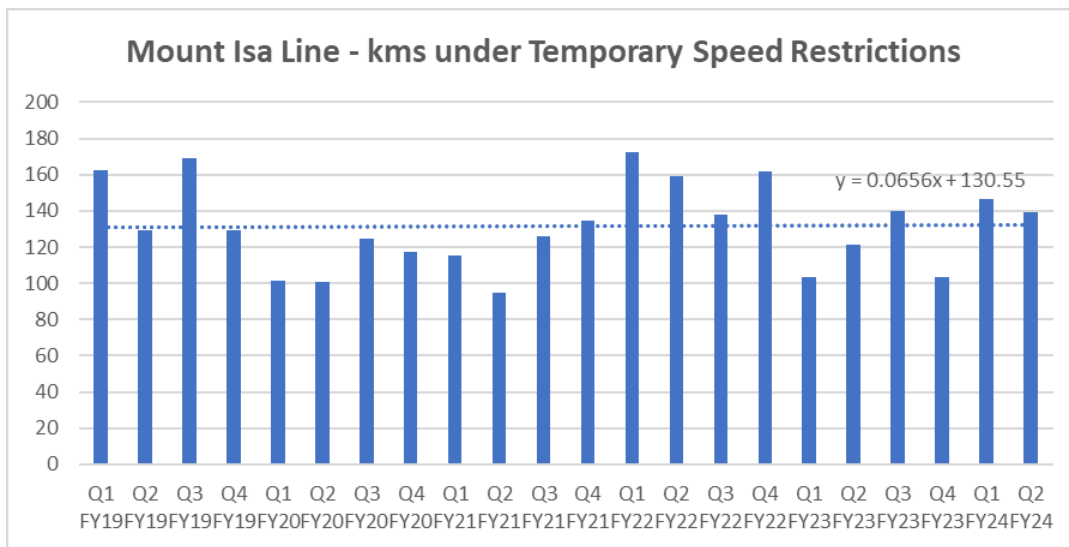
Track kilometres under speed restrictions on the Mount Isa Line have varied between 100km to 170km over the past several years as shown in the Figure 4.2 below. These fluctuations are largely caused by weather impacts on the track formation. The base quarter chosen by Aurizon Bulk (i.e. Q1 FY20) was

²³ <https://www.qca.org.au/wp-content/uploads/2022/10/aurizon-coal-bulk-sub-gr-2025-dau-feb-2024-redacted.pdf> pg 14.

soon after the three-month closure of the Mount Isa Line from February to April 2019 for flood recovery work and there was good access available to the track to reduce temporary speed restrictions at the same time. Therefore, it is not an accurate representation of the Temporary Speed Restrictions.

As shown in Figure 4.2, if a slightly longer period is chosen there is negligible change in the total distance of temporary speed restrictions over the last 5 years (i.e. line of best fit shown on the graph) with an average distance of 131 kilometres under speed restrictions. This is in strong contrast to the 50 per cent decline in operational performance as claimed by Aurizon Bulk.

Figure 4.2: Temporary speed restrictions on the Mount Isa Line

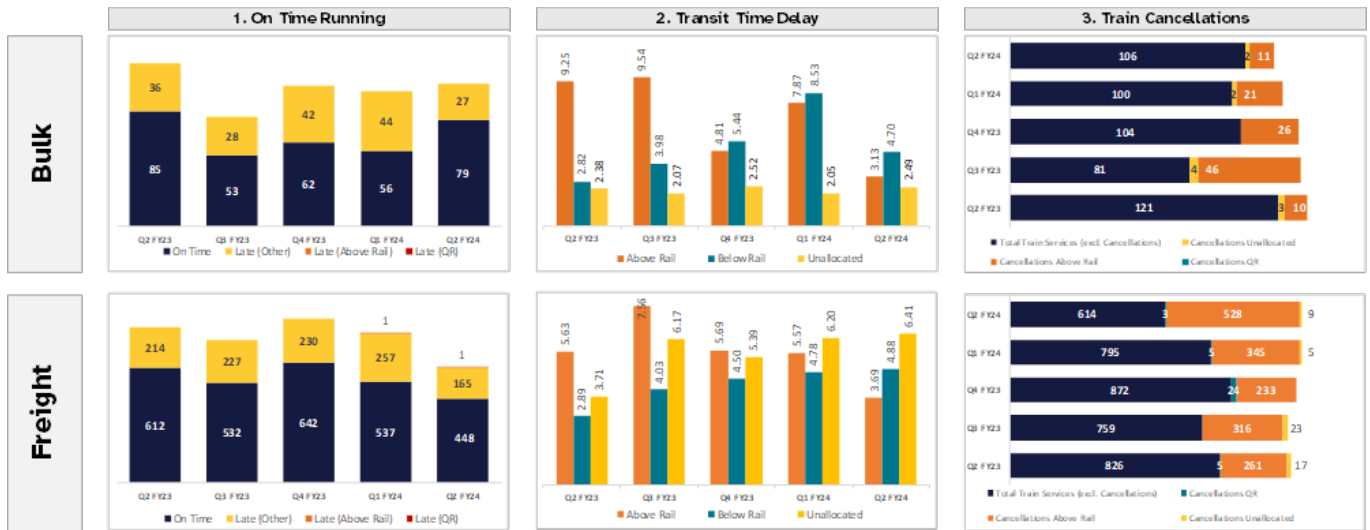


Source Queensland Rail’s Public Quarterly Performance Report Q1 FY19 to Q2 FY24

With respect to operational performance on the Mount Isa Line, Aurizon Bulk fails to acknowledge the performance of the above rail operators on supply chain performance. Figure 4.3 shows the largest portion of Transit Time Delays and Train Cancellations over the past 5 quarters were due to above rail rather than below rail causes.

There has been an increase in below rail caused Transit Time Delays from Q2 FY23 to Q1 FY24, however, there has been an improvement in the most recent quarter. These results highlight the need for the Rail Network User Groups to review, discuss and suggest rail operational improvements from a supply chain rather than individual company perspective.

Figure 4.3: On Time Running, Transit Time Delay and Train Cancellations on the Mount Isa Line



Source Queensland Rail's Public Quarterly Performance Report Q2 FY24

On the cost performance side, Aurizon Bulk's submission outlines a growing concern regarding network performance, specifically in the management of costs and expenses on the system. While facing challenges typical of industry infrastructure providers, such as the significant inflation of materials and labour shortages, there has been no transfer of cost increases to users on the Mount Isa Line. In fact where costs have increased this has not been passed onto customers.

Analysis of Mount Isa Line cost performance in Aurizon Bulk's submission is conducted using nominal terms, which introduces a potential for misinterpretation as it obstructs the accurate comparisons of cost over time. While the nominal increases presented by Aurizon Bulk may seem substantial, without adjusting for inflation, they reflect simple rises in levels rather than providing evidence of a genuine increase in underlying costs. This distortion is exacerbated when network volumes are disregarded, creating a misleading sense of growth without a comprehensive understanding of the driving factors over time.

To shed light on the true cost performance, Table 4.2 below outlines Mount Isa Line operating expenses from the starting year of AU1 in 2016-17 through the most recent reporting year 2022-23, expressed in current real terms (\$2023-24). The table shows operating costs per GTK in real terms are comparable to previous years.

Notably, one-off costs related to derailment, collision, and flood repairs are excluded from the table, as these do not offer insights into Queensland Rail's network management practices over the period. Furthermore, the figures are normalised by system gross tonne-kilometres per annum, providing a more accurate basis for evaluating cost efficiency.

Table 4.2: Mount Isa Line Normalised Operating Expenses Real Terms \$2023-24

	AU1		AU2					AU1	AU2	Change
	FY17 ²⁴	FY18	FY19	FY20	FY21	FY22 ²⁵	FY23	Avg	Avg	
Reported Data (Millions)										
Maintenance	49.4	48.3	34.2	41.1	46.8	56.6	47.9	43.3	50.4	
Train Ops Management	5.3	4.2	4.3	4.9	4.8	5.2	5.7	4.7	5.2	
Other Expenses	4.8	7.6	16.3	7.6	10.0	14.5	10.3	9.1	11.6	
Corporate Overhead	3.2	3.0	6.2	4.9	4.1	3.3	7.2	4.3	4.9	
Depreciation	8.1	7.8	15.8	15.9	12.6	10.4	10.2	11.9	11.1	
Total	\$70.8	\$70.8	\$76.7	\$74.4	\$78.3	\$90.0	\$81.4	\$73.2	\$83.2	14%
System Normalised Operating Expenses										
Volume (Million Gtks)	5,105	4,378	4,369	6,061	6,330	5,097	5,562	4,978	5,663	14%
Opex \$/'000gtk	\$13.9	\$16.2	\$17.6	\$12.3	\$12.4	\$17.7	\$14.6	\$15.0	\$14.9	(1%)

Source: Queensland Rail Below Rail Financial Statements and QCA Performance Reports 2016-17 to 2022-23

Reported in real terms, the data shows an average 14 per cent increase in system costs during the AU2 period over AU1. However, this corresponds with an average 14 per cent increase in system volume as measured in gross tonne kilometres. Taken as a unit measure, normalised reported costs in real terms are on par with the previous period.

In 2019, the Mount Isa Line sustained a significant amount of damage at more than 200 sites between a 300 kilometre stretch from Hughenden to Oorindi (60 kilometres east of Cloncurry) following extensive flooding.

Over an accelerated 12-week recovery program to restore services, urgent repairs were made to 47 kilometres of rail and more than 120,000 tonnes of ballast, in addition to repairing 38 bridge abutments, 75 culverts and a train derailment site at Nelia.

The recovery efforts at more than 200 sites, involved up to 400 Queensland Rail employees and contractors. Engineers and track repair crews were brought in from across Queensland to assist with the recovery efforts, in addition to contractors from Rockhampton, Townsville, Ingham, Cloncurry, Richmond and Mount Isa from a range of backgrounds including surveyors, earthworks, excavators, truck operators, and traffic control. The Taskforce met regularly throughout the 12-week period to lead more

²⁴ FY17 saw exit from the intermodal market by Aurizon.

²⁵ FY22 saw Pacific National exit from Mount Isa Line. FY22 and FY23 Qube ramp up operations as bulk and intermodal operator.

than 160,000 hours of work to repair track infrastructure between Hughenden and Oorindi as quickly as possible, without compromising safety. These coordinated efforts enabled the line to reopen within the expected timeframe, on 29 April 2019.

The Mount Isa line's closure presented a unique opportunity for Queensland Rail's maintenance staff to gain unrestricted track access to the remainder of the line and undertake large scale maintenance activities such as rerailing and track reconditioning. As a result, when the line reopened on 29 April 2019 end-to-end run times between Townsville and Mount Isa were able to be reduced by up to 50 minutes, with the overall delays due to temporary speed restrictions reduced from 128 minutes to 78 minutes across the 1,000 kilometre journey.

4.3.1 Containerised freight tonnage has been trending upward over time

North West Phosphate outlined several matters which they purport are leading to a decline in asset utilisation on the Mount Isa Line. North West Phosphate has asserted that one of the main reasons for the reduction of tonnes on the Mount Isa Line is because of high intermodal access charges. Similarly, Aurizon Bulk has claimed that access prices for containerised freight volumes are the most expensive and inflexible, causing Queensland Rail to be unresponsive to opportunities to expand containerised freight.

Given the vigorous competition between road and rail transport for intermodal freight on the Mount Isa Line Queensland Rail has not increased its access charges in real terms for several years. Standard access charges for bulk mineral concentrates and intermodal freight on the Mount Isa Line have in fact only increased by CPI over the last 7 years (i.e. from FY18 to FY24), except for in July 2019, where intermodal access charges on the Mount Isa Line were reduced by 5.2% in real terms. Overall, average access charges on the Mount Isa Line have reduced by 7.3% in real terms since the start of AU1 to date.

There is currently some pressure for the rates to be further reduced, however Queensland Rail is still of the view that rail transport holds a competitive advantage – at least on price – over road. The trend toward increasing volumes of containerised freight on the Mount Isa Line can be seen in Figure 4.4 and Figure 4.5 that depict, among other things, volumes for intermodal freight that correspond to containerised freight.

Over the past 12 years, total intermodal freight (i.e. the total of eastbound and westbound freight) shows growth in volumes, except in 2021-22 where weather events disrupted volumes. The growth in intermodal freight and therefore containerised freight indicates that Queensland Rail is not neglecting servicing containerised freight customers and, in fact, looks to expand on opportunities where they arise and can be accommodated on the network.

Figure 4.4 and Figure 4.5 show a reduction in overall volumes on the Mount Isa Line over the last 12 years due to loss of bulk fuel, magnetite and other bulk mineral concentrates (primarily impacted by commodity cycles) and extended track closures due to weather effects.

Figure 4.4: Mount Isa Line eastbound volumes

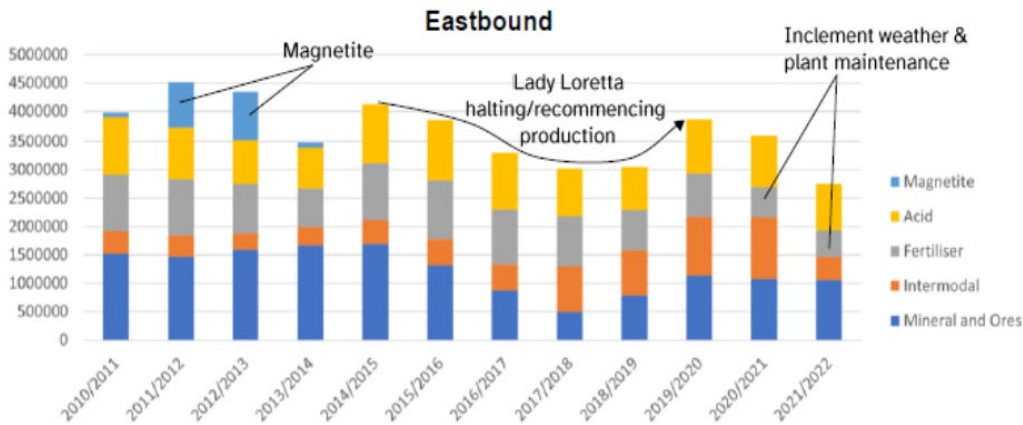
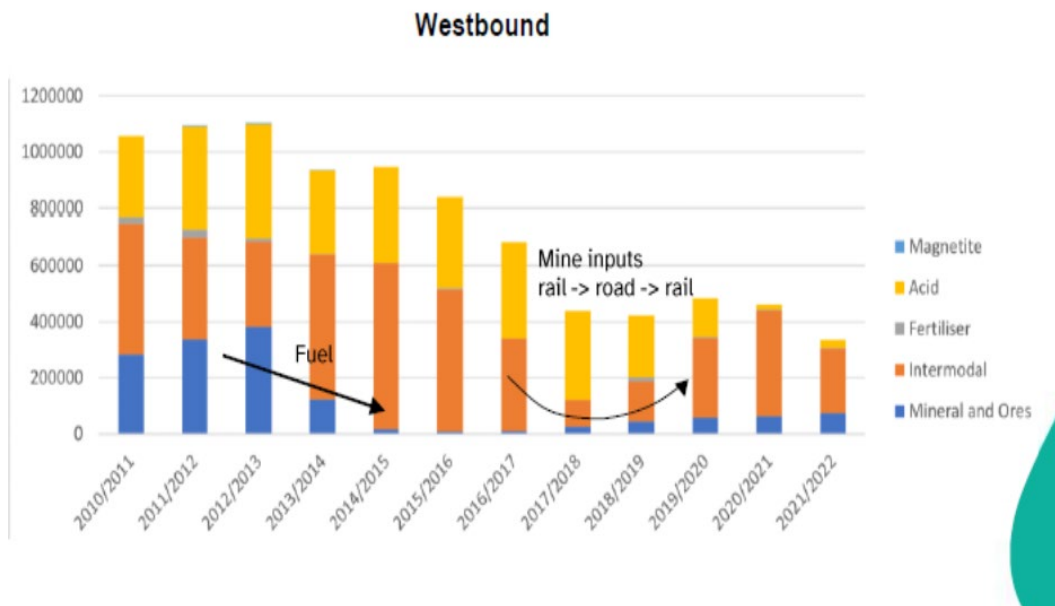


Figure 4.5: Mount Isa Line westbound volumes



4.3.2 Maintenance costs has been stable over time

Benchmarking network access charges and costs is a common practice in the railway industry to assess competitiveness and fairness. However, the effectiveness of such comparisons is contingent upon a thorough understanding of all the relevant factors that influence access charges.

Aurizon Bulk’s comparisons²⁶ fail to provide all the specific details regarding the parameters against which Mount Isa Line containerised product access charges are being measured. The absence of information on the geographical location, traffic density, and the types of containerised freight being compared hampers the ability to draw meaningful conclusions. Different regions and freight types may have distinct operational challenges and cost structures, making direct comparisons unreliable.

²⁶ Aurizon Submission to QCA Queensland Rail 2025 DAU; 02 February 2024; p.13-p.17

Aurizon Bulk has not explained how costs have been normalised in its benchmarking activity, rather only how the cost has been unitised by distance. As access to the level of detailed reporting that Queensland Rail provides can be challenging to source across alternative providers, it is difficult to assess whether there are like for like comparisons.

The benchmarking exercises also do not account for whether the comparison corridors receive below rail subsidies from the government being implicitly or explicitly²⁷; or any cross-subsidisation within the comparative networks. These types of support can significantly impact the financial dynamics of a railway operation. Ignoring these crucial factors can distort the assessment of the actual costs associated with the Mount Isa Line corridor.

Aurizon Bulk's claims also neglect to specify whether these comparative corridors operate at a loss. Some corridors may be strategically important for logistical reasons, even if they do not generate immediate profitability. Without all the comparators known, it is impossible to discount any long-term business strategy or objectives to develop an accurate evaluation of those networks.

In any evaluation, benchmarking analysis of costs for the Mount Isa Line need to consider its critical operational challenges, including significant temperature ranges, extreme weather conditions, remoteness, limited access, and a narrow-gauge track configuration.

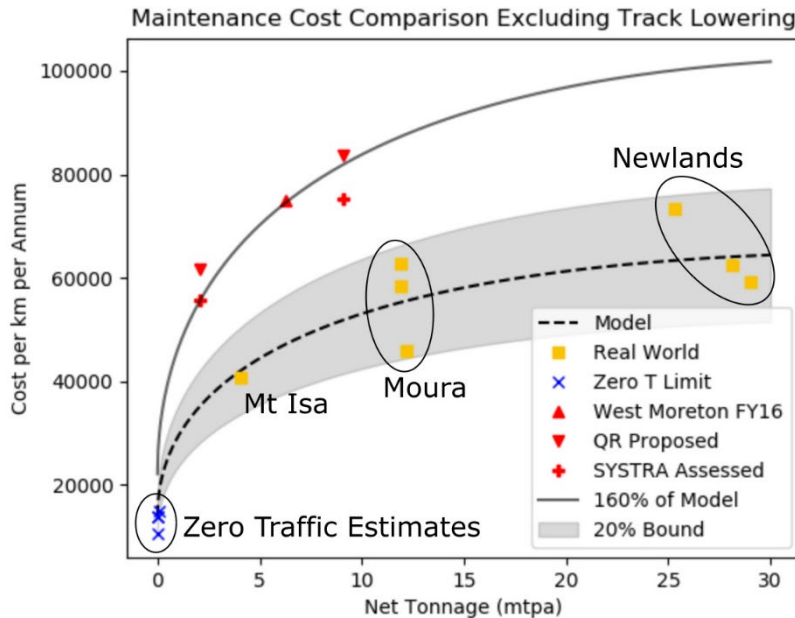
A more useful understanding of the cost trajectory and placement for the Mount Isa Line was included in the Systra Report from DAU2, as the analysis developed an expected band for major Queensland network costs with the underlying cost conditions identifiable, comparable and known.

In the review of Queensland Rail's DAU2 submission and detailed in the report entitled *Queensland Competition Authority: Queensland Rail West Moreton System - Review of Proposed Maintenance, Capital & Operations Expenditure* dated May 2019, Systra provided an assessment of the reasonableness and efficiency of the maintenance, capital, and operations cost estimate submission by Queensland Rail for the West Moreton System access undertaking commencing in 2020, AU2.

The Systra variable cost model (as detailed in the Systra Report) is based on maintenance costs of other Queensland Rail networks which were normalised by the length of track (including the Mount Isa Line).

²⁷ For example UGL Regional Linx operation of the Country Rail Network for NSW Government under a 10 year contract from January 2022, worth \$1.5B [UGL takes over NSW's Country Rail Network as part of \\$1.5B contract - Roads & Infrastructure Magazine \(roadsonline.com.au\)](https://www.roadsonline.com.au/news/ugl-takes-over-nsws-country-rail-network-as-part-of-1.5b-contract)

Figure 4.6: Comparison of maintenance costs of Mount Isa compared to other networks



Source: Systra

Though the assessment was done on the appropriateness of then forecast West Moreton costs, the figure showed that the unit maintenance costs for the Mount Isa Line appeared reasonable as they were generally on the trend line. This would suggest that the system’s maintenance cost efficiency is prudent by comparison to Central Queensland Coal Networks on a dollar per track kilometre basis versus a net system tonnage basis. The figure also demonstrates the increases in unit rates due to differentials in the variable component as tonnages rise above 10-5 tonne profile. Additionally, the influence of less efficient axle loads, with the Mount Isa Line at 20 tonne axle load (TAL) compared to Moura and Newlands operating at 26.5 TAL is noted and a contributing factor to relative maintenance cost efficiencies.

5. Queensland Rail has negotiated with customers to achieve appropriate commercial outcomes

In its submission²⁸, Aurizon Bulk asserts that Queensland Rail is exercising market power in commercial negotiations and not following the access application and negotiation processes set out in AU2. Queensland Rail disagrees with these claims. This section sets out the existing negotiation process, evidence that Queensland Rail has negotiated to achieve appropriate commercial outcomes with its customers and evidence of the responsiveness of Queensland Rail to access applications. Queensland

²⁸ Aurizon Submission to QCA Queensland Rail 2025 DAU; 02 February 2024; p.22 - p. 25

Rail also responds to other issues raised by stakeholders in relation to the access and negotiation process.

5.1 Existing process

The existing access application and negotiation process is set out in Part 2 AU2. In summary, the process involves the following steps set out in the table below.

Table 5.1: Access application and negotiation process

Step	Description	Timeframes
Preliminary steps	A prospective access seeking may request an initial meeting with Queensland Rail to clarify negotiation process prior to submitting an access application and request information on available capacity	
Submit application	An access seeker submits an access application to Queensland Rail	
Acknowledge of application	Queensland Rail is required to acknowledge the application within five business days of receipt	5 business days of receipt ²⁹
Provision of indicative access proposal	Queensland Rail is required to provide an indicative access proposal to the access seeker within 20 business days of acknowledgement of application – the indicative access proposal will, among other things, set out relevant rolling stock, train configuration and operating characteristics, and provide an initial estimate of access charges	20 business days
Negotiation of access agreement	The access seeker and Queensland Rail negotiate on the detailed terms and conditions contained within the access agreement; and	
Execution of access agreement	Queensland Rail and access seeker execute the final access agreement if negotiations are successful.	

Queensland Rail considers current negotiation process and timeframes are reasonable. The process currently allows access seekers to request preliminary information which could include information on capacity and charges.

To support customers and their desire to quickly price development opportunities, Queensland Rail offers an initial enquires process to kickstart the costing process. At all stages of the pre-negotiation and

²⁹ Note, for example, Aurizon Network has 10 working days to acknowledge an access application compared to Queensland Rail’s five Business Days. Each process is bespoke for each network’s circumstances, however, the DAU3 process balances timeliness and the need for sufficient information to properly provide a proposed access charge and train paths.

negotiation process, Queensland Rail provides dedicated business support, assisting with design, analysis, and the overall support of new business ventures.

Access seekers are equipped with forward-looking costs, inputs, and the methodology applied in determining access charges through Queensland Rail's indicative access proposals. Any additional information needed to support their business opportunities is made available upon request, ensuring a comprehensive and transparent approach.

Queensland Rail's measured approach in access pricing ensures fairness and avoids creating a complex negotiation process that could lead to inefficiencies (including long response times).

In negotiating prices Queensland Rail considers several factors, including financial sustainability, regulatory compliance, and equitable treatment of all access seekers. Despite these legitimate concerns, stakeholder submissions seem to overlook these factors, attributing perceived inflexibility to the exercise of 'market power'³⁰ despite the evidence suggesting otherwise.

Stakeholder feedback has primarily focused on incorporating more prescription into the negotiation framework to achieve short-term individual cost objectives. While Queensland Rail is dedicated to fostering competition and increasing rail volumes, these goals must be balanced with the imperative of sustainable revenue to uphold and improve infrastructure.

Queensland Rail believes that some of the proposals oversimplify the intricate considerations in determining access charges and achieving market growth. These proposals assume that a reluctance to implement broad-based reductions in access charges (in some cases without mutual obligation) indicates the negative effects of using market power, without considering broader operational and financial sustainability factors or acknowledging potential risks like implicit favouritism and market dynamics distortion. There are also important safety considerations that have to be properly assessed.

Balancing competition promotion and volume growth with sustainable revenue for infrastructure upkeep is crucial for Queensland Rail. The current negotiation framework, which has been carried over for DAU3, aims to achieve this balance by establishing clear network-wide objectives, offering pricing flexibility based on market dynamics, and implementing mechanisms to prevent excessive charges or unsupportable discrimination. These rules provide a structured approach to negotiations, ensuring fairness and transparency in access pricing for both Queensland Rail and access seekers. In Queensland Rail's view, the proposed approach aligns with considerations of the ARA Future of Freight Report (the **Report**)³¹ that has been cited by Aurizon Bulk.

5.2 Queensland Rail has worked to assist its end users

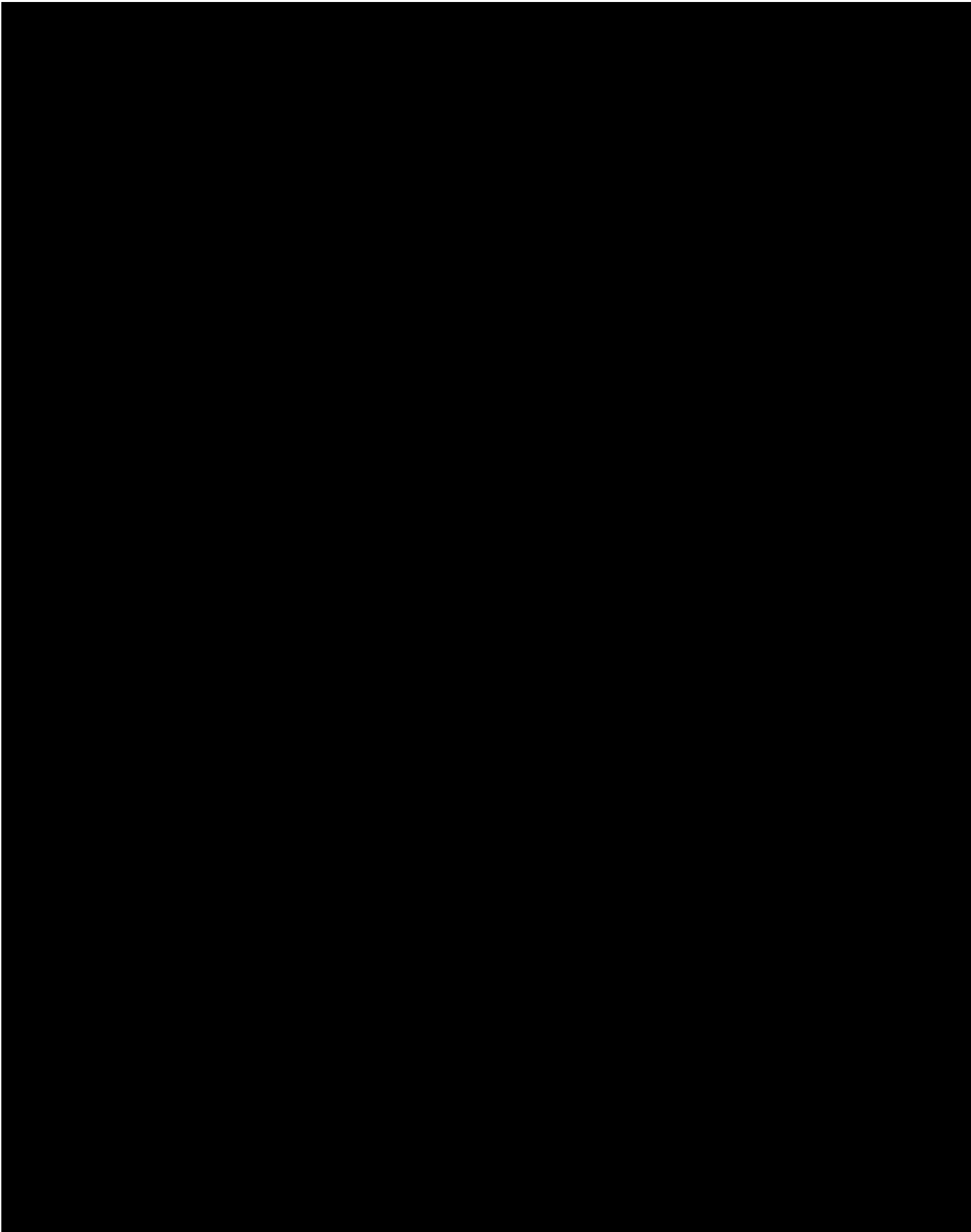
Aurizon Bulk has, in its submission, created an impression that Queensland Rail does not work to assist all customers and potential customers gain access to its network.

Queensland Rail strives to work with access seekers and end users to advance the use of the network. Assisting access seekers and users makes financial sense to Queensland Rail as additional usage of the network contributes to cost recovery of largely fixed capital costs associated with out networks.

In the following Queensland Rail provides four case studies that demonstrate Queensland Rail's commitment to work with access seekers and users to achieve mutually beneficial outcomes.

³⁰ Aurizon Submission to QCA Queensland Rail 2025 DAU; 02 February 2024; p.12

³¹ Australasian Railway Association The Future of Freight report, October 2023 – Establishing an Efficient Freight Transport Network.



5.3 Queensland Rail is responsive to applications for access and negotiations

Queensland Rail endeavours to ensure that it meets the timeframes set out in AU2. Overall, Queensland Rail's performance and responsiveness to access applications has been of a high standard. Queensland Rail's AU2 2022-2023 Annual Performance Report provides information on various metrics of the negotiation process for the year and shows that:

- 100 per cent of access applications once complete were acknowledged within 5 business days.
- 96 per cent of indicative proposals were provided to access seekers within 20 business days or within the agreed extension timeframe,
- 92 per cent of indicative proposals were accepted by access seekers within a 10-business day window of issuance.

More importantly no disputes have been lodged in relation to the negotiation process. This indicates that the majority of access seekers are reasonably satisfied with the information and process that Queensland Rail provides.

However, it is noted that Aurizon Bulk make several claims that Queensland Rail has not met its obligations, which Queensland Rail does not support. Queensland Rail sets out and explains details of relevant interactions with Aurizon Bulk in the box below in response to Aurizon Bulks claims in its submission.

Box 1: Access application and negotiation with Aurizon Bulk

This box sets out timeframes for Aurizon Bulk's access application and negotiation for an application submitted to Queensland Rail in December 2022 for access for containerised freight services from Acacia Ridge to Port of Brisbane commencing July 2023.



In addition to Aurizon Bulk's assertion concerning access application and negotiation timeframes, Aurizon Bulk states in its submission that Queensland Rail did not apply AU2 negotiation processes or standard terms and conditions when responding to its application for interstate containerised service. Queensland Rail, however, did apply the negotiation process, provided terms and conditions that are in line with the standard terms and conditions and applied standard access charging principles for standard gauge services which includes fixed and variable components.

5.4 Other feedback from stakeholders

5.4.1 Aurizon Bulk proposes timeframes should be truncated

Aurizon Bulk has stated that the indicative proposal timeframes should be truncated to provide conditional capacity analysis and/or access charge information however this fails to recognise that provision of this information and the related process is already catered for within AU2. It should also be noted, through the examples below, that Queensland Rail has provided such preliminary information to

Access Seekers including Aurizon Bulk on many occasions over AU2 to respond to business opportunities.

Queensland Rail has on numerous occasions provided preliminary information to Access Seekers. This preliminary information includes indicative assessment of access charges and where required capacity (including potential location and costs of infrastructure). Some examples are [REDACTED]

Queensland Rail does not support the proposal requiring the removal of the need to complete and advise on capacity analysis as part of the development of an indicative access proposal. Key elements of an indicative access proposal are availability of capacity to contract over the proposed term, any infrastructure issues to be addressed to enable implementation, and the commercial terms which underpin the proposal is provided. This informs both Queensland Rail and the Access Seeker in determining if a future access agreement would be feasible and able to be executed and implemented by the Access Seeker's target start-up date.

Queensland Rail considers the current access application AU2 process and requirements fair and reasonable in approach, requiring an access seeker to provide an access application which is complete and includes key pieces of information for a proposed operation, to allow Queensland Rail to complete its assessment of Available Capacity which includes consideration of potential impacts on Committed Capacity, asset capability and related commercial terms, when developing the indicative access proposal.

For timetabled and time sensitive services that operate through constrained parts of the network with the likelihood of impacting Committed Capacity it is reasonable to expect that the Access Seeker provide basic schedule requirements like Day of week and scheduled time for entry and exit from the network. Where required, the indicative proposal can be qualified with various assumptions, with the intent of those being resolved during the negotiation period should the Operator wishes to progress on the basis of the proposal.

5.4.2 Investment in the Corridor / Innovation

North West Phosphate in its submission requested changes to the regulatory framework to require Queensland Rail to:

"Make a concerted effort to improve corridor operations and performance, through operational improvements (e.g. rail splitting for safety and efficiency, or double stacking of containers for improved productivity)".³²

Queensland Rail has undertaken significant work on projects to advance operational improvements and innovation, including as described in this section.

In 2017 the Queensland Government provided commitment for an additional \$50 million to 'repair and maintain' the Mount Isa Line. The funding was allocated across three projects:

- Waterway Resilience Project
- Stage Trak Renewal Project

³² North West Phosphate submission, 1 February 2024.

- Increased Structural Gauge Project

Waterway Resilience Project

This project will enhance the flood immunity of the Mount Isa Line by installing new structures at priority locations to increase resilience compared with current culvert installations, while also removing culverts adjacent of both Chatfield Creek bridges and replacing with spans and new piers.

A hydrology study for priority locations has been completed and some sites have been designed to be replaced with bridges while others are to be replaced with the same or larger concrete culverts

Contracts for design have been awarded with the Issued for Construction drawings and Quantity Surveyor's report completed in February 2024

The construction program is being finalised pending agreement of the required closures to deliver the works.

Stage 2 Track Renewal Project

The purpose of this project is to facilitate the change over from steel to concrete sleepers and re-railing with heavier rail. To date, a significant length of the Mount Isa Line track has been renewed, with only 210km of steel sleepered track remaining between Hughenden and Mount Isa. Sites are addressed on a priority basis based on age, condition and location. Installation is scheduled between operating services and in suitable weather.

The scope for this project is being delivered as a 'business as usual' project and has not drawn on the Government grant funding.

Increased Structural Gauge Project

Proposed to increase the structural gauge on the corridor to enable a container plus a half height container to be loaded on top of each other on a conventional rail container wagon and operate between the Port of Townsville and terminals on the Mount Isa Line. This initiative was aimed at significantly increasing the operating efficiency of trains resulting in material cost reductions per net tonne payload for operators and end customers resulting from more two way loading.

Five locations were identified requiring track lowering to increase the height under the over bridges.

Design contracts were awarded and engineering designs completed for all locations including a detailed design and hydrology assessment for one location due to water inundation issues. The assessments confirmed the engineering feasibility of the initiative.

An independent external business case and economic assessment was undertaken confirming the market demand and viability of the initiative.

A stakeholder engagement process was undertaken with end customers/operators, and whilst all stakeholders provided strong support for the concept and unanimously agreed that this project is the priority investment for the Mount Isa Line, a project feasibility threshold issue was discovered.

At one location the required clearance was not able to be achieved to meet the emerging trends of increasing container heights which would require a greater vertical clearance.

If the Townsville Eastern Access Rail Corridor is constructed it would eliminate this issue and the project could be revisited to facilitate stacking between Mount Isa and the Port of Townsville to deliver benefits for all stakeholders.

6. Existing price structures are appropriate

Broadly, stakeholders expressed dissatisfaction with several aspects of Queensland Rail's existing price structure, including:

- fixed prices, take or pay prices and relinquishment fees, i.e. fixed commitments; and
- a lack of price differentiation of containerised goods to increase rail volumes, e.g., providing discounts to new customers or to capture freight which has road as a viable alternative.

This section provides an overview of its proposed pricing structure for DAU3, which is principally carried over from AU2, summarises stakeholders' issues with the pricing structure, and addresses stakeholder comments in the remainder of this section.

While stakeholders understandably seek lower access charges on the premise of encouraging modal shift, the ACRI Report recognises that moving more freight from road to rail is a more complex problem.

The ACRI report says:

"Importantly, in considering issues around rail access pricing, there is a tension between the objective to enable rail operators to effectively compete with road, while also setting a charge that enables sufficient ongoing maintenance and renewal of the rail infrastructure.

Therefore, this does not indicate that there is long term benefit from a move to 'rock bottom' access pricing to facilitate competition with road; such pricing does not support necessary maintenance and investment and will ultimately lead to further service degradation and reduced modal share. And in any case, given the multi-network and multi-jurisdiction nature of main train services, the application of such an approach by any individual network may not work in practice."³³

6.1 Queensland Rail's pricing structure in AU2 and DAU3

Queensland Rail's pricing structures are based on economic considerations. Flexibility in negotiations is therefore subject to ensuring the financial sustainability of rail services, adherence to regulatory obligations and efficient infrastructure management.

Queensland Rail's regional rail network provides below-rail services for a diverse range of products including:

- coal, minerals concentrate and metals (may be as bulk freight or containerised);
- fertiliser and sulphuric acid;
- intermodal freight (including containerised general freight, cement, sulphur, phosphate rock and mining inputs);
- agricultural products (sugar, grain, livestock and cotton); and
- long-distance and heritage passenger transport.

³³ ACRI Report, p. 28

Under the existing negotiation and pricing framework, Queensland Rail has introduced multiple commercial initiatives for its Mount Isa Line customers during AU2, which are summarised Table 6.1.

Table 6.1: Commercial initiatives on the Mount Isa line in AU2

Initiative	Summary
Fully Variable Ramp Up Pricing	The provision of ad hoc services incurs additional costs for Queensland Rail for train planning and coordination and exposes Queensland Rail to revenue risk. However, for new operations on the Mount Isa Line where the short-term demand/train profile is uncertain, or there is a defined ramp up period, Queensland Rail has provided a variable charge only (for a limited period) to customers to limit downside financial risk in operating services, with a view to transfer services to a traditional fixed: variable split when the operation stabilises (an efficient train load)
Proportional counting for take or pay	To reduce some of the downside financial risk in contracting additional paths as businesses grow, Queensland Rail has developed Take or Pay provisions to proportionally recognise credits from secondary agreements where the operation has already matured.
Trial Pricing	Special pricing arrangements for trial shipments of new products (e.g. rock phosphate) have been provided so that end customers can test the products in end markets.
Competitive Discounts for Intermodal	For AU2, the QCA approved a change in the price differentiation provisions to now consider the characteristics of a train service and whether the customer is operating in the same end market. Following the change, Queensland Rail now offers an upfront discount for intermodal logistics on the system, recognising them as generally being less efficient (over a discrete bulk operation) because the net tonne of product transported per gross tonne is less.
Commodity Based Pricing	Unit train and certain combination train services may attract lower negotiated prices depending on the characteristics of the service, and market considerations.

6.2 Fixed charges, take-or-pay prices and relinquishment fees

6.2.1 Stakeholder feedback

Feedback from stakeholders indicated dissatisfaction around existing pricing structure arrangements. Specifically, Centrex (owner of Agriflex) submitted that fixed take-or-pay path charges are a significant risk to all operators, and that it would like to see alternative contractual arrangements:³⁴

“The current system of path charges is a disincentive to using the rail service. The fixed “take or pay” path charges (which account for ~60% of the rail charges), is a significant risk to all operators but in particular smaller junior mining operations in a start up situation. These types of operations can encounter irregular production issues while starting operations producing an intermittent production profile which in turn introduces a risk of billing regular train services. Given the declining volumes being experienced by the Mt Isa rail line, it seems that there is sufficient excess capacity for all potential users without the use of fixed path charges. Many customers are opting for 6 month access agreements to remedy this situation providing Queensland Rail with short term contracts underpinning their long life assets.

Agriflex would like to see alternative contractual arrangements that incentivise new entrants, therefore increasing volumes and driving down unit rates.”

Similarly, Aurizon Bulk identifies the potential effect that take-or-pay charges have on incentivising new volumes, noting the unwillingness of junior miners to bear the risk of a fixed volume commitment for each train service.³⁵

³⁴ Centrex, Queensland Rail’s draft access undertaking 3 (DAU3), 31 January 2024, p 4.

³⁵ Aurizon, Queensland Rail 2025 Draft Access Undertaking submission to the QCA, 2 February 2024, p 21.

Aurizon Bulk disagreed with Queensland Rail's suggestion that take or pay is needed to ration capacity to those who value it the most and to prevent over-contracting for capacity, as it submits that:³⁶

- the Mount Isa corridor is experiencing declining volumes and has less than 50 per cent of available paths contracts, and so there appears to be sufficient capacity available; and
- the risk of over-contracting is low and can be managed through 'user it or lose it' resumption rules.

Whilst acknowledging the role that relinquishment fees have in preventing access providers from failing to recover investments in full, Aurizon Bulk submitted that the relinquishment fees of the current magnitude were not required on the Mount Isa corridor. Aurizon Bulk continued that:³⁷

- high path relinquishment fees placed high risk on freighters with uncertain volumes and demand, which is unnecessary given spare capacity on the network; and
- operators are exposed to re-basing of charges each year, as short-term agreements preclude long-term certainty of access charges,

which Aurizon Bulk submits disincentivises operator investment in services which have road as an outside option at the detriment of efficient outcomes required by the QCA Act.

Aurizon Bulk has claimed that there may be a higher marginal cost³⁸ for additional volumes at contract renewals when a two-part access charge is developed for a requested train service of greater weight. This can lead to higher fixed fees, and a greater obligation on behalf of the operator to contribute to the costs of the network.

More broadly, Aurizon Bulk recommended that negotiation criteria should be attached as a schedule to DAU3 that addresses:³⁹

"...critical pricing terms such as price structure, take or pay, relinquishment fees and service standards."

6.2.2 Queensland Rail's response

Two-part pricing

Pricing structures aim to balance the economic viability of the rail network while considering the diverse needs of various users. The purpose of a train path charge is to reflect the fixed cost of providing a train path to a train operator/end user. A train path charge is levied whether the path is used or not. A train path charge is intended to provide incentives for users to make the best use of the available infrastructure this is particularly relevant for systems with capacity constraints. A train path charge:

- provides an incentive for users to contract for only services they need; and
- encourages users to operate the most efficient train services.

As a significant proportion of Queensland Rail's overall costs of providing regional rail infrastructure are fixed, a train path charge provides Queensland Rail with a level of revenue and planning certainty. This is very important for the Mount Isa Line, where Queensland Rail relies entirely on customer revenue to ensure the ongoing financial viability of the system.

³⁶ Aurizon, *Queensland Rail 2025 Draft Access Undertaking submission to the QCA*, 2 February 2024, p 21.

³⁷ Aurizon, *Queensland Rail 2025 Draft Access Undertaking submission to the QCA*, 2 February 2024, p 22.

³⁸ Aurizon Submission to QCA Queensland Rail 2025 DAU; 02 February 2024; p.20.

³⁹ Aurizon, *Queensland Rail 2025 Draft Access Undertaking submission to the QCA*, 2 February 2024, p 4 and 30.

A two-part structure generally aligns within the provisions of Aurizon Network's UT5 (clause 6.0) and the ARTC's IAU (clause 4.5) which outline explicit and implicit fixed charges within their access charge frameworks for non-coal carrying train services. Elsewhere, this structure of fixed and variable is extremely common including in arrangements for non-coal access rights under the Hunter Valley Access Undertaking (**HVAU**), the NSW Rail Access Undertaking, and the Victorian Essential Services Commission (**ESC**).

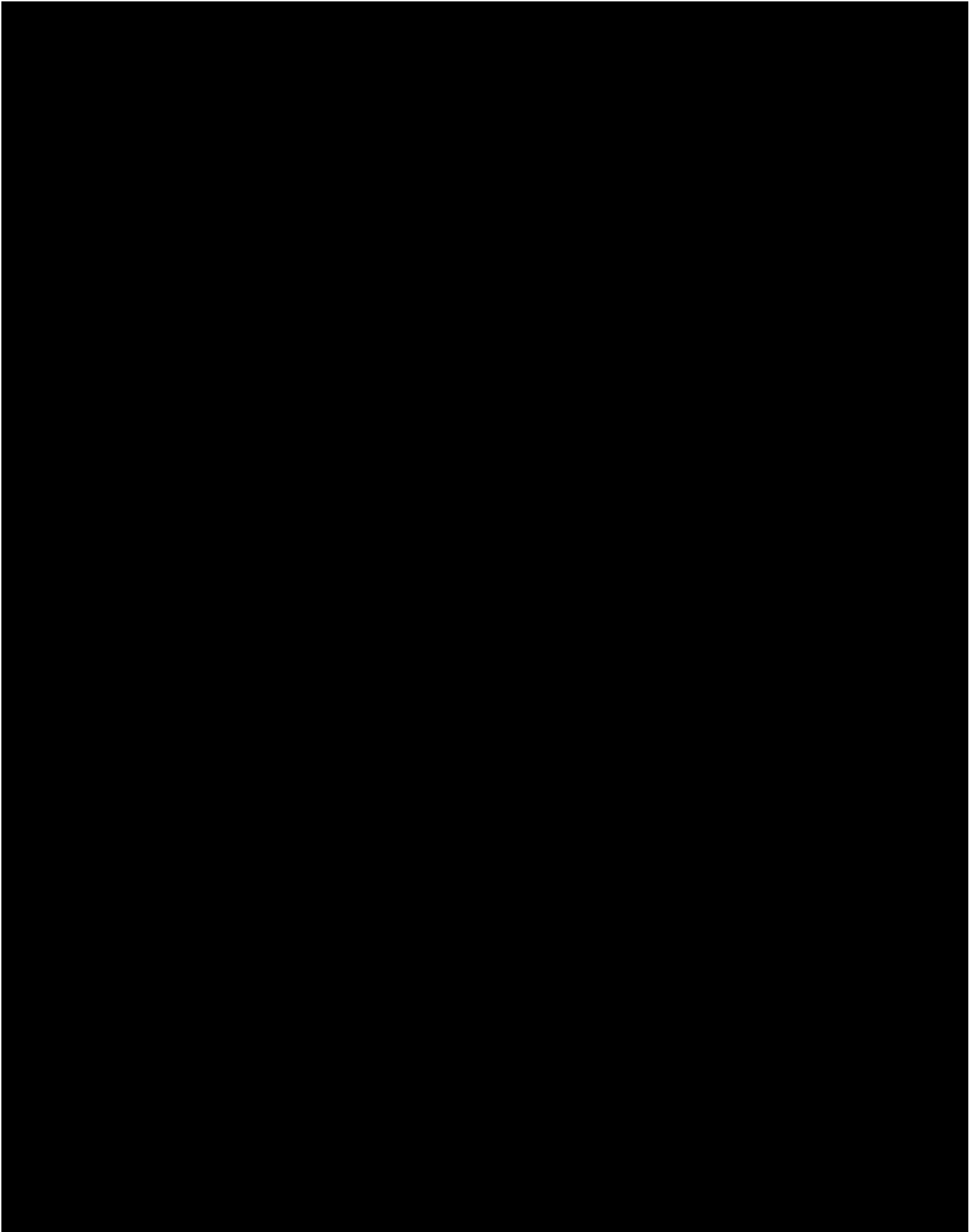
Aurizon Bulk has raised several issues regarding the pricing process for some Mount Isa Line access agreements. As some details are confidential, issues surrounding general train re-basing for intermodal services on the Mount Isa Line are addressed at a high level below, with detail relating to the specifics of access agreement negotiations explored in the following confidential section.

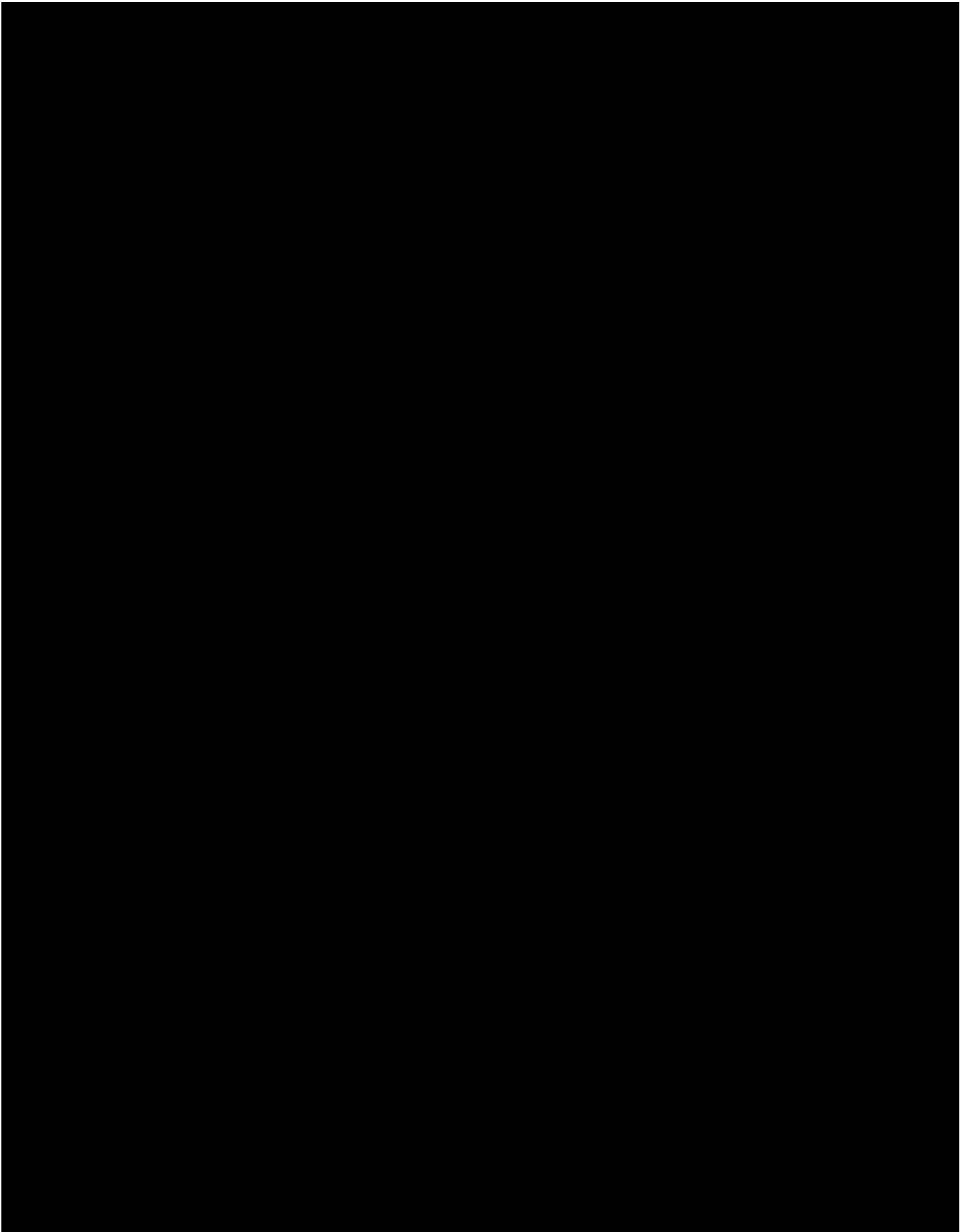
As described in the above section, forecasting risk poses a challenge for both customers and below rail providers within the negotiation process. Assuming all other factors remain constant, the cost per tonne lowers as more product is transported, and an above-rail operation becomes more efficient. Alternatively, if volume forecasts are excessively optimistic when planning a train service, there can be downside risk for an access seeker when Queensland Rail is determining ongoing fixed contributions.

Queensland Rail employs various strategies to ensure train basing is fair, and representative of volume expectations. These include:

- Implementing flexible pricing structures to mitigate the initial impact of forecasting errors.
- Offering Access Agreements with volume reviews, enabling adjustments to access charges based on actual performance, providing a balance between stability for operators and the need to adapt to changing market conditions.
- Ensuring collaborative dialogue with operators, and other key stakeholders to provide valuable insights into market trends and potential challenges that Queensland Rail should be aware of.
- Conducting performance reviews to assess the accuracy of previous volume forecasts, and to understand product and container cycles.
- Having open and transparent communication with customers to provide clear information about the factors influencing access charges.

Queensland Rail has engaged in negotiations with its customers to help mitigate the risks that stakeholders have highlighted. Queensland Rail presents some recent examples below, illustrating Queensland Rail's willingness to be fair and flexible to the needs of end customers.





Take or Pay

Take or Pay provisions are common in many commercial supply arrangements across the rail industry (including between Aurizon Network and its above rail operators) as well as in mining and energy. These provide for a customer to continue to compensate the supplier for the non-discretionary costs incurred in providing the service if the customer does not meet its contractual obligations.

For rail, it is important to note that Take or Pay is only applied when the operator/end customer does not meet their contractual obligations in relation to the operation of a train. If Queensland Rail is unable to provide rail capacity (defined as Queensland Rail Cause in the Access Agreement), then Queensland Rail does not charge Take or Pay. If an organisation is paying excessive Take or Pay charges, they have most likely over-procured below rail capacity. The organisation best placed to manage Take or Pay is the party contracting the below rail capacity.

The principles governing the requirements for Take or Pay are well-established, encompassing the following aspects:

- **Prevention of over-contracting and hoarding:** Take or Pay serves as a disincentive, discouraging operators from excessively contracting capacity, which could otherwise lead to insufficient capacity for other operators or miners.
- **Contribution to fixed capital:** Queensland Rail consistently reinvests in the network to maintain its fitness for future contracted capacity. It is only fair that parties entering into capacity contracts commit to utilising the agreed-upon capacity.
- **Efficient maintenance planning:** The contracted capacity allows Queensland Rail to plan its maintenance and capital activities, albeit sometimes not in the most efficient manner. Operators are expected to honour their commitment to using the designated paths.
- **Prevention of less commercial traffics dominating capacity:** Without effective or efficient Take or Pay agreements, less commercially viable traffics could consume substantial capacity at the commercial expense of Queensland Rail.
- **Implementation of fixed path charges for efficient capacity utilisation:** Fixed path charges are established to ensure the effective utilisation of capacity. Without such charges, an operator might opt for running a short, inefficient train, leading to inefficient system utilisation and lost revenue for Queensland Rail.
- **Protection against commercial lost opportunities:** Holding a path (contracting capacity) implies that Queensland Rail cannot offer that path to any other operator or end user. Therefore, a commitment to utilisation (Take or Pay) is necessary to safeguard Queensland Rail from potential commercial lost opportunities.

On the Mount Isa Line Queensland Rail's policy aligns take or pay arrangements with a user's fixed train path charge (■■■■). This means the fixed charge is paid for usage used or not, providing Queensland Rail with financial stability to be able to plan future operational and capital spending on the system, which is not supported by TSC payments.

As outlined in the Commercial Initiative for the Mount Isa Line (table 6.1), to assist ramp up operations for new entrants and volumes, Queensland Rail has entered into ad-hoc fully variable arrangements, as well as cross-functional agreement take or pay arrangements to limit downside customer risk. However, as traffic grows on the Mount Isa Line and volumes are contracted into the Master Train Plan, Take or

Pay becomes vital for efficient path utilisation. It is a crucial pricing mechanism for below rail access providers, ensuring revenue certainty and mitigating financial risks associated with infrastructure investments.

Revenue from take or pay charges supports ongoing maintenance and improvements, ensuring safety, reliability, and efficiency of the rail network. For these reasons, Queensland Rail does not believe the removal of Take or Pay is appropriate.

Relinquishment fees

Take or Pay insures the service provider against the below rail operator not operating one or more trains. In contrast, relinquishment fees insure the service provider against the below rail operator not utilising a contracted path for the remainder of the contracting period.

Relinquishment fees are essential for investment decision making, as they provide incentives to below rail operators to correctly identify the level of capacity they require, so Queensland Rail can appropriately invest in making the required capacity available for all below rail operators. In addition, relinquishment fees ensure that Queensland Rail can pass through the costs of investment that below rail operators have signalled they require to those below rail operators, even if they break their contract.

Consequently, and in addition to the reasons identified for Take or Pay above, Queensland Rail does not believe removal of relinquishment fees is appropriate.

6.2.3 Expert report from HoustonKemp supports maintaining take-or-pay arrangements

HoustonKemp was engaged to provide Queensland Rail with an expert report on the economic implications of removing take-or-pay arrangements among other matters related to DAU3 (**Refer Attachment 2**). HoustonKemp concluded the following:

- the removal of take-or-pay arrangements would be inconsistent with the objectives set out in the QCA Act. In coming to this conclusion, HoustonKemp noted that:⁴⁰
 - *fixed charges are commonly used to facilitate the efficient recovery of fixed costs – this promotes:*
 - *dynamic efficiency as take-or-pay arrangements improve Queensland Rail's ability to recover its long run economic costs; and*
 - *allocative efficiency as removal of take-or-pay arrangements would require Queensland Rail to increase its variable charge, which would mean variable charges are further removed from the marginal costs of providing the service; and*
 - *the removal of fixed charges will result in allocative inefficiency as access holders have an incentive to over-contract on train paths and capacity may not be allocated to those that value it the most."*

⁴⁰ p.13 Economic assessment of price differentiation of containerised goods and removal of take-or-pay arrangements, 8 March 2024.

6.3 Price differentiation to increase rail volumes

6.3.1 Stakeholder submissions

Stakeholders allege that while existing rules allow Queensland Rail to price differentiate, it does not price differentiate to the extent that it is allowed. Aurizon Bulk, North West Phosphate and Centrex stated in submissions that they would like amendments to both clarify the circumstances under which Queensland Rail may price differentiate and to increase its application of price differentiation.

Aurizon Bulk said DAU3 should be amended to allow Queensland Rail to apply price differentiation to grow rail volumes through:⁴¹

- supporting and incentivising emerging demand;
- supporting road-to-rail modal conversion; and
- maintain current demand vulnerable to road-based competition.

Stakeholders have also proposed changes to other aspects of DAU3 so that Queensland Rail places a higher emphasis on attracting freight from road to rail.

6.3.2 Queensland Rail's response

Aurizon Bulk's proposal resembles that considered in AU2

Queensland Rail notes that Aurizon Bulk's proposal shares similarities with the road-to-rail pricing rule previously examined during the DAU2 approval process. Pacific National suggested a modification to the 2020 DAU, specifically the inclusion of a road-to-rail modal shift pricing rule, emphasising the need for a specific focus on principle 168A(d) to incentivise cost reduction and productivity improvement. This proposal would have required Queensland Rail to specifically demonstrate how pricing on the North Coast Line (and the Mount Isa Line) would encourage road-to-rail modal shift through lower access charges, targeting heavy vehicle road access charges as a key competitive and pricing pressure point.

However, the QCA addressed this proposal in its Final Decision on AU2. The QCA, taking into account the factors outlined in s. 138(2) of the QCA Act, decided against mandating the requirement. The QCA argued that a narrow focus on promoting one freight transport mode over another, potentially leading to increased subsidisation of rail access, could introduce distortions inconsistent with the objectives of Part 5 and the pricing principles (ss. 138(2)(a), (g)). The decision in the end sought to strike a balance between Queensland Rail's legitimate business interests and the interests of access seekers, access holders, and train operators (ss. 138(2)(b), (e), (h)).

Queensland Rail maintains that these considerations are still valid and are sufficient reasoning as to why no changes were sought in DAU3. Economic considerations and negotiation flexibility remain crucial while ensuring the financial sustainability of rail services. A standardised approach promotes fairness and avoids complexity in negotiations, preventing inefficiencies such as prolonged response times. Despite Aurizon Bulks proposal for multi-commodity pricing appearing to enhance flexibility, Queensland Rail contends that such amendments could result in sub-optimal outcomes for both Queensland Rail and access seekers.

⁴¹ Aurizon, *Queensland Rail 2025 Draft Access Undertaking submission to the QCA*, 2 February 2024, p 27 and 28.

Maintaining current pricing rules ensures consistency

The retention of the current pricing rules ensures a consistent approach to the treatment of non-coal carrying train services in Queensland. This guarantees minimal discrepancies in how the rules are applied within the State and in neighbouring jurisdictions, fostering uniformity between Queensland Rail (DAU3) and Aurizon Network (UT5). It also generally aligns with the principles of price differentiation and pricing limits set out in Australian Rail Track Corporation (ARTC)’s 2013 Interstate Access Undertaking (IAU).

An outline of how the pricing rules for the treatment of non-coal reference tariff train services similarly align across the three access undertakings is provided in the table below.

Table 6.2: Similarities of Pricing Rules Queensland Rail and neighbouring jurisdictions

Provisions	Comments
Pricing Objectives	All aim to maximise commercially viable use of Capacity while meeting Common Costs. UT5 focuses on Rail Infrastructure utilization (clause 6.7.1). DAU3 considers revenue adequacy and network utilization for non-coal carrying train Services (clause 3.1 and clause 3.1.2), and the IAU considers the ARTC’s legitimate business interests, the public interest in promoting competition and efficient rail usage, and the interests of applicants by ensuring fair, open, and non-discriminatory access to the network (clause 1.2)
Price Differentiation	All aim to prevent discrimination in Access Charges based on identity and ensure compliance with regulatory obligations. DAU3 and UT5 have specific limitations on price differentiation and provides consequences if there is a contravention.
Pricing Limits	All set upper and lower limits for Access Charges. UT5 has a detailed process for setting price limits based on Incremental Cost and Stand Alone Cost (clause 6.6.2). DAU3 requires Ceiling Revenue Limit and Floor Revenue Limit (clause 3.2.1 and clause 3.2.2). The IAU requires charges must fall between a Floor Limit, ensuring revenue covers incremental costs (excluding depreciation and return on assets), and a Ceiling Limit, covering the Economic Cost of a segment. Economic Cost involves specific and non-specific costs (4.4).
Revenue Adequacy	DAU3 and UT5 emphasise the entitlement to earn revenue sufficient to meet efficient costs and provide a reasonable return on investment. UT5 states specific requirements regarding Efficient Costs and return on investment (clause 6.8(b)). DAU3 has similar objectives but does not detail specific requirements.
Structure of Non-Reference Tariff Access Charges	Both DAU3 and UT5 allow negotiation for Access Charges without a Reference Tariff. ARTC Access charges comprise a variable component based on distance and gross mass (\$/gtkm) and a flagfall component specific to each train service type and segment (\$/km) (clause 4.5). All elements of the charge structure are open to negotiation.

While incorporating negotiation objectives into the preamble may bring clarity to Aurizon' Bulks services⁴² (potentially at the expense of other equally deserving services), the absence of explicit negotiation objectives doesn't imply their exclusion. The negotiation process itself can be guided by overarching objectives, even if not expressly stated, and this has proven effective in maintaining system performance thus far.

Similarly, Pacific National suggests that the DAU3 preamble, pricing, and access charges should reflect the positive externalities of rail over road transport, such as improved safety, reduced congestion, and better environmental outcomes⁴³. There is no evidence however to suggest exclusion, especially considering the significant support the primary east coast intermodal systems including North Coast Line receive and which support access charges. Ultimately, pricing structures must consider factors like maintenance costs, infrastructure development, and financial sustainability. While safety and environmental benefits are crucial, a balance with economic viability is imperative.

Ultimately, the assumption that there is a misalignment between Queensland Rail's objective of being a champion of rail freight and its commercial positions is unfounded. Queensland Rail, as a business entity, inherently pursues growth and sustainability, discrediting any perceived conflict between these objectives.

A summary of the DAU3 Pricing Rules and their advantages is provided in the below table.

Table 6.3: DAU3 Pricing Rules Summary

Element	Objective	Comments	Advantages
Revenue Adequacy (3.1.1)	Ensure access charges generate expected revenue to cover efficient costs and provide a return on investment.	<p>Ensures that access charges are aligned with the efficient costs of providing access.</p> <p>Access seekers can gauge the fairness of charges based on actual costs and returns published annually.</p> <p>The inclusion of a return on investment recognises regulatory and commercial risks. This provides flexibility for Queensland Rail to adapt its charges based on market dynamics, fostering a financially viable rail network while preventing overcharging.</p>	Balancing financial stability with market adaptability
Network Utilisation (3.1.2 and 3.2)	Maximise commercially viable use of capacity while meeting common costs.	<p>Enables the establishment of different access charges for Train Services serving diverse markets.</p> <p>This reflects an understanding of market-specific demands and promotes transparent negotiations</p>	Optimising capacity with market-centric flexibility

⁴² Aurizon Submission to QCA Queensland Rail 2025 DAU; 02 February 2024; p.26.

⁴³ Pacific National Submission to the QCA in Response to Queensland Rail's 2025 DAU; February 2024; p. 9-10.

Element	Objective	Comments	Advantages
		<p>tailored to individual service characteristics.</p> <p>Queensland Rail’s ability to tailor access charges based on market-specific demands demonstrates flexibility. This adaptability allows Queensland Rail to optimise capacity use efficiently, catering to the unique needs of different markets and ensuring fair and competitive access.</p>	
Pricing Limits (3.2.1 and 3.2.3)	Ensure Expected Access Revenue does not exceed the Ceiling Revenue Limit.	<p>The establishment of Ceiling and Floor Revenue Limits enhances transparency by setting clear boundaries for acceptable Access Charges.</p> <p>Access seekers can review the financial parameters through Indicative Access Proposals, and reported material, promoting open and informed negotiations.</p> <p>The existence of these limits provides flexibility by allowing Queensland Rail to set charges within defined parameters. QR can adapt charges to align with market conditions, ensuring optimal outcomes for both parties while preventing excessive charges or under-pricing.</p>	Clear financial boundaries with adaptable pricing.
Limits on Price Differentiation (3.3)	Consider various factors without discrimination, including initial estimates, service characteristics, commercial impact, logistical impacts, and contributions by access seekers.	Queensland Rail's commitment to non-discrimination is a transparent acknowledgment of fair treatment for all access seekers. The outlined factors for price differentiation provide clear criteria, ensuring a transparent and objective basis for negotiations. The flexibility to negotiate based on specific characteristics, costs, and risks enables Queensland Rail to tailor charges while adhering to a transparent framework.	Equitable negotiations with transparent criteria.
Conflict Resolution (3.4)	Provide a hierarchy for resolving conflicts between pricing rules.	The hierarchy of precedence in conflict resolution ensures transparency in decision-making during disputes. The clearly defined	Transparent and adaptable conflict resolution

Element	Objective	Comments	Advantages
		order of precedence provides access seekers with a transparent understanding of how conflicts will be resolved.	

Addressing road-based competition

Queensland Rail acknowledges the relevance of price competitiveness for attracting new freight from road and maintaining current demand vulnerable to road-based competition. Queensland Rail has developed high level pricing structures on the Mount Isa line based on product and market, cost and risk considerations, fostering a stable pricing environment and minimising disputes.

Beyond below rail access pricing, various factors significantly influence the dynamics of competition between road and rail on the Mount Isa Line. Tonnages on the line are notably shaped by the commodity cycle and face competition from road transport. Moreover, the system is exposed to unpredictable weather events like extreme heat, cyclones, and monsoonal flooding, leading to speed restrictions, delays, and network non-availability.

In response to the formidable challenges posed by road transport, endeavours to enhance the appeal of rail transport extend beyond price considerations. Initiatives Queensland Rail have explored include:

- a potential increase of the loading gauge between Stuart and Mount Isa was investigated to allow double stacking (standard ISO container plus half height) and potentially improve the productivity of rail transport;
- the establishment of a common user intermodal terminal on the Mount Isa Line, including at the Port of Townsville; and
- methods to encourage above rail competition, including the introduction of additional rail operators.

Crucially, transport policy decisions wield a profound impact on modal share outcomes. Compliance requirements present a divergence between road and rail, with road compliance costs predominantly covered by the government. In contrast, accredited rail operators shoulder the responsibility of rail compliance, overseen by the Office of National Rail Safety Regulator. This entails the implementation of effective management systems for rail infrastructure, rollingstock, and rail safety workers, with costs borne by the rail industry.

Infrastructure investment patterns further differentiate road and rail competition dynamics. The significant gap in funding levels between road and rail, exemplified by the Queensland Transport and Roads Investment Program, underscores this distinction.

Moreover, the recovery of infrastructure costs differs markedly between the two modes of transportation. Heavy vehicle road users contribute through registration fees and fuel excise, yet it is acknowledged that these charges do not fully account for the disproportionate damage caused by heavy vehicles. Conversely, rail transport contends with a cost structure disadvantage, impacting pricing and influencing freight customers' mode choice.

Importantly, in considering the issues around rail access pricing, there is a tension between the objective to enable rail operators to effectively compete with road, while also setting a charge that enables sufficient ongoing maintenance and renewal of the rail infrastructure. The future of freight report highlights the challenges associated with aiming for 'rock bottom' access pricing solely to facilitate

competition with road, and emphasises that such pricing does not support necessary maintenance and investment, potentially leading to further service degradation and reduced modal share.⁴⁴ Moreover, given the multi-network and multi-jurisdiction nature of many train services, the application of such an approach by any individual network may not work in practice. Therefore, the negotiation framework in place for DAU3, with its focus on balanced objectives, pricing flexibility, and preventative mechanisms, is crucial in addressing these complexities and promoting a sustainable future for Queensland Rail and the industry.

Implementing multi-commodity pricing

The hold-up problem (prevalent in many commercial enterprises) can manifest itself in the negotiation of access charges. For example, when a customer aims to expand their business through rail services without certainty about the exact product railings (volumes or quantities) they will require. Seeking individual access charges by product, the customer desires pricing flexibility tailored to each product's characteristics for rail transportation. Conversely, the below rail provider must establish access charges ensuring the revenue certainty vital for infrastructure maintenance and financial stability. This challenge unveils the hold-up problem, as the uncertainty surrounding product railings complicates the provision of a stable revenue stream within reasonable regulatory obligations.

To address this issue, both parties must strike a balance between the customer's demand for flexibility and the below rail provider's need for revenue certainty. Multi-commodity services however pose additional challenges, necessitating protection against opportunistic behaviour and demand fluctuations while maintaining fairness and preventing anti-competitive practices.

While Aurizon's suggestions for multi-commodity pricing measures for its service may seem to enhance flexibility,⁴⁵ in Queensland Rail's view such amendments could lead to sub-optimal outcomes for both Queensland Rail and access seekers. Maintaining a uniform and considered pricing approach is crucial for ensuring fairness, transparency, and efficiency in the rail access market.

However, this has not precluded assessment of individual market and service considerations that may warrant discounts (or premiums) to facilitate volumes while ensuring competitive efficiency. Aurizon's Bulks submission includes two examples of this for [REDACTED]

Elsewhere, Queensland Rail has been able to offer competitive pricing structures [REDACTED]

Aurizon Bulk has however raised an issue of variable multi-commodity and multi-customer pricing within a single train service, implying that Queensland Rail's disinclination in presenting discounts sufficient to limit Aurizon Bulk's commercial exposure is evidence of a failure in the pricing rules. The approach that has been suggested however presents several potential drawbacks which lead to sub-optimal outcomes, explored in the below table.

⁴⁴Australasian Railway Association and Freight on Rail Group, The future of freight, October 2023, p 54.

⁴⁵ Aurizon Submission to QCA Queensland Rail 2025 DAU; 02 February 2024; p.26.

Table 6.4: Sub-Optimal Outcomes Multi-Commodity Train Service Pricing

Issue	Description	Impact
Uncertainty for Access Holders and Seekers	Varying charges create uncertainty for access holders and seekers regarding the cost structure and factors influencing pricing.	Lack of transparency and predictability hinders business planning, particularly for New Business, making it difficult to assess the economic viability of operations.
Complexity and Uncertainty	Multi-commodity pricing significantly increases the complexity of negotiations and contract agreements.	Challenges in determining fair pricing structures due to the diverse nature of commodities result in uncertainty, potentially leading to prolonged negotiation processes, disputes, and hindered market efficiency.
Potential for Conflicts and Arbitration	The introduction of multi-commodity pricing increases the likelihood of conflicts and disputes in determining appropriate charges for each commodity.	Higher chances of disputes require additional arbitration and conflict resolution efforts, leading to delays in service provision and potentially undermining collaboration between Queensland Rail and access seekers.
Differential Impact on Access Seekers	Multi-commodity pricing may not uniformly benefit all access seekers due to distinct transportation requirements, costs, and market values.	Entrenching multi-commodity pricing might disadvantage certain access seekers, resulting in significantly inequitable outcomes. Existing Access Holders might also perceive reduced pricing as unfair, creating an uneven playing field. This could result in legal challenges or regulatory intervention, potentially leading to poorer outcomes for all stakeholders.
Operational Inefficiencies	Differential charges may lead to suboptimal utilisation of train capacity or a shift in market dynamics	May result in perverse incentives to rail one product more than others – disrupting the natural market forces and potentially distorting competition.
Undermining Pricing Limits and Transparency	The current pricing limits and transparency mechanisms, may become less effective with multi-commodity pricing.	Determining fair access charges between Ceiling and Floor Revenue Limits for multiple diverse (and sometimes unknown) commodities becomes challenging, potentially undermining the predictability and fairness of the pricing structure.
Administrative Costs	Managing different charges for various products increases the complexity of the pricing structure.	This complexity poses administrative burdens and challenges in the management, tracking, reporting and billing of different commodities accurately.

While stakeholders' requests for prescription to drive complex access charges implies a desire for flexibility, the practical implementation of it within multi-commodity services where the freight plan is not generally known upfront, raises concerns about opportunistic behaviour and legitimately may lead to negative downstream issues such as price discrimination that harms competition.

To effectively manage the system, Queensland Rail also has a legitimate claim to a degree of revenue certainty for ongoing maintenance, infrastructure improvement, and financial sustainability. This is challenging in the face of uncertain product railings.

Queensland Rail believes maintaining the existing pricing rules fosters a competitive environment which will continue to attract more participants to the market. It allows all stakeholders, including potential new entrants, to easily understand and compare access costs. This is especially relevant for junior miners who are interested in exploring rail opportunities but are not yet ready to develop an operation.

Queensland Rail engaged HoustonKemp to provide an Expert Report which included advice in relation to the economic implications of price differentiation of containerised freight (Refer Attachment 2).

HoustonKemp concluded that price differentiation of containerised goods would not promote the objectives set out in the QCA because:

- there are practical difficulties with price differentiating between containerised goods;
- Queensland Rail has limited information to infer the willingness to pay of different customer groups; and
- it is unclear if willingness to pay for rail transport is materially different between customer groups as willingness to pay is constrained by the cost of road transport, which is available to all customers;
- price differentiation would likely mean charging goods or owners a different price even when they are on the same train – this gives rise to competition concerns if these goods or owners operate in the same end market; and
- price differentiation would require customers to report on goods carried and require Queensland Rail to verify this information – this would increase the administrative burden for customers and Queensland Rail.

Refer to the HoustonKemp's Expert Report for details and reasoning regarding the above.

7. Reporting

Queensland Rail's existing reporting and transparency framework (which has been largely carried over for DAU3) is robust and characterised by a notably high level of openness and transparency.

In response to stakeholder feedback seeking an expansion of reporting requirements, it's noteworthy that Queensland Rail already publicly provides an exhaustive array of operational performance metrics. This includes but is not limited to:

- on-time performance;
- train cancellations;
- safety incidents;
- speed restrictions;

- track quality;
- possessions; and
- customer complaints.

The existing reporting arrangements also feature a meticulous breakdown of data related to capacity, access applications, negotiation processes, dispute resolutions, access agreements, maintenance costs, operating expenditure, capital investment, and train service volumes. Furthermore, regular reports on service performance and network operations are routinely disseminated to stakeholders, ensuring transparency and accountability. A selection of these reports with distribution, issuance and description is provided in the below table.

Table 7.1: Notable Reports Distributed to Access Holders and related parties

Report Title	Distribution	Issued	Description
Mount Isa Line Service Performance	Aurizon	Monthly	On-time performance (monthly and yearly), Transit Times, Contracted versus scheduled services, Percentage On-time for Origin to Destination combinations, Top Ten delay aggregated variances, average per train service by delay/incident type, Current TSR speed restrictions, and Possessions for the Month.
North Coast Line Service Performance	Aurizon	Monthly	Monthly report exclusively for the North Coast Line, covering On-time performance (monthly and yearly), Transit Times, Contracted versus scheduled services, Percentage On-time for Origin to Destination combinations, Top Ten delay aggregated variances, average per train service by delay/incident type, Current TSR speed restrictions, and Possessions for the Month.
North Coast Line Network Operations	Aurizon	Weekly	Providing On-Time Performance (Departure, Arrivals, Entry, Exit) weekly totals and by journey, Top Ten Delays/Incidents Northbound/Southbound weekly totals and by journey.
Weekly Train Cancellations	Aurizon	Weekly	Weekly report on train cancellations by Aurizon.
Mount Isa Line Service Performance	Incitec Pivot Fertilisers	Monthly	Monthly report exclusively for the Mount Isa Line by Incitec Pivot Fertilisers, covering On-time performance (monthly and yearly), Transit Times, Contracted versus scheduled services, Percentage On-time for Origin to Destination combinations, Top Ten delay aggregated variances, average per train service by delay/incident type, Current TSR speed restrictions, and Possessions for the Month.
North Coast Line Service Performance	Pacific National	Monthly	Monthly report exclusively for the North Coast Line by Pacific National, covering On-time performance (monthly and yearly), Transit Times, Contracted versus scheduled services, Percentage On-time for Origin to Destination combinations, Top Ten delay aggregated variances, average per train service by delay/incident type, Current TSR speed restrictions, and Possessions for the Month.
North Coast Line Network Operations	Pacific National	Weekly	Providing On-Time Performance (Departure, Arrivals, Entry, Exit) weekly totals and by journey, Top Ten Delays/Incidents Northbound/Southbound weekly totals and by journey.

Report Title	Distribution	Issued	Description
Mount Isa Line Service Performance	Qube and Glencore	Monthly	On-time performance (monthly and yearly), Transit Times, Contracted versus scheduled services, Percentage On-time for Origin to Destination combinations, Top Ten delay aggregated variances, average per train service by delay/incident type, Current TSR speed restrictions, and Possessions for the Month.
Speed Restriction Dashboard Train	All Operators	Daily	Speed Restriction Dashboard for all services.
South West User Group (SWUG) Systems Performance	All operators and adjoining operations (Coal, grain).	Bi-monthly	Bi-monthly forum for the South West User Group, detailing the agenda and topics discussed. Includes service orders (received, agreed, scheduled and ran), MTP/STP ATR train numbers graphed for 12 months, range utilisation by month based on contracted trains on the down/loaded. Speed restrictions for last 12 months, commentary of outlier incidents and upcoming possessions, top ten delays by systems travelled, top ten delays broken into corridors, top ten average delays per service on corridors
SWUG Monthly Train Delays	Aurizon; Watco	Monthly	All train movements in West Moreton traffic for the South West User Group.

In addition, Queensland Rail annually compiles a Below Rail Financial Statements (**BRFS**), offering a comprehensive overview of the organisation's overall financial performance. Within this context, the BRFS constitute a subset of Queensland Rail's Financial Statements, meticulously allocating assets, costs, revenues, and investments exclusively associated with below-rail services.

Commencing from 2016-17, the QCA has mandated Queensland Rail to prepare distinct Below Rail Financial Statements for specific segments, including the Mount Isa Line, North Coast Line, Metropolitan system, and the separately reported West Moreton system since 2010. The purpose of these Below Rail Financial Statements is to furnish access seekers and access holders with detailed insights into the revenues and costs associated with providing declared rail infrastructure services.

Queensland Rail is also currently bound by obligations to provide detailed information on proposed access charges within the negotiation process, encompassing the costs, inputs, and methodologies employed in their formulation. Additionally, Queensland Rail is mandated to disclose commercial access pricing to other operators, thereby ensuring transparency and equity in pricing within the market.

In this way, the proposed DAU3 framework provides a level of transparency that extends beyond operational performance metrics, encompassing a granular financial breakdown that ensures stakeholders have access to a comprehensive understanding of Queensland Rail's financial landscape.

Given the comprehensive nature of the current reporting mechanisms, the avenues available for further information (including on an as-requested basis) introducing further regulatory requirements may potentially burden Queensland Rail with unnecessary administrative burden, thereby impeding the operational efficiency stakeholders seek.

8. Prioritisation of certain freight services

Stakeholders have raised issues related to how different train services are prioritised on Queensland Rail's network. The two key issues raised relate to the prioritisation between freight train services and passenger train services, and between different freight services.

Queensland Rail's response is as follows:

- The processes for allocation of capacity to passenger services and passenger priority obligations are governed by Queensland legislation (not Queensland Rail); and
- There could be merit in introducing a 'premium' freight train service that has priority over freight train services but this would represent a substantial change and would require careful consideration.

Queensland Rail has also responded to some of the suggested changes to the Network Management Principles in this section.

8.1 Key issues raised by stakeholders

Prioritisation between passenger train services and freight train services

Some stakeholders have raised concerns that passenger services are prioritised over freight demand, and seek 'transparency' about the allocation of capacity to passenger services. For example, Pacific National submits that Queensland Rail should provide modelling on future passenger service growth, and that a priority matrix be established setting out passenger and freight services at different times of the day and on weekends⁴⁶.

Prioritisation between different freight train services

Unlike bulk freight markets, the timing of paths for inner-city containerised freight is critical in order to meet the service requirements of freight customers and to compete effectively with road freight. Aurizon Bulk has proposed the introduction of premium paths.⁴⁷ Premium paths are those considered to have an efficient transit time combined with a late evening departure and an early morning arrival.

Aurizon Bulk notes that this is a particular issue for the North Coast Line System, where there are limited premium pathing windows. To address these issues concerning path management and optimisation, Aurizon Bulk has proposed that Queensland Rail should:

- introduce tools to enable schedule optimisation, so that Queensland Rail has the ability to reschedule train paths for operators with consistently poor on time performance;
- introduce flexibility for scheduling of trains in accordance with train service level, rather than including fixed network entry/exit times;
- introduce rules so that Queensland Rail may price differentiate between premium and non-premium train paths;
- introduce rules so that an access seeker can register its interest in acquiring a new or varied train path; and

⁴⁶ Pacific National Submission to the QCA in Response to Queensland Rail's 2025 Draft Access Undertaking, February 2025, page 13.

⁴⁷ Aurizon, *Queensland Rail 2025 DAU/Aurizon Submission to QCA*, 2 February 2024, p 32.

- once registered, Queensland Rail provide access seekers with capacity information for a sufficient time period to allow the access seeker to assess opportunities for path resumption or rescheduling.

8.2 Queensland Rail's response

Queensland Rail considers stakeholder views that passenger services operated by Queensland Rail is in competition with freight services is incorrect.

Queensland Rail operates passenger services on behalf of and under contract with the Queensland Government. The characteristics of passenger train services are such that they are not commercial without significant Queensland Government support in the form of transport service payments.

Queensland Rail is neither responsible for the identification of passenger service requirements nor the effects of the preserved train path obligations. These matters are prescribed by legislation.

Passenger train services receive special treatment under the *Transport Infrastructure Act 1994* (Qld) (TIA) as follows:

- Section 265 of the TIA – sets out an obligation for a railway manager to bring a delayed passenger train service back to its scheduled running time (including where this may result in a freight train service being delayed);
- Section 266 of the TIA – sets out a right for the Director General of the DTMR to identify the requirements for regularly scheduled passenger train services (e.g. identify the capacity requirements) and obliges railway managers to allocate rail capacity that is available or will become available to meet those requirements; and
- Section 266A of the TIA – provide for the preservation of train paths for regularly scheduled passenger train services and for non-coal freight services.

All of Queensland Rail's passenger train services use either preserved train paths or train paths that are the subject of the Director General of DTMR's passenger train service requirements.

Queensland Rail is obliged to endeavour to bring delayed passenger train services back on time ahead of non-passenger train services. In doing this, Queensland Rail may consider relevant matters such as whether livestock is being transported (e.g. Queensland Rail can prioritise a train service containing livestock ahead of a passenger train service to ensure the humane treatment of livestock) or may consider a train service entitlement and related matters, but Queensland Rail is not permitted to distinguish between different types of regularly scheduled passenger services.

The effect of the above provisions of the TIA is that while Queensland Rail is a vertically integrated business with both above rail and below rail activities, Queensland Rail's above rail activities in operating passenger train services are not in competition with third party train services. Queensland Rail is effectively acting as a non-vertically integrated access provider in respect of third party access to its rail network.

It follows that changes in priority that passenger services receive on Queensland Rail's network cannot be achieved through amendments to Queensland Rail's Access Undertaking or through a QCA regulatory process.

A summary of the passenger service requirements and preserved train path provisions as set out in the TIA is provided below.

8.3 Passenger service requirements – section 266 of the TIA

Section 266 of the TIA provides, amongst other matters:

- A right for the Director General of DTMR to establish a process that regularly allows the Director General to identify '*passenger service requirements*' – that is, requirements for train paths for the following:
 - Regularly scheduled passenger services on railway track in Queensland.
 - Rolling stock that is to be used for a regularly scheduled passenger service and is being relocated for the purpose of providing the service.
- The Director General, by way of notice to a railway manager, may require the railway manager to provide information to enable the Director General to identify passenger service requirements.
- Once the Director General has identified the passenger service requirements, the Director General then notifies each rail transport operator, who is an accredited person under the RSNL, of the passenger service requirements relevant to the railway manager's railway
- Once notified of the Director General's passenger service requirements, a railway manager must give priority to the passenger service requirements whenever a train path is, or will become, "available" for a railway manager to allocate. In complying with this obligation, the railway manager must not distinguish between different types of regularly scheduled passenger services.

Queensland Rail is obliged to give priority to the operator of the relevant passenger train service, which may be Queensland Rail itself or a third party, in respect of the allocation of the relevant train path. Queensland Rail will, as applicable, either use the train path itself or offer the train path to the operator of the relevant passenger train service in preference to the operator of any other train service.

It is the Director General of DTMR rather than Queensland Rail who is entitled to determine the passenger service requirements. This is done under the TIA and independently from the QCA Act or any access undertaking. Once those passenger service requirements have been determined by the Director General and notified to Queensland Rail, Queensland Rail must comply with section 266 of the TIA and give priority to the allocation of train paths to satisfy those passenger service requirements.

The Director General will no doubt have substantial regard to the Government's public transport objectives – particularly as the passenger train service referred to in the passenger service requirements will also require transport service payments.

Train paths that have been identified by the Director General through section 266 of the TIA (including train paths that will become available) must effectively be treated as committed. This means those train paths will not be available for allocation to access seekers unless the access seeker is the person who will be providing the relevant passenger train service – as priority must be given to allocating those train paths to satisfy the Director General's passenger service requirements.

Section 266 of the TIA does not operate to strip existing access holders of their contracted train service entitlements under existing access agreements. However, from the time when an access agreement expires, priority must be given to allocating the train paths made available with that expiry to meet passenger service requirements, as applicable.

8.4 Preserved Train Paths – section 266A of the TIA

The TIA was amended in 2010 to include section 266A. Section 26A of the TIA applies in respect of any train path that was, on 8 September 2010, allocated for the provision of:

- Regularly scheduled passenger train services; or
- Non-coal freight train services.

These train paths are known as 'preserved train paths'.

If a preserved train path becomes available for allocation by Queensland Rail, Queensland Rail must only allocate that preserved train path to a train service that is the same type of train service as that which give rise to the preserved train path. For example, a preserved train path arising from a regularly scheduled passenger train service must only be allocated to a train service that is a regularly scheduled passenger train service.

However, section 266A of the TIA ceases to apply to a preserved train path if the Director General of DTMR has given:

- Written notice that the train path is no longer subject to section 266A of the TIA; or
- Written consent to the allocation of that train path to a different type of train service.

Arguably, section 266A of the TIA does not prevent Queensland Rail from allowing a preserved train path to be used for a different type of service when it is not being used for a train service of the type for which it has been preserved. For example, such a path could be used on an 'ad hoc' basis for a coal train service provided it remains available for a train service of the type for which it was preserved. However, the decision to allocate a preserved train path to a type of train service other than the type for which it was preserved is one for the Director General of DTMR and not Queensland Rail.

In relation to preserved train paths for regularly scheduled passenger train service, the preservation of those train paths will naturally result in an absence of competition for those train paths as practically there will be only one operator who is seeking to run the relevant passenger train service – whether Queensland Rail or a private operator – and that person will therefore have priority for the allocation of that train path.

8.5 Potential for two-tiered freight access

Aurizon Bulk's proposal to introduce tools to enable schedule optimisation, premium and non-premium train paths, and mechanisms to acquire new or varied train paths would effectively introduce a two-tier system, which would allow access holders/seekers to purchase a 'premium service' at a higher cost in turn for more flexibility/priority when scheduling train paths.

This in theory could promote allocative efficiency as:

- train paths and priority are allocated to customers who value them the most; and
- it potentially allows Queensland Rail's to recover additional revenue, through price differentiation.

Queensland Rail recognises that a two-tiered freight access regime is worth further consideration, on the presumption that passenger services retain the highest level priority as required by the TIA. However, this proposal if implemented, represents a significant and material change to how Queensland Rail operates its network and can have a material effect on other stakeholders.

Consideration of how such a proposal affects contractual relationships governing access and service, and as well as our own operational systems and procedures would need to be evaluated and any issues addressed. It follows that introducing two tier access for freight would require careful stakeholder consultation and investigation before it can be implemented if a decision were to be made to proceed.

9. Scope of access undertaking

9.1 Standard Gauge network

Aurizon has recommended amending DAU3 so that it applies to standard gauge services using the dual gauge link from Acacia Ridge to the Port of Brisbane.⁴⁸ Queensland Rail notes that the Metropolitan System is not a declared service and therefore should not be within the scope of DAU3.

The QCA cannot require such an amendment to DAU3. The QCA Act does not require that Queensland Rail provide an access undertaking for services which are not the subject of declaration under the QCA Act.

9.2 Key issues raised by stakeholders

Aurizon considers there is ambiguity around the status of interstate services using Queensland Rail's dual gauge track and connecting to the ARTC standard gauge network at Acacia Ridge.⁴⁹ Aurizon proposes amending DAU3 so that it applies to standard gauge services using the dual gauge link from Acacia Ridge to Port of Brisbane.⁵⁰

9.3 Declared services are defined by the Minister

The decision of the Treasurer and Minister for Infrastructure and Planning, as Minister administering the QCA Act to declare parts of Queensland Rail's service was made after extensive consultation and after consideration of the QCA's Recommendation⁵¹.

Queensland Rail's services are declared using defined routes, each of which traverse a combination of network systems. Individual rail systems are not declared in their own right. The Metropolitan System is not declared, except as it is utilised in combination with another system, in accordance with the definitions contained in the Minister's decision. The boundaries of the Metropolitan System for the purposes of the declared Route Services Rosewood to the west, Nambour to the north, south to Varsity Lakes station and south-west to the Acacia Ridge Terminal.

The Minister was satisfied (based on the QCA's recommendation) that the access criteria contained in the QCA Act are satisfied in respect of the parties of the Queensland Rail service defined in the decision. The declared services are defined as 'Route Services' by reference to the use of a combination of network Systems (i.e. the facilities').

⁴⁸ Aurizon Submission to the QCA, p33.

⁴⁹ Aurizon Coal and Bulk submission, p.30.

⁵⁰ Aurizon Coal and Bulk submission, p 33.

⁵¹ QCA, Declaration Review: Final Recommendations – Part B: Queensland Rail Service, Jun 2020.

The Minister considered and specifically declined to assess the access criteria against Queensland Rail's services by reference to individual rail lines or systems, saying:

"I note that Queensland Rail in its submissions sought to describe parts of its services by reference to rail lines or systems. While this is a convenient way to analyse the various components of the Queensland Rail network, I note and accept the approach taken by the QCA to define parts of the services as 'routes'(which includes the use of those parts of the relevant rail lines and systems that are used for a particular route) as this recognises the operation of the rail access services and may necessitate the use of rail infrastructure in one or more rail lines or systems".⁵²

The Minister reference parts of the QCA's recommendation, which include:

"... neither the separation of the network into these rail systems, nor the description given to each system by Queensland Rail, necessarily means that use of these systems constitute separate "services" for the purpose of analysis under s. 87A of the QCA Act. Furthermore, these descriptions are not necessarily based on the economic activity in dependent markets that are potentially affected by the use of this rail infrastructure, as different parts of the Queensland Rail network are often used in combination with each other to provide rail access to customers in different dependent markets.

The operation of rail access services may necessitate the use of rail infrastructure in one or more rail systems. As a result, unless the provision of the service is confined to an individual system, the QCA has identified and defined services in terms of the use of 'routes', which encompass the relevant rail system(s) and other infrastructure that are necessary to operate that service.

This is central to the QCA's approach to identifying and defining the different 'parts' of the declared service, namely identifying the assets that are used to provide rail access services to customers in different dependent markets."⁵³

The operation of rail access services may necessitate the use of rail infrastructure in one or more rail systems. The QCA has identified and defined services in terms of the use of 'routes', which encompass the relevant rail systems and other infrastructure that are necessary to operate that service.

This is central to the QCA's approach to identifying and defining the different 'parts' of the declared service, namely identifying the assets that are used to provide rail access services to customers in different dependent markets.⁵⁴

While the QCA's explanation may be less precise, both the QCA and the Minister went on to assess and make findings about whether the access criteria are satisfied in respect of each of the Route services, not the individual rail systems.

This is also clear from the fact that each definition of Route service uses the word "and" – for example, the use of the West Moreton System *and* the Metropolitan System. A train traversing the West Moreton System and the Metropolitan System is using the West Moreton Route service. If it was intended that the definitions include use of only one or other services, then the definition would use the words "or" or "either of", or some other formulation clearly intended to convey that intention.

Any change to declared services would require a further application for declaration. It is not appropriate for the QCA to reconsider the Treasurer's decision to address a perceived ambiguity. To do what Aurizon Network seeks would be to extend the declaration to a service which has not been assessed against the declaration criteria.

⁵² Queensland Government Gazette No 31, para 3.2.2.

⁵³ QCA Final Recommendation section 2.2.2.

⁵⁴ QCA Final Recommendation section 2.2.2.

10. Conclusion

Queensland Rail appreciates the opportunity to provide clarification in relation to the submissions received on DAU3. Queensland Rail believes that the upcoming opportunities to seek common ground, make collaborative submissions, seek agreement, or where agreement is not reached for all parties to gain a full understanding of each other's reasoning, is an important part of the DAU3 process post this submission. To this end, Queensland Rail will continue to engage collaboratively with stakeholders.

Attachment 1: HoustonKemp Economists - Response to stakeholder submissions on appropriateness of West Moreton system reference tariff



HOUSTONKEMP
Economists

Response to stakeholder submissions on appropriateness of West Moreton system reference tariff

A report for Queensland Rail

7 March 2024

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Executive summary

Queensland Rail submitted its 2025 draft access undertaking (DAU3) to the Queensland Competition Authority (QCA) in November 2023. If approved, DAU3 would replace Queensland Rail's existing access undertaking (AU2) from 1 July 2025. To inform its decision as to whether to approve DAU3, the QCA published DAU3 on its website and invited stakeholders to provide feedback on DAU3. The QCA received 9 submissions from stakeholders on DAU3, covering a wide range of different topics.

We have been engaged by Queensland Rail to respond to key issues raised by stakeholders in relation to proposed reference tariffs for the West Moreton system. This report sets out our response to four key topics, namely:

- appropriateness of the proposed weighted average cost of capital (WACC);
- affordability of the proposed reference tariff;
- implications of having a residual value for the coal regulatory asset base (RAB); and
- implications of asset optimisation on the West Moreton system.

Appropriateness of the proposed WACC

The substantive comments raised by stakeholders in relation to WACC focused on the following two areas:

- the asset beta proposed by Queensland Rail, which stakeholders submitted should be lower; and
- the appropriateness of having a top-down WACC adjustment through an uplift in the cost of debt.

Queensland Rail has proposed to maintain the approach from AU2 in estimating equity betas, updated to incorporate guidance from the QCA provided in its rate of return review. In our opinion, this is appropriate, noting that:

- our analysis demonstrates that there has been no significant change in market conditions that would affect the use of a AU2 asset beta of 0.50;
- there have been no significant changes in Queensland Rail's activities in the West Morton coal system that would undermine the QCA's the first principles analysis of the risks; and
- maintaining the AU2 asset beta is potentially conservative given that estimated asset betas for comparator businesses have increased over time.

In determining the appropriate WACC to apply for Queensland Rail in AU2, the QCA provided a 160 basis point uplift to the debt risk premium to reflect the potential for short-term volume uncertainty that Queensland Rail faces relative to typical BBB-rated businesses. We understand that there is still significant short-term volume uncertainty on the West Moreton network. As such, a top-down WACC uplift to the cost of debt is still appropriate for DAU3.

Affordability of proposed tariff

Yancoal and New Hope raised concerns about the affordability of the proposed tariffs under DAU3. In light of stakeholder concerns, we have reassessed the affordability of proposed tariffs and whether there is a risk that proposed tariff could lead to an early exit of any of the three mines on the West Moreton system. Specifically, we have performed additional stress tests of our earlier analysis by considering:

- the profitability of the three mines operating on the West Moreton system over time;
- the implications of lower coal prices on tariff affordability; and
- the implications of higher below rail charges on tariff affordability.

Our analysis shows that mines operating on the West Moreton system are expected to be profitable during the DAU3 period and proposed tariff is expected to be affordable unless coal prices are more than 12 per cent lower than forecasts or below rail prices increase by around 150 per cent. It follows that proposed tariffs for DAU3 are expected to be affordable and not expected to lead to pre-mature closure of any of the mines operating on the West Moreton system.

Implications of having a residual value

To address the potential for asset stranding, Queensland Rail has proposed shifting from depreciating assets over their technical life to their economic life. Stakeholder concerns with the accelerated depreciation methodology comes the potential for:

- Queensland Rail to over-recover its efficient costs; and
- non-coal users to potentially 'free-ride' unless a residual value is introduced.

In our assessment, there is no reasonable possibility of either of these concerns materialising, as:

- existing regulatory frameworks prevent over-recovery, as prices collected by Queensland Rail must not exceed the ceiling revenue limit;
- capital costs are allocated to coal and non-coal users based on capacity available to the different users;
- separate RABs are maintained for coal and non-coal users, and so the depreciation profile for coal users does not affect the prices paid by non-coal users; and
- Queensland Rail has no reasonable prospects of recovering any residual value or additional costs from non-coal users, due to their limited capacity to pay and the likely limited financial viability of the West Moreton network following cessation of coal traffic.

Implications of asset optimisation

In view of concerns regarding the affordability of proposed tariffs, Yancoal states that asset optimisation should be considered, noting that:

... the very significant capital expenditure spend, justified largely based on the inadequate state of the current rail infrastructure, should give rise to serious questions about whether the existing regulatory asset base should be materially optimised downwards.

In our opinion, the write down of assets on the West Moreton system is inappropriate, inconsistent with objectives of the QCA Act, and could have material and significant consequences for investment in sectors subject to economic regulation throughout Queensland and Australia. In coming to this conclusion, we note the following:

- inconsistency with the pricing principles in the QCA Act, as access prices should generate expected revenues that are sufficient to meet the efficient costs of providing services, and asset optimisation would prevent recovery of previously assessed efficient costs;
- Queensland Rail is highly exposed to the market in its ability to recover costs, which prevent it from charging above affordable tariff levels; and
- there are significant consequences of asset optimisation for the economic efficiency of all sectors regulated by the QCA, ie, that asset optimisation creates a regulatory precedent for writing off investments that have been assessed as efficient by the QCA, which creates regulatory uncertainty and discourages investment.

1. Introduction

The rail service provided by Queensland Rail on the West Moreton system is a declared service for the purposes of Queensland's third party access regime established under Part 5 of the Queensland Competition Authority (QCA) Act. Under this access regime, Queensland Rail is required to submit a draft access undertaking (DAU) for consideration and approval by the QCA.

The current access undertaking (AU2) is set to expire on 30 June 2025. Queensland Rail submitted its 2025 DAU (DAU3) to the QCA in November 2023, which will become AU3 from 1 July 2025 if approved by the QCA. To inform its decision on whether to approve DAU3, the QCA published Queensland Rail's DAU3 on its website for public consultation.

The QCA received 9 submissions in response to DAU3. Several of those submissions raised matters that were not covered by Queensland Rail in the explanatory material accompanying DAU3. Given this, the QCA has offered stakeholders, including Queensland Rail, additional time to comment on new matters raised.

Queensland Rail has asked us to respond to the following key issues raised by stakeholders, which we address as follows:

- in section 2 we address concerns raised by stakeholders on the appropriateness of the proposed weighted average cost of capital (WACC) for coal haulage train services on the West Moreton system;
- in section 3 we assess the affordability of the proposed reference tariffs in DAU3;
- in section 4 we discuss the economic implications of having a residual value for the coal regulatory asset base (RAB) on the West Moreton system; and
- in section 5 we examine the economic implications of asset optimisation on the West Moreton system.

2. Appropriateness of proposed WACC for DAU3

This section sets out key concerns raised by stakeholders in relation to the appropriateness of the proposed WACC and our response to these key concerns.

2.1 Summary of key issues raised by stakeholders

Queensland Rail proposed a WACC of 7.39 per cent, supported by a report prepared by HoustonKemp. Queensland Rail's proposed WACC draws upon the QCA's latest rate of return guidelines,¹ and the QCA's determination for Queensland Rail in AU2.²

Stakeholders raised concerns that insufficient consideration was given to the decreased level of systematic risk that Queensland Rail faces in AU3, as compared to that in AU2. On this basis, stakeholders submitted that the WACC proposed by Queensland Rail is not appropriate for AU3, and that:

- the asset beta should be brought closer into alignment with regulated energy/water businesses rather than at the upper range of energy/water businesses and toll roads, as:
 - > the level of systematic risk faced by Queensland Rail has reduced, such that it is more comparable to regulated energy/water businesses; and
 - > regulatory framework changes have reduced or shifted to producers the systematic risk faced by Queensland Rail;
- the top-down WACC uplift for the cost of debt is no longer appropriate, as:
 - > the level of systematic risk faced by Queensland Rail has decreased, as short-term uncertainty that was present in AU2 is no longer present;
 - > the top-down adjustment is inconsistent with the QCA's stated approach in its updated rate of return guidelines; and
 - > the top-down WACC uplift compounds with accelerated depreciation, and so is double-compensating Queensland Rail against asset stranding risk.

In addition, Aurizon Network submitted that a weighted average trailing cost of debt is more appropriate than a simple average for Queensland Rail, as its RAB is expected to change materially over the AU3 period.

Further, stakeholders raised several clarification requests on how Queensland Rail proposed to calculate and update the WACC, including:

- whether Queensland Rail would adopt an annual update to the trailing average cost of debt or an end-of-period true-up;
- whether the WACC uplift applied to the cost of debt only or both the cost of debt and the cost of equity; and
- which averaging period Queensland Rail proposes to adopt for the cost of debt.

We discuss each of these in the remainder of this section.

¹ QCA, Rate of return review - version 3, February 2024.

² QCA, Queensland Rail 2020 draft access undertaking, Decision, February 2020.

2.2 Asset beta

Queensland Rail has proposed to maintain the approach from AU2 in estimating equity betas, updated to incorporate guidance from the QCA provided in its rate of return review. Specifically, Queensland Rail proposed to:

- use 10-year rolling average asset betas for the sample of firms contained in Appendix E of the QCA's November 2021 rate of return review, to check the range of the two comparator sets (being regulated energy/water businesses and toll roads);³
- confirm the asset beta derived during AU2 still lay between the upper and lower bounds derived from the updated comparator set values; and
- maintain the equity beta adopted for AU2 and back-solve for an updated asset beta using the QCA's new method for de-levering,⁴ as opposed to maintaining the asset beta derived during AU2 and solving for an updated higher equity beta.

We address comments from stakeholders on the appropriateness of the asset beta and equity beta calculations in the remainder of this section.

2.2.1 Concerns that the level of systematic risk that Queensland Rail is exposed to has decreased

Yancoal submission

Yancoal submits that it is inappropriate to simply maintain the AU2 equity beta and back-solve for the new asset beta, because:⁵

- it is inconsistent with economic first principles for how a bottom-up estimate of a WACC is calculated, as the asset beta should first be estimated, and the levered equity beta should be derived from it; and
- the asset beta is a measure of the underlying risk of a regulated entity, and so consideration of changes in the level of the systematic risk faced by Queensland Rail's West Moreton coal network is required to calculate an asset beta for AU3.

Yancoal acknowledges that the QCA's AU2 decision is likely to remain a useful reference point, but submits that there has been a material reduction in the level of systematic risk faced by Queensland Rail's West Moreton coal network. Specifically, Yancoal identifies:⁶

- (i) the New Acland Stage 3 mining lease and related water licence has been approved and mining and production volumes are ramping up, which was highly uncertain at the time of the AU2 approval;
- (ii) the New Wilkie mine has reopened and railed coal, whereas Peabody's previous Wilkie Creek operations were on care and maintenance with no evident prospect of that changing at the time of the AU2 decision;
- (iii) QR is forecasting the West Moreton network being fully utilised with 9.6 Mtpa of contracted coal capacity for the majority of the DAU3 term, contrasted with the 2.1 Mtpa ultimately approved as an appropriate forecast for AU2; and
- (iv) volumes have recovered fast enough that indication from QR are that its previous capitalised losses are likely to be largely recovered during the AU2 period.

³ QCA, *Rate of return review – Appendix E*, Final report, November 2021, pp 105-107.

⁴ The QCA adopted the Brealey-Myers approach to de-levering and leveraging in its rate of return review. See: QCA, *Rate of return review – Appendix E*, Final report, November 2021, p 92.

⁵ Yancoal submission, p 8.

⁶ Yancoal submission, p 8.

New Hope submission

Similarly, New Hope submits that there have been several important developments for the calculation of the asset beta and equity beta since AU2, ie:⁷

- first, there have been changes to QR's customer and demand profile, impacting its systematic risk exposure – notably, QR is now forecasting much higher contracted volumes across a broader customer base;...
- third, the QCA has reviewed and updated its framework for assessment of the asset / equity beta in its Rate of Return Review; and
- finally, the sample of toll road businesses available for beta estimation has become even smaller.

New Hope notes that Queensland Rail's proposed asset beta (derived from the AU2 equity beta) is midway between the median asset beta values for:⁸

- a large set of regulated energy and water businesses (a sample of 39 businesses, with a median 10-year asset beta of 0.38, as estimated by HoustonKemp); and
- a very small set of toll road businesses (a sample of just four businesses, with a median 10-year asset beta of 0.58, as estimated by HoustonKemp).

New Hope submits that:⁹

- given the reduction in the level of systematic risk faced by Queensland Rail's West Moreton coal system, and considering Queensland Rail's systematic risk compared to energy/water businesses and toll roads using the QCA's general factors,¹⁰ the asset beta should be aligned with regulated energy/water businesses which are the most relevant comparator businesses for setting the asset beta; and
- if any weight is given to toll road businesses' asset betas, each of the available toll road businesses should be given no more weight than each energy/water business.

The QCA's approach for AU2

In AU2, the QCA determined the appropriate asset beta for West Moreton coal was likely to be:¹¹

- higher than the estimated asset beta for regulated energy and water businesses (0.38); and
- lower than the estimated asset beta for toll road businesses (0.51).

The QCA found that it was appropriate to select an asset beta at the upper end of this range (0.50) for Queensland Rail's West Moreton coal network.

The QCA also found that the appropriate asset beta for West Moreton coal was higher than both Aurizon Network (0.42) and ARTC's Hunter Valley Coal Network (HVCN) (0.45), due to:

- its smaller customer base, which led to an intrinsically weaker regulatory framework and lower revenue protections; and
- serving principally thermal coal producers, in contrast to Aurizon Network who serves primarily metallurgical coal producers, who are relatively less vulnerable to sustained economic shocks.

⁷ New Hope submission, p 17.

⁸ New Hope submission, p 17.

⁹ New Hope submission, pp 17-20.

¹⁰ QCA, *Rate of return review - version 3*, February 2024, pp 78-79.

¹¹ QCA, Queensland Rail 2020 draft access undertaking, Decision, February 2020, p 36.

The QCA found that both Aurizon Network and ARTC HVCN have stronger regulatory frameworks to recover revenue due to their larger customer bases, which mean a reduction in volumes railed by a single customer or the loss of a customer can be recovered by increasing the access charges to remaining customers, using unders and overs accounting. This is not feasible for West Moreton coal, which must instead use a limited life loss capitalisation account, deferring revenue to a time when volumes have returned to higher levels. However, the limited life loss capitalisation amount approach does not guarantee revenue recovery nor contribute towards revenue smoothing.¹²

The QCA also found that West Moreton coal and ARTC HVCN, who serve predominantly thermal coal customers, face higher levels of systematic risk than Aurizon Network, who serves primarily metallurgical coal customers, as metallurgical coal producers are relatively less vulnerable to sustained economic shocks due to their relative margins.¹³

Our assessment

In our opinion a firm's systematic risk is not expected to change significantly over time, unless broad market factors such as regulatory frameworks or market conditions change. Our analysis demonstrated that an asset beta of 0.50, consistent with Queensland Rail's AU2 decision, lies within the range of regulated electricity and water businesses (as a lower bound) and toll roads (as an upper bound) using prevailing market data.

Table 2.1, reproduces our estimates of the mean of 10-year weekly asset betas alongside those determined in Queensland Rail's AU2 and presented in the QCA WACC review.

Table 2.1: Mean of 10-year weekly asset betas

Industry	Queensland Rail AU2	QCA WACC review	HK estimate, 30 April 2023
Electricity and water	0.38	0.39	0.39
Toll roads	0.51	0.57	0.59
Queensland Rail	0.50	N/A	0.50

Source: HoustonKemp analysis of Bloomberg data; QCA, Queensland Rail 2020 draft access undertaking, Decision, February 2020, p 35; QCA, Rate of return review – Appendix E, Final report, November 2021, pp 105-107.

This analysis demonstrates that there has been no significant change in market conditions that would affect the use of a AU2 asset beta of 0.50.

Further, there have been no significant changes in Queensland Rail's activities in the West Morton coal system that would undermine the QCA's the first principles analysis of the risks, which concluded that it was appropriate to select an asset beta at the upper end of this range (0.50) for Queensland Rail's West Moreton coal network.

Rather, it is arguable that maintaining the AU2 asset beta is conservative given that the lower bound has increased marginally and that the upper bound of the reasonable range has increased materially from 0.51 (AU2) to 0.59 (30 April 2023). In conclusion, in our opinion the systematic risks identified during the QCA's AU2 determination have not changed.

¹² QCA, Queensland Rail 2020 draft access undertaking, Decision, February 2020, p 37.

¹³ QCA, Queensland Rail 2020 draft access undertaking, Decision, February 2020, p 38.

Stakeholders submitted that QR's broader customer base and the fact that it is fully contracted represents a reduced systematic risk. New Hope also submitted that the systematic risk faced by Queensland Rail's West Moreton network is more similar to regulated energy/water businesses than toll roads, and should be aligned with these businesses. We note that New Hope's assessment of the systematic risk faced by the West Moreton coal system is limited to a first principles assessment, and does not consider the impact of the limited number of customers that use the West Moreton coal system.

However, at most, Queensland Rail's West Moreton coal network will have three operational mines (and therefore customers) during the AU3 period. This is compared to:

- approximately 35 mines owned by 11 coal producers on the HVCN;¹⁴ and
- approximately 50 mines served by Aurizon Network in Queensland.¹⁵

In addition, consistent with the QCA's observations in AU2, Queensland Rail faces greater exposure to volume risk than regulated energy/water businesses,¹⁶ which in our assessment has not changed for AU3.

Consequently, the risk to Queensland Rail from regulatory frameworks if volume forecasts do not materialise or a mine does not come online remain significant, as the limited loss capitalisation approach to revenues would still apply. This contrasts with Aurizon Network, ARTC HVCN and regulated energy/water businesses, who have sufficient customer bases to adopt unders and overs accounting to ensure revenue recovery.

New Hope's submits that the West Moreton System will have low systematic risk because it serves a commodity export market. We note that New Hope does not assess whether the level of systematic risk Queensland Rail faces from exposure to the thermal coal export sector is in fact low. In our opinion, there is no evidence to suggest that the level of systematic risk faced due to exposure to the thermal coal export sector is materially different to that in AU2, particularly given the increasing and uncertain shift towards decarbonisation. We discuss the implications of a decrease in the coal price on tariff affordability in section 3.3.2.

2.2.2 Submissions that regulatory changes have reduced Queensland Rail's systematic risk

Yancoal submission

Yancoal submits that the systematic risk that Queensland Rail's West Moreton coal network is exposed to has also been reduced by regulatory changes since AU2, ie:¹⁷

In addition, QR is proposing to further reduce the systematic risks faced by the West Moreton network through significant regulatory changes that are clearly designed to immunise it from the remaining volume risk (and that were not part of AU2), including:

- accelerated depreciated profiles for both existing and future capital expenditure (i.e., providing a return of capital before assets are physically expired) based on an estimated weighted average mine life; and
- volume based trigger for re-opening reference tariffs during the term.

¹⁴ Hunter Valley Coal Chain Coordinator, *HVCCC History – HVCCC today*, available at <https://www.hvccc.com.au/history/>, accessed 1 March 2024.

¹⁵ Aurizon Network, *Company overview*, available at <https://www.aurizon.com.au/company>, accessed 1 March 2024.

¹⁶ QCA, Queensland Rail 2020 draft access undertaking, Decision, February 2020, p 35.

¹⁷ Yancoal submission, p 8.

New Hope submission

Similarly, New Hope identifies the changed regulatory landscape between AU2 and AU3, ie:¹⁸

second, additional risk protection mechanisms have been proposed in AU3 – notably an accelerated depreciation profile to address stranding risk;

New Hope also submits that the volume trigger for review of reference tariffs proposed by Queensland Rail immunises it against changes in volume and shifts risks to producers.¹⁹ As such it states:²⁰

this provides a material reduction in QR's volume risk from the regulatory arrangements which exist under AU2, such that if this was to be accepted by the QCA as being appropriate, there should be a corresponding reduction in the asset beta. As a result it would clearly be inappropriate to simply adopt the equity beta from the AU2 decision as QR proposes to.

Our assessment

In our assessment, the amended approach to depreciation allows for accelerated recovery of depreciation based on expected mine life, reducing the long-term asset stranding risk. However, the new approach to depreciation does not protect Queensland Rail against broader revenue risks, as the depreciation allowance is based on a specific volume forecast, which may or may not materialise.

By way of example, in the event that a mine does not come online or has less volume than forecast, Queensland Rail is still exposed to revenue risk, as it cannot shift the entirety of the costs onto its other customers due to bill impacts. Put another way, it must still maintain the limited loss capitalisation approach to revenue recovery, despite the amended approach to depreciation.

For similar reasons, whilst the proposed volume trigger would allow Queensland Rail to revisit reference tariffs in the event that annual contractual tonnages fell below 7.5mtpa, it would remain unable to pass through its total efficient revenues to its remaining customers due to bill impacts concerns, and would still have to maintain the limited loss capitalisation approach to revenue recovery.

This is in contrast to other comparator businesses such as regulated energy/water businesses, Aurizon Network and ARTC HVCN, who can spread revenue reductions from decreased volumes amongst their sufficiently broad customer bases.

2.3 Top-down WACC adjustment

In determining the appropriate WACC to apply for Queensland Rail in AU2, the QCA provided a 160 basis point uplift to the debt risk premium to reflect the potential for short-term volume uncertainty that Queensland Rail faces relative to typical BBB-rated businesses. This debt risk premium uplift was calculated by taking the margin of difference between US BBB and BB corporate stocks. This converts to a 64 basis point top-down adjustment to the WACC based on a 40 per cent gearing ratio.²¹

Maintaining this same methodology to account for the short-term volume uncertainty Queensland Rail faces relative to typical BBB-rated businesses, Queensland Rail has proposed a 150 basis

¹⁸ New Hope submission, p 17.

¹⁹ New Hope submission, p 25.

²⁰ New Hope submission, p 25.

²¹ QCA, Queensland Rail 2020 draft access undertaking, Decision, February 2020, pp 43-45.

point uplift to the debt risk premium for AU3 based on a revised margin of difference between US BBB and BB corporate stocks. This converts to a 60 basis point top-down adjustment to the WACC based on a 40 per cent gearing ratio.²²

We discuss comments from stakeholders on the top-down WACC adjustment in the remainder of this section.

2.3.1 Concerns that the top-down WACC uplift is not justified due to changes in risk levels

Yancoal submission

Yancoal considers that regulated water infrastructure and electricity network providers are the closest comparators to Queensland Rail. Yancoal submits that Queensland Rail has a materially lower risk profile relative to AU2, such that a top-down adjustment is no longer justified.²³ Specifically, Yancoal notes:

- the New Acland Stage 3 mining lease and related water licence have been approved and mining and production volumes are ramping up, which was highly uncertain at the time of the AU2 approval;
- the New Wilkie mine has reopened and railed coal, whereas Peabody's previous Wilkie Creek operations were on care and maintenance for the entirety of AU2 with no evident prospect of that changing;
- QR is forecasting the line being fully utilised with 9.6 Mtpa of contracted coal capacity for the majority of the DAU3 term, contrasted with the 2.1 Mtpa ultimately approved as an appropriate forecast for AU2;
- QR indications are that QR's previous capitalised losses are likely to be largely recovered during the AU2 period; and
- QR has proposed very significant regulatory changes (beyond those include in AU2) that are clearly designed to immunise it from the volume risk including:
 - accelerated depreciated based on weighted average mine life; and
 - volume based trigger for re-opening reference tariffs during the term.

Finally, Yancoal submits that the implicit reason underpinning the top-down adjustment was the lower prevailing rate when point in time methodologies were being used to derive bottom-up estimates of the cost of debt and cost of equity, rather than a 10-year trailing average, and that the QCA was concerned the bottom-up WACC may have been understated relative to the risks borne by Queensland Rail as a long-term infrastructure provider. Yancoal states that this is no longer the position as the assessment is occurring in a higher rate environment, citing the 219 basis point increase in the estimated risk-free rate.²⁴

New Hope submission

Similarly to Yancoal, New Hope acknowledges that, at the time of the AU2 decision, there were several factors warranting a departure from the QCA's standard methodologies and risk assumptions for the benchmark efficient firm, including both short-term uncertainty and long-term risk factors that were not addressed through other risk protection mechanisms in AU2.²⁵

²² Aurizon Network submission, p 8.

²³ Yancoal submission, p 10.

²⁴ Yancoal submission, p 10.

²⁵ New Hope submission, p 15.

However New Hope submits that:²⁶

the circumstances in which the QCA will be making its decision for AU3 are markedly different – the short-term uncertainty present at the time of the AU2 Decision have been substantially addressed, while longer term risk factors have been addressed through other elements of QR’s proposal (particularly the proposed approach to depreciation). The cost of debt uplift is therefore no longer justified.

New Hope identifies that the QCA’s cost of debt uplift was specifically to address short term uncertainty due to New Hope’s stage three mine approval, and not its longer-term stranding risk, which should be addressed through an appropriate depreciation profile.²⁷

New Hope states:²⁸

To the extent that there is any remaining risk around thirdparty [sic] challenges to approvals for the New Acland Stage 3 project, these should not be reflected in the AU3 WACC. There is only one outstanding legal challenge (relating to a water licence) which is expected to be resolved prior to commencement of AU3. In any event, if there were to be any successful challenges to NHG’s approvals which led to the project not proceeding, this would trigger a right for QR to review reference tariffs and submit a draft amending undertaking to the QCA under cl 3.2 of Schedule D. Given this mechanism to review reference tariffs in the event of material decline in contracted volumes (which would be triggered if the New Acland Stage 3 project did not proceed), it would not be appropriate to account for this in the WACC for AU3.

Consequently, New Hope submits that it would be appropriate to revert to the QCA’s standard methodology for estimating the cost of debt based on benchmark rates for corporate bonds with a BBB rating.²⁹

Our assessment

Consistent with our discussion of the asset beta, Queensland Rail still faces significant short-term volume risk from its limited customer base. In addition, comparator firms for calculating the asset beta are regulated energy/water businesses and toll roads, which have large, diversified customer bases. As such, the WACC does not contemplate the volume risk that Queensland Rail is exposed to.

We understand that two of the three mines in the West Moreton system still provide significant short term volume uncertainty to Queensland Rail. Specifically:³⁰

- it is unclear whether New Ackland stage three will proceed, given that it is facing a legal challenge from the Oakey Coal Action Alliance regarding the Queensland government’s decision to grant an associated water license to New Ackland, which is expected to be heard sometime during calendar year 2024; and
- New Wilkie Energy entered receivership in early 2024 and the New Wilkie mine is currently in care and maintenance while alternatives for its future operation are considered.

[Redacted text block]

²⁶ New Hope submission, p 15.

²⁷ New Hope submission, pp 15-16.

²⁸ New Hope submission, p 16.

²⁹ New Hope submission, p 16.

³⁰ Aurizon Bulk Submission, p 60.

For these reasons in our opinion, retaining a WACC uplift for short-term volume uncertainty continues to be appropriate for Queensland Rail in AU3. Consistent with the QCA's approach in AU2, the margin of difference between BBB to BB corporate stocks represents a downgrade of West Moreton coal's financial risk profile and its business risk profile by one notch.³¹

The trigger mechanisms for tariff review identified by New Hope are designed to allow regulated businesses to change their reference tariffs in response to a material change in circumstances, such as a mine not going ahead, in order to ensure revenue recovery and prevent asset stranding. However, a trigger mechanism for tariff review does not address the effect of volume uncertainty on capital raising, which exists independently of whether or not the mines go ahead.

Volume uncertainty affects the interest rate that a benchmark below rail operator could get when raising capital. Higher volume uncertainty means higher risk, which limits the amount of financing that a below rail operator would be able to access at competitive rates, increasing the cost of accessing additional financing.

Consequently, in our opinion, the cost of debt uplift remains the appropriate methodology to compensate for volume uncertainty present on the West Moreton coal system.

2.3.2 Concerns that the top-down WACC adjustment is not consistent with the QCA's approach

Yancoal submission

Yancoal submits that the QCA's approach to determining whether the WACC is reasonable is that the QCA will:³²

- (i) consider whether the proposed WACC estimate is reasonable;
- (ii) if the QCA considers the WACC value may not be reasonable, determine a WACC value through:
 - a. undertaking a bottom-up estimation; and
 - b. then potentially applying a 'top-down' adjustment if the bottom-up estimation is not considered reasonable.

Yancoal continues that Queensland Rail's submission is inconsistent with the QCA's approach, as it:

...effectively assumes a top-down adjustment is justified due to its inclusion in AU2 tariffs without any robust assessment of the appropriateness and reasonableness of the bottom-up estimate proposed for DAU3.

Yancoal considers that the AU2 final decision demonstrates that is necessary to compare Queensland Rail's circumstances to other regulated comparator entities before any top-down WACC adjustment could be considered.³³

³¹ QCA, Queensland Rail 2020 draft access undertaking, Decision, February 2020, p 44.

³² Yancoal submission, p 9.

³³ Yancoal submission, p 10.

Our assessment

In its rate of return review, the QCA states:³⁴

Our view is that once a regulated entity proposes a WACC value, we will undertake analysis to determine whether the overall proposed WACC is reasonable, noting that this task will require the exercise of judgement.

The QCA continues that in considering whether a WACC is reasonable, information that it may consider (although it is not bound nor limited to this list) includes:³⁵

- methodologies or values the QCA considers appropriate, eg, where proposed values are consistent with previous regulatory decisions and there are no substantive reasons to change, such as previous beta values;
- the risks the firm faces within its regulatory framework; and
- the WACC of other Australian regulated entities with similar risk profiles, noting that in comparing values it is important to consider firm-specific factors that cause differences in risk profiles and other mechanisms in the regulatory framework.

Notably, one of the factors identified by the QCA that it may consider in assessing whether a WACC is reasonable is consideration of the risks that the firm faces.

Further, the QCA states:³⁶

The cost of debt is the cost to a firm of servicing and raising debt from a range of lenders. It is a fundamental component of the WACC, as debt financing is a significant cost to capital-intensive firms with long-lived assets such as regulated infrastructure entities.

It therefore appears consistent with the QCA's rate of return review to consider the risks faced by Queensland Rail that affect its ability to obtain debt financing, including significant volume uncertainty, in assessing whether the WACC is reasonable.

For the reasons we set out in our response in section 2.3.1, in our opinion a cost of debt uplift is an appropriate mechanism to manage the significant volume uncertainty on the West Morton coal system.

2.3.3 Concerns that the top-down WACC uplift compounds with accelerated depreciation

Aurizon Coal and Bulk submission

Aurizon Coal and Bulk is concerned with the compounding nature of different elements of QR's proposal, ie:³⁷

Asset stranding risk can be addressed by an uplift to the WACC (as was applied in AU2) or accelerated depreciation that allows reduced asset lives to reflect the possibility that the economic life will be less than the physical asset life⁴⁵. However, QR proposes both an acceleration of depreciation and an uplift to its WACC.

Our assessment

Consistent with our discussion in section 2.2.2 regarding the effect of regulatory changes on the asset beta, economic depreciation is designed to mitigate asset stranding risk in the long run, and

³⁴ QCA, Queensland Rail 2020 draft access undertaking, Decision, February 2020, p 20.

³⁵ QCA, Queensland Rail 2020 draft access undertaking, Decision, February 2020, p 20.

³⁶ QCA, Queensland Rail 2020 draft access undertaking, Decision, February 2020, p 33.

³⁷ Aurizon Coal and Bulk submission, p 56.

does not address short-term volume uncertainty. It follows that, in our assessment, having both the WACC uplift and the accelerated depreciation is appropriate.

In addition, having both a top-down adjustment and accelerated depreciation is not unique to the West Moreton coal network. For example, Aurizon Network has both accelerated depreciation and a top-down WACC uplift.³⁸

2.3.4 Requests for modelling clarification

Aurizon Network submission

Aurizon Network comments that applying a 60 basis point top down WACC adjustment and a 150 basis point adjustment to the cost of debt (after accounting for a 40 per cent gearing ratio) may not be equivalent on a post-tax basis, because:³⁹

As an adjustment to the cost of debt, the uplift would have been incorporated into a debt interest cost in the tax expenses (i.e. the uplift would have been tax neutral in the building blocks).

Aurizon Network considers it is unclear how Queensland Rail has applied the 60 basis point uplift in WACC to the cost of debt and equity used to calculate the revenue building blocks. Aurizon Network notes that building block revenues will be different if the top down uplift is applied to the cost of debt (ie, a 150 basis point adjustment to debt risk premium) or if the uplift is applied to both the cost of debt and equity. This is because any adjustment to cost of equity results in additional revenue allowance for benchmark net tax costs, while the adjustment to the cost of debt does not result in any additional net tax allowance.⁴⁰

Aurizon Network considers that adjusting the cost of debt alone may not be consistent with the QCA's preferred approach to making a top-down adjustment to the WACC. Aurizon Network notes that the QCA's final decision on Aurizon Network's 2017 draft access undertaking applied a 25 basis point increase to the overall WACC from 5.45 per cent to 5.70 per cent, which was achieved by making adjustments to both the cost of debt and cost of equity.⁴¹

Our clarification

We understand that Queensland Rail has achieved its 60 basis point uplift to WACC by adjusting the cost of debt only. This approach is consistent with the approach adopted in AU2 and corresponds to the most conservative approach and minimises the impact of the uplift on customer prices. It is also consistent with the QCA's approach in its rate of return guidelines, which is to adjust the bottom-up WACC if the QCA considers that the WACC is not reasonable.⁴²

Adopting Aurizon Network's recommendation of adjusting both the cost of equity and cost of debt would increase overall revenue allowance Queensland Rail can collect on the West Moreton system over DAU3.

³⁸ QCA, Aurizon Network's 2017 draft access undertaking | Decision, December 2018, p 53 and 73.

³⁹ Aurizon Network submission, p 8.

⁴⁰ Aurizon Network submission, p 8.

⁴¹ Aurizon Network submission, p 8.

⁴² QCA, Rate of return review – version 3, February 2024, p 17.

2.4 Calculating cost of debt based on simple average or weighted average

Queensland Rail has adopted an arithmetic (simple) trailing average cost of debt for DAU3, consistent with the QCA's preferred approach.⁴³ In the remainder of this section, we discuss concerns by stakeholders that a weighted average approach is more appropriate for calculating Queensland Rail's cost of debt.

2.4.1 Comments provided by stakeholders

Aurizon Network's view is that a single trailing average is appropriate when the regulatory asset base (RAB), and therefore level of debt, is relatively stable over time. However, Aurizon Network submits that, when the RAB is expected to change materially over time, then the cost of debt should be calculated based on a weighted average with reference to the value of the RAB.⁴⁴

Aurizon Network considers that calculating cost of debt based on weighted average would lead to a cost of debt estimate that is more aligned with actual borrowing costs associated with the capital expenditure profile.⁴⁵ Aurizon Network makes reference to comments made by QTC and the AER to support its view that calculating weighted average cost is appropriate when calculating cost of debt in the context of a changing RAB over time.⁴⁶

Aurizon Network has estimated the cost of debt for the West Moreton system using a simple average compared with a weighted average. Aurizon Network estimates that the cost of debt would be around 0.22 to 0.5 per cent higher for the West Moreton system during the five year AU3 period.⁴⁷

2.4.2 Our assessment

Our preliminary assessment is that both the simple average and weighted average approaches to calculating cost of debt have their merits.

We agree that a weighted average is likely to provide a more accurate estimate of the actual cost of debt. However, we also acknowledge that a weighted average approach results in greater complexity and departs from the QCA's existing methodology.

We note that we have not verified the accuracy of Aurizon Network's calculation of WACC under the two different approaches.

2.5 Clarifications

2.5.1 True up or annual updating

The cost of debt is calculated using a historical trailing average. The cost of debt could be updated annually or through a true-up at the end of the regulatory period. Aurizon Network states that Queensland Rail has not explained whether it proposes to have annual updates or true-up at the end of the regulatory period. Further, Aurizon Network mentions that the 2025 DAU does not

⁴³ QCA, *Rate of return review – version 3*, February 2024, section 5.6, pp 47-58.

⁴⁴ Aurizon Network submission, pp 12-14.

⁴⁵ Aurizon Network submission, pp 14-15.

⁴⁶ Aurizon Network submission, pp 12-13.

⁴⁷ Aurizon Network submission, p 12.

include appropriate drafting or provisions to amend or update the WACC during the five year regulatory period.⁴⁸

To illustrate the difference between annual update and end of term true up, Aurizon Network considers the situation where cost of debt is expected to remain above the trailing average over the regulatory period. In this scenario, Aurizon Network observes that true up at the end of the regulatory period could result in a significant true up, which:⁴⁹

appears contradictory to the purported benefits from the trailing average approach by providing more stable prices between regulatory periods through avoiding material changes in the cost of debt which may occur from the on-the-day approach.

We agree that Queensland Rail should nominate whether it proposes to have annual updates or true-up at the end of the regulatory period for changes in the trailing average cost of debt for DAU3.

We understand from discussions with Queensland Rail that it proposes annual updates to the trailing average cost of debt, which, as observed by Aurizon Network, should result in smoother trailing average than applying an end-of-period true-up.

2.5.2 Uplift of WACC

Aurizon Network submits that it is unclear from Queensland Rail's submission whether the WACC uplift is applied to both the cost of debt and equity, like AU1, or just the cost of debt, like AU2.⁵⁰

Consistent with the QCA's methodology for AU2, Queensland Rail only adopts a cost of debt uplift, and does not apply a WACC uplift to the cost of equity. We note that this is a conservative approach, as uplifting both the cost of debt and cost of equity would increase Queensland Rail's overall WACC allowance.

2.5.3 Trailing average – which period to use

Aurizon Network submits that the QCA's default approach to the averaging period for the trailing average cost of debt:⁵¹

...significantly exposes the regulated firm to the possibility of windfall gains and losses where it has not uniformly and consistently raised debt over the course of a year, and there is no suggestion that an efficient firm would finance debt in that way

Aurizon Network seeks clarification of whether Queensland Rail intends to nominate annual averaging periods or apply the default approach of the average of each month within the relevant year.⁵²

Queensland Rail proposes to maintain the default approach in the QCA's rate of return guidelines, which is taking the average of 12-monthly observations from April to March in advance of the next regulatory year, and removes administrative complexity of nominating averaging periods.⁵³

⁴⁸ Aurizon Network submission, p 11.

⁴⁹ Aurizon Network submission, p 13.

⁵⁰ Aurizon Network submission, p 8.

⁵¹ Aurizon Network submission, p 10.

⁵² Aurizon Network submission, p 11.

⁵³ QCA, *Rate of return review – version 3*, February 2024, pp 50-51.



3. Assessing the affordability of proposed tariff

Yancoal and New Hope have raised concerns regarding the affordability of the proposed reference tariff for DAU2. This section discusses these concerns and our response to the concerns raised.

3.1 Key issues raised by stakeholders

In our previous report, we assessed the affordability of recovering new capital investment and existing regulatory asset base (RAB) over a 14 year period, ie, the lower bound estimate of the weighted average remaining mine life for mines on the West Moreton system. This analysis is conservative, as Queensland Rail proposes to recover existing RAB over a 19-year period rather than a 14 year period. Our analysis found that recovering capital over a 14 year period would not lead to early exit of any of the three mines on the West Moreton system, and as such, we conclude that recovering capital costs over a 14 year period would be affordable.

Yancoal and New Hope raised concerns about the affordability of the proposed tariffs under DAU3. Broadly, these concerns fall into two areas, ie:

- that any increases to the tariffs from AU2 would be unaffordable for coal producers; and
- that any increases to the tariffs are inconsistent with the objectives of the QCA Act.

Consequently, Yancoal and New Hope submitted that, in evaluating tariffs, the QCA should:⁵⁴

- first, closely review each element of the building block methodology; and
- second, implement a tariff cap at an affordable level (below the building block level), to ensure tariffs do not result in coal mines exiting production.

Aurizon Network noted that the QCA would need to strike an appropriate balance between initiatives to address asset stranding risk and the associated impact on pricing.⁵⁵ It also commented that earlier adoption of any measures to address asset stranded risk would provide for a smoother transition for stakeholders.

We discuss the concerns raised by Yancoal and New Hope and our further assessment of tariff affordability in the remainder of this section.

3.2 Concerns that tariff increases would be unaffordable

Stakeholders note that the AU2 tariff was set at the 'affordable' tariff level rather than the 'ceiling' tariff level due to affordability concerns, and that any increases to the tariffs from AU2 would be considered unaffordable.⁵⁶

Yancoal submits that:⁵⁷

factors such as the higher proposed WACC, extensive capital expenditure program, higher operation and maintenance costs, and QR's accelerated depreciation proposal have resulted in a similar building blocks tariff which is materially higher tariff than the previously assessed

⁵⁴ Yancoal submission, p 5; and New Hope submission, p 7.

⁵⁵ Aurizon Network submission, p 20.

⁵⁶ Yancoal submission, p 4; New Hope submission, p 7.

⁵⁷ Yancoal submission, p 4.

affordability tariff (even accounting for escalation to FY\$26 - see red line added to the graph below), even under a 9.6 Mt/yr high volume forecast.

Yancoal notes that Cameby Downs' profitability and break-even point remains basically the same as it was at the time of the AU2 decision.⁵⁸ Given these factors, Yancoal considers that it is inappropriate to raise prices above the affordable tariff from AU2, because increases above that level are unaffordable.⁵⁹

Yancoal notes that the following factors that exacerbate its concerns regarding the affordability of the proposed reference tariff:⁶⁰

- the thermal coal pricing outlook is anticipated to be more subdued and pessimistic than the AU2 term, exacerbated by strong a relatively stronger Australian dollar (where producers' costs are mostly denominated) against the US dollar (where producers' revenue is mostly denominated); and
- the tariff appears to be able to increase beyond the headline rate through:
 - > recovery of loss capitalisation incurred in AU2;
 - > revised tariffs through the volume trigger; and/or
 - > increases in the trailing average cost of debt.

On this basis, Yancoal considers there is a material risk that:⁶¹

- (a) if the QCA was to approve a reference tariff at the headline level sought by QR that one or more of the West Moreton producers will cease production during the DAU3 terms; and
- (b) if QR then sought to socialise that same revenue expectation to the remaining producers using the volume trigger at that point, it will result in an even higher tariff that in turn is likely to result in a further producer or producers ceasing production (creating a vicious cycle of declining volumes).

New Hope submits that Queensland Rail has not explained how it has determined that a 31% increase above the "affordable" tariff will not adversely impact on the utilisation of the network. New Hope submits.⁶²

there is no increase on the current tariff which could be considered "affordable", because the existing tariff has been set at a level which risks reducing utilisation of the network by making the business of one or more of its customers unviable.

3.3 Our assessment of tariff affordability

In view of concerns raised by stakeholders, we have reassessed the affordability of proposed tariffs and whether there is a risk that proposed tariff could lead to an early exit of any of the three mines on the West Moreton system. Specifically, we have performed additional stress tests of our earlier analysis by considering:

- the profitability of the three mines operating on the West Moreton system over time;
- the implications of lower coal prices on tariff affordability; and
- the implications of higher below rail charges on tariff affordability.

⁵⁸ Yancoal submission, p 4.

⁵⁹ Yancoal submission, p 4.

⁶⁰ Yancoal submission, pp 5-6.

⁶¹ Yancoal submission, p 5.

⁶² New Hope submission, p 7.

Our analysis is based on revenue, costs and production estimates and forecasts produced by AME. This data has already been provided to the QCA. We present the results of our analysis in the remainder of this section.

3.3.1 Assessment of profitability over time

Some stakeholders have commented that, given the AU2 tariffs were set on an affordability basis, it follows that increases in prices above levels set in AU2 would raise affordability concerns. To evaluate the three coal mines' capacity to pay over time, we:

- first explore historical and forecast world coal prices between the 2013 and 2030 as prepared by AME; and then
- examine the profitability of the three mines operating on the West Moreton system during the same time period.

Historical and forecast coal prices between 2013 and 2030

Figure 3.1 presents historical and forecast coal prices prepared by AME for Newcastle 5,500 daily spot price and 6,300 daily spot price. We note that whilst individual mines will receive different price per tonne for their coal, the prices received are likely to follow a similar pattern to the thermal coal estimates shown below.

We also note that the analysis in the remainder of this section 3.3.2 and 3.3.3 does not rely on the prices displayed in Figure 3.1, but rather on AME's coal price estimates for each mine, which are adjusted from benchmarks based on known coal quality characteristics of each mine.

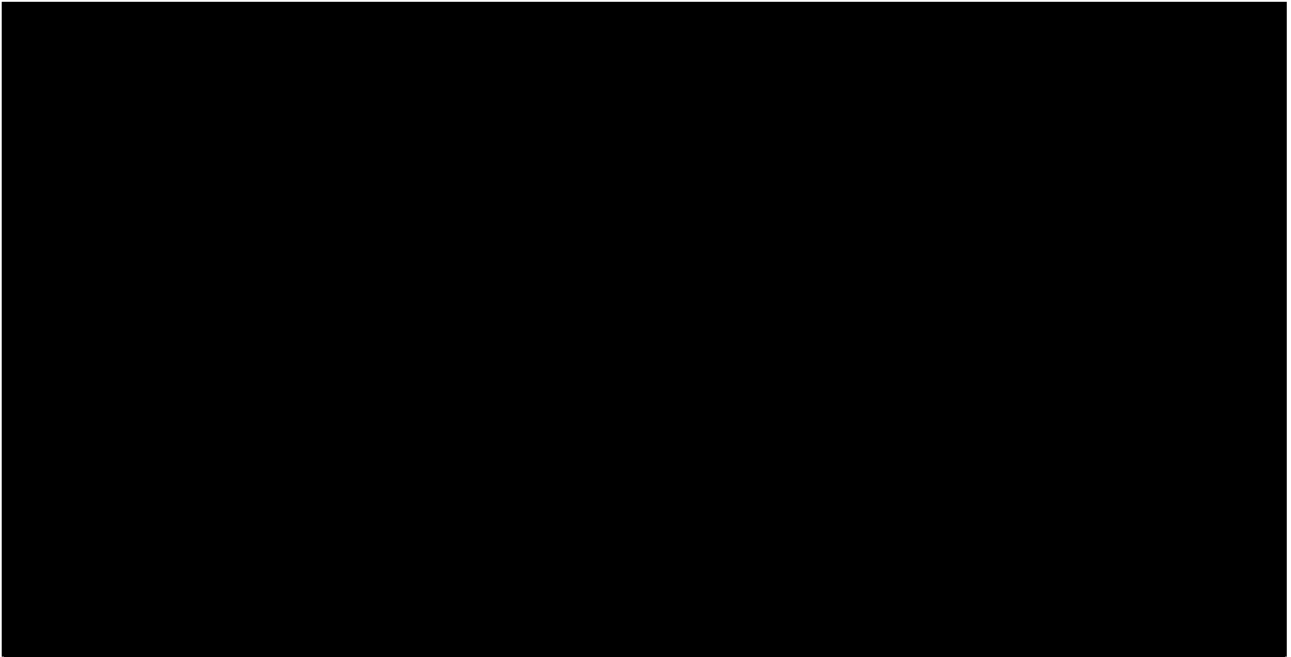
Figure 3.1 shows that:

- during the last 10 years, coal prices were at or near its their lowest point at the time when the QCA was making its decision for AU2 in 2020, around [REDACTED] for 5,500 kcal/kg coal and [REDACTED] for 6,300 kcal/kg coal; and
- coal prices have increased significantly and are expected to be [REDACTED] for 5,500 kcal/kg coal during the AU3 period, and [REDACTED] for 6,300 kcal/kg coal.

In summary, world coal prices are expected to be [REDACTED] higher during DAU3 period when compared to 2020. This suggests that miners' ability to pay for below rail train services are likely to be materially higher during DAU3 when compared to AU2.



Figure 3.1: AME Newcastle thermal coal daily spot price forecast (US\$/tonne)



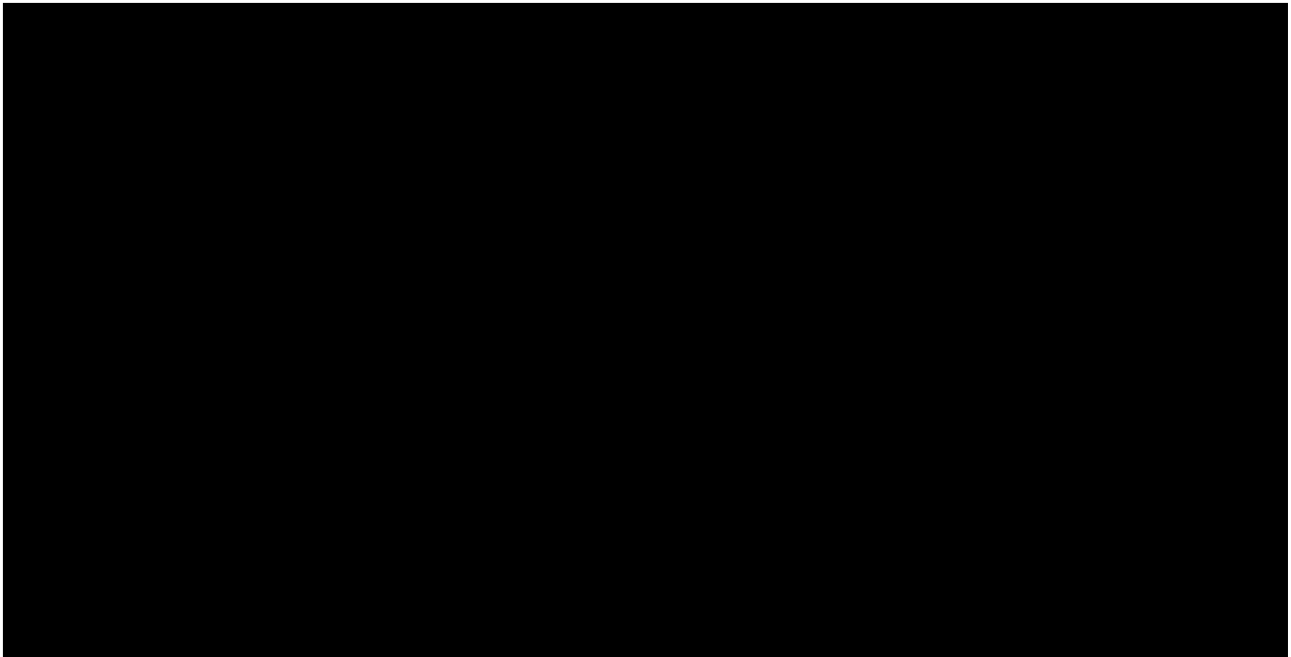
Source: AME data.

Profitability of mines operating on West Moreton system between 2013 and 2030

Figure 3.2 shows AME's estimated and forecast profit per tonne (\$US per tonne) for each of the three mines operating on the West Moreton system. This data show that whilst profitability was a particular concern at the time the QCA was making its decision for AU2, profit levels have increased significantly. For example, Cameby Downs and New Acland [REDACTED], but all three mines are expected to be profitable during the AU3 period.



Figure 3.2: EBIT for mines in the West Moreton basin based on current prices (US\$ per tonne)



Source: AME Research.

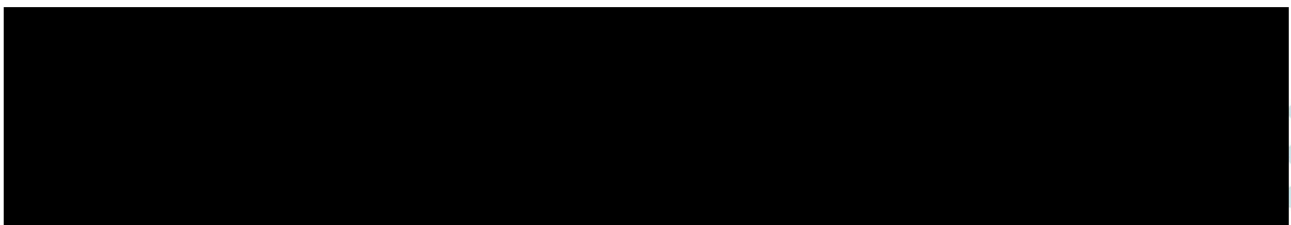
3.3.2 Implications of lower coal prices on tariff affordability

Yancoal has raised the concern that the proposed tariffs may not be affordable with lower coal prices. Aurizon Network has also suggested that the QCA consider the affordability of tariffs under different assumptions and scenarios.

In our previous work, we found that each of the three coal mines that would use the West Moreton system had a positive NPV based on earnings over the life of the mine. This assumes that the required rate of return on investment for each coal mine is [REDACTED], which we consider to be conservatively high.

To assess the potential implications of lower coal prices, we have calculated the break-even coal price for each mine using AME revenue and cost forecasts as an input. We have continued to assume that the required return for each mine is [REDACTED]. We set out the results of analysis in table 3.1 below.

Table 3.1: Coal price reduction required to cause mine to break even



Source: analysis using AME Research data.

This analysis demonstrates that Queensland Rail's proposed tariffs are affordable unless coal prices are more than [REDACTED]. We consider that this is a conservative estimate, [REDACTED], then coal prices could decrease further before the breakeven point is achieved.

3.3.3 Implications of higher below rail costs on tariff affordability

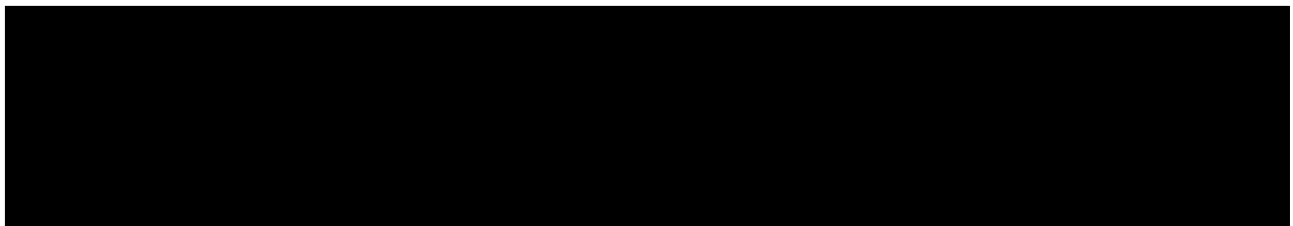
We explain in section 3.2 that Yancoal considers the reference tariff proposed by Queensland Rail could increase due to:

- recovery of loss capitalisation incurred in AU2;
- revised tariffs through the volume trigger; and/or
- increases in the trailing average cost of debt.

Given this, we have conducted further analysis to assess the implications of higher below rail charges on the overall affordability of the coal mines operating on the West Moreton system.

Similar to our assessment of lower coal prices above, we present the increase in below rail costs required to cause the mines to break even for both current AU2 charges and proposed DAU3 charges in table 3.2 below. We find that below rail prices for DAU3 would need to increase by approximately [REDACTED] before mines reach a breakeven point, [REDACTED].

Table 3.2: Reduction in below rail costs required to achieve breakeven point



Source: HoustonKemp analysis of AME data.

3.4 Concerns that tariff increases are inconsistent with the objectives of the QCA Act

3.4.1 Stakeholder submissions

Whilst Yancoal acknowledges the competing interests in section 138 of the QCA Act, it submits several criteria favour the adoption of an affordable tariff, ie:⁶³

- (d) the object of Part 5 of the QCA Act – given an unaffordable tariff will result in risks of stranding investment in, and inefficient use of, the West Moreton network (s 138(2)(a) and 69E QCA Act);
- (e) the legitimate business interests of the owner/operator of the service – as sustaining the projected high volume is critical for enabling the required investment and providing a return on and of that capital (s 138(2)(b) QCA Act);
- (f) the public interest in the line remaining viable and in the royalties, employment and economic contributions provided by the West Moreton coal producers continuing (s 138(2)(d) QCA Act);

⁶³ Yancoal submission, pp 6-7.

(g) the interests of persons who may seek access to the service (s 138(2)(e) QCA Act)...

Yancoal acknowledges the QCA is required to have regard to the factor that pricing should generate expected revenue that is at least enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved (sections 138(2)(g) and 168A(a) of the QCA Act). However, Yancoal submits that:⁶⁴

- this principle does not support QR's proposed tariff, which is based on costs that are not efficient and include higher than commensurate rate of return with regard to the risks actually borne by Queensland Rail providing access to the West Moreton system; and
- the QCA Act does not provide for this factor to have precedence over the other factors the QCA is required to have regard to under section 138(2) of the QCA Act.

3.4.2 Our assessment

We explain in section 3.3 that we do not find any indications that the proposed tariff will be unaffordable for the mines. As such, we do not find any evidence that the proposed tariff:

- increases asset stranding risk or inefficient use of the West Moreton network;
- contributes towards reduced volumes along the West Moreton network, to the detriment of the business interests of the owner/operator of the service;
- impacts the viability of the line; or
- negatively impacts the interests of persons seeking access to the West Moreton network.

In our opinion, allowing Queensland Rail to recover its capital investment when it is affordable to do so would promote multiple objectives contained in the QCA act as:

- it would be consistent with pricing principles set out in the Act (section 168A of the QCA Act), which requires setting prices so that expected revenue for the service is at least enough to meet efficient costs of providing access to the service;
- the legitimate interest of Queensland Rail as it has an opportunity to recover its efficient costs;
- the legitimate interest of existing users and potential access seekers, as the financial viability of the West Moreton system would otherwise be in question; and
- the public interest, as any financial shortfall would otherwise need to be funded by the Queensland Government

As such, we believe the tariffs proposed for DAU3 are consistent with the principles contained in section 138(2) of the QCA Act.

⁶⁴ Yancoal submission, p 7.

4. Implication of having a residual value

In this section, we discuss the economic implications of having a residual value at the end of the weighted average mine life.

4.1 Key issues raised by stakeholders

To address the potential for asset stranding, Queensland Rail has proposed shifting from depreciating assets over their technical life to their economic life. Both Yancoal and New Hope have submitted that given the capital projects are likely to benefit non-coal users after the cessation of coal traffic, there should be a residual value to reflect this. Specifically:

- Yancoal submits that:⁶⁵

... given that the new capital projects QR is proposing to invest in will have significantly longer physical lives than the economic life that QR is proposing, and that they will then presumably be useable and of benefit to non-coal users (livestock, grain and passenger), Yancoal suggests that the depreciation should be to a residual value rather than to the point of being completely depreciated over the accelerated depreciation period.

- New Hope submits:⁶⁶

Whether it is appropriate that both existing and new assets be fully depreciated with zero residual value by June 2044 when non-coal use of the system may continue, given that the relevant assets will have remaining lives of up to ~85 years at that time. Continued use of the system past 2044 will, if QR's proposal is accepted, represent a double-recovery and windfall for QR or a 'free ride' for the relevant users of the system.

4.2 Our assessment

The key issues raised by stakeholders can be summarised as follows:

- Queensland Rail has the potential to over-recover its efficient costs; and
- Non-coal users could potentially 'free-ride' unless a residual value is introduced.

We discuss whether not having a residual value could these to the outcomes raised by stakeholders and then assess the economic merits of having a residual value.

4.2.1 Regulatory frameworks for Queensland Rail prevent over-recovery

The change in depreciation framework will not result in over-recovery of capital costs as the pricing rules for non-coal users on the West Moreton system are different to the pricing framework for coal users. Specifically, non-coal users of the West Moreton network do not have a reference tariff. Instead, prices for non-coal users are set with reference to the pricing rules set out in its access undertaking.

Prices must be set such that the revenue collected by Queensland Rail falls between the ceiling and floor revenue limits. The ceiling revenue limit represents the maximum amount of revenue that can be collected by Queensland Rail from the provision of train services and ensures that

⁶⁵ Yancoal submission, p 12.

⁶⁶ New Hope submission, p 12.

Queensland Rail does not collect a revenue that exceeds the efficient costs of providing train services on a system.

The above discussion highlights that Queensland Rail cannot recover more than its ceiling revenue for providing train services on a system. It follows that there is no concern that Queensland Rail will recover more than its efficient costs.

4.2.2 Non-coal users are allocated a proportion of the costs under existing framework

Queensland Rail has historically allocated capital costs between coal and non-coal users based on their proportional use of the assets. For example, coal-specific assets (such as the coal-only sidings/balloon loop) are only allocated to coal users whereas common network assets are proportionally allocated to coal trains based on the proportion of train paths available to coal trains.

Costs that are allocated to coal users are rolled into the RAB for coal users when calculating reference tariffs. Costs that are not rolled in to the RAB for coal users are therefore allocated to non-coal users. By way of example, we set out Queensland Rail's proposed approach to allocating capital costs between coal and non-coal users for DAU3 in table 4.1.

Table 4.1: Proposed asset allocators to calculating opening RAB for coal for DAU3

	Proportion	Percentage
Pre-1995 Common Network	97/137	70.8 per cent
Post 1995 Common Network	97/113	85.8 per cent
Coal Specific	1/1	100.0% per cent

Source: Queensland Rail, Queensland Rail's DAU3 Explanatory Document, 17 November 2023 p 18

The reference tariff for coal haulage train services is calculated with reference to the RAB for coal users. As such, the depreciation profile for coal users does not affect the charges paid by non-coal users, as Queensland Rail maintains a separate RAB for coal and non-coal users. Non-coal users are allocated a proportion of costs under the existing framework, and the total amount allocated to non-coal users will not change because of the amended depreciation profile methodology.

In implementing the adjusted depreciation profile for coal users, the RAB for coal users would be depreciated to zero over the economic life of the assets (ie, 14 to 19 years). However, this is of no relevance to non-coal users, as the prices charged to these consumers are unrelated to the RAB for coal users and guided by different pricing principles.

We note that Yancoal and New Hope have not raised any concerns in relation to allocation of capital costs between coal and non-coal users. Further, New Hope has indicated that it supports Queensland Rail's proposed approach to allocating capital costs between coal services and non-coal services, stating that it: ⁶⁷

... accepts continuation of the allocation methodology which was approved for AU2.

⁶⁷ New Hope submission, p 8.

4.2.3 Queensland Rail does not have any reasonable prospects of recovering residual value

Yancoal and New Hope's submission appear to suggest that Queensland Rail recover any residual value from non-coal users. However, in our opinion, it is very unlikely that Queensland Rail will be able to recover any residual value or additional costs from non-coal users. In coming to this conclusion, we note that:

- Queensland Rail currently does not collect the ceiling amount from non-coal users on West Moreton system due to their limited ability to pay – it follows that Queensland Rail would not be able to collect additional revenue from non-coal users; and
- the financial situation on the West Moreton system following the cessation of coal traffic will be very challenging as revenue from coal users represents most of total revenue on the West Moreton network. It follows that recovering of any capital costs will become even less likely when compared to current operating circumstances.

Given this above, we conclude that the inclusion of residual value to be recovered from non-coal users would lead to economically inefficiency and be inconsistent with the QCA Act. This is because:

- Queensland Rail would have a financial disincentive to invest further in the West Moreton system, as Queensland Rail does not have any reasonable prospects of recovering any residual value from non-coal users; and
- the QCA Act requires that the QCA have regard to the pricing principles mentioned in section 168A when deciding whether to approve a draft access undertaking⁶⁸ – one of the pricing principles is that access prices should generate expected revenue for the service that is at least enough to meet efficient costs of providing service.⁶⁹

⁶⁸ QCA Act 1997, section 138.

⁶⁹ QCA Act 1997, section 168A.

5. Implication of asset optimisation

In this section, we discuss the economic implications of asset optimisation on the West Moreton system.

5.1 Key issues raised by stakeholders

Yancoal and New Hope have both raised concerns regarding the affordability of the proposed reference tariff for DAU3. We have discussed these concerns and our conclusion that Queensland Rail's proposed reference tariffs for DAU3 are affordable in section 3 of this report.

In view of concerns regarding the affordability of proposed tariffs, Yancoal states that asset optimisation should be considered, noting that:⁷⁰

... the very significant capital expenditure spend, justified largely based on the inadequate state of the current rail infrastructure, should give rise to serious questions about whether the existing regulatory asset base should be materially optimised downwards.

5.2 Our assessment

In section 3, we conclude that all three mines operating on the West Moreton system are expected to be profitable during AU3 period and that the proposed reference tariffs are affordable. It follows that the need for asset optimisation does not exist.

Notwithstanding, in our opinion, the write down of assets on the West Moreton system is inappropriate, inconsistent with objectives of the QCA Act, and could have material and significant consequences for investment in network structure throughout Queensland and Australia. In coming to this conclusion, we note that:

- the pricing principles in the QCA Act require that access prices should generate expected revenues for the service that is sufficient to meet efficient costs of providing services;
- Queensland Rail is highly exposed to the market in its ability to recover costs, which prevent it from charging above affordable tariff levels; and
- asset optimisation has broader implications for economic efficiency across all sectors regulated by the QCA.

Firstly, the QCA Act requires that access prices should generate expected revenues for the service that are sufficient to meet the efficient costs of providing services, plus a rate of return commensurate with the level of risk faced by the entity in providing those services.

The existing RAB reflects the efficient capital costs of providing access to the West Moreton network, as it has been assessed as efficient by the QCA. Any write down of the existing RAB would preclude Queensland Rail from recovering these efficient costs, which results in an economically inefficient outcome.

Secondly, market dynamics dictate the ability and timing for Queensland Rail to recover its total efficient costs. By way of example:

⁷⁰ Yancoal submission, p 14.

- in times of weak market conditions, such as those when the AU2 determination was made, Queensland Rail had a financial incentive to lower charges paid by access holders to affordable levels to prevent a decline in demand, resulting in Queensland Rail being unable to recover its total efficient costs; and
- in times of strong market conditions, it is efficient for Queensland Rail to recover these lost total efficient costs, in addition to its normal total efficient costs. In absence of this recovery of lost capitalisation, Queensland Rail is not provided revenue sufficient to compensate it for the provision of access to the West Moreton network.

Finally, asset optimisation has implications for economic efficiency for all sectors regulated by the QCA as it creates a regulatory precedence for writing off of investments that have been assessed as efficient by the QCA.

Several other regulatory agencies have identified the dangers of regulatory uncertainty on investment behaviour. For example:

- in its draft statement of principles for the regulation of transmission networks, the Australian Competition and Consumer Commission (ACCC) states:⁷¹

In a regulated environment, the actions of the regulator could influence the assessment of risk and expected returns by introducing elements of uncertainty and risk. Regulatory uncertainty weakens existing incentives for efficient behaviour, so that a higher rate of return is required for investment...

The potential for further reviews of the asset base and re-optimisation could create the perception of increased regulatory risk...

...it could be argued that it is unfair to write-off redundant assets which were initially built in good faith but only prove to be ill-advised with the benefit of hindsight. The Commission is sympathetic to such views but considers the mechanisms in place to provide for faster return of capital (depreciation) on assets at risk, places the means and decision to significantly diminish any possible commercial loss in the hands of the TNSP.

- in its rule determination for transmission network service providers (TNSPs), the Australian Energy Market Commission (AEMC) states:⁷²

A key mechanism for managing the investment risk for TNSPs was to 'lock-in' and roll forward the RAB from one regulatory period to the next. This aimed to give greater security to investors in the transmission system that their investments would be treated in an appropriate way over time. More specifically, the RAB would not be subject to optimisation at regulatory resets to reflect the economic value of the assets to users, which would otherwise present a significant risk to investors.

To summarise the concerns of the ACCC and AEMC above, asset optimisation creates regulatory uncertainty about whether service providers will be able to recover their efficient costs, which leads to allocative inefficiency, as it reduces the incentive for service providers to invest in regulated services.

⁷¹ ACCC, Draft Statement of Principles for the Regulation of Transmission Revenues, 27 May 1999, pp 5 and 52.

⁷² AEMC, Draft National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006, Rule Determination, 16 November 2006, p 98.



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Attachment 2: HoustonKemp Economists - Economic assessment of price differentiation of containerised goods and removal of take-or-pay arrangements



HOUSTONKEMP
Economists

Economic assessment of price differentiation of containerised goods and removal of take-or-pay arrangements

Draft report for Queensland Rail

8 March 2024

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Figures

Figure 1: Rail networks in Queensland



Executive summary

Queensland Rail submitted its 2025 draft access undertaking (DAU3) to the Queensland Competition Authority (QCA) in November 2023. If approved, DAU3 would replace Queensland Rail's existing access undertaking (AU2) from 1 July 2025. To inform its decision as to whether to approve DAU3, the QCA published DAU3 on its website and invited stakeholders to provide feedback on DAU3. The QCA received 9 submissions from stakeholders on DAU3, covering a wide range of different topics.

Queensland Rail has asked us to assess the economic implications of two proposed changes suggested by several stakeholders, being;

- price differentiation of containerised goods; and
- the removal of take-or-pay arrangements.

Economic implications of price differentiation of containerised goods

Several stakeholders provided submissions stating their desire for DAU3 to set clear rules enabling Queensland Rail to price differentiate under a greater range of circumstances.

Price differentiation has the potential to promote economic efficiency as it can facilitate the recovery of efficiency costs and can be used to send price signals to access holders and access seekers. Existing pricing rules allow for Queensland Rail to adjust its access charge based on the characteristics of the service provided, and broader costs and risks. However, existing pricing rules also limit Queensland Rail's ability to price differentiate, with the intention of preventing it from distorting competition in an upstream or downstream market.

We understand that Queensland Rail currently price differentiates where appropriate. For example, access charges for containerised freight are generally around 10 per cent lower when compared to bulk freight. Further, we understand that Queensland Rail sometimes offers discounts to new customers on a trial basis.

However, Queensland Rail currently does not price differentiate between different containerised goods. In our opinion, price differentiation of containerised goods would not promote the objectives set out in the QCA Act because:

- there are practical difficulties with price differentiating between containerised goods:
 - > Queensland Rail has limited information to infer the willingness to pay of different customer groups; and
 - > it is unclear if willingness to pay for rail transport is materially different between customer groups as willingness to pay is constrained by the cost of road transport, which is available to all customers;
- price differentiation would likely mean charging goods or owners a different price even when they are on the same train – this gives rise to competition concerns if these goods or owners operate in the same end market; and
- price differentiation would require customers to report on goods carried and require Queensland Rail to verify this information – this would increase the administrative burden for customers and Queensland Rail.

Economic implications of removal of take-or-pay

Queensland Rail generally applies a take-or-pay commitment to the train path charge in its agreements with customers, ie, a customer must pay that charge for the number of paths in its contract, regardless of whether they are used or not. Put another way, take-or-pay arrangements represent a fixed fee, as it is paid regardless of whether the path is used or not.

In our opinion, the removal of take-or-pay arrangements would be inconsistent with the objectives set out in the QCA Act. In coming to this conclusion, we note that:

- fixed charges are commonly used to facilitate the efficient recovery of fixed costs – this promotes:
 - > dynamic efficiency as take-or-pay arrangements improve Queensland Rail’s ability to recover its long run economic costs; and
 - > allocative efficiency as removal of take-or-pay arrangements would require Queensland Rail to increase its variable charge, which would mean variable charges are further removed from the marginal costs of providing the service; and
- the removal of fixed charges will result in allocative inefficiency as access holders have an incentive to over-contract on train paths and capacity may not be allocated to those that value it the most.

1. Introduction

The Queensland Competition Authority (the QCA) regulates third party access to certain infrastructure services in Queensland, including Queensland Rail's network. Potential access seekers have the right to seek access to Queensland Rail's network under the terms and conditions contained within Queensland Rail's access undertaking. The access undertaking also sets out the framework for negotiating access and development of access agreements.

The QCA is responsible for approving Queensland Rail's access undertaking. The current access undertaking, Access Undertaking 2 (AU2), expires on 30 June 2025. In light of its scheduled expiry, Queensland Rail submitted its Draft Access Undertaking 3 (DAU3) on 10 November 2023 and, once approved by the QCA, will become AU3 and be effective from 1 July 2025.

To inform its decision on whether to approve DAU3, the QCA has invited interested parties to make submissions. In response to this invitation, three stakeholders (Aurizon, Centrex and North West Phosphate) provided submissions stating their desire for DAU3 to set clear rules enabling Queensland Rail to price differentiate under a greater range of circumstances.^{1,2,3,4}

Further, stakeholders also submitted feedback regarding Queensland Rail's approach to setting access charges. Both Aurizon and Centrex expressed dissatisfaction with the current take-or-pay arrangements,^{5,6} with GrainCorp stating that:⁷

QR can use its natural monopoly powers to impose "take it or leave it" non-price terms and conditions and operational decisions on access seekers such as GrainCorp, which can have immediate and long-term commercial ramifications on GrainCorp's ability to meet its operational targets and not suffer significant commercial imposts. Different access seekers can also be vulnerable to inappropriate risk allocation that are reflected in the commercial terms of access agreements and other contractual documents.

Within this context, Queensland Rail has asked us to prepare a report setting out our opinion on the following topics:

- the appropriateness of price differentiating between different containerised freight; and
- the implications of removal of take-or-pay arrangements.

The remainder of this report is structured as follows:

- section 2 describes the context and outlines the current negotiation framework and pricing rules;
- section 3 sets out the assessment frameworks we have used, which are consistent with those that apply to the QCA under the QCA Act;
- section 4 examines the appropriateness of price differentiating between different containerised freight; and

¹ Aurizon, *Queensland Rail 2025 Draft Access Undertaking submission to the QCA*, 2 February 2024, p 27 and 28.

² Aurizon, *Queensland Rail 2025 Draft Access Undertaking submission to the QCA*, 2 February 2024, p 4 and 30.

³ North West Phosphate, *North West Phosphate submission to the Queensland Competition Authority on Queensland Rail's 2025 Draft Access Undertaking*, 1 February 2024, p 2.

⁴ Centrex, *Queensland Rail's draft access undertaking 3 (DAU3)*, 31 January 2024, p 1-2.

⁵ Centrex, *Queensland Rail's draft access undertaking 3 (DAU3)*, 31 January 2024, p 1-2.

⁶ Aurizon, *Queensland Rail 2025 Draft Access Undertaking submission to the QCA*, 2 February 2024, p 4 and 30.

⁷ Graincorp, *Re: Queensland Rail 2025 Draft Access Undertaking (DAU3) – GrainCorp supplementary submission to QCA*, 16 February 2024, p 3.

- section 5 assesses the implications of removing take-or-pay arrangements.

2. Background and context

In this section, we set out the details of Queensland Rail’s network, the negotiation framework and pricing rules under AU2.

2.1 Queensland Rail’s network

Queensland Rail’s network extends 6500 kilometres across Queensland. The rail network is diverse both in its task and use, and includes:

- intermodal and general freight on the North Coast Line;
- bulk minerals on the Mount Isa Line;
- coal on the West Moreton Line; and
- passenger services predominantly in south-east Queensland.

Figure 1: Rail networks in Queensland



2.2 Most of Queensland Rail's network is financially unviable

In contrast to other regulated infrastructure sectors, such as water services and electricity and gas networks, Queensland Rail does not receive sufficient revenue from access charges to recover its costs for most of its lines. In other words, the revenue collected by Queensland Rail is materially below the long run economic costs of providing the service, except for the West Moreton line. Given this, Queensland Rail's entire network is supported by Transport Services Payments from the Queensland government, except for the Mt Isa line.

The fundamental constraint on Queensland Rail's ability to generate revenue to recover its costs is competition from road transport for a material proportion of its freight traffic, particularly containerised freight. In other words, road transport is a viable substitute for rail, particularly for trips involving short to medium distances. It follows that Queensland Rail's ability to set access charges is constrained by the cost of road freight – Queensland Rail cannot charge more than the cost to transport the freight by road, since its users would otherwise switch to road transport.

Queensland Rail is not vertically integrated, ie, Queensland Rail does not compete with the freight operators for which it is providing access for. This means that concerns in relation to potential anti-competitive conduct behaviours (such as margin squeezes, discriminatory access quality and raising competitors' costs) are not a relevant consideration for Queensland Rail.

2.3 Pricing arrangements on Queensland Rail's network

The pricing rules that apply to coal traffic using the West Moreton and Metropolitan lines are different to those that apply to other services, reflecting differences in Queensland Rail's ability to recover its costs. These are discussed in further detail below.

Reference tariffs on West Moreton and Metropolitan lines for coal traffic

The West Moreton System and the Metropolitan System are the only two rail systems on Queensland Rail's network that have a reference tariff. The reference tariff applies to coal haulage services and acts as price cap for a reference service. It is a two-part tariff, comprising:

- a per train path charge; and
- a gross tonne kilometre (GTK)-based charge.

The reference tariff is calculated so that Queensland Rail can recover the ceiling revenue limit. It represents the maximum amount that Queensland Rail can charge and is subject to approval by the QCA.

Pricing rules that apply to other services

Queensland Rail does not have a reference tariff for non-coal services (and coal services on systems other than West Moreton and Metropolitan). Rather, Queensland Rail is required to comply with a set of pricing principles, which we set out below in their order of precedence:

- limits on price differentiation, which set out when Queensland Rail can price differentiate, noting that Queensland Rail cannot price differentiate between access seekers and access holders in circumstances where:
 - > the characteristics of the train services are alike; and
 - > the access seeker(s) and access holder(s) are operating in the same end market;
- price limits, which set out that expected access revenue should fall within:
 - > a ceiling limit, which reflects the standalone efficient cost of providing the service; and
 - > a floor limit, which reflects the incremental cost of providing access;

- network utilisation, so that access charges may be determined when capacity on a part of the network may be insufficient to meet requests of all access seekers; and
- revenue adequacy, whereby expected revenue should cover the efficient cost of providing access, including a return on investment.

The limits on price differentiation are to prevent access providers giving an access seeker or access holders an unfair competitive advantage over its competitors by providing it with preferential treatment in its access agreement, ie, when access seekers and access holders are in the same market. This is consistent with the requirement is set out in the QCA Act, ie:⁸

In providing access to a declared service, an access provider must not unfairly differentiate between users of the service in a way that has a material adverse effect on the ability of 1 or more of the users to compete with other users.

We explain above that Queensland Rail is not vertically integrated and so has no incentive to differentiate between access seekers and holders in order to favour its own services (because it does not offer any other services that depend on its own access service).

We understand that Queensland Rail currently charges a two-part tariff for other services, comprising:

- a per train path charge; and
- a gross tonne kilometre (GTK)-based charge.

⁸ Queensland Competition Authority Act 1997, Clause 168C

3. Assessment framework

3.1 QCA's assessment framework

The QCA Act is the foundational reference point for decisions made by the QCA. The act requires that the QCA make decisions in a manner that is consistent with the QCA Act. In relation to the approval of access undertakings, the QCA's assessment criteria are:⁹

- (a) promote the economically efficient operation of, use of and investment in, significant infrastructure by which services are provided, with the effect of promoting effective competition in upstream and downstream markets.
- (b) the legitimate business interests of the owner or operator of the service
- (c) if the owner and operator of the service are different entities – the legitimate business interests of the operator of the service are protected
- (d) the public interest, including the public interest in having competition in markets (whether or not in Australia)
- (e) the interests of persons who may seek access to the service, including whether adequate provision has been made for compensation if the rights of users of the services are adversely affected
- (f) the effect of excluding existing assets for pricing purposes
- (g) the pricing principles ... that the price should:
 - a. generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved
 - b. allow for multi-part pricing and price discrimination where it aids efficiency
 - c. not allow a related access provider to set terms and conditions that discriminate in favour of the downstream operations of the access provider or a related body corporate of access provider or a related body corporate of the access provider, except to the extent the cost of providing access to other operators is higher; and
 - d. provide incentives to reduce costs or otherwise improve productivity and
- (h) any other issues the authority considers relevant

Efficiency is a key concept underpinning the QCA's assessment criteria. 'Efficiency' is a term of art in economics and is widely accepted by economists as having three distinct dimensions, being: ¹⁰

- **productive efficiency**, ie, production using a least-cost combination of inputs;
- **allocative efficiency**, ie, production of an optimal set of goods and services, which is allocated so as to provide the maximum benefit to society; and
- **dynamic efficiency**, ie achieving productive and allocative efficiency over time, in the face of changes in technology and consumer preferences.

⁹ QCA, *Queensland Rail 2020 Draft Access Undertaking*, February 2020, p 2

¹⁰ For further discussion of the dimensions of efficiency and their relation to public policy see Productivity Commission, *On efficiency and effectiveness – some definitions*, May 2013.

Each of these dimensions of efficiency is reflected in the architecture of the QCA's assessment, particularly criteria (a) and (g). By way of explanation:

- the reference to efficient 'operation of' and 'investment in' significant infrastructure refers to the productive dimension of efficiency, ie, this is promoted if decisions made by the QCA promote the supply of infrastructure services using the least cost combination of both capital and operating inputs;
- the reference to efficient 'use of' significant infrastructure refers to the allocative dimension of efficiency, ie, this is promoted if decisions are made that give rise to a level and structure of prices that both recover the cost of making infrastructure services available and maximise the extent to which infrastructure services are allocated to those consumers that derive the greatest benefit from them without discrimination, so as to maximise the benefit to society; and
- dynamic efficiency is the promotion of productive and allocative efficiency over time, ie, this is promoted if decisions are made that balance the pursuit of productive and allocative efficiencies for current consumers with the requirement to invest for productive and allocative efficiency gains in the long term.

Criterion (a) also makes explicit reference to promoting efficient competition in upstream and downstream markets. QCA decisions should therefore avoid outcomes that may have a detrimental effect on competition outcomes in related upstream and downstream markets.

The final relevant part of QCA's assessment criteria is to protect the interests of the owners and operators, and of potential access seekers. We note that these criteria make no distinction between existing access holders or new access seekers.

3.2 Assessment framework

We have assessed Queensland Rail's proposed revised price differentiation approach by reference to whether it promotes the objectives of the QCA Act identified above, ie, whether it promotes:

- the three dimensions of efficiency;
- competition in upstream and downstream markets; and
- protects the interest of Queensland Rail, existing access holders, and potential access seekers.

Where relevant, we have also considered practicalities of proposed changes by stakeholders and whether they comply with current pricing rules.

4. Appropriateness of price differentiation for containerised goods

Queensland Rail has received feedback from its customers that it should price differentiate between different containerised goods. We set out this feedback and our assessment of the appropriateness of price differentiating between different containerised goods below.

4.1 Key issues raised by stakeholders

Stakeholders allege that while existing rules allow Queensland Rail to price differentiate, it does not price differentiate to the extent that it is allowed. Aurizon, North West Phosphate and Centrex stated in submissions that they would like amendments to both clarify the circumstances under which Queensland Rail may price differentiate and to increase its application of price differentiation.

Specifically, Aurizon submitted that DAU3 should be amended to:¹¹

- clearly allow, under CI 3.3 (“Limits on price differentiation”), that:
 - QR may apply price differentiation, including through differentiating access charges for different products on multi-product [SIC] train, in order to grow rail volumes, either through supporting and incentivising emerging demand, to support ‘road to rail’ modal conversion and to maintain current demand vulnerable to road based competition; and
 - QR may differentiate to reflect the different market value of non-premium paths compared to premium paths within a given market.

Aurizon also recommended that a schedule be added which includes service specific negotiation criteria for multi-commodity freighter services on the Mt Isa line, stating that these negotiation criteria should clearly set out the circumstances in which price differentiation will be applied for different products on those services.¹²

North West Phosphate submitted that it would welcome changes where Queensland Rail would have a greater incentive to price differentiate between access seekers, as this approach would enable smaller, less profitable junior miners to scale production and better access new markets.¹³ It supported this by stating that:¹⁴

Currently all containerised freight attracts the same price, but the transported products have different markets and attract different prices. Differentiating between mining outputs, and attributing lower access prices to products sold in global markets with lower margins, would provide an economic incentive to junior mine development.

Centrex took a stronger position, suggesting that Queensland Rail did not adhere to price discrimination requirements:¹⁵

We wish to highlight that there is a perceived lack of adherence by Queensland Rail to price discrimination requirements.

¹¹ Aurizon, *Queensland Rail 2025 Draft Access Undertaking submission to the QCA*, 2 February 2024, p 27 and 28.

¹² Aurizon, *Queensland Rail 2025 Draft Access Undertaking submission to the QCA*, 2 February 2024, p 4 and 30.

¹³ North West Phosphate, *North West Phosphate submission to the Queensland Competition Authority on Queensland Rail’s 2025 Draft Access Undertaking*, 1 February 2024, p 2.

¹⁴ North West Phosphate, *North West Phosphate submission to the Queensland Competition Authority on Queensland Rail’s 2025 Draft Access Undertaking*, 1 February 2024, p 2.

¹⁵ Centrex, *Queensland Rail’s draft access undertaking 3 (DAU3)*, 31 January 2024, p 1.

Centrex cited sections of the QCA Act 1997 and AU2 to support this, and argued that Queensland Rail's defence was illegitimate, stating that:¹⁶

The argument that all miners are direct competitors and therefore price discrimination is not appropriate is incorrect and detrimental.

4.2 Existing limitations on price differentiation

Price differentiation relates to a supplier offering different prices to customers. Suppliers are only able to differentiate under conditions in which:

- different groups of customers have different willingness-to-pay;
- the supplier is able to infer the group to which a customer belongs;
- arbitrage is not possible; and
- customers offered a high price are not lost to competitors.

Existing pricing rules allow for Queensland Rail to adjust its access charge based on the characteristics of the service provided, and broader costs and risks. It follows that Queensland Rail can provide an improved price signal to access holders and access seekers, thereby promoting allocative efficiency because users who value a higher quality train path or certain departure or arrival times will be allocated those paths.

However, existing rules also place limits on Queensland Rail's ability to price differentiate. Specifically, these limits include that:¹⁷

(d) In formulating Access Charges for a Train Service for which there is no applicable Reference Tariff, Queensland Rail will not differentiate between Access Seekers and Access Holders in circumstances where:

- (i) the characteristics of the Train Services are alike; and
- (ii) the Access Seeker(s) and Access Holder(s) are operating in the same end market.

(e) For the purposes of clause 3.3(d), Queensland Rail will determine whether the characteristics of the Train Services are alike having regard to matters including:

- (i) location;
- (ii) duration and quality of the Train Path;
- (iii) nature of the Train consist;
- (iv) longevity of Access; and
- (v) arrival and departure times of the day and week.

These limitations are consistent with the objectives within the QCA Act as it prevents Queensland Rail from distorting competition in an upstream or downstream market.

4.3 Examples of price differentiation by Queensland Rail

Queensland Rail had advised that it uses price differentiation where it considers appropriate and aids efficiency, in line with the limitations discussed in section 4.2. Queensland Rail has advised the following examples where it:

¹⁶ Centrex, *Queensland Rail's draft access undertaking 3 (DAU3)*, 31 January 2024, p 1-2.

¹⁷ Queensland Rail, *Access undertaking 3, Draft*, 10 November 2023.

Further, it is unclear whether there would be material differences in willingness to pay between different customers. For containerised freight, Queensland Rail generally competes with road transport for goods that have less time sensitivity and are travelling over long distances. As road transport is a common option available to all customers and determines the willingness to pay for rail transport, it is unclear whether there are likely to be material differences in willingness to pay for rail between different customers.

4.4.2 Price differentiation of containerised freight could give rise to competition concerns

There are a limited number of above rail operators that transport containerised freight on Queensland Rail's network. For example, Aurizon Network is the only above rail operator that transports containerised freight on the Mt Isa line.

Further, a containerised train usually carries multiple goods, which are owned by multiplied customers – this is in contrast to bulk trains that usually transport one commodity per train, which may be owned by one owner. Price differentiation based on goods or owners would mean that a different charge would apply to different goods/owners even if they are on the same train. This would raise potential competition concerns if the owners and/or goods are in the same end market.

4.4.3 Price differentiation would increase the administrative burden for Queensland Rail and its customers

Price differentiation would require Queensland Rail to have knowledge of the goods contained in each container or the owner of these goods. Queensland Rail does not have oversight of the contents of containers that are carried on its network. This means that Queensland Rail would not be able to verify the charge that should be applied to each train. This problem is amplified by the fact that, in many cases, a single container may contain multiple types of goods from multiple suppliers.

In order for Queensland Rail to successfully implement a price differentiation approach based on customers or goods, Queensland Rail will need to have knowledge of the goods contained in each container and the end customer. This information would need to be reported by customers and verified by Queensland Rail. It follows that price differentiation of containerised goods would increase the administrative burden for Queensland Rail and its customers.

4.4.4 Overall conclusion

In our opinion, price differentiation of containerised goods would not promote the objectives set out in the QCA Act because:

- there are practical difficulties with price differentiating between containerised goods:
 - > Queensland Rail has limited information to infer the willingness to pay of different customer groups; and
 - > it is unclear if willingness to pay for rail transport is materially different between customer groups as willingness to pay is constrained by the cost of road transport, which is available to all customers;
- price differentiation would likely mean charging goods or owners a different price even when they are on the same train – this gives rise to competition concerns if these goods or owners operate in the same end market; and
- price differentiation would require customers to report on goods carried and require Queensland Rail to verify this information – this would increase the administrative burden for customers and Queensland Rail.

5. Implications of removing take-or-pay arrangements

Queensland Rail has received feedback from its customers that it should remove take-or-pay arrangements. In this section, we set out this feedback and examine the implications of doing so.

5.1 Feedback received from stakeholders

Feedback from stakeholders of Queensland Rail indicated dissatisfaction around existing take-or-pay arrangements.

Specifically, Centrex (whole owner of Agriflex) submitted that fixed take-or-pay path charges are a significant risk to all operators, and that it would like to see alternative contractual arrangements. It stated that:¹⁸

The current system of path charges is a disincentive to using the rail service. The fixed “take or pay” path charges (which account for ~60% of the rail charges), is a significant risk to all operators but in particular smaller junior mining operations in a start up situation. These types of operations can encounter irregular production issues while starting operations producing an intermittent production profile which in turn introduces a risk of billing regular train services. Given the declining volumes being inexperienced by the Mt Isa rail line, it seems that there is sufficient excess capacity for all potential users without the use of fixed path charges. Many customers are opting for 6 month access agreements to remedy this situation providing Queensland Rail with short term contracts underpinning their long life assets.

Agriflex would like to see alternative contractual arrangements that incentivise new entrants, therefore increasing volumes and driving down unit rates.

Similarly, Aurizon noted that:¹⁹

take-or-pay amounts are disproportionate to the cost that QR could avoid if the service ceased to operate.

5.2 Existing take-or-pay arrangements

Queensland Rail charges its customer for access on the basis of:

- a per train-path charge; and
- a gross tonne kilometre (GTK)-based charge.

Queensland Rail generally applies a take-or-pay commitment to the train path charge in its agreements with customers, ie, a customer must pay that charge for the number of paths in its contract, regardless of whether they are used or not. Put another way, take-or-pay arrangements represent a fixed fee, as it is paid regardless of whether the path is used or not.

5.3 Our assessment

Fixed charges are very common in industries with high levels of fixed costs. For example, electricity tariffs generally include:

- a fixed daily charge, which reflects the cost of access to the service; and

¹⁸ Centrex, *Queensland Rail's draft access undertaking 3 (DAU3)*, 31 January 2024, p 4.

¹⁹ Aurizon, *Queensland Rail 2025 Draft Access Undertaking submission to the QCA*, 2 February 2024, p 21 and 30.

- one or more variable charges, which reflects the cost of *use* of the service.

Similarly, take-or-pay arrangements are also very common in water, telecommunication, rail and gas sectors.

In the absence of increasing returns to scale, textbook 'efficient pricing' requires setting marginal prices equal to marginal costs.²⁰ In other words, setting the variable charge component to be equal to the marginal cost of production will promote efficient use of the service. However, in the presence of fixed costs, such a pricing approach will mean the service provider will not be able to recover its costs. This is of particular relevance for Queensland Rail given that a large proportion of its costs are fixed.

If prices are set at marginal cost, dynamic efficiency will not be promoted because the service provider will have a financial disincentive to continue to provide the service over time as it is unable to recover its fixed costs. It follows that in the long run there is allocative inefficiency as the service is no longer provided, even if the value obtained by users is higher than the long run economic costs of providing the service.

It follows that prices need to be above marginal cost so that a service provider can recover its fixed cost. Fixed costs are recovered via a fixed charge and/or a mark-up of its variable charge so that is above the marginal cost of providing the service.

Service providers seek to ensure recovery of fixed costs in a manner that limits the departure from the efficient outcomes that would arise under marginal cost pricing. Having a fixed charge, such as take-or-pay arrangements, reduces the mark-up required on the variable charge. Given this, it is common for service providers to recover some of its fixed costs through fixed charges, as the recovery of fixed costs entirely from variable charges would involve significant mark-ups, which could lead to allocative inefficiency.

Further, as a matter of principle, capacity held by access holders can no longer be provided to other access holders and access seekers. Where capacity can only be held one party at a time, allocative efficiency is enhanced when it is held by parties that value it the most.

If take-or-pay arrangements are removed, then there is no longer a cost to contract capacity. However, contracting of train path has an opportunity cost for Queensland Rail as train paths that have been contracted to one access holder are no longer available to other access holders or seekers. This misalignment between the price the access holder pays for the right to contract a train path (nil) and the cost Queensland Rail incurs by providing that right to that train path (which could potentially be high) would lead to allocative inefficiency as access holders and seekers have an incentive to over-contract train paths so that capacity is not held by those that value it the most.

By way of summary, in our opinion, the removal of take-or-pay arrangements would be inconsistent with the objectives set out in the QCA Act. In coming to this conclusion, we note that:

- fixed charges are commonly used to facilitate the efficient recovery of fixed costs – this promotes:
 - > dynamic efficiency as take-or-pay arrangements improve Queensland Rail's ability to recover its long run economic costs; and
 - > allocative efficiency as removal of take-or-pay arrangements would require Queensland Rail to increase its variable charge, which would mean variable charges are further removed from the marginal costs of providing the service; and
- the removal of fixed charges will result in allocative inefficiency as access holders have an incentive to over-contract on train paths and capacity may not be allocated to those that value it the most.

²⁰ See, for example: Beggar, D, *Access pricing and competition*, 2001, page 1.



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