

Queensland Rail 2025 Draft Access Undertaking

Submission to QCA



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Overview

Aurizon welcomes the opportunity to provide a submission to the Queensland Competition Authority (QCA) in response to the Queensland Rail (QR) 2025 Draft Access Undertaking (DAU3).

Aurizon is Australia's largest rail operator, with its operations extending across Australia, including the large scale bulk haulage of coal and iron ore, integrated supply chain services for other bulk products and the recent introduction of inter-city containerised freight services. Aurizon's operations extend across most of QR's rail systems, and the ability to efficiently negotiate 'fit-for-purpose' access to QR's network is critical to Aurizon's ability to offer attractive rail haulage services to its customers.

In preparing this submission, Aurizon has separated consideration of the access undertaking framework and standard access agreement (SAA) (addressed in Part 1) and West Moreton (WM) reference tariffs (addressed in Part 2).

Access Undertaking Framework

Aurizon recommends the following changes be made to DAU3:

1. With a presence in all mainland states and the Northern Territory, Aurizon's operations fall under nearly all of Australia's multitude of different rail access regimes. Reflecting this experience, Aurizon strongly supports the case for a more harmonised approach to rail access regulation within Australia. This does not mean a 'one size fits all' approach - different networks have very different characteristics in terms of volume and type of traffic, established pricing methodologies and the relevance of the ceiling price constraint, and the extent of vertical integration, and these differences should continue to be accommodated in different regulatory requirements. Further, Queensland's narrow gauge network inevitably requires some bespoke arrangements. However, even allowing for these differences, there is significant opportunity to improve national consistency and harmonisation in aspects of the regulatory frameworks, enabling operators to have a more efficient process for negotiating and managing access across their total operating footprint. Accordingly, Aurizon recommends that, wherever possible, QR and the QCA should pursue increased consistency in access negotiation frameworks, the standard contracting terms for access, and in access management methods applied. Aurizon has proposed a number of specific amendments throughout this submission to achieve this.
2. Recognising – as has previously been highlighted by the QCA – the market power that QR continues to hold and the limited circumstances in which it has a natural incentive to maximise freight volumes on its network¹, Aurizon recommends DAU3 be amended to better facilitate balanced negotiations between QR and access seekers, and negotiated outcomes that truly reflect the needs of the dependent markets. This should include:
 - a. Specification of additional negotiation and pricing objectives to:
 - include negotiation objectives as a new sub-clause within the Preamble, broadly modelled on the negotiation objectives in ARTC's Interstate Access Undertaking (IAU) and which would specifically include a commitment by QR to promote the economically

¹ QCA (2020); Final Recommendation – Queensland Rail Declaration Review, March 2020, p. 38.

efficient investment, use and operation of the network, and to grow rail volumes including through supporting emerging demand and 'road to rail' modal conversion;

- clearly allowing, under CI 3.3 ("Limits on price differentiation"), that:
 - QR may apply price differentiation, including through differentiating access charges for multi-product services, 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 based on time of day or day of week, to reflect the different market value of non-premium paths compared to premium paths.
- b. Include, as a schedule to DAU3, service specific negotiation criteria for multi-commodity Freighter services on the Mt Isa line, reflecting that the DAU3 negotiation framework does not effectively support balanced commercial negotiation for these particular services. These negotiation criteria should clearly set out the circumstances in which price differentiation will be applied for different products on those services, as well as addressing other critical pricing terms such as price structure, take or pay, relinquishment fees and service standards.
- 3. In order to address the ambiguity around the status of interstate services using QR's dual gauge track, DAU3 should be specifically expressed to apply in its entirety to standard gauge services using the dual gauge link from Acacia Ridge to Port of Brisbane.
- 4. So as to improve the timeliness of information provided to access seekers, provide that an access application for timetabled MTP services does not need to include advice on specific train schedules required, and that an IAP can be provided based on the assumption that the path will be scheduled using existing available capacity and with the specific path to be confirmed through the negotiation period. Further, provide for a shorter IAP response times (eg two weeks) in these circumstances, given the absence of a requirement for a capacity analysis to be performed.
- 5. Aurizon is concerned that the queuing framework may have unintended and overly-onerous consequences for existing access holders' business continuity and forward planning by exposing them too broadly to re-negotiation for currently contracted paths. Aurizon acknowledges QR's concerns around providing guaranteed contract renewal, and therefore recommends that DAU3 be amended to specify that, provided an access holder notifies QR within 120 days of the expiry of its access agreement that it wishes to renew its access entitlement, it will initially be placed first in the queue for that capacity. The queue re-ordering provisions will continue to apply.
- 6. In order to provide clarity around QR's scheduling and train control processes, amend the Network Management Principles (**NMP**) to:
 - a. Include a mechanism for more quickly including new and varied paths in the Master Train Plan (**MTP**), particularly where these do not have any impact on any other parties, and provide for this to occur between scheduled MTP reviews;
 - b. Review the NMP processes in consultation with operators (acting collectively) to ensure that the NMP reflects an efficient process that meets the needs of all parties, including if applicable varied processes in different systems;
 - c. Maintain the NMP CI 2.4 provisions in their AU2 form, providing that a planned possession is not able to proceed until a dispute has been resolved;

- d. Remove NMP CI 3(i)(i)(B) which enables QR to deviate from the train management principles in order to avoid potential congestion, and otherwise review the train management principles, in consultation with operators (acting collectively), in order to improve the clarity of guidance provided to train controllers in managing deviations from the Daily Train Plan (DTP).
7. Aurizon believes that considerable benefit can be provided from improved harmonisation of the performance metrics used by Australia's freight rail networks, as this will enable clearer understanding and comparison of performance for similar services across different networks. Accordingly, Aurizon recommends that DAU3 be amended to:
 - a. Modify the performance indicators listed in CI 5.1.2(a), and which are included in QR's quarterly published performance reports, to:
 - Include Aurizon's proposed common Key Performance Indicators (**KPIs**), as set out in Table 2, which Aurizon will request be consistently utilised by all Rail Infrastructure Managers (**RIMs**) providing access to regularly scheduled services on Australian rail networks;
 - Include the amendments to QR specific system performance KPIs as set out in Table 3;
 - b. Replace the list of KPIs in Schedule 5 of QR's SAA with the performance indicators listed in Table 4, which are consistent with Aurizon's proposed common KPIs for reporting on aggregate system performance.
8. Based on Aurizon's experience in entering the interstate containerised freight market, and the difficulty associated with securing suitable paths, Aurizon recommends that DAU3 incorporate enhanced provisions to enable schedule optimisation in the event that similar pathing constraints emerge on QR's network. Aurizon will seek consistent provisions in regulatory frameworks for other Australian rail networks, to:
 - a. Enable improved opportunity for schedule optimisation, by modifying QR's SAA to:
 - Include a right for QR to reschedule train paths where an operator has consistent poor reliability, and, an obligation for rail operators to negotiate in good faith to agree variations to agreements defining network entry and exit times to accommodate that varied schedule; and
 - Provide that Train Service Levels in Schedule 2, Attachment 1 of QR's Access Agreements should be specified in a way that provides some flexibility for the scheduling of trains in accordance with that Train Service Level, rather than including fixed network entry/exit times.
 - b. More effectively manage the potential for path hoarding, by modifying QR's SAA to:

- replace the resumption utilisation threshold to be either at least 50% utilisation over 3 months or at least 75% utilisation over 6 months, with a path only measured as 'utilised' where it is used for a train service of at least 50% of its usual length/weight;
 - add a new resumption trigger, being the loss of a connecting path on an adjoining network, excluding only where the operator has continued to operate a modified train service not reliant on that connecting path;
 - remove the provisions that enable an access holder to contest the resumption once the underutilisation trigger has been met; and
 - if a resumption is triggered for a path, allow QR the option of either resuming the path or rescheduling it to the nearest otherwise available time.
- c. Provide access seekers/holders with better opportunities to seek new or varied paths that rely on path rescheduling or resumption by:
- establishing a process for an access seeker to register its interest in acquiring a new or varied train path if it were able to be made available as a result of path rescheduling or resumption; and
 - once registered, require QR to provide the access seeker with capacity information (as defined in Schedule A Cl 2) for a sufficient time period to allow the access seeker to assess opportunities for path resumption or rescheduling.
9. Aurizon has also identified a number of drafting amendments that will improve the operation of DAU3 including by betterer aligning it to actual practice.

West Moreton reference tariffs

10. Aurizon recommends that QR's proposed WM reference tariff is reviewed to balance:
- a. QR's recovery of efficient costs; and
 - b. the affordability of the tariff to coal producers.
11. Aurizon recommends that QR publish the assumptions on which it has based its assessment of WM system capacity, including:
- a. Network availability in weeks per year (i.e. 46 – 48 – 50 – 52);
 - b. Number of paths per week (return) between WM system coal mines and Port of Brisbane (i.e. 97);
 - c. Reduced number of paths per week (return) available between November and March for the Summer Timetable;
 - d. Assumed network availability losses from heat restrictions during hot weather and rainfall events based on historical data and forecasts of climate change impacts going forward;
 - e. Passenger peak constraints in the Metropolitan system;
 - f. Assumptions on other variables that influence cycle time and therefore system capacity (e.g. number of consists operating in the system, consist payload, port unload rate, mine load rate

18. Aurizon recommends that once the key measures and performance standards for the network to achieve the forecast volume demand are known, QR ensure its proposed capital projects align with the agreed service level outcome, and provide information to stakeholders about:
 - a. how each element of the capex contributes to those agreed service levels
 - b. what alternative options were considered by QR and the reasons why they were not pursued, and
 - c. what happens if capex doesn't achieve the agreed network service levels and there is a capacity shortfall.

19. Aurizon recommends that:
 - a. QCA's approach to assessing the fixed and variable proportions of QR's maintenance activities be undertaken with QR's DAU3 maintenance budget to determine the proportionate reduction in costs from lower coal tonnage.
 - b. QR consult supply chain stakeholders on its final proposed maintenance plan and costs to understand their risk appetite and preferred options or preferences for maintenance spending.
 - c. QR investigate interest in forming an industry group to evaluate and approve the scope, benchmarks, and costs of QR's maintenance and capex plans on a regular basis. Consideration should be given to establishing a similar group to the Rail Infrastructure Group (RIG) established under Aurizon Network's UT5, and the Rail Capacity Group (RCG) established under ARTC's Hunter Valley Access Undertaking.

20. Aurizon recommends that:
 - a. An independent review of QR's 'bottom up' assessment of train control costs be undertaken.
 - b. A 'bottom-up' review be undertaken of QR's management and infrastructure administration expenses to assess what would be a reasonably efficient allowance for a coal only system.

21. Aurizon recommends QR provide:
 - a. A summary of the building block components and allowable revenue for each year of the DAU3 term.
 - b. Access to the redacted information in the explanatory material relating to capital, maintenance and operating expenditure for individual projects.

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ACCESS UNDERTAKING FRAMEWORK



AURIZON®

1. Harmonised approach to national rail access regulation

Aurizon is Australia's largest rail freight operator, with operations extending across Australia. Aurizon provides a broad range of rail haulage services, including the large scale bulk haulage of coal and iron ore, integrated supply chain services – including rail, road and port – for a range of mineral, industrial and agricultural bulk products and the recent introduction of inter-city containerised freight services. Aurizon also operates and manages 5,100km of track infrastructure including the Central Queensland Coal Network and the Tarcoola to Darwin railway.

Since competition policy reforms were developed and implemented in Australia in the 1990s, the most significant infrastructure sectors have been subject to detailed reviews of the objectives and performance of their economic regulatory frameworks. In some cases this has seen significant institutional and statutory changes to infrastructure regulation, for example in electricity and gas, which are (each) now subject to a consistent national framework.

In contrast, the approach to rail access regulation in Australia is highly fragmented, characterised by state-based regimes and regulators, alongside voluntary arrangements within the national access regime. A variety of regulatory instruments are used, including generic access regimes with business specific undertakings, code-based approaches and network specific regimes.

To date, there has not been a comprehensive, cross-jurisdictional review of rail access regulation in Australia. Where reviews have been undertaken, the issues with Australia's fragmented approach to transport and rail regulation has been a recurring theme, including in:

- The Productivity Commission's Review of National Competition Policy Arrangements (2005)²;
- The Prime Minister's Export and Infrastructure Taskforce (2005)³;
- The Competition and Infrastructure Reform Agreement (**CIRA**) signed by the Council of Australian Governments (**COAG**) in 2006;
- The Productivity Commission's Review of the National Access Regime (2013)⁴;
- The Competition Policy Review (2015)⁵.

These inconsistencies in approach are most problematic where individual services operate across multiple jurisdictions, with each RIM discretely managing its component of access, requiring different terms and conditions and applying different access management approaches. While QR's narrow gauge rail network has historically meant that no multi-jurisdiction rail freight services have operated on its network, this is no longer the case given Aurizon's recent introduction of inter-city containerised freight services to the Port of Brisbane. Aurizon's containerised freight services now traverse infrastructure managed by six separate RIMs, regulated under five discrete rail access regimes, each with a different regulator.⁶

However, these inconsistencies are also problematic for any access seeker with operations extending across multiple jurisdictions, and can result in quite different outcomes (in the form of terms and conditions of access, and investment risk) for comparable services operating in different locations.

² Productivity Commission (2005); Review of National Competition Policy Reforms, Report no. 33

³ Exports and Infrastructure Taskforce (2005); Australia's Export Infrastructure, Report to the Prime Minister

⁴ Productivity Commission (2013); National Access Regime, Inquiry Report no. 66

⁵ Competition Policy Review Panel (2015); Competition Policy Review, Final Report

⁶ These include: QR regulated by the QCA, ARTC regulated by ACCC; Sydney Trains and UGL Linx regulated by IPART; Arc Infrastructure regulated by ERAWA; and Aurizon Bulk Central Network regulated by ESCOSA

This is the case faced not only by Aurizon, but by all rail freight operators on QR's rail network who provide services across a national footprint, including Pacific National, Qube and Watco.

Aurizon acknowledges the inevitable complexity of operating train services across a national footprint, given different rail gauges, and inconsistent technical and operating requirements across network boundaries. However, as has been highlighted by the Future of Freight reports,⁷ Australia's fragmented approach to rail access regulation exacerbates this complexity and further reduces efficiency and increases the cost of providing rail haulage services. While some of these constraints (such as different rail gauges) are unavoidable, Aurizon considers that improved harmonisation of regulatory, technical and operating requirements, wherever feasible, is critical to the future performance and productivity of the rail sector.

The rail industry has collectively sought a new model for access regulation across Australian jurisdictions that will promote regulatory harmonisation.⁸ In the absence of a substantive cross-jurisdictional review to address this, Aurizon considers that reviews of specific jurisdictional frameworks – such as QR's DAU3 review – should take the opportunity to promote improved national harmonisation wherever possible. Importantly though, this does not mean a 'one size fits all' approach - different networks have very different characteristics in terms of volume and type of traffic, established pricing methodologies and the relevance of the ceiling price constraint, and the extent of vertical integration, and these differences should continue to be accommodated in different regulatory requirements. Further, Queensland's narrow gauge network inevitably requires some bespoke arrangements. However, even allowing for these differences, there is significant opportunity to improve national consistency and harmonisation in aspects of the regulatory frameworks, enabling operators to have a more efficient process for negotiating and managing access across their total operating footprint.

This intent is reflected in the requirements under section 44M(4)(aa) of Part IIIA of the Competition and Consumer Act 2010 for effective state based regimes to be consistent with the objective of providing a framework and guiding principles to encourage a consistent approach to access regulation.

There is currently a unique opportunity to better align Australia's rail access regimes, with ARTC's draft 2024 IAU currently being considered by the ACCC, the NSW Government currently considering its response to IPART's review of the NSW rail access regime, and recent changes to the WA Rail Access Code triggering a range of regulatory processes over the next two years. Consequently regulatory harmonisation is a relevant matter the QCA should consider under section 138(2) of the QCA Act in deciding if it is appropriate to approve QR's DAU3.

Accordingly, Aurizon has sought to identify opportunities within DAU3 to improve national consistency in aspects of the access negotiation frameworks where this will provide benefits to operators and customers, in particular in the access negotiation framework, the standard terms and conditions for access, and in access management methods applied. In some cases, this has resulted in Aurizon seeking amendments to DAU3, notwithstanding that the existing provisions are reasonable when considered on a discrete basis, but where modified arrangements could be readily adopted that will be more consistent with approaches used elsewhere.

⁷ Australian Railway Association (ARA) and Freight on Rail Group (FORG) (2023); The Future of Freight Summary Report; October 2023; p.18.

⁸ Australian Railway Association (ARA) and Freight on Rail Group (FORG) (2023); The Future of Freight Summary Report; October 2023; p.21.

Aurizon will seek a similar approach in other upcoming regulatory reviews, such as the ACCC's review of ARTC's draft 2024 Interstate Access Undertaking, regulatory processes to be undertaken in accordance with the WA Rail Access Code and in the further development of the NSW rail access framework.

Recommendation

Aurizon recommends DAU3 be amended:

- 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.

2. Negotiation framework and pricing rules

In its final report into the QR declaration review, the QCA concluded that QR has both the ability and incentive to exercise market power, including on corridors such as the North Coast Line and the Mt Isa corridor where QR is unable to price at or near the ceiling and where no reference tariff applies. The QCA also highlighted that there are only limited circumstances in which QR has a natural incentive to maximise freight volumes on its network. As a result, the QCA concluded that declaration is necessary in order to address the imbalance in negotiating power and enable access seekers to negotiate access arrangements that allow them to effectively manage risk, therefore promoting efficient entry and investment.⁹ Aurizon strongly supports this conclusion and agrees that regulation is essential to support a balanced negotiation for access on these corridors.

The negotiation framework within QR's current access undertaking (**AU2**) is intended to provide a flexible framework that facilitates balanced commercial negotiation for access, enabling QR and access seekers to tailor access agreements to the needs of each service and as a result to maximise the use of rail. The AU2 negotiation framework is largely replicated in DAU3.

However, in Aurizon's experience, AU2 has not been effective in supporting genuine negotiations for access, with QR continuing to exercise market power in its access negotiations for services where no reference tariffs apply. This can be seen not only in the level of access charges applied, but from QR's conduct in negotiations and its required terms and conditions of access. Concerns include QR's rigid approach to the specification of access proposals, its unwillingness to negotiate around these proposals and instead apply a 'take it or leave it' approach, the commercial risks that it imposes on access holders regardless of their ability to manage these risks with customers, and the limited accountability that QR accepts in its provision of access.

Perhaps the best example of our concerns can be seen on the Mt Isa corridor. This corridor is critical in supporting the continued operations and future development of resource and industrial projects in the north west province. Further, there is real opportunity for rail to attract freight from road with rail's share of 'mode contestable' freight having fallen over time, even though the development of new, small scale mining projects is creating increasing volumes of contestable containerised freight. However, we consider that QR's inflexible and high cost access arrangements – enabled by its exercise of market power – significantly hinder Aurizon's ability to respond to these opportunities.

⁹ QCA (2020); Final Recommendation – Queensland Rail Declaration Review, March 2020, p. 38, 69, 91.

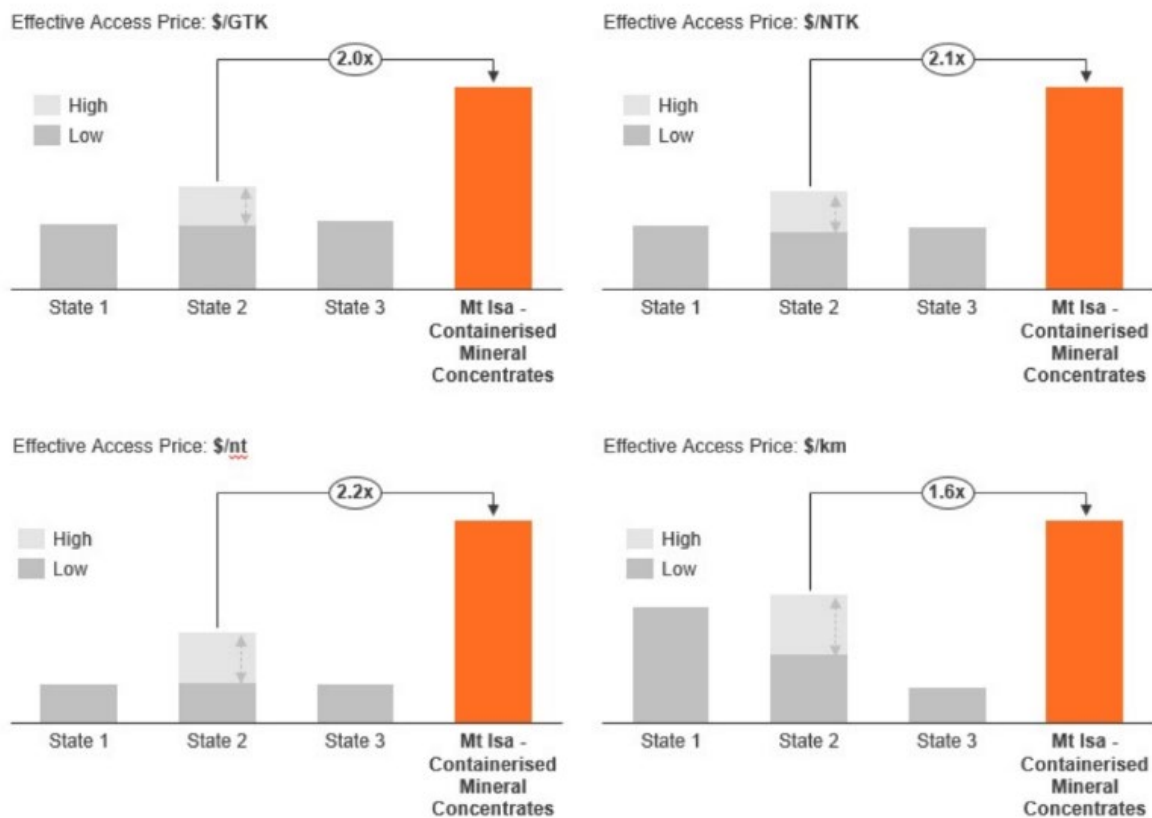
In order to demonstrate Aurizon’s concerns, we have presented a case study on our experiences on the Mt Isa corridor over recent years. Based on this experience, we have then set out a range of amendments to the DAU3 negotiation and pricing framework that we consider necessary in order to better hold QR to account in responding to the needs of its customers and tailoring access arrangements to these needs.

2.1 Mt Isa corridor case study

In Aurizon’s experience, in negotiating access on the Mt Isa corridor, QR uses its market power to ensure that it maintains a largely stable revenue stream and profit margin on this corridor while having little accountability in relation to cost efficiency or service quality. Further, QR uses its regulatory obligations to not unfairly differentiate between access seekers as a shield against requests that it apply greater price differentiation and accept more flexible access terms in order to promote market growth, presumably to avoid the risk of reducing access revenue from existing train services as well as to manage the perceived risk around claims of non-compliance with its access undertaking.

At the outset, Aurizon’s internal benchmarking demonstrated that the Mt Isa corridor is the most expensive Australian corridor for the transport of containerised products, with charges for containerised minerals around c.2x to c.3x other comparable corridors.

Figure 1 Benchmarked access charges for containerised freight



Source: Aurizon

There is a real opportunity for rail to attract freight from road on the Mt Isa corridor, as discussed in 2.1.1 below. However, in this case study we show how QR’s exercise of market power is stifling this opportunity, including through:

- Absence of an effective incentive to achieve efficient operating and maintenance costs, which elevates the rail access charges that QR applies in order to achieve its targeted profit margin (see 2.1.2);
- Absence of an effective incentive to maintain and improve service quality, with declining operational performance increasing above rail costs and reducing the quality of services that can be offered to customers (see 2.1.3);
- A standard access pricing approach that provides high surety of QR's access revenue but operates counter to QR's stated objective of growing freight on rail (see 2.1.4); and
- Difficulty in negotiating commercial outcomes that support efficient train operations and promote additional freight on rail (see 2.1.5).

2.1.1 Market opportunity

The Mt Isa corridor is a critical transport route for a range of resource and industrial users in the north west province. While the transport of bulk form mineral concentrates and industrial products is the primary freight task on this corridor, there are a range of products carried on this route in containerised form, including mineral products (mineral concentrates, refined metals, phosphate rock), and mining and industrial inputs (eg cement, fuel, grinding media, etc).

As has been identified in the rail industry's Future of Freight reports prepared by Synergies Economic Consulting, rail continues to be the preferred transport mode where customers are able to transport these products in bulk form.¹⁰ However, existing bulk loading and unloading facilities are privately owned by the major mining companies, and their operation is integrated within their specific supply chains.

However, transporting in bulk form is not viable for many of the products shipped on this corridor, which are instead shipped in containerised form, often on multi-product/multi-user trains. This includes a range of products that are not transported at sufficient scale to justify the use of bulk trains, including export production from smaller miners and those who do not have access to bulk loading/unloading facilities. Transporting freight in containerised form is a higher cost method than bulk wagons, both because of the lower product volume able to be moved on the train as well as additional product handling costs. Road freight also becomes a viable option for many containerised products.

Where road and rail freight options are available to a customer, the key drivers of mode choice are frequency, transit time, reliability and price. The weighting that a customer places on each of the mode choice factors is heavily influenced by the characteristics of the freight task, and changes with the type of freight and the value placed on differences in service quality. Rail freight usually needs to be priced at a discount to road, to compensate both for lower service quality as well as the additional 'hassle factor' associated with using rail freight.¹¹

¹⁰ Synergies Economic Consulting (2023); The Future of Freight – Improving Modal Share (Workstream 1); October 2023; p.133.

¹¹ Synergies Economic Consulting (2023); The Future of Freight – Improving Modal Share (Workstream 1); October 2023; p.48-55

There are significant differences in the cost structures of road and rail transport that influence the types of freight service that each mode is more suited to, with the key factors impacting on the cost competitiveness of rail compared to road being:¹²

- *Distance* - rail transport generally has lower linehaul cost than road, especially for large volumes and over longer distances. However, pick-up and delivery (**PUD**) and terminal handling costs add significantly to the door-to-door cost of intermodal rail operations. The QCA has estimated that, in relation to general freight carried on the north coast line, road is advantaged at distances below 600km, while rail is advantaged at distances above 1,000km. Within the 600-1,000km range, road and rail are likely to be more strongly competitive.¹³
- *Volume* – once a decision is made to operate a train service, the cost of the train is largely fixed, and the competitiveness of rail will depend on its ability to maximise the use of the train’s capacity;
- *Product density* - road and heavy vehicle mass limits mean that, for high density cargoes, road is not able to fully utilise its available volumetric capacity. Therefore, rail is generally more suited to the carriage of high density cargo.
- *Relative efficiency of each mode* – this is strongly influenced by the quality of the road and rail infrastructure on which they operate. The location and efficiency of intermodal terminals will also have a substantial impact on the efficiency of intermodal services.

As a result of all of these factors, there is a spectrum of customer preferences, with a proportion of freight being advantaged to each particular mode, as illustrated below.

Figure 2 Contestable freight



On the Mt Isa line, transport distances are up to 1,000km, consistent with the distance range within which the QCA considers that road and rail are strongly competitive for general freight. However, the containerised products currently railed on the Mt Isa line tend to be non-time sensitive (meaning customers will place a lower value on the speed and reliability benefits of road) and high product density (meaning that trucks cannot fully utilise their volumetric capacity and road offers a less efficient transport option). As a result, these products tend to be ‘rail advantaged’, and continue to use rail freight notwithstanding that

Even for such rail advantaged freight, road freight is increasingly being preferred by smaller miners, who have variable volume (and therefore are reluctant to accept the take or pay obligation often required for rail transport) and whose product may need to be trucked a significant distance to a rail load point. These influences can be seen in Synergies’ estimated mode share for mineral concentrates (which are transported in both bulk and containerised form), and how this varies at different origin-destination combinations on the route, as shown below. This estimate groups smaller

¹² Synergies Economic Consulting (2023); The Future of Freight – Improving Modal Share (Workstream 1); October 2023; p.55-56.

¹³ QCA (2020); Final Recommendation – Queensland Rail Declaration Review, March 2020, p. 45.

export producers around the broader Cloncurry region, as this is where there is opportunity for them to load containerised minerals and mineral concentrates onto trains:

Figure 3 Mt Isa corridor - mode share for mineral concentrates (bulk and containerised form)



Source: Synergies Economic Consulting, *The Future of Freight – Improving Modal Share (Workstream 1)*; October 2023; p.134.

Synergies has identified that opportunities to increase rail mode share for rail advantaged mineral products on the Mt Isa line will primarily accrue where rail operators are able to develop innovative commercial and operating solutions to attract aggregated volumes from smaller producers using a shared service.¹⁴

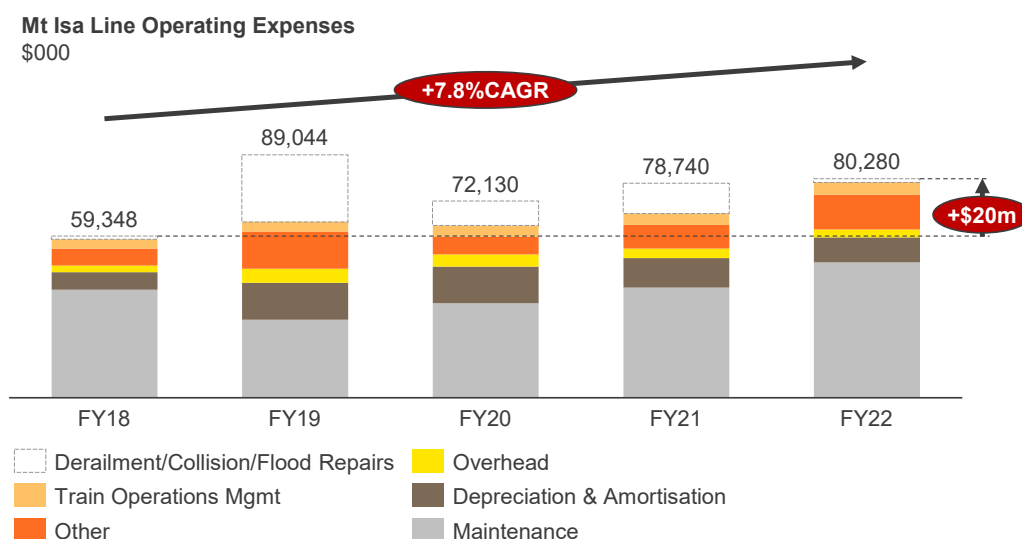
However, other products are less intrinsically advantaged towards rail – for example, if they are of lower product density, or are transported in smaller consignments – particularly where there are opportunities for road to offer a backhaul service. For these products, rail will not be able to offer an attractive option if rail access charges continue to be set at the level applicable to strongly ‘rail advantaged’ products. While there is little data on the volume of road freight carried on the Flinders Highway, there are anecdotal reports of high and increasing truck volumes on this route, particularly following the approval of Type 2 road trains to operate into the Port of Townsville. This indicates that there is a material opportunity for rail to attract freight off road onto shared ‘freighter’ type services, if it is able to offer an attractive pricing package.

2.1.2 Inefficient cost of operating and maintaining the corridor

QR’s current access framework, including AU2 and access agreements, do not appear to effectively incentivise QR to achieve cost efficiencies on this corridor. The cost to operate and maintain the Mt Isa corridor has increased by \$20m (from \$60m to \$80m) over the last 5 years (FY18 – FY22); a Compound Annual Growth Rate (CAGR) of 7.8%, as illustrated in Figure 1. This is more than double the rate of CPI, which had a corresponding CAGR of 3.2%.

¹⁴ Synergies Economic Consulting (2023); *The Future of Freight – Improving Modal Share (Workstream 1)*; October 2023; p.134-135.

Figure 4 Mt Isa corridor operating expenses



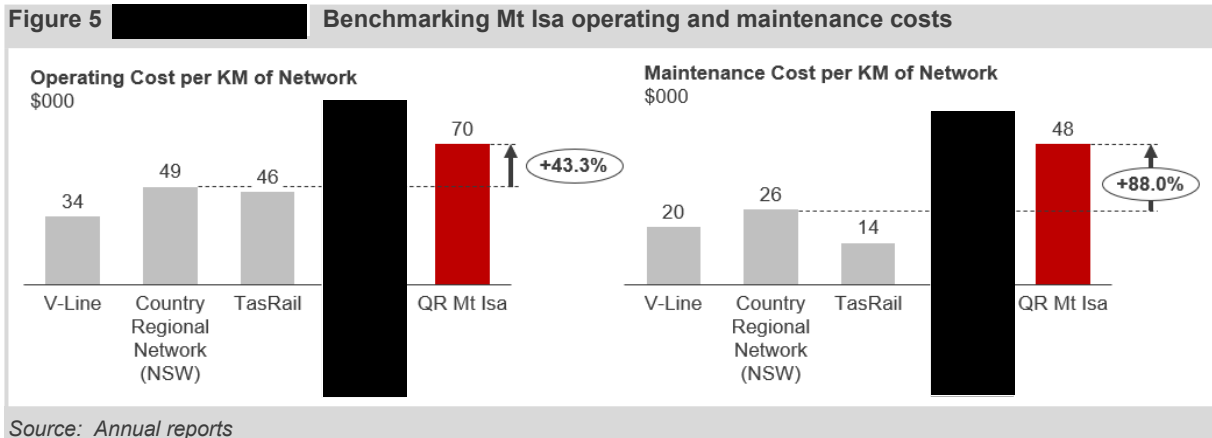
Source: QR's Below Rail Financial Statements, various years, see <https://www.queenslandrail.com.au/business/access/Pages/QCA-Reporting.aspx>

Normalising for distance, the cost to operate and maintain the Mt Isa corridor surpasses a peer group of similar bulk freight corridors,¹⁵. Aurizon has compared the cost to operate and maintain the Mt Isa corridor to four broadly comparable bulk freight corridors, each of which are used to transport around 1-4mtpa of freight:

1. Victorian Rail Network: Owned and operated by V/Line, Victoria's rail network is used to transport passengers, bulk products and intermodal freight across the state. V/Line currently maintains 3,556km of track.
2. Country Regional Network (NSW): The Country Regional Network spans across 2,386km of operational track connecting the regions of NSW to the interstate network, metropolitan rail system and major ports. The network provides a vital service for the state's grain and cotton industries as well as allowing movement of minerals and containerised freight. UGL Regional Linx is the current operator of the network.
3. Tasmanian Rail Network: Comprised of 611km of operational narrow-gauge track and operated by TasRail, the Tasmania Rail network runs primarily through the north of Tasmania with connections to Hobart in the state's south-east. While intermodal freight accounts for approximately 50% of annual volumes, the Tasrail Network is also used to transport coal, mineral concentrates, logs and paper providing key support for Tasmania industries.
4. Tarcoola to Darwin: Formally operated by OneRail, now Aurizon, the 2245km Tarcoola – Darwin Rail Network is used to convey intermodal freight, bulk commodities, and passenger services through Central Australia.

¹⁵ Bulk coal corridors have been excluded from this assessment given much higher freight volumes and commercial frameworks

As Figure 5 demonstrates, QR has Operating Costs per kilometre c.43% greater than the highest of the four comparable corridors. Figure 5 also demonstrates that QR's maintenance costs are c.88% greater than the highest of the comparable corridors.



2.1.3 Declining operational performance

QR committed to operational improvements on the Mt Isa corridor under AU2. However over the course of AU2, data demonstrates that there has been a decline in operational performance (even with operating and maintenance costs increasing by c.7.8% pa). This is most sharply illustrated by declining corridor velocity, but also by reductions in corridor availability and QR's delay in commencing Regional User Groups aimed at identifying and evaluating opportunities to improve corridor performance.

I. Slowing Corridor Velocity

The distance of the Mt Isa corridor subject to speed restrictions has increased over the last 4 years:

- In September 2019, 100km of the corridor was under restriction;
- In September 2023, 150km of the corridor was under restriction, an increase of 50%.

This is illustrated in the QR reporting data in Figure 6.

Figure 6 Mt Isa corridor speed restrictions



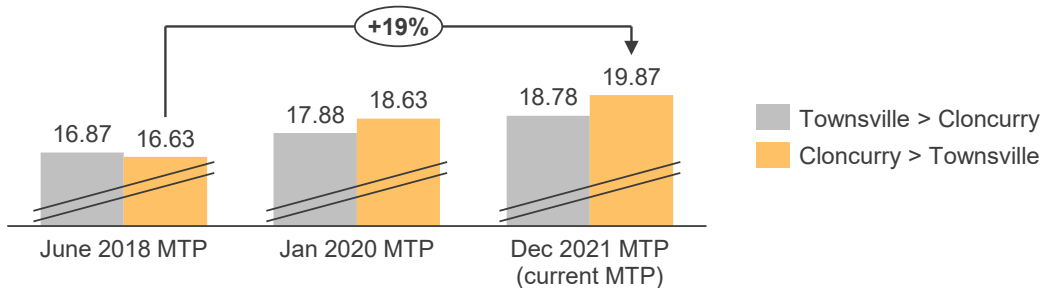
Sectional Run Times (**SRTs**) on the Mt Isa line have increased over the last 5 years, by as much as 19% for some services. SRTs are provided by QR and form the basis of the schedules established in the MTP. The SRTs have gradually increased to absorb the aforementioned speed restrictions and overall declining corridor velocity, with the slower overall velocity being reflected in the corridor timetable at each update.

Figure 7 illustrates the aggregate SRTs for a containerised train operating between Townsville and Cloncurry (with pathing for 5 cycles per fortnight). The graph shows that QR has increased the scheduled time for the train to complete its journey by up to 19% (Cloncurry to Townsville) from June 2018 to today.

Figure 7 QR MTP Sectional Run Times

QR MTP Run Times – Townsville <> Cloncurry (hrs)

Includes Stuart to Hughenden, Hughenden to Cloncurry and the Dwell at Hughenden and Stuart
The hours are the average of the 5 MTP services across the A & B week



This data shows that since June 2018, over 5 hours has been added to the scheduled time for a Townsville-Cloncurry return service, with speed restrictions adding around 8 hours to the cycle for a Townsville-Mt Isa service. The reduction in train velocity adds two types of costs to above rail operators:

- In the short term, speed restrictions cause additional train crew hours, with the current level of speed restrictions requiring operators to incur an additional c.12 hours of train crew per Townsville-Mt Isa return service.¹⁶
- In the longer term, there are increased capital costs as a result of having to commit additional trains to move the same volume of freight.

II. Reduced Corridor Availability

Up until November 2023, Aurizon had been able to contract pathing on a 52-week basis. That meant that users were able to secure pathing for each week of the year. However, in a recent access agreement renewal, QR would only providing pathing for 48 weeks, meaning that QR could restrict access to the corridor for 4 weeks per year, with no access holder recourse to QR. This decision was made late in the agreement renewal process, with no prior consultation and no opportunity for negotiation. The implications of this change are as follows:

- The access holder’s rail access entitlement now allows it to rail 7.7% fewer tonnes across the year;
- The operator has lost the ability to generate revenue for up to 4 weeks per year, while they continue to incur their fixed costs over this period, causing an increase in the average cost per unit of freight moved;
- Reduction in rail’s overall competitiveness against road (noting that road users do not lose access to the road in similar circumstances), both due to the increased average cost as well as the reduced service quality of rail.

¹⁶ Two driver operation for around half the journey, single driver operation for the remainder

III. Lack of Regional Network User Groups

AU2 (and now DAU3) includes a commitment by QR to Regional Network User Groups as a way to improve the operation of the supply chain, with QR to provide resources for data review, analysis, and modelling. However the access undertaking does not create any accountability on QR's compliance with this commitment, with significant delays in commencing Regional Network User Groups:

- The first Mount Isa Regional Network User Group was held on 21 November 2023, over 3 years past the stipulated date;
- The first North Coast Line Regional Network User Group was held on 26 July 2023, nearly 3 years late past the stipulated date.

Aurizon supports Regional Network User Groups and has been an active participant in the South West User Group. We believe that these groups can provide a valuable forum to collectively understand the issues influencing corridor performance, as well as to identify and assess opportunities for improvement. With the operational and commercial challenges being faced by the Mt Isa line, Aurizon considers that the identified service quality issues would have been more clearly understood – and potentially better addressed – had QR convened the Mt Isa Regional Network User Group at an earlier point in time and genuinely used this as a forum to identify and evaluate opportunities for improvement.

2.1.4 Standard access pricing process

In Aurizon's experience, QR applies the following formulaic process to establish its two-part tariffs on the Mt Isa line. This process is applied when establishing pricing for a new Access Agreement, and for renewing an existing Access Agreement.

- The operator submits an access request, which contains amongst other things, rollingstock details, freight details and expected volumes. From this information, QR determines the Gross Tonnes Kilometres ('GTK', the product of gross mass and distance) of the service.
- The GTK of the service is multiplied by QR's headline rate \$/GTK rate. [REDACTED]
- The resulting revenue amount is split into a two-part tariff. [REDACTED]
- QR consistently applies a relinquishment fee equal to [REDACTED]

This standard approach creates a number of issues which are particularly problematic for Freighter type services which transport a range of containerised freight products, aggregating demand from multiple customers, as explained below.

I. High marginal cost for additional volumes

If the operator has been successful in growing volumes on its service, then at each renewal period the split between fixed and variable is rebased, with the higher forecast freight volumes (and thus higher forecast GTK) resulting in a higher path charge for the service. This results in an increase to the marginal cost of the additional products carried on the service:

- Within the original access period, the marginal cost of access for new volumes is the variable component of the charge (i.e. 40% of the headline \$/GTK rate);

- At contract renewal, the access cost for these new volumes is repriced to the full headline \$/GTK rate.

The effect of this is that QR extracts a higher portion of value from the service, notwithstanding that the operator may have no certainty of maintaining this higher freight volume over the term of the agreement. Further, this practice hampers the ability of the operator to effectively compete with road, which is at odds with QR's stated objective of growing freight volumes on rail.

II. High take or pay risk

Aurizon has two concerns with QR's expectation of take or pay, particularly its view that pathing certainty, i.e. Master Train Plan (**MTP**) services, is dependent upon such a high take or pay commitment.

QR has suggested that this take or pay is needed to 1) ration capacity to those who value it the most, 2) as a reciprocal commitment in return for QR putting the train in its MTP schedule and 3) to provide a discipline to ensure operators do not 'over-contract' for capacity. However, when the Mt Isa corridor is experiencing declining volumes and has less than 50% of available paths contracted (as per QR's data), it would seem there is more than sufficient capacity available for all users. Accordingly, there is no need for this level of take or pay commitment to ration capacity and the risk to QR of operators over-contracting is low and can be managed through 'use it or lose it' resumption rules. Further, the take-or-pay amounts are disproportionate to the cost that QR could avoid if the service ceased to operate.

Consequently, given the avoidable costs of marginal and contestable services not operating are low and there is no capacity constraint affecting QR from selling additional capacity, then the materiality of take or pay obligation exceeds the opportunity costs to QR of providing the service.

However, these proportionally high take or pay charges are problematic for many of the customers on the corridor, particularly the types of customers who use containers on multi-commodity services. These services are generally used for export production from smaller, junior miners as well as mining inputs and general freight. Junior miners may encounter production issues, meaning their volumes can be intermittent. Mining input and general freight demand is also variable from week to week. These customers can be unwilling to bear the risk of a fixed volume commitment for each and every train service (especially when road operators do not have a fixed charge requirement), acting as a disincentive to using rail. Indeed, QR has acknowledged that high take or pay charges on rail contribute to freight customers preferring road transport over rail.¹⁷ From the operator's perspective, this means that it is either unable to compete for this type of freight, or it needs to be willing to absorb the QR take or pay risk on the path.

In addition, having such high take or pay protection on its access charges means that there is little commercial consequence to QR when volumes fall, including due to reductions in service quality.

In this environment, these high take or pay charges act as a disincentive for operators to run additional services (where freight volumes are uncertain) and diminish QR's accountability in maintaining and improving service quality – both contrary to QR's stated objectives of growing freight volumes on rail. Hence, QR's onerous take or pay charge reduce the incentive for increasing the

¹⁷ Queensland Rail (2019); Declaration Review: Queensland Rail's Response to the QCA's Draft Recommendation; 11 March 2019; p.35.

efficient utilisation of infrastructure, contrary to the objects of the access regime, and are not promoting efficient outcomes, as required by the QCA Act pricing principles.

III. High path relinquishment fees

QR requires that contracted paths can only be relinquished where the access holder pays its standard relinquishment fee (as outlined above). While a relinquishment fee of this magnitude can be reasonable and efficient in some circumstances, e.g. if the access provider has needed to invest to provide capacity for a service and requires the service to continue for the full expected term in order to recover this investment, these circumstances do not apply on the Mt Isa corridor.

However, for Freighter services where demand is variable and uncertain, and not underpinned by long term take or pay contracts, there is a high risk for an operator in entering into long term contracts with such high path relinquishment fees. This is particularly the case where, as for the Mt Isa corridor, there is ample capacity and little practical risk of being unable to secure paths in future.

However, the use of short term agreements prevents an operator from gaining long term certainty around access charges to be applied for the service, and exposes the operator to the 're-basing' of access charges on a regular basis. The risks associated with either of these options again provide a disincentive for operators to invest in the development of services which rely on road-competitive freight and again are not promoting efficient outcomes, as required by the QCA Act objects clause and pricing principles.

2.1.5 Difficulty in negotiating appropriate commercial outcomes

QR's AU2 (and DAU3) is intended to create a negotiation framework that supports the commercial negotiation of access agreements appropriate to individual services, reflecting the markets served. Reliance on commercial negotiation, together with the ability for QR to price discriminate in order to maximise the utilisation of capacity, is clear from the wording of the QCA Act (1997), AU2 and the QCA's decisions, as summarised in Table 1 below.

Table 1 Summary of terminology that supports price discrimination

Document	Section / Page	Comment
QCA Act 1997	Section 100	3) Subsection (2) does not prevent the access provider treating access seekers differently to the extent the different treatment is— (a) Reasonably justified because of the different circumstances , relating to access to the declared service, applicable to the access provider or any of the access seekers; or
	Section 138A	An approved access undertaking for a service may require or permit the owner or operator of the service to do the following, in the circumstances stated in the undertaking- (a) Treat access seekers differently in negotiating access agreements, or amendments to access agreements, relating to the service; or (b) treat users differently in providing access to the service.
	Section 168A	The pricing principles in relation to the price of access to a service are that the price should – (b) allow for multi-part pricing and price discrimination when it aids efficiency

AU2 and DAU3	Section 3.1.2	[QR] may establish different Access Charges for Train Services serving different markets to maximise the commercially viable use of Capacity while meeting, in aggregate, the Common Costs.
AU2 Decision Minute	Page 107	<p>Queensland Rail said it must take into account a range of competing considerations when setting access charges, including:</p> <ul style="list-style-type: none"> • competition with road transport and the objective of maximising rail freight volumes <p>If access charges at the ceiling exceed customers' willingness to pay, it is likely to be in the interests of all parties to negotiate access charges below the ceiling. This may also encourage the efficient use of the network and promote competition in dependent markets, while providing an opportunity for Queensland Rail to limit the gap between revenue and costs.</p>
	Page 109	<p>Greater pricing flexibility may provide greater scope for Queensland Rail to increase the revenue it recovers from access charges and reduce the subsidy, while promoting the efficient use of the network (ss. 138(2)(a), (b), (g), 168A(a), (b)).</p> <p>Greater pricing flexibility promotes the efficient usage of rail infrastructure, by enabling Queensland Rail to adjust prices in response to competition from alternative modes of transport (particularly road for some types of freight) and expand the demand for its service by targeting customers that are more price-sensitive, potentially promoting competition in dependent markets (ss. 138(2)(a), (b), (d), (e), (g), 168A(b)).</p>

However, in Aurizon's experience over the course of AU2, QR has been unwilling to negotiate away from its standard pricing methodologies in order to incentivise additional demand and has used its regulatory obligation to not unfairly discriminate between access seekers/holders as a shield against attempts to negotiate around its proposed access charges, including through the application of greater price discrimination.

This is consistent with the view previously expressed by Glencore in the context of the QR declaration review:¹⁸

Glencore's strong impression is that QR has the (misconceived) view that its pricing does not impact on the development of projects – such that it does not seek to set pricing in a way that incentivises or facilitates additional investment or demand. Consequently, QR's submissions amount to pure speculation that it will not be incentivised to engage in monopoly pricing, and Glencore urges great caution in determining the likely outcomes with and without declaration in dependent markets on the basis of such speculation, when all past conduct of QR contradicts the very theoretical arguments QR and Houston Kemp raise.

¹⁸ Glencore

Some examples of the difficulties that Aurizon has had in achieving appropriate commercial arrangements are described below. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted content]

2.2 How problems can be addressed in DAU3

2.2.1 Specification of negotiation and pricing objectives

While QR's access undertaking is clearly established in a way that is intended to support the growth of freight on rail, there is no mechanism in AU2 (or DAU3) that can be used to hold QR to account in acting in a way that supports this objective. Instead, this outcome is reliant on the assumption that QR has an incentive to grow the volume of freight on the corridor – an incentive that the QCA has previously concluded only applies in limited circumstances.¹⁹ In Aurizon's view, there is a misalignment between the QR's public position that it seeks to grow freight on rail, and its commercial positions that place such a high weighting on minimising QR's downside risk that they act to stymie the growth of rail freight.

The inclusion of negotiation objectives in the DAU3 preamble (Clause 1), in a similar way to the inclusion of Objectives in ARTC's IAU²⁰, would assist by providing a clear statement of a balanced set of outcomes that are intended to be supported by DAU3. Specifically, Aurizon considers that DAU3 should include a clear commitment by QR towards the economic benefits intended to be achieved from the access framework, including:

- promoting competition in the rail haulage market;
- promoting the economically efficient investment, use and operation of the network; and
- to grow rail volumes including by supporting and incentivising emerging demand (eg through emerging miners), retaining volumes on rail and supporting 'road to rail' modal conversion.

Including these desired economic benefits as specific objectives of DAU3 will provide access seekers with greater leverage to seek more flexible access arrangements that promote volume growth on the network, in a way that will ultimately enable QR to maintain and grow its access revenue base. These will also provide a more balanced guide to the outcomes intended to be achieved under DAU3 in the event of an arbitration by the QCA.

In addition to these overarching objectives, there should be further clarification included in the DAU3 pricing rules (specifically in CI 3.3: Limits on price differentiation) around the circumstances in which QR may apply price differentiation in order to achieve these negotiation objectives. There are two circumstances in particular where the DAU3 pricing rules should clearly permit price differentiation, as discussed below.

Promoting growth in mode contestable freight

Reflecting the issues that have emerged on the Mt Isa corridor over recent years, CI 3.3 should be modified to clearly provide that QR may apply price differentiation in order to grow rail volumes, either through supporting and incentivising emerging demand, maintaining freight on rail or promoting 'road to rail' modal conversion. In particular, the principles should specifically provide for the application of price discrimination for different products on a multi-product train. This increased sophistication in the

¹⁹ QCA (2020); Final Recommendation – Queensland Rail Declaration Review, March 2020, p.38-39.

²⁰ ARTC Interstate Access Undertaking (2008), CI 1.2, also included in ARTC's proposed 2024 Interstate Access Undertaking currently being considered by the ACCC

application of access charges will likely be necessary to enable operators to compete effectively for mode contestable freight, assuming QR remains reluctant to reduce access charges for existing products and services, given its desire to maintain current revenue.

While Aurizon agrees that it is critical that the limits on price differentiation continue to be applied in a way that protects the environment for competition, providing confirmation in DAU3 that price differentiation is reasonable in these circumstances will ensure that QR does not continue to use its 'regulatory obligations' as a shield against considering requests for increased flexibility or price differentiation where this will assist in growing the overall freight task.

Notably, Aurizon does not consider that this represents a change to the policy intent of the QCA Act and AU2, which creates sufficient flexibility to allow this form of price differentiation. However, where QR's risk aversion means that it is unwilling to apply this pricing flexibility, the only way to remedy this is to modify the pricing principles to clearly legitimise this practice and overcome that aversion.

Recognising the market value of premium paths

Beyond the Mt Isa corridor, Aurizon's recent experience in introducing new inter-city containerised freight services between Melbourne, Sydney, Brisbane, Adelaide and Perth has highlighted the ways in which a standardised approach to rail access arrangements can unintentionally inhibit the entry of new operators in this market.

Inter-city containerised freight services are largely used for the transport of a broad range of consumer goods, similar to the containerised freight services operating on the North Coast Line. In this market, there is a strong demand from freight customers for rail services that depart in the evening, and arrive at their destination early morning, allowing efficient distribution to store networks. This service requirement is evident on the North Coast Line with most containerised freight services departing Brisbane in the evening and scheduled to arrive in Mackay, Townsville and Cairns overnight or early morning. There are only a limited number of paths each day that can achieve this service requirement, resulting in these being 'premium paths' for the inter-city freight market. If a new entrant to this market is unable to gain access to these premium paths, this will cause significant competitive disadvantage for that entrant, both due to its poorer service offering in the market, as well as any longer than average transit time imposing higher operating costs. As a result, the premium paths have a materially higher market value than non-premium paths.

While QR's AU2 (and ARTC's 2008 IAU) allows for access charges to be differentiated based on time of day and/or day of week, in Aurizon's experience RIMs do not do so. Aurizon will be seeking amendment to ARTC's 2024 IAU in order to clarify that its standing offer for freighter services applies to premium paths, and that differentiated prices may be negotiated for non-premium paths which have a lesser market value. CI 3.3 of DAU3 should similarly be modified to clearly provide that QR may apply price differentiation when providing access for non-premium paths relative to premium paths, should this issue arise on the QR network.

Recommendation

Aurizon recommends DAU3 be amended to:

- include negotiation objectives as a new sub-clause within the Preamble, broadly modelled on the negotiation objectives in ARTC's IAU and which specifically include a commitment by QR to promote the economically efficient investment, use and operation of the network, and to grow rail volumes including through supporting emerging demand and 'road to rail' modal conversion;
- 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 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.

2.2.2 Service specific negotiation criteria

Aurizon considers that QR's current approach to negotiations is not well aligned to the needs of its customers, particularly for multi-commodity/multi-user Freighter type services which need to continually attract customers to maximise utilisation, and which compete with road freight for elements of the freight task. This is exacerbated by aspects of the DAU3 negotiation framework which limit the operator's negotiating power for these services:

- The DAU3 pricing rules do not provide clear guidance as to the price that will apply for such services, as they are based on a floor and ceiling price constraint. Where access charges are in practice set somewhere between these constraints, the pricing limits do not in themselves provide useful information on the price that should actually be applied;
- Where there are multiple access holders/operators operating similar services (with Aurizon and Glencore both operating Freighter type services), CI 3.3 of DAU3 is likely to constrain QR from offering different arrangements for new or renewed arrangements compared to those applying for an existing operator of a similar service, even if those different arrangements – if applied to all operators – would be more effective in promoting new demand while still achieving QR's required revenue outcomes. Unless all access agreements expire at the same time, QR will have a 'rolling' obligation to not price differentiate which will have the unintended consequence of preventing economically desirable changes from being negotiated;
- The nature of the freight, and the availability of road as a competitive transport mode for much of this freight, means that customers require a rapid response to opportunities, with timeframes for tender preparation measured in weeks. The embedded incentive for shorter term access agreements results in operators continually needing to renegotiate contracts. In this context, while arbitration is the standard remedy under DAU3 to address access disputes, the extended timeframes associated with arbitration mean that this is not a viable mechanism to resolve access charges for these tenders. Instead, it is more likely that the opportunity to compete for the freight will be lost.

Given these circumstances, Aurizon considers that there is a need for a modified approach to access negotiations for these services.

The challenge of providing for more balanced access negotiations, particularly where access charges are set without reference to the price ceiling, has been considered in the context of multiple rail access regimes, with varied approaches being progressed in different jurisdictions. However, none of these approaches provide a complete solution. Critically, Aurizon considers it important that the negotiation model reflect the following features:

- It must not enable QR to simply set access charges on a 'take it or leave it' basis, further entrenching QR's ability to impose pricing outcomes and limit, rather than facilitate, effective negotiation with access seekers;
- Similarly, it should not be treated as a trigger for QR to adopt a building block based cost assessment to justify price increases. The access charges for these services need to reflect the competitive environment in which the services are provided;
- It must be targeted to the needs of the operators and customers for those services, genuinely providing for operator/customer input, and include an effective process to resolve disputes through referral to the QCA.

Aurizon considers that this could be achieved through the development of specific negotiation criteria for application to defined service types. Initially, these should be developed to apply to multi-commodity freighter services on the Mt Isa line, however DAU3 could establish a set of criteria for use in determining whether there is a need for similar criteria to be developed for other service types. The service specific negotiation criteria would then be incorporated as a schedule to DAU3. This would ensure that:

- There is a clear process to enable genuine and collaborative customer engagement in their development, including opportunity for input not only by access holders such as Aurizon, but also by our customers for those services. For example, the negotiation criteria could be developed through the QCA's collaborative submissions phase;
- There is opportunity for the QCA to resolve any issues unable to be agreed, through the QCA's final decision.

The elements that should be addressed in the Mt Isa Line Freightier negotiation criteria should include:

- Recognising that the current access charge for these services is really only suitable for strongly rail advantaged freight, the negotiation criteria should set out the circumstances in which the access price differentiation will be applied to reflect the QCA Act objective for price discrimination where it will aid efficiency. This could include variation to the standard access price to provide incentives for emerging demand (eg small customers, low project maturity or low commodity value), or freight that is highly contestable with road (eg freight that is currently on road or has characteristics that allows road freight to provide an efficient service);
- The definition of products that may be carried on these services. This should be specified broadly so as to promote an operator's ability to run an efficient train service and attract additional products to its train, and where relevant facilitates price differentiation for different products on those trains;
- Price structure, including the weighting between fixed and variable charges. In this regard, it will be important to consider the QCA Act objective for multi-part tariffs to be applied where this will aid efficiency, and, where relevant, to facilitate price differentiation for different products on multi-product trains;
- Take or pay, set to promote efficiency, having regard to issues such as the incremental investment required to provide the required capacity (if any), the level of corridor utilisation, amount of required capacity, and the ability to impose take or pay commitments to freight customers;
- Relinquishment fees, set to promote efficiency, having regard to similar issues as for take or pay;
- Quality of rail access service, potentially including performance based KPIs, to ensure that service quality is maintained.

Once established, these negotiation criteria will provide greater structure around access negotiations, particularly for more uncertain demand (eg junior miners or other road contestable freight). Not only will this facilitate a fast and efficient contract renegotiation process at term expiry, but it will also provide a structure for negotiation with QR during the term of an access agreement in relation to the pricing to be applied for new products.²¹

²¹ Note, while Access Agreement should not restrict the carriage of any products on a multi-commodity train service, it may be necessary to negotiate with QR to confirm the price to be applied to a new product.

Recommendation

Aurizon recommends DAU3 be amended to:

- Include, as a schedule to DAU3, service specific negotiation criteria for multi-commodity Freighter services on the Mt Isa line, reflecting that the DAU3 negotiation framework does not effectively support balanced commercial negotiation for these services.
- These negotiation criteria should clearly set out the circumstances in which price differentiation will be applied for different products on those services, as well as addressing other critical pricing terms such as price structure, take or pay, relinquishment fees and service standards.

3. Other negotiation framework issues

3.1 Scope of Access Undertaking

There is some ambiguity around the status under AU2 of interstate services using QR's dual gauge track and connecting to the ARTC standard gauge network at Acacia Ridge.

Prior to the June 2020 declaration of the Queensland Rail service by the Minister under section 81(4) of the QCA Act, the services were regulated under the declaration savings provision in section 250(1)(b) of the QCA Act which provided that the following service was declared:

the use of rail transport infrastructure for providing transportation by rail if the infrastructure is used for operating a railway for which Queensland Rail Limited, or a successor, assign or subsidiary of Queensland Rail Limited, is the railway manager

However, section 249 provided that the following service is excluded from part 5 of the QCA Act:

the service is the use of rail transport infrastructure for providing transportation by rail between Queensland and another State if:

(a) the infrastructure is standard gauge track; and

(b) the transportation is effected by using standard gauge rollingstock.

Notwithstanding, section 249(3) also limited the extent of these restrictions for a period of 10 years from their commencement (8 September 2010).

The drafting of this exclusion remained unchanged since the original service declaration in 1998. At that time, QR owned the standard gauge track from Acacia Ridge to the Queensland/NSW border, and it was planned that access to this standard gauge would be managed by ARTC under a wholesale access agreement. It was considered most efficient for this standard gauge network segment to be regulated in the same way as the adjoining ARTC interstate network. Hence, services using this track were excluded from the QCA service declaration in order to provide an opportunity for the national access regime to apply²². In contrast, in relation to the then recently completed dual

²² A service may not be declared under the National Access Regime where an effective state based access regime is in force for the service (section 44F, CCA), and a voluntary access undertaking cannot be submitted under the National Access Regime where an effective state based access regime is in force for the service (section 44ZZA(3AA), CCA)

gauge link from Acacia Ridge to Port of Brisbane, there was concern around the risks and uncertainty that would result if two different access regimes were applied to services using this track. Accordingly, the exclusion was limited to those interstate services using both standard gauge rollingstock and standard gauge track. However, the drafting of the exclusion in relation to its application to dual gauge track was unclear.

This uncertainty continued with the 2020 declaration order,²³ which was made following the QCA's review of the QR service declaration²⁴. Neither the declaration review, the declaration order, or the Queensland Government's subsequent application for certification of the Queensland Rail Access Regime (QRAR)²⁵ made any reference to the exclusion of interstate standard gauge services from the QR declaration. For example, in considering whether the relevant service included the use of the dedicated dual gauge track from Lytton Junction to Fisherman Islands the QCA stated:

The QCA considers that the 'service' about which it must make a recommendation under s. 87A of the QCA Act is the service as a whole (i.e. use of the entire Queensland Rail network) as described in s. 250(1)(b).

Importantly, the QCA's Final Recommendation makes no reference to the exclusions in the now expired section 249 of the QCA Act. Similarly, in describing the scope of the coverage of the QRAR the Queensland Government states:

In any case, the Regime only applies to railway lines and rail infrastructure which are situated wholly within the state of Queensland. The interstate rail track situated between Acacia Ridge and the New South Wales border is leased and operated by the Australian Rail Track Corporation and is not covered by the Regime.

From this statement there is no reason to believe that services using the dual gauge corridor from Lytton Junction to Fisherman Islands are intended to be excluded.

However, while the declaration incorporates the whole of the metropolitan system it does so with reference to services which utilise the metropolitan system and other parts of the QR network as shown:

"North Coast Route service" means the use of the North Coast Line and the Metropolitan system;

"South Western Route service" means the use of the South Western system, the Metropolitan system and those parts of the West Moreton system that interconnect the South Western system and the Metropolitan system;

Western Route service" means the use of the Western system, the Metropolitan system and those parts of the West Moreton system that interconnect the Western system and the Metropolitan system;

²³ Queensland Government Gazette (Extraordinary Queensland Government Gazette no. 31 for 1 June 2020; vol. 384; pp.203-306)

²⁴ QCA (2020); Final Recommendation – Part B: Queensland Rail Declaration Review

²⁵ Queensland Government (2021); Application to the National Competition Council for a Recommendation to Extend the Certification of an Access Regime; Queensland's third party access regime for rail services provided by Queensland's rail networks; January 2021

“West Moreton Route service” means the use of the West Moreton system and the Metropolitan system.

As the use of the metropolitan system itself is not a defined service in the declaration order this creates uncertainty as to whether the use of the dual gauge corridor from Lytton Junction to Fisherman Islands without the use of another system falls within the scope of declaration. This is despite the declaration order also referring to the QR service as that service as defined in section 250(1)(b) (and without the section 249 exclusion).

When Aurizon sought access from Acacia Ridge to Port of Brisbane for its interstate containerised freight service, QR advised that it did not consider this service to be declared. Applying this interpretation provides QR with an unreasonable opportunity to exert market power in negotiations for access to this service. The basis for QR’s market power is similar to the north coast line, where the QCA concluded that QR has both the ability and incentive to exercise market power.²⁶ This reflects that, while intermodal competition constrains the total cost of delivering freight by rail between Melbourne and Brisbane, QR can use its market power to maximise its share of available rent, even if that did not give rise to the earning of monopoly rents.

While QR’s dual gauge link represents only 29.5km of the c.2000 km route from Melbourne to Brisbane, access to this ‘last mile’ is essential to enable Aurizon to reach its destination at Port of Brisbane, meaning that the level of QR’s market power is disproportionate to its share of the route distance. Further, QR’s network is primarily provided for passenger services, and QR is not highly motivated to maximise the volume of freight on this corridor. While a regulated RIM, such as ARTC, may aim to set access charges at a level designed to support rail’s ability to compete with road, this can simply have the effect of increasing the opportunity for an unregulated RIM such as QR to increase charges on its adjoining component of the network to maximise its share of available rent. The effect of this may not only be to squeeze Aurizon’s available margins, but also to squeeze the available margin of adjoining network owners who are more strongly motivated to maximise the volume of freight on rail.

Further, given this link provides access to one of only two current standard gauge containerised freight terminal options in greater Brisbane (the other terminal not being multi-user), access to this link is critical in order for Aurizon to be able to provide containerised freight services into Brisbane unless and until another rail terminal is constructed in greater Brisbane which does not utilise this link. The ability to provide national service coverage is a key attribute sought by many freight forwarder customers, meaning that the cost to Aurizon of not being able to operate services into Brisbane may be significantly higher than the commercial margin on freight carried between Melbourne and Brisbane. This further amplifies the ability of QR to exert market power in negotiations for access on the link to Port of Brisbane.

While QR advised that it would apply AU2 negotiation processes and standard terms and conditions to this service, in practice this did not occur, as explained in the box below.

Box 1 Aurizon’s negotiation experience for its interstate containerised freight service

Aurizon initially submitted an access application on 5 December 2022 for access for containerised freight services from Acacia Ridge to Port of Brisbane commencing July 2023. While there was ongoing engagement with QR around the operational aspects of the application, including our planned delay to the commencement of train services until September 2023, there was very limited opportunity for engagement on the commercial aspects of the application. An IAP was not provided by QR until 31 July 2023, more than

²⁶ QCA (2020); Final Recommendation – Queensland Rail Declaration Review, March 2020, p.69.

seven months after the access application and well after the date by which Aurizon had needed to finalise and execute its customer agreement. It was only at this point that Aurizon was made aware of the unusual pricing arrangements proposed for this service, including: [REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

QR's IAP also included advice that remedial work would be required on the dual gauge track prior to the operation of standard gauge services on the route – with such work likely to take up to four months and only to be scheduled once Aurizon provided agreement in principle for an access agreement. In order to commence services during September 2023, Aurizon had little option but to rapidly provide this agreement in principle. This, combined with the very limited remaining timeframe required to finalise and execute an access agreement before service commencement, meant there was no realistic opportunity for genuine negotiation on any of the commercial terms for access.

During this negotiation, QR failed to provide an IAP within the timeframes required under AU2, and withheld the provision of critical information on proposed pricing terms until such time that Aurizon would have no option but to accept its proposal – a clear exercise of market power – with Aurizon having no recourse to the provisions of the access undertaking designed to enforce compliance with the negotiation process.

Given the clear opportunity for QR to exercise market power in negotiations for access to the 'last mile' of an interstate service – and evidence that it has done so in negotiations to date - Aurizon considers it imperative that these services be regulated, with the most efficient approach (in terms of speed and administration cost) to clearly include these services within the scope of QR's access undertaking. Notwithstanding the uncertainty associated with the scope of the Queensland Rail declaration in respect of interstate services using the dual gauge link, as DAU3 is a voluntary Draft Access Undertaking, QR has the ability to remove this uncertainty by explicitly including these services within the scope of its access undertaking.

Any unwillingness of QR to do so would simply highlight the additional value that it believes it can achieve from negotiating access for these services in an unregulated environment, where it is free to exercise market power.

Recommendation

Aurizon recommends DAU3 be amended to:

- be specifically expressed to apply in its entirety to standard gauge services using the dual gauge link from Acacia Ridge to Port of Brisbane.

3.2 Timeliness of Indicative Access Proposal

One of the difficulties in negotiating access with QR is the timeframes within which information is provided. Apart from WM coal services, many of Aurizon's haulage opportunities require a rapid response, with timeframes for tender preparation measured in weeks. This is particularly the case for customers for whom road transport is a viable alternative, with road hauliers able to provide proposals in short timeframes.

QR's standard response timeframes are not compatible with the market demand for these services, with DAU3 continuing to provide QR with one week to acknowledge an access application and a further four weeks to provide an Indicative Access Proposal (IAP). This is exacerbated by QR's practice of requiring firm advice of the specific paths required either within the access application, or as a clarification to the access application, before these timeframes apply. This occurs notwithstanding that the IAP is indicative and preliminary in nature, and that there is opportunity to provide an IAP based on the assumption that the path will be scheduled using existing available capacity and that the scheduled paths to be used will be confirmed through the negotiation period.

In practice, uncertainty around the specific scheduled path to be applied (particularly where it is also necessary to align this with adjoining network managers) means that information on access pricing is often not available prior to Aurizon's requirement to propose rail haulage commercial terms to customers. Accordingly, Aurizon considers there is merit in DAU3 providing for faster provision of pricing information by QR.

Recommendation

Aurizon recommends DAU3 be amended to:

- Provide that an access application for timetabled MTP services does not need to include advice on specific train schedules required, and that an IAP can be provided based on the assumption that the path will be scheduled using existing available capacity and with the specific path to be confirmed through the negotiation period; and
- Provide for a shorter IAP response times (eg two weeks) in these circumstances, given the absence of a requirement for a capacity analysis to be performed.

3.3 Queuing framework

In DAU3, QR has redrafted the queuing principles for access applications, set out in Clause 2.9. In essence, the queuing principles reflect the same policy intent as AU2 and provide that, in the event that QR does not have sufficient capacity to fulfill all access applications, then the access applications will be incorporated into a queue.

The order of queued applications will initially be based on the date of their access application. QR may change the order of the queued applications in the circumstances defined in Clause 2.9.5(b), including in order to promote an access application that is more favourable to QR's legitimate business interests, assessed as follows:

- For WM coal services, access applications for a term of at least ten years may be promoted over shorter term applications; and
- For all other services, access applications that achieve a higher present value of contribution to common costs may be promoted over access applications that would provide a lesser contribution to common costs.

The queuing framework does not apply to defined Renewal Applications. The existing access agreements for which priority contract renewal is permitted are linked to the services which have a

right to receive constrained renewal pricing arrangements under Clause 3.3(i), which is a one-off right applied to coal and bulk mineral train services.

While the access undertaking provides for renewal provisions to be negotiated and included in access agreements, renewal provisions in access agreements are usually limited. QR has previously submitted the reasons why it is unwilling to provide an automatic right to renewal of access agreements given QR's diverse traffic types, particularly noting that:

- It is reasonable that, at contract renewal, QR be able to rebase its pricing within the existing pricing provisions of the access undertaking²⁷; and
- In the event that rail capacity was constrained, it would not be possible to allocate that capacity to a new entrant, even if that entrant placed a higher value on that capacity than the renewing access holder²⁸.

Aurizon is concerned that the queuing framework may have unintended consequences for existing access holders, in terms of their ability to re-negotiate for currently contracted paths in order to maintain the continuity of their business.

In other published SAAs for networks with diverse traffic types²⁹, the issue of contract renewal is addressed by providing a right to re-negotiate for the paths (in accordance with the then current regulatory framework), provided that the access holder provides notice of its wish to do so within a defined time period before the expiry of the agreement, but there are no automatic or enforceable rights of renewal or extension.

While QR's SAA also provides that negotiations in respect of a renewal must occur in good faith as required by and subject to the QCA Act and the Access Undertaking³⁰, the queuing framework (which is unique to QR's access undertaking) may give priority to another access application simply due to the other application being submitted prior to the existing access holder notifying its wish to renew. While QR has rights to re-order the queue in specified circumstances (as noted above), if the earlier application is for a like train service requiring non-discriminatory pricing, it may be difficult for the existing access holder to meet the criteria that enables QR to promote it ahead of an earlier access application.

This concern can be readily addressed by providing in CI 2.9 of DAU3 that, so long as an existing access holder notifies QR that it wishes to negotiate for the renewal of its access rights within a defined period of time prior to expiry of its agreement, it will initially be placed first in any queue. This will not detract from QR's legitimate business interests in setting access charges in accordance with the (then) current pricing provisions in the access undertaking, or in preferencing allocation of the capacity to a different access seeker who places a higher value on the capacity, as it will continue to have the right to re-order the queue in accordance with Clause 2.9. However, it will provide additional confidence to access holders around their ability to negotiate for renewal of their access rights, which is important in managing business continuity risk.

²⁷ Queensland Rail (2019); Queensland Rail's Response to the QCA's Draft Decision on Queensland Rail's Draft Access Undertaking 2; 11 July 2019; p.16

²⁸ Queensland Rail (2018); Response to submissions on Queensland Rail's 2020 DAU; 16 November 2018; p.20.

²⁹ ARTC Standard Access Agreement, CI 2.9, ABCN Time-Path Allocation and Reallocation Policy CI 11, for which the Standard Access Agreement CI 5.2(b) and 5.5(a) requires the network owner and operator comply

³⁰ QR DAU3 Standard Access Agreement CI 1.2(b)

Recommendation

Aurizon recommends that DAU3 be amended to:

- specify that, provided an access holder notifies QR within 120 days of the expiry of its access agreement that it wishes to renew its access entitlement, it will initially be placed first in the queue for that capacity. The queue re-ordering provisions will continue to apply.

4. Network management principles

For DAU3, QR has largely proposed to continue the AU2 Network Management Principles, with modification only in relation to the consultation process around possession planning. However, Aurizon has ongoing concerns around a number of aspects of QR's AU2 NMP, and these are discussed below, in addition to our feedback on the specific change sought by QR.

4.1 Train Planning processes

4.1.1 Master Train Plan Principles

The NMP includes an obligation on QR to indicate in a MTP the capacity necessary to satisfy all relevant Train Service Entitlements, all of QR's passenger Train Services and time allocated for Regular Planned Possessions (CI 2.1(a)(i)).

It goes on to establish some constraints around the timing for amendment to the MTP, including that:

- QR will notify all Access Holders and any other parties whose activities may be affected at least three months prior to the commencement of the modification (CI 2.1(d));
- An access holder must give QR sufficient notice of any required changes to a MTP to enable QR to consider the amendments and, if changes are to be made, comply with the above notification requirements (CI 2.1(e)); and
- A notice given by an Access Holder under for a change to the MTP must be provided no less than three months before the required change for a freight service, or six months before the required change for a passenger service (CI 2.1(f)).

However, QR's actual practice for updating the MTP does not align with this process, and the timeframes for services to be included in the MTP are excessively long, particularly when these have no impact on any other service. For example, for Aurizon's interstate containerised freight services (which commenced in late September 2023 following execution of the access agreement early that same month), QR has refused to include these services in the MTP until its planned February 2024 MTP update. In the meantime, Aurizon has needed to continue to submit DTP path requests – which provides lesser certainty around QR's provision of these paths – notwithstanding the paths are committed in an access agreement and should, as per CI 2.1(a)(i) be included in a MTP from contract commencement.

The reason for this delay is unclear, particularly as:

- Aurizon had submitted its access application for this service in December 2022, and had been in ongoing discussions with QR regarding the final pathing for an extended period of time prior to the contract being finalised. The period of time for these discussions was well in excess of the three month notification period that CI 2.1(f) requires;

- The insertion of these paths did not affect any other paths, and therefore Aurizon considers that the change did not affect the availability of any access holder or other party's access to the network, and therefore no requirement for a notification period under CI 2.1(d);
- Even if QR were to apply a conservative interpretation of CI 2.1(d) and require a three month notification period be observed, this would have allowed the services to be included in the MTP from December 2023.

Unlike the process in the NMP, which envisages the MTP as a live document which will be changed as required, QR appears to adopt a process of fixed periodic MTP revisions, which may, for example, be set to align with the summer MTP (starting November) and winter MTP (starting March) applied in some systems, including WMandWM and Mt Isa.

If QR wishes to adopt a process of fixed MTP revision dates (eg summer and winter timetable dates), then:

- It should include a process for incorporating new or changed contracted paths in the MTP in between MTP reviews. This is the approach used by Transport for NSW (TfNSW), which has a concept called STN paths which are able to be inserted into the Standard Working Timetable in (SWTT) between timetable reviews. This gives the access holder certainty over the path until its guaranteed inclusion in the next SWTT and more rights vis-à-vis maintenance and possession scheduling than a DTP service; and
- There should be no need for notification and consultation processes with other access holders and other parties unless their services or activities are affected by the new or changed path.
- These changes will allow new or changed services reflected in the MTP in much shorter timeframes, particularly where they do not affect any other party, enabling QR to be more responsive to customer requirements.

4.1.2 Scheduling terminology, timing and processes

According to DAU3, QR maintains a MTP, a Supply Chain Calendar (SCC) (which is to be updated at least monthly) and a DTP.

However, for the WM Coal system, QR has:

- an MTP;
- the Western Corridor Alignment Calendar (**WCAC**), which includes major closures (ad hoc planned possessions) not in the MTP. The WCAC is ideally (for QR's purposes) confirmed 3 months out from commencement;
- a forecast plan with pathing (16-18 weeks out which is then reviewed weekly-fortnightly); and
- the DTP.

This actual process for scheduling these plans does not align with the process described in the NMP and it appears that the NMP has not been updated as QR's processes have changed. Aurizon considers that it would be opportune for QR to review the NMP scheduling process to ensure that the NMP reflects an efficient process that meets the needs of all parties (QR, including recognition, if applicable, of varied processes in different systems). With ACCC's authorisation for rail operators to

collectively negotiate with QR in relation to access terms,³¹ this review should be conducted collectively with all operators on QR's network.

Recommendation

Aurizon recommends that the DAU3 NMP be amended to:

- Include a mechanism for more quickly including new and varied paths in the MTP, particularly where these do not have any impact on any other parties, and provide for this to occur between scheduled MTP reviews; and
- Otherwise, review the NMP processes in consultation with operators (collectively) to ensure that the NMP reflects an efficient process that meets the needs of all parties, including if applicable varied processes in different systems.

4.2 Possession planning

QR has proposed to remove of the CI 2.4 provisions regarding a planned possession not being able to proceed until a dispute has been resolved. QR's rationale is that this is not required of other RIMs and that the standard dispute mechanism in the AU should be applied to prevent over-regulation.

Aurizon considers that the right for access holders to contest actions that they consider are in breach of its access agreement is reasonable and forms an important element of QR's SAA. Accordingly, allowing them to contest possessions that they consider have been inappropriately scheduled is implicit should not be controversial. Reflecting this, CI 2.4 does not introduce an additional dispute mechanism or an additional right for access holders to dispute issues, and should not be construed as over-regulation. Instead, CI 2.4 provides clarification of the process to be applied and ensures that there is no incentive for QR to delay resolution of a dispute in order to allow the possession to proceed. As a result, CI 2.4 assists in promoting disciplined operation of the network, and accountability on QR to comply with its obligations to the access holder.

Recommendation

Aurizon recommends that CI 2.4 of the NMP should be retained in its AU2 form.

4.3 Train control decisions

From an operational perspective, one of the most important factors influencing the quality of the service provided to an operator is the decisions made by train controllers in managing inevitable deviations from the DTP. QR's NMP, together with similar documents from other RIMs, provide guidance and instruction as to how such decisions will be made. Each RIM's train control decision criteria seek to address similar issues in identifying what trains should have priority, with passenger services usually given highest priority, preference given to trains that are late due to the RIM, and so on, each RIM addresses these issues in different ways in establishing its decision rules.

Aurizon would prefer to see a more consistent approach taken in setting train control rules across Australian networks, and the circumstances in which priority is given to different trains, particularly for those trains that operate over multiple networks as part of a single journey. For QR, given it has very

³¹ ACCC Determination on application of revocation of AA1000425 and the substitution of authorisation AA1000644; 1 February 2024

limited interstate services operating on its network, this is most relevant for north coast line services operating over both the QR and Aurizon Network infrastructure.

However, Aurizon considers that the most critical objective is for the NMP to provide clear and unambiguous guidance on how such decisions are made. In this regard, Aurizon considers that QR's train control rules are less clear than those of other RIM's – particularly when compared to the decision criteria in Aurizon Network's NMP. QR's rules do not always provide transparent guidance on how train controllers are expected to make their decisions. As a result, not only is it difficult for freight operators to predict how train control decisions will be made, it is also very difficult to hold QR to account in providing freight operators with a reasonable service quality in the day of operations.

This concern is amplified by the inclusion in AU2 of an ability for QR to deviate from the train management principles to avoid potential congestion, as permitted in the NMP CI 3(i)(i)(B). Notwithstanding that this rule has now been in place since 2020, it is unclear in what circumstances QR uses this provision to vary from the rules otherwise in place, and how effective it has been in addressing potential congestion. Concerningly though, the broad discretion provided by this rule means that QR could always have an excusal for any decision that it makes that could be otherwise be considered to be in contravention to the other decision criteria.

In Aurizon's experience, it is extremely difficult for a train controller to have visibility around the future impact (beyond the next cross or two) of any train control decision – and this will particularly be the case in the complex metropolitan network. As has been highlighted by QR, train control is a safety critical function and the controllers need to be fully focused on the task at hand. An expectation that they should be trying to 'look ahead' to avoid future congestion will make this safety critical task harder. As a result, Aurizon considers that QR should review its train control decision rules, again in consultation with rail operators, to provide clearer guidance to train controllers, including in particular removing the right to deviate from the DTP for ambiguous reasons such as avoiding potential congestion.

Recommendation

Aurizon considers that the DAU NMP should be amended to:

- Remove CI 3(i)(i)(B) which enables QR to deviate from the train management principles in order to avoid potential congestion;
- Otherwise review the train management principles in consultation with rail operators (acting collectively) in order to improve the clarity of guidance provided to train controllers in managing deviations from the DTP.

5. Performance reporting

At present, most RIMs are required to report on performance, either publicly³² or to operators/access holders on their network³³, however each report on a different set of indicators. In some cases, individual indicators are well aligned across RIMs, but in other cases different indicators are used to provide similar, but not identical, performance information. Aurizon Network and ARTC Hunter Valley, performance reporting requirements have been developed in close consultation with users in order to meet their specific requirements. However, there is no clear rationale for the different performance indicators reported by other networks, notwithstanding that operators on these networks have largely common information needs given their predominant operation of scheduled freight services. Aurizon believes that considerable benefit can be provided from improved harmonisation of the performance metrics used by Australia's freight rail networks.

The use of a consistent suite of core KPIs is important where individual trains operate over multiple networks (such as Aurizon's containerised freight service), as this will provide information on train/network performance for the whole service. However, a consistent suite of core performance indicators is also of value regardless of the operation of multi-network services. This is because:

- Most rail operators, including Aurizon, operate over a national footprint, and this would allow operators to take a more consistent approach to assessing the performance of similar services in different jurisdictions, and to make valid comparisons of performance across jurisdictions – improving their ability to negotiate effectively with RIMs around service quality, and ultimately with benefits in promoting the efficiency of rail services; and
- Many freight customers – including both bulk and containerised freight customers - also operate across a national footprint. An aligned approach to reporting rail network performance will allow operators to present consistent information to their customers on the performance of their freight services, including the reasons for any disruptions to service, in the same way that can occur for road freight.

On this basis, Aurizon has identified a set of core, common KPIs that it considers should be reported by all RIMs. These include KPIs on aggregate system performance (as publicly reported by QR in accordance with its access undertaking) and on individual service performance (which would be reported under individual access agreements). In addition to these core, common KPIs, RIM specific KPIs may be developed to address issues that are more unique to that RIM's network, operations or regulatory framework.

For clarity, we do not propose that these core KPIs replace the bespoke reporting arrangements agreed in relation to Aurizon Network and ARTC Hunter Valley.

5.1 Aggregate system performance KPIs

QR currently reports on aggregate system performance (by geographic zone), based on the KPIs specified in Clause 5.1. ARTC also reports publicly on aggregate system performance in accordance with its IAU, and Arc Infrastructure will soon be required to publicly report on aggregate system performance under recent changes to the WA Railways (Access) Code 2023. Aurizon Bulk Central Network's (**ABCN**) requirements for reporting on aggregate system performance of the Tarcoola to Darwin Railway (**TDR**) are set out in its Service Quality Policy. These KPI suites generally cover similar core aspects of performance, but with slightly different information provided - each with its

³² QR, ARTC Interstate, Arc Infrastructure

³³ Aurizon Network, ARTC Hunter Valley, Aurizon Bulk Central Network

strengths and weaknesses. Aurizon has reviewed these KPI suites to identify how they can be harmonised in a way that provides the most useful form of performance information. Our proposed core common KPIs are set out in the table below.

Table 2 Proposed common aggregate system performance KPIs

Category	Proposed common KPI	Explanation
Reliability Measures related to no and % of services performing according to schedule Should be specific to freight services (and to freight categories where appropriate)	No and % of healthy services exiting within tolerance	Reported by ARTC and ABCN. NSW MRN and CRN also use consistent healthy/unhealthy terminology. QR reports similar information in a slightly different format, and this would require modification to QR's reports (CI 5.1.2(a)(ii)(B)(1)). Arc will also be required to report information on similar aspects of performance, but the exact form of the indicators is not yet clear. Arc uses the same terminology but with different definitions of healthy/unhealthy. There would be benefit in applying consistent approach across networks. Of the options currently used, the ARTC/ABCN indicator provides the clearest understanding of network performance.
	No and % of unhealthy services not deteriorating further	Reported by ARTC and ABCN. QR does not have a similar indicator and this would need to be added to QR's existing reports. Provides valuable information for understanding of overall network performance.
	No and % of services that are healthy	Reported by ARTC and ABCN. QR reports same information in a slightly different format and this would require modification to QR's reports (CI 5.1.2(a)(ii)(B)(2)). Arc will also be required to report information on similar aspects of performance.
	No and % of services that exit no later than schedule within tolerance	Reported by ARTC, ABCN and QR (CI 5.1.2(a)(ii)(A)). Will also be required to be reported by Arc.
Network Availability Measures relating to availability of network Should be specific to freight services (and to freight categories where appropriate)	No and % of services rescheduled for the purpose of RIM possession	Reported under SAA by ARTC. Partially reported by QR, and would require modification to QR's existing reports (CI 5.1.2(a)(xi)). Provides valuable information on overall reliability of the train schedule, given the demand for network possessions.
	No and % of services cancelled and not rescheduled due to RIM	Reported by QR (CI 5.1.2(a)(iv)) and will be required to be reported by Arc. In aggregate these KPIs should provide information on all MTP services not operated. Provides valuable information on network availability and reasons for MTP services not run
	No and % of services cancelled and not rescheduled due to operator/access holder	Note for clarity, for multi-network trains, where a RIM caused service cancellation means that the operator is required to cancel that same service on an adjoining network, the adjoining network owner should categorise the reason for this cancellation as 'other reasons'
	No and % of services cancelled and not rescheduled for other reasons	
	% of time network available for services	Similar information reported by ARTC (HVCN) and AN. Provides information on extent of RIM's possession demands on network.
<i>Possible additional indicator</i>	<i>% of maintenance work (hours) delivered in planned possessions</i>	<i>Similar information reported by ARTC (HVCN) and AN. Provides valuable information on performance in maintenance planning and execution. Could</i>

		<i>potentially be used as an alternate to QR's specific KPIs around possession performance.</i>
Transit times/delays Measures relating to network delays Should be specific to freight services (and to freight categories where appropriate)	Average scheduled speed	Reported by ARTC only (under network availability category), and would need to be added to QR's existing reports. Provides valuable information on whether network capability is improving or degrading over time (including due to congestion causing new trains to achieve slower transit times), particularly when in conjunction with delay KPIs below.
	No and % of Services which transit the Network no later than scheduled transit, within tolerance	Reported by ARTC, ABCN, and would need to be added to QR's existing reports. Provides valuable information for understanding of overall network performance
	The average above rail delay, in minutes per transit hour	Information reported by ARTC, ABCN and QR, although QR presents the information in minutes per 100 train kilometres, and would require modification to QR's existing reports (CI 5.1.2(a)(iii)). Arc will also be required to provide information on number of delays by cause. Presenting the information in minutes per transit hour will more readily enable comparison across networks.
	The average below rail delay, in minutes per transit hour	
	The average unallocated delay, in minutes per transit hour	
Speed restrictions	KM and % of track under TSR	Reported by ARTC, ABCN and QR (CI 5.1.2(a)(vi)). Arc will also be required to report KM under TSR.
Track condition	Track Quality Index	Reported by ARTC, ABCN and QR (CI 5.1.2(a)(vii))

In relation to the remaining aggregate system KPIs currently included in Clause 5.1.2, Aurizon's view on these, including on QR's proposed amendments to these KPIs, is set out in the table below.

Table 3 QR Specific aggregate system performance KPIs

Category	Proposed KPI	Aurizon response
Ad Hoc Planned Possessions CI 5.1.2(a)(x) Measures related to no and % of regular and ad hoc planned possessions starting/finishing on time	QR has proposed to remove ad hoc planned possessions from this requirement, on the basis that its systems do not support this. QR has never complied with this obligation in relation to ad hoc planned possessions.	This reporting requirement was introduced in AU2 as the consequence for QR introducing the new category of ad hoc planned possessions, to provide accountability around QR's use of this provision. While QR has stated that 'ad hoc possessions only have a minor effect on delays with these works often only having a single digit delay' ³⁴ , the basis for this statement is unclear given its advice that start and end times for these possessions are not included in Vizirail. Aurizon considers that if QR wishes to retain the right to apply ad hoc planned possessions, it is important that it is transparent and accountable in the way it uses this right, by providing reporting on their impact. However, recognising the level of detail required in CI 5.1.2(a)(x), Aurizon would be satisfied if QR

³⁴ Queensland Rail (2023); Draft Access Undertaking 3 Explanatory Document; November 2023; p.63

		<p>reported on ad hoc planned possessions in the same way that it reports on urgent and emergency possessions in CI 5.1.2(a)(xi).</p> <p>Further, it may be satisfactory to adopt a simplified approach to reporting on compliance with possession timeframes, i.e. % of maintenance work (hours) completed within planned possessions (including regular and ad hoc planned possessions), as noted in relation to common core KPIs.</p>
<p>Urgent and Emergency Possessions CI 5.1.2(a)(xi) Measures relating to the number and duration of urgent and emergency possessions and their impact on train services</p>	<p>QR has not proposed any amendment to this requirement, however a review of QR's quarterly reports shows that it does not actually report the impact of urgent and emergency possessions on train services as required.</p>	<p>Aurizon considers that an understanding of the impact of urgent and emergency possessions on the operation of scheduled train services is critical. Possessions that do not impact the operation of train services are of far less concern than those that require a service to be rescheduled or cancelled. Accordingly, Aurizon has proposed that the impact on train services from possessions (in aggregate) form part of the common KPIs. If this proposal is accepted, then Aurizon would be satisfied for the obligation to separately report the impact of urgent and emergency possessions on train services to be removed.</p> <p>Further, a simpler, and more complete, understanding of the extent to which urgent and emergency possessions are required to complete necessary maintenance would be provided by replacing the current CI 5.1.2(a)(xi) requirement with reporting of the % of maintenance work (hours) completed within planned possessions as noted above.</p>
<p>Deviations from DTP CI 5.1.2(a)(ii)(D) The number of times that network controllers deviate from train management principles to avoid potential congestion</p>	<p>QR has removed the requirement to report this information on the basis that no other RIM is required to report this type of detail and its system do not support this. QR has never complied with this obligation.</p>	<p>This reporting requirement was introduced in AU2 as the consequence for QR introducing for itself the right to deviate from the DTP so as to avoid congestion. This KPI was intended to provide accountability around QR's use of this provision. This KPI is particularly relevant for freight passing through a passenger network, as this is where delays to freight services due to the risk of impact on potential congestion is of most concern.</p> <p>While QR claims that no other RIM is required to report on a train control KPI in this level of detail and complexity³⁵, this reflects that QR is the only RIM who wants to retain the ability to deviate from standard scheduling rules for this reason. There is no similar ability for ARTC or Aurizon Network to deviate from its DTP. Similarly, Sydney Trains, also managing a complex passenger network, does not retain an ability to deviate from its DTP for this reason.</p> <p>As discussed in Section 4.3 above, Aurizon has recommended this provision be removed from DAU3. However, if QR retains this right, it is essential that QR be accountable in how it is used. Accordingly, QR should be required to amend its systems in order to provide transparency around the</p>

³⁵ Queensland Rail (2023); Draft Access Undertaking 3 Explanatory Document; November 2023; p.62.

		extent to which this entitlement is used, and to evaluate on an ongoing basis the effectiveness of any such train control decisions in actually avoiding congestion.
Complaints CI 5.1.2(a)(viii) Reporting on written complaints received by QR on specified matters	QR has proposed no change to this requirement.	Aurizon considers that there is little value in this information. Where there is a concern around QR's actions in relation to the specified matters, they will usually need to be resolved quickly, and typically by phone conversation or meeting. Written complaints would not usually be an option considered – and this is apparent in recent reports where no verified complaints have been recorded. However, by reporting on written complaints, this indicator can give the impression that there are no concerns around QR's actions on these matters, even where this is not really the case. Aurizon would prefer the quarterly reports to focus on more relevant measures, as sought in the proposed common KPIs and would not object to this indicator being removed from DAU3.
System user groups Operation of system user groups	AU2 includes requirements around the operation of regional network user groups to promote productivity and operational improvements, however QR's performance against these obligations has been poor, with the MIL and NCL groups only commencing late 2023.	In order to provide greater accountability on QR around the operation of the system user groups, Aurizon considers that QR should be required to report on, for each regional user group: <ul style="list-style-type: none"> > Number of meetings held; > Seniority of QR representatives at meetings; > Overview of initiatives identified and progressed.

Recommendation

Aurizon recommends DAU3 be amended to:

- Modify the performance indicators listed in CI 5.1.2(a), and which are included in QR's quarterly published performance reports, to:
 - Include Aurizon's proposed common KPIs, as set out in Table 2, which Aurizon will request be consistently reported by all RIMs providing access to regularly scheduled services on Australian rail networks;
 - Include the amendments to QR specific system performance KPIs as set out in Table 3.

5.2 Individual service KPIs

QR's negotiation framework anticipates that KPIs relevant to individual services will be negotiated in the relevant access agreement, although the SAA includes a minimum list of KPIs. Having reviewed the base KPIs in QR's SAA, Aurizon considers that these do not provide the most useful information for the purpose of assessing performance under an access agreement for regularly scheduled train services. Aurizon considers that it would be more relevant and useful to provide information similar to the aggregate system performance indicators, but specific to each train service specified in an individual access agreement. Not only would this provide a consistent approach to assessing performance, it would enable operators to understand the performance of their train services relative to the performance of the system as a whole.

Accordingly, we propose that the list of performance indicators in QR's SAA Schedule 5 be replaced by the following service specific KPIs.

Table 4 Proposed common service specific KPIs

Category	Proposed common indicator	Explanation
Reliability Measures related to no and % of services performing according to schedule	No and % of healthy services exiting within tolerance	Consistent with reliability measure in proposed common indicators for system reports. Reported under SAA by ARTC.
	No and % of unhealthy services not deteriorating further	Consistent with reliability measure in proposed common indicators for system reports. Reported under SAA by ARTC.
	No and % of services that are healthy	Consistent with reliability measure in proposed common indicators for system reports. Reported under SAA by ARTC.
Network Availability Measures relating to availability of network	No and % of services rescheduled for the purpose of RIM possession	Reported under SAA by ARTC.
	No and % of services cancelled and not rescheduled due to RIM (potentially separately reported for planned possessions and other unplanned reasons)	Consistent with network availability measure in proposed common indicators for system reports, but with greater detail re impact of possessions
	No and % of services cancelled and not rescheduled due to operator/access holder	
	No and % of services cancelled and not rescheduled for other reasons	
Transit times/delays Measures relating to network delays	No and % of Services which transit the Network no later than scheduled transit, within tolerance	Consistent with transit time/delay measures in proposed common indicators for system reports.
	The average above rail delay, in minutes per transit hour	Consistent with transit time/delay measures in proposed common indicators for system reports, and generally consistent with proposed Freight Lost Time measure (by cause) for Sydney Trains
	The average below rail delay, in minutes per transit hour	
	The average unallocated delay, in minutes per transit hour	
Speed restrictions	Impact of TSRs on train running (measured in total minutes)	Reported under SAA by ARTC.
Track condition	n/a	Included in public reports by geographic zone. Not specific to individual access agreement.

Recommendation

Aurizon recommends that QR's SAA be amended to:

- Replace the list of KPIs in Schedule of 5 of QR's SAA with the performance indicators listed in Table 4, which are consistent with Aurizon's proposed common KPIs for reporting on aggregate system performance.

6. Path management and optimisation tools

Aurizon's experience in entering the interstate containerised freight market has highlighted some critical issues that we consider are not currently well managed in Australia's rail access regimes.

Unlike bulk freight markets, for inter-city containerised freight, the timing of paths is critical in order to meet the service requirements of freight customers and to compete effectively with road freight. Premium paths are those with an efficient transit time combined with a late evening departure and an early morning arrival.

While this issue is particularly critical in the inter-city containerised freight market (given the limited time windows applied to premium paths), it also arises in more broadly in scheduled networks, where a new service will need to be 'fitted around' existing scheduled services, and as a result will often have to accept far greater crossing delays than the existing services.

Moreover, while access to suitable train paths is essential in order to compete effectively in freight haulage markets, Australia's rail access regimes create only limited accountability on operators for how these paths are used (both in terms of their level of path utilisation and their performance in reliably operating to schedule).

The difficulty for a new entrant in gaining access to suitable train paths is a function of two separate, but related, issues:

- Inflexibility in the ability for RIMs to adjust existing paths to allow for the introduction of a new service of comparable quality – which remains the case regardless of how consistently the incumbent operators reliably operate to schedule;
- In some cases, an incumbent operator may 'hoard' contracted paths, notwithstanding that it may not have sufficient demand to fully utilise them, in order to prevent a competitor from gaining access to those paths.

While there is generally considered to be ample spare capacity on most of QR's networks, if a new entrant were to seek access to a market – particularly general freight on the north coast line where limited premium pathing windows apply – it is not clear whether scheduling limitations would prevent the new entrant from gaining access to suitable paths.

In order to ensure that DAU3 can effectively support new entry to QR's network and competition in the rail haulage market, Aurizon considers that it is essential that RIMs, including QR, have the necessary tools to effectively manage the utilisation of capacity and to reduce opportunities for path hoarding by operators to limit competition in the rail haulage market. Further, Aurizon considers that these tools should be consistently defined and applied across Australia's rail networks to provide a common path management framework and to reduce opportunities for gaming for multi-network trains.

6.1 Tools to enable schedule optimisation

Where an access seeker wishes to operate a new service on a scheduled network, a requirement to fit that service around existing paths can result in the new service bearing significantly greater crossing delays, and transit times, than existing services. However, RIMs often have limited flexibility to optimise the schedule in order to introduce a new scheduled service with less aggregate transit time delay, as they generally commit to a specific network entry and exit time for each operator.

Notwithstanding this firm path commitment given by RIMs, there is generally limited accountability for rail operators to run to schedule – while access agreements often include a firm obligation on operators to comply with their train schedule, there are generally no direct consequences for late running except a loss of priority at train crosses.³⁶ As a result, the scheduling of a new train path may be constrained by an existing train schedule, even where the existing access holder does not reliably operate services to that schedule.

Most Australian access frameworks include a limited entitlement to reschedule services where an operator/access holder has consistent poor reliability performance, with the intention of more closely aligning the schedule to actual performance.³⁷ This entitlement, provided it works effectively, provides an important tool in enabling schedule optimisation, as it provides an opportunity to modify an existing scheduled path (where it is not used reliably) to facilitate the introduction of an efficient new scheduled path. However, QR's DAU3 SAA does not include any ability for QR to reschedule a service where the operator has consistent poor reliability performance. Aurizon considers that this entitlement should be included in QR's SAA.

Further, we consider that in introducing a train path review entitlement into its SAA, there is merit in QR using a modified version of the entitlement included in other SAAs, in order that this can be used more effectively to ensure that scheduled train paths reflect actual network usage, and to enable schedules to be optimised for the purpose of introducing new services. The train path review provision typically adopted in other SAAs provide that nothing compels the operator to accept a train path offered by the RIM if contractual obligations owed by the operator to any person would prevent it from doing so. This would allow an operator to refuse an alternate train path on the basis of a contracted entry or exit time to/from a terminal or adjoining network, notwithstanding that it does not consistently meet that time and that the revised path more closely resembles its actual practice. Instead, Aurizon considers that obligations regarding network entry and exit times should not be a valid reason for refusing a different train path that more closely reflects actual practice, and that there should be a positive obligation on the operator to use its best endeavours to negotiate a varied entry or exit time that aligns with a revised schedule offered by QR (and which more closely resembles its actual practice).

In addition, Aurizon considers that it would be desirable for Train Service Levels in Schedule 2, Attachment 1 of QR's access agreements to be specified in a way that provides some flexibility for the scheduling of trains in accordance with that Train Service Level, rather than simply specifying fixed network entry/exit times. This would provide QR with additional opportunities to modify existing schedules to facilitate the inclusion of new train services, or otherwise optimise the train schedule.

³⁶ This is the case under the QR SAA and under the ARTC SAA

³⁷ Including ARTC Interstate Access Undertaking SAA CI 9.6; Arc Infrastructure Train Path Policy CI 3.2; Aurizon Bulk Central Time Path Allocation and Reallocation Policy CI 16

Recommendation

Aurizon recommends that, in order to improve opportunities for QR to optimise its MTP and introduce new services if required, QR's DAU3 SAA be amended to:

- Include an ability for QR to reschedule train paths where an operator has consistent poor reliability performance and, in doing so, a rail operator should have an obligation to use its best endeavours to negotiate variations to agreements defining network entry and exit times to accommodate that varied schedule; and
- Provide that Train Service Levels in Schedule 2, Attachment 1 of QR's access agreements should be specified in a way that provides some flexibility for the scheduling of trains in accordance with that Train Service Level, rather than including fixed network entry/exit times.

6.2 Tools to prevent path hoarding

The potential for slot hoarding to be used in the airline sector for anti-competitive purposes has been well recognised, with incumbent airlines having an incentive to maintain bookings for attractive airport runway slots, and cancel services where they have insufficient demand, in order to limit new entrant access to the market. Accordingly, there are established worldwide guidelines³⁸ to ensure that slots at capacity constrained airports are allocated neutrally and fairly amongst airlines using consistent policies, principles and processes, including 'use it or lose it' policies for continued access to slots.

Similar concerns apply in rail, where an incumbent may have an incentive to maintain contracted access to premium paths simply to prevent a competitor from gaining access to them, notwithstanding that it may not have sufficient demand to fully utilise these paths. While the incumbent will bear the take or pay path cost for any contracted path, it may be willing to accept this cost if this means that it can prevent a competitor from offering a premium service into the market. Further, if there is a requirement to pay a significant relinquishment fee to release a path, this will create a further incentive for an incumbent to retain currently contracted paths, regardless of its ongoing demand.

Most Australian rail access regimes, including QR's DAU3 SAA, include mechanisms to address the risk of path hoarding. However, there are significant differences in how these are applied across regimes, and the utilisation requirement can be quite low (with utilisation requirements ranging from 50% to 75%) compared to the 80% use-it-or-lose-it requirement applied to airlines.

In Aurizon's view, the QR DAU3 SAA path resumption provisions should be amended to improve QR's ability to effectively address path hoarding, if this were to emerge.

QR's DAU3 SAA provides, in CI 21.1, that

- QR may issue a resumption notice to an access holder, stating that QR is considering reducing the access holder's access rights, if:
 - The access holder fails to operate all train services on scheduled train paths for seven or more out of any twelve consecutive weeks (where a train service is treated as not operating

³⁸ International Air Transport Association (IATA), Worldwide Airport Slot Guidelines (WASG)

where it does not present at its scheduled entry point onto the network or does not complete its full journey); and

- QR can demonstrate that it has a sustained alternative demand for the capacity, or will otherwise receive a commercial benefit sufficiently material to justify the resumption.
- The resumption notice must include a request for the access holder to demonstrate a sustained requirement for the access rights;
- If the access holder has not demonstrated a sustained requirement for the access rights within 40 business days, QR may proceed with the resumption; and
- If the access holder does not agree with the resumption, it has a further 20 business days to dispute the reduction, with the dispute to be determined by an expert.

These provisions provide a low utilisation threshold, as an operator can fail to use its paths for 50% of the time without QR having any ability to intervene. This low utilisation threshold is applied only by QR and ARTC³⁹, with Arc Infrastructure⁴⁰ and ABCN⁴¹ applying a higher utilisation threshold of around 75%, more consistent with that applied in the airline industry, although this is assessed over 6 months compared to QR's and ARTC's 3 month assessment period. Aurizon considers that there is merit in applying a higher utilisation threshold of 75%, although in order to protect the interests of access holders this should be assessed over a 6 month period. However, there is also merit in allowing resumption to be considered within a shorter time if utilisation is excessively low. As a result, we consider there would be merit in amending the utilisation threshold specified in CI 21.1(a)(i) of QR's SAA to provide that path resumption processes are triggered where an access holder either:

- fails to utilise its scheduled path for 50% or more occurrences, measured over 3 months; or
- fails to utilise its scheduled path for 75% or more occurrences, measured over 6 months.

Consistent with the approach used by Arc, in order to remove the opportunity for this trigger to be gamed by an operator periodically running short trains, a path should only be measured as 'utilised' where it is used for a train service of at least 50% of its usual length/weight.

Further, in order to allow a more efficient path resumption process where services operate over multiple networks, the loss of a connecting path on an adjoining network should be introduced as an additional path resumption trigger, except only if the operator has continued to operate a modified train service not reliant on that connecting path.

Aurizon also considers that the decision of whether path resumption can be applied should be based only on the factual utilisation test, as is generally the case for other rail access providers.⁴² The provisions within QR's DAU3 SAA that provide that a resumption cannot proceed, notwithstanding

³⁹ ARTC Interstate Access Undertaking Standard Access Agreement, CI 9.5(a) provides that if a service using any scheduled path is not operated 7 or more out of any 12 consecutive times, the scheduled path can be deleted from the agreement.

⁴⁰ Arc Infrastructure Train Path Policy, CI 4.1.3(c) provides that if a scheduled path has not been consistently used over a 3 month monitoring period, if the operator then fails to utilise that path more than 6 times in a six month period (i.e. 23% of the time), then the train path may be confirmed as being underutilised, with Arc then allowed to withdraw the contractual entitlement to the path in accordance with CI 4.2.

⁴¹ Aurizon Bulk Central Time Path Allocation and Reallocation Policy, CI 8.2(a) provides that if a scheduled path has not been operated 3 consecutive times, if the operator then fails to utilise that path more than 6 times in a six month period (i.e. 23% of the time), then the train path may be confirmed as being underutilised, with Aurizon Bulk Central then allowed to withdraw the contractual entitlement to the path.

⁴² The resumption test for ARTC and Aurizon Bulk Central is based purely on the factual consideration of past utilisation. Arc Infrastructure's test requires that Arc consult with the operator and provide it with an opportunity to demonstrate to Arc's reasonable satisfaction that it has a bona fide future requirement for the train path, but does not provide for the operator to dispute its decision.

that the utilisation threshold has triggered, if an access holder can demonstrate a sustained future requirement for the access, and which allow the resumption to be disputed on this basis, create uncertainty and opportunity for frustration and delay in the path resumption process. These provisions were originally included in QR's SAA when QR was a vertically integrated rail provider, in order to ensure that QR did not have the opportunity to resume paths from a third party operator for its own competitive advantage - a concern that no longer applies to QR as a vertically separated access provider. However, in many cases, there is only a limited time available for an operator to take advantage of a new market opportunity, and the additional time taken for these processes may be sufficient to deny a new entrant its opportunity to enter the market as a competitor to the incumbent.

Finally, there is a risk that QR may be disincentivised to use its path resumption powers in some circumstances. This is particularly the case where there are capacity constraints within a premium window, but capacity is available at other times on the network. QR would have a financial incentive to keep an incumbent's access agreement for a premium path on foot (and receive take or pay for paths not used) and only offer the new entrant a less attractive path. In order to address this risk, Aurizon suggests that, when the underutilisation threshold is triggered, QR has the option of either resuming the path or rescheduling the path to the nearest otherwise available time.

Recommendation

Aurizon recommends that, in order to reduce the opportunity for anti-competitive path hoarding, the path resumption provisions in CI 21.1 of QR's DAU3 SAA be amended to:

- modify the resumption utilisation threshold to be either at least 50% utilisation over 3 months or at least 75% utilisation over 6 months, with a path only measured as 'utilised' where it is used for a train service of at least 50% of its usual length/weight;
- add a new resumption trigger, being the loss of a connecting path on an adjoining network, except only if the operator has continued to operate a modified train service not reliant on that connecting path;
- remove the provisions that enable an access holder to contest the resumption once the underutilisation trigger has been met; and
- allow QR the option of either resuming a path or rescheduling it to the nearest otherwise available time.

6.3 Information on network utilisation

Transparency of information on the performance of operators against their scheduled path is critical in order for access seekers to be able to understand the opportunities for path rescheduling or resumption, and the extent to which this may be used to create the opportunity for them to secure a new or varied path. However, Aurizon acknowledges that there may be only limited instances where access seekers are actively seeking new or varied paths that cannot be accommodated given existing scheduling constraints. It is indeed possible that this circumstance may never apply for some routes. As a result, Aurizon does not consider it warranted to impose an ongoing obligation on RIMs to publish detailed information on the performance of operators against their scheduled paths. However, access frameworks should provide a mechanism for this information to be provided to an access seeker, in the relevant circumstances. Accordingly, Aurizon considers that DAU3 should be amended to:

- include a process for an access seeker to signal their desire to acquire a new or varied train path if it were able to be made available as a result of path rescheduling or resumption. This could be similar to the process for joining a capacity queue; and

- where an access seeker has registered such an interest, QR should then provide the access seeker with information on recent past performance of operators against their scheduled paths, so that the access seeker can assess the extent to which QR's opportunities for path resumption or schedule modification may assist it in securing its required path.

Aurizon notes that QR already has an obligation to provide capacity information to an access seeker, either as part of preliminary information provided prior to them submitting an access application or during negotiations. Capacity information is defined in CI 2 of Schedule A to include the MTP, the DTP and train control diagrams showing actual performance against DTP, but Schedule A does not provide any guidance as to the time horizon over which the DTP and train control diagrams will be provided. Aurizon agrees that, provided information is given for a sufficient time period, this will be sufficient to allow an access seeker to assess opportunities for path resumption or schedule modification.

Recommendation

Aurizon recommends that, QR's DAU3 be amended to:

- provide a process for an access seeker to register its interest in acquiring a new or varied train path if it were able to be made available as a result of path rescheduling or resumption; and
- once registered, QR will provide the access seeker with capacity information (as defined in Schedule A CI 2) for a sufficient time period to allow the access seeker to assess opportunities for path resumption or rescheduling.

7. Other issues

In addition to the issues of policy discussed above, Aurizon recommends a number of amendments to DAU3 provisions in order to address specific drafting concerns and to better align the access undertaking with actual practice. These are set out in the table below.

Table 5 Additional issues

Issue	DAU3 Position	Aurizon response
Part 2 – Negotiation Process		
Timing of finalisation of Operating Plan	cl.2.7.2(a)(iii)(B) currently states the access seeker must finalise the Operating Plan while the Interface Risk Assessment (IRA) is being undertaken and prior to development of the IRMP. Effectively this cannot happen because QR requires the date of the Access Agreement to be included in the Operating Plan before it is signed off by the operator. The Operating Plan is often not signed off until after the IRA, IRMP and Access Agreement are all completed and executed. Cl.2.7.2(f) is also inconsistent with the need for the Operating Plan to be finalised before the IRMP.	Change drafting to say: Finalise the Operating Plan while the Interface Risk Assessment is being undertaken and the IRMP developed. This is a more accurate reflection of the iterative process involved.
Timing of EIRMR	Cl 2.7.2(a)(v) requires preparation of the EIRMA	Cl 2.7.2(a) sets out a range of issues that need to be addressed as part of the negotiation of an access agreement. While many of the issues set out in Cl 2.72.(a) are iterative and will be progressed in tandem, they are listed in a broadly sequential way in order to provide structure to the negotiation process.

		Recognising this, Aurizon suggests moving this clause to before cl.2.7.2(a)(iv), which talks about the IRA and development of the IRMP, which is what the EIRMA is prepared and provided for.
Negotiation cessation for safety reasons	CI 2.8.2 provides that QR may cease negotiation if it believes the proposed operation may adversely affect a passenger service	Aurizon queries the need for this clause given the standard IRA/IRMP process. If the risk of an operation is assessed to be above the level that QR was willing to accept and no adequate controls could be identified, the effect would be the same. In this context, the additional right for QR to cease negotiations if it considers that the proposed operation may adversely affect a passenger service is ambiguous and the situations in which this could be invoked are unclear. Aurizon considers that, if clauses are not required, they should be removed to keep the document and framework as simple and clear as possible.
Schedule H – Standard Access Agreement		
Insurance requirements	QR propose to remove the CI 16 requirement that an operator's public liability policy must cover agents/ consultants/ subcontractors and replace this with a requirement for the operator to ensure that agents/ consultants/ subcontractors take out their own insurance.	<p>To reflect its inclusion of cl.16.1(b) QR also needs to delete the reference in cl.16.1(a)(vi) to "or the operators agents, consultants, contractors and their sub-contractors."</p> <p>In addition, to reflect an insurance market in which capacity is harder to secure and becoming much more expensive, other rail network providers have recently agreed to reduce 'chunky' liability insurance limits. Aurizon recommends QR reduce the limit of liability in cl.16.1(a)(iv)(B) from \$350m to \$150m. This would bring QR more in step with other rail network providers including Aurizon Network.</p> <p>Aurizon requests the reference to "(without limitation)" at the end of cl.16.1(a) be deleted as it could be construed that the insurances have no limitations, whereas in reality, all policies will be subject to conditions and exclusions.</p> <p>For similar reasons, Aurizon requests the reference to "(without limitation)" at the start of cl.16.1(a)(iv)(C) be deleted. The reference to "claims against an Insured Party" should read "claims against the operator". And Aurizon requests deletion of the following "arising out of or in connection with any thing done or omitted to be done in the performance or purported performance of this agreement; and the operator's operations and activities on the Network; and", to be replaced with "arising out of or in connection with any thing done or omitted to be done arising out of the business activities of the operator."</p> <p>Aurizon also suggests that clauses 16.1(a)(iv)(D) and 16.1(a)(v)(C) be deleted. The level of deductible is a matter for the operator to consider based on its own risk profile and/or risk appetite. Including a specific deductible in a long-term contract is undesirable as the level of deductible may be subject to change.</p> <p>Finally, QR should also recognise the use of captive insurance companies by operators in the coal industry. Clause 16.3 should be extended to include "any insurance policy required to be effected and maintained by the Access Holder and the operator pursuant to clause 16 may at any time, be placed in whole or in part with a wholly owned captive insurance company."</p>

02

WEST MORETON REFERENCE TARIFFS



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1. West Moreton system reference tariff – QR proposal

QR is proposing an increase in real terms of 23.6% for the WM reference tariff from applied AU2 rates.

Table 6 Headline one-part tariff changes

	AU2 @ July 2023	AU2 @ projected July 2025	DAU3 @ July 2023	DAU3 real increase
WM Ceiling Tariff	\$42.24/000gtk	\$44.82/000gtk	\$32.63/000gtk	23.6%
WM Tariff applied	\$24.90/000gtk	\$26.41/000gtk		
Metro Tariff	\$20.65/000gtk	\$21.93/000gtk	\$21.93/000gtk	nil

Table 7 Key factors influencing increase in WM reference tariff

	AU2	DAU3	% change	Comment
Volume	2.1mtpa	Max 9.6mtpa		Increase in tonnage reflects additional volume from New Wilkie, New Acland and an uplift from Cameby Downs
RAB	\$388.9m (July 20)	\$535.2m (July 25)	+38% (nominal)	DAU3 allocated coal share of \$446.2m Reflects actual/projected capex of ~\$115m over AU2 period
WACC	5.46%	7.39%	+35%	Reflects changes in market parameters and change in QCA WACC methodology.
Capex (5 years)	\$153m (FY26 \$s)	\$346.9m (FY26\$S)	+127% (real)	QR propose increase in capex to reduce operational risk, optimise maintenance costs, and increase confidence of supply chain delivering 9.6mtpa.
Accelerated depn	2020 RAB ~30 yrs Capex - 35 years	2025 RAB – 19yrs Capex – 14 yrs	+60% depn on opening RAB +150% depn on capex	Proposed lives based on: - Lower bound WAML estimate 14 years - Upper bound WAML estimate 19 years Propose that future capex be recovered over 14 years. Existing RAB be recovered over remaining mine lives.
Maintenance (5 years)	\$106.5m (FY26\$S)	\$172.5m (FY26\$S)	+62% (real)	Driven by tonnage increase impacts
Opex (5 years)	\$45.1m (FY26\$S)	\$85.3m (FY26\$S)	+89% (real)	Driven by large increase in Corporate Overhead and Other expense categories

QR acknowledges the DAU3 reference tariff is a significant change from AU2, and its justification is the uplift in volume. It also references high international coal prices⁴³.

⁴³ Queensland Rail, Draft Access Undertaking 3 (DAU3) Explanatory Document, 10 November 2023, p 56.

On this point, the thermal coal price soared to more than \$US400 (\$A594) a tonne in 2022. Currently it is trading at \$US127 (\$A189) a tonne and the Resources Energy Quarterly (REQ) report from December 2023 expects prices to drift even lower in 2024-25.

QR has proposed increases in capital investment and maintenance and operational expenditure to achieve the forecast system tonnage of 9.6mtpa. These increases are notable. The increase in capital expenditure (**capex**) equates to 127% (real) from AU2. Proposed maintenance costs increase by 62% (real) from AU2, and operating costs increase by 89% (real).

QR is also proposing a host of new measures to address the risk around these volumes being achieved and maintained. These include a new reference tariff review trigger⁴⁴, that will allow QR to seek a reset of reference tariffs if it believes annual aggregate contracted coal tonnages (excluding ad hoc and additional services) will be below 7.5mtpa. Previously QR successfully used the existing variation of reference tariffs mechanism in Schedule D of AU2 to increase reference tariffs in response to reductions in contracted volumes in the WM system.

In addition, QR is proposing an accelerated / shorter economic life for existing assets to a maximum of 19 years and for future assets to a maximum of 14 years from the start of the DAU3 regulatory period (1 July 2025). This is intended to assist QR mitigate stranding risk on its assets as global thermal coal production decreases over the next 20 to 30 years.

This element of QR's proposal is somewhat inconsistent with its assertion that it faces the same volume uncertainty it faced in AU2, when a rapid decline in volume to 2.1mtpa meant that its future ability to recover costs (including sunk asset costs) was highly uncertain.

While some current access agreements are due for renewal during the DAU3 period, all mines in the system have remaining lives well beyond the expiry of the DAU3 regulatory period. In the context of the transition towards a net zero carbon emissions future QR justifies an assumption of shorter remaining mine life than would be the case based on resource depletion. However, QR expects to retain an uplift to the cost of debt to account for its regulatory and commercial risks (albeit reduced from the approved AU2 uplift of 160 basis points on the debt margin to a top-down adjustment equivalent to 150 basis points on the debt margin).

In summary, QR has developed the WM reference tariffs:

- based on forecast system coal tonnage of 9.6mtpa,
- determining the network will need significant, record capital and maintenance expenditure to provide capacity for coal,
- including a major increase in operating costs and allocating the bulk of those costs to coal,
- accelerating depreciation to mitigate its asset stranding risk, including recovery of future capital expenditure within 14 years,
- maintaining a short-term volume risk uplift in its cost of debt, and
- doubling down on its entitlement to trigger a reference tariff review where it believes contracted volumes will fall below 7.5mtpa.

Depending on how the balance of the Loss Capitalisation Account (**LCA**) is recovered, the DAU3 reference tariff may increase further.

QR has maintained a LCA recording the difference between revenue recovered through AU2 reference tariffs and revenue that would have been recovered had the ceiling reference tariff been applied, however, the balance of the LCA is not publicly available. QR has not dealt with the recovery of the LCA current balance in DAU3, stating that it is waiting to gain an understanding of the

⁴⁴ Cl.3.2 Schedule D, DAU3

level of the revised reference tariff and consider whether it is affordable to recover only in AU2, or to spread recovery across AU2 and DAU3. QR has flagged submission of an AU2 Draft Amending Access Undertaking (DAAU) in the first half of 2024 for the revised reference tariffs, which will need to include adjusted cost inputs for the higher volumes as well as a proposal for recovery of the LCA.

Aurizon is concerned with the compounding nature of different elements of QR's proposal. 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.

There is also a degree of incompatibility in the rationales provided by QR. For instance, it proposes spending \$346.9m - almost doubling its RAB largely through long life upgrades to its network - to facilitate 9.6mtpa of tonnage throughput, claiming the increase is justified to provide a fit for purpose, efficient cost network. On the other hand, it believes a short-term volume risk premium is justified, along with a range of other protections for the investment it makes in its network. On top of that, it proposes to accelerate the depreciation of both the existing Regulatory Asset Base (RAB) and new capital expenditure, to mitigate asset stranding risk.

2. Regulatory and economic context

2.1 Striking the right balance

The uncertainty around future coal volumes, along with stakeholder concerns with tariff affordability shaped the QCA's determination of an appropriate approach to access pricing for AU2. It sought to balance the objectives, amongst other things, of:

- Promoting the efficient operation of use of and investment in network assets, including encouraging more access holders to contract on the WM system (s.138(2)(a) QCA Act);
- Generating sufficient expected revenue to meet efficient costs and give QR the opportunity to make a return on investments commensurate with the regulatory and commercial risks of providing access (ss.138(2)(b), (g); 168(a) QCA Act);
- Setting a price that has regard to the interests of access seekers and holders, and competition in downstream markets (ss.138(2)(a), (d), (e), (h) QCA Act).⁴⁶

Aurizon considers this approach to be appropriate for DAU3 as well. If anything, the concerns regarding tariff affordability and volume uncertainty are even more pressing now than they were when the QCA was considering AU2. This is borne out by the recent placing of New Wilkie Energy into receivership just 8 months after it restarted the New Wilkie mine⁴⁷.

Coal producers do not have an unlimited capacity to absorb cost increases, and there is a risk that loading too much cost into the reference tariffs over the DAU3 term may be counter-productive,

⁴⁵ Frontier Economics, Climate related expenditure and frameworks, a report for Aurizon Network, 13 December 2022, pp 40

⁴⁶ See QCA, Queensland Rail 2020 draft access undertaking, Decision February 2020, pp 12-15

⁴⁷ <https://www.afr.com/companies/mining/coal-mine-tumbles-into-administration-amid-boardroom-upheaval-20240103-p5euvi>

resulting in a tariff that is unaffordable, leading to coal producers seeking alternate options or even the premature closing of existing mines and the loss of significant revenue to QR.

For AU2 the level of the reference tariff struck by the QCA was considered necessary to achieve the right balance between QR's ability to recover efficient costs and ensuring the tariff remained affordable for producers.

Since then, there have been unexpected twists and turns in the road to decarbonisation and the long-term outlook for thermal coal. Experts suggest:

- energy security and affordability concerns will continue to slow the decline in demand.
- there will be ebbs and flows depending on the pace of renewables penetration, technology advances and economic growth across different regions.
- The most likely outcome is volatility⁴⁸.

Making long term investment decisions in this environment is fraught, and Aurizon considers those most at risk are the producers.

The most sensible approach that QR can take is to listen to its customers often, not just during this DAU3 process but regularly throughout the next regulatory period. And to tailor its response to what its customers are asking for. If they say that an increase of nearly 25% in the reference tariff (before consideration of LCA recovery) is unsustainable, QR needs to reconsider its proposed approach.

Presently, Aurizon believes that the QR proposal lacks a weighed acknowledgment of the interests of the parties in the WM coal supply chain. This part of our submission will examine these interests and offer recommendations for a more reasonable QR proposal.

2.1.1 Climate change

Climate change is a significant driver of seven of the nine key risks identified by the Bureau of Infrastructure and Transport Research Economics (**BITRE**) in its 2023 report on supply chain resilience (Figure 9).

Figure 8 Key risks to rail and road transport supply chain resilience



Source: BITRE, *Road and Rail Supply Chain Resilience Review – Phase 1, 2023*.

⁴⁸ Wood Mackenzie: Our top takeaways from the Coal forum 2023; <https://www.woodmac.com/news/opinion/our-top-takeaways-from-the-coal-forum-2023>.

The key risks and challenges posed by climate change for the WM coal system reflect:

I. Damage to network infrastructure from changing weather patterns

This could be caused by more often extreme heat events or longer-lasting higher heat conditions, as well as more rainfall and flooding events.

QR is generally well protected, by its regulatory and contractual framework, from limitation on claims of consequential loss⁴⁹ and its ability to pass-through repair or recovery costs⁵⁰. There is more discussion in section 2.2.1 below concerning QR's contracting framework and how it mitigates QR's exposure via an annual path commitment. Accordingly, these risks are largely borne by customers.

Averting or minimising the impact of such events is critical for customers who rely on access to QR's network. If the network closes, whether due to a catastrophic event or more regular 'pre-emptive' closures for high temperatures or rainfall, customers incur consequential loss from business interruptions and both customers and operators have a reduced capacity to achieve planned throughput because of reduced network availability. For its customers sake, it is critical that QR makes well targeted investments in its network's resilience.

II. Changes in market conditions

The most obvious change will be from reduced demand for thermal coal. This is discussed in section 2.1.2.

Customers will also face transition risks relating to changes in policy, law, markets, technology, and prices necessary to achieve the transition to a low-carbon economy. Just one example of this for the WM coal producers will be higher charges from suppliers who pass on the increases they incur from climate change obligations.

The Australian government's Safeguard Mechanism requires facilities, such as Aurizon and (likely) the coal mining producers in WM System, to reduce their emissions by 4.9% per annum, starting from FY24. Technological constraints prevent rapid decarbonisation of industries such as mining and rail transport (i.e. there are currently no zero emission freight locomotives in operation, and Australia has not supported adoption of biodiesel for heavy industry). As such, Aurizon will have to purchase and retire Australian Carbon Credit Units (ACCUs) to meet its emission reduction obligations, which will incur additional costs, whilst also investing in decarbonisation initiatives (e.g. battery electric locomotives). Mining operations will face similar increases in operating costs, due to the emissions intensive nature of the sector and the current absence of carbon abatement technology.

Aurizon has a multi-pronged strategy to meeting its climate change obligations⁵¹ and can spread higher operating costs across its haulage business, but at the end of the day, above rail operators will be subject to higher costs due to climate change, and these costs will ultimately be passed through to customers in the form of higher charges.

III. Insurance and risk management

The combined effects of the above two risks creates a situation where the likelihood of extreme events, and the intensity of such events, makes insurance and risk management more important, while at the same time businesses with links to coal are finding it more and more challenging to obtain

⁴⁹ No liability for consequential loss – cl.13.1 AU2

⁵⁰ Variation of reference tariff for Review Event – Schedule D cl.5 AU2

⁵¹ Aurizon Climate Strategy and Action Plan, 2020

appropriate insurance. In such circumstances, customers at the end of the supply chain often bear the full cost of insurance for risks over which they have no control.

The extent to which capacity in the insurance market is harder to secure and increasingly much more expensive, is demonstrated by the reduction of ‘chunky’ liability insurance limits by some rail network providers. Aurizon Network recently reduced the limit of liability under its access agreement from \$350m to \$150m, and Aurizon has recommended that QR amend its SAA to follow suit⁵².

Labour shortages associated with COVID, along with climate events like flooding and heatwaves have impacted the production rate for miners and increased the unit costs of production. This may have contributed to record high thermal prices following the invasion of Ukraine, but producers generally couldn’t ramp up production to take advantage of these prices⁵³.

2.1.2 The future of thermal coal

While thermal coal reached unexpectedly high prices during the current regulatory period it is forecast to return to lower levels over the long term. See Table 8 and Table 9 below.

Table 8 Thermal coal historic price

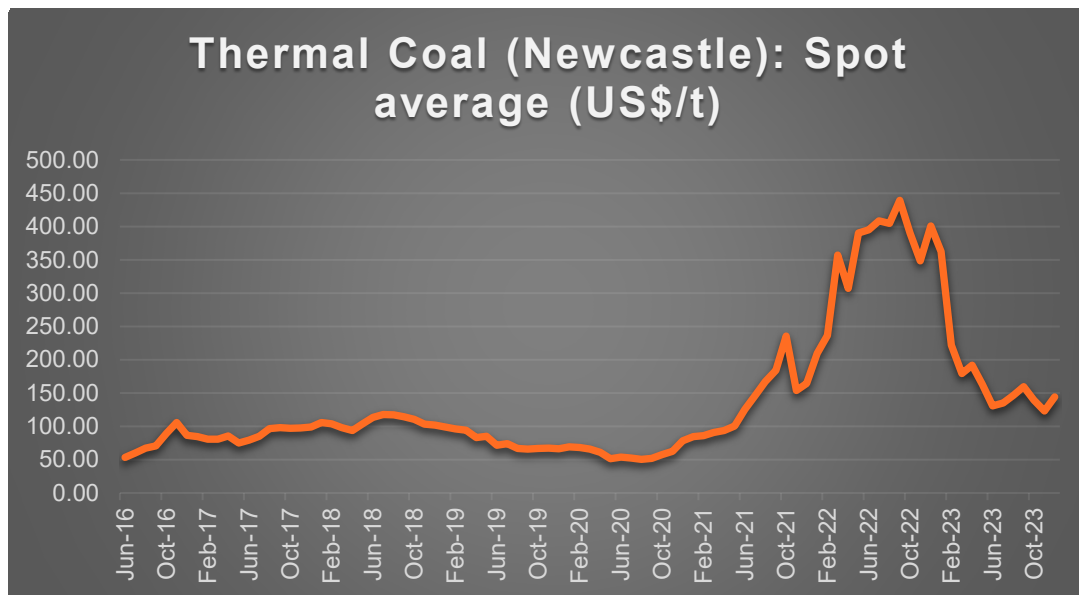


Table 9 KPMG thermal coal forecast prices (Newcastle benchmark 6,000kcal thermal coal):

	2023	2024	2025	2026	2027	LT
Average thermal coal price (US\$/t)	184.8	149.0	126.7	107.3	101.8	91.7

Source: KPMG coal price and FX market forecasts (Sep/Oct 2023)

⁵² See comments on Schedule H in Part 1, section 7 of this submission

⁵³ Institute for Energy Economics and Financial Analysis: Coal cost trends: Climate impacts on coal mining likely long term; <https://ieefa.org/resources/coal-cost-trends-climate-impacts-coal-mining-likely-long-term>

Global consumption of thermal coal (2022: 6.9 billion tonnes⁵⁴) will reduce in the decades ahead⁵⁵. However, the demand for Australian coal relies on the seaborne trade market that makes up just 15% of global consumption and is more and more influenced by Asian trade, which represents 83% of global seaborne import volume. In terms of future demand, it's significant that the average age of coal-fired generation capacity in Asia is just 14 years⁵⁶ against an expected retirement age of 40 years⁵⁷. Countries with younger coal-fired generators are less likely to transition toward renewable power until existing assets are closer to expiry.

Additionally, according to the Office of the Chief Economist, thermal coal producers may face increased challenges bringing new thermal coal supply to the market due to lower investment and greater difficulty accessing finance. As a result, it's likely thermal prices for 6,000kcal thermal coal could remain over US\$100/t through most of the outlook period⁵⁸.

Finally, the quality of thermal coal is an important consideration. On average, Australia's export thermal coal has high energy content and relatively low ash content, which results in less coal consumption per kilowatt hour (kWh) of power station output and reduces carbon dioxide (CO2) emissions in comparison to lower quality coals.

Beyond coal quality, the International Energy Agency (IEA) notes that out of the 10 largest coal-producing countries, Australia has the third lowest emissions intensity for the production and transportation of coal. This is less than half of Russia's emissions intensity, and about one-third lower than the United States⁵⁹. This means that thermal coal export volume from Australia is forecast to remain stable over the medium term. See Table 10.

Table 10 Thermal coal volume forecast

	2021-22	2022-23	2023-24f	2024-25f	2025-26z	2026 - 27z	2027-28z	CAGRr
Mt	196	182	197	199	200	199	195	-0.1

Source: Office of the Chief Economist, Resources and Energy Quarterly, March 2023

F - forecast

r - compound annual growth rate (per cent), for the period from 2022-2028 or for the equivalent financial years

Z – projection

Within this context, 2 of the 3 mines in the West Moreton system face challenges to their operation.

As noted above, New Wilkie Energy entered receivership early in 2024 and the New Wilkie mine is currently in care and maintenance while alternatives for its future operation are considered.

New Hope's New Acland Stage 3 is facing a challenge from the Oakey Coal Action Alliance (OCAA) that could hinder its future operations. The hearing date for the legal challenge to the Queensland Government's decision to grant an associated water licence to New Acland is not set but is expected to be sometime in calendar year 2024.

⁵⁴ International Energy Agency, Coal Information (July 2023)

⁵⁵ International Energy Agency, World Energy Outlook 2022

⁵⁶ S&P Global Market Intelligence World Electric Power Plants Database (March 2023) as at 2023, capacity weighted

⁵⁷ International Energy Agency, World Energy Investment 2018

⁵⁸ Office of the Chief Economist: Resources and Energy Quarterly (March 2023)

⁵⁹ International Energy Agency, World Energy Outlook 2019

Hopefully both matters will be resolved prior to the finalisation of the QCA's assessment of QR's DAU3 proposal and there will be greater certainty around volume on the corridor. Even so, these scenarios illustrate the increased obstacles and costs that coal producers face in the current regulatory and economic market.

Recommendation

Aurizon recommends that QR's proposed WM reference tariff is reviewed to balance:

- QR's recovery of efficient costs, and
- the affordability of the tariff to coal producers.

2.2 West Moreton system rail capacity

2.2.1 QR capacity analysis

QR states the Toowoomba range is the capacity constraint on the WM system, with a maximum capacity of 113 return train paths / week on average over a year: 14 return paths are preserved for non-coal freight (grain, livestock) and 2 return paths are preserved for the long-distance passenger service, the Westlander. QR also states that the Metropolitan system is not capacity constrained and can accommodate 113 return train services as well as any coal or freight services that might originate in the Metropolitan system and travel between Rosewood and the Port of Brisbane⁶⁰.

This means that QR will contract 97 return train paths / week, on average, to coal services and will schedule and run additional services up to 113 if non-coal freight and the Westlander are not utilising their preserved paths.

Train Service Entitlements for coal services are specified by QR in its SAA⁶¹ as Train Service levels, expressed as the number of train services or paths over a daily, weekly, monthly and /or yearly period that QR is contracted to provide. Typically, an annual number of train services/paths is specified and QR stipulates it will provide paths on a relatively even weekly basis across the annual period subject to variation in accordance with the NMP in Schedule F of DAU3.

The number of paths available varies during the Summer Timetable months (13 weeks between November to March) because additional speed restrictions and limited hours of operation (no trains between 10:00 and 19:00) apply to the WM network west of Jondaryan.

In addition to the Summer Timetable restrictions, QR applies maximum speed reductions across the WM system under Standard Hot Weather Precautions. These precautions require maximum allowable speed across sections to reduce (the amount of reduction depends on the section) when the air temperature reaches 32°C. Services are not allowed to continue operating once the temperature reaches 35°C.

⁶⁰ Queensland Rail, Draft Access Undertaking 3 (DAU3) Explanatory Document, 10 November 2023, p 7.

⁶¹ Standard Access Agreement, Queensland Rail's Access Undertaking 21 July 2020, Schedule H, and Schedule 2, Attachment 1 of the SAA

QR's obligation to its customers as regards paths is therefore flexible enough to allow it to, for example, schedule 90 paths per week during high network constraint periods, then schedule 106 paths per week during the rest of the annual period to achieve the 97 paths / week, on average.

The annual capacity obligation of 97 paths / week, on average, is based on a defined number of weeks of network availability across the calendar year. It isn't clear how many weeks QR has assumed are in the annual period over which its obligation applies. In the past QR has advised that it bases its capacity analysis on a 46-week year, assuming 6 weeks of possessions /closures/ restrictions/outages in total across the calendar year.

QR is not restricted from exceeding this 6-week period if it acts in accordance with the NMP. In other words, customers' annual path entitlements may be provided over fewer than 46 out of 52 weeks.

In contrast to QR's obligation as regards provision of access to its network, Aurizon, as rail operator, must have its trains available for operation 24 hours per day and 365 days per year to satisfy the requirements of a reference train service under Schedule D of DAU3⁶².

In addition, operators such as Aurizon need to determine at contract commencement what its resourcing requirements will be under its haulage agreement with a producer. The most efficient solution will be based on the provision of access to train paths by QR on a relatively even basis across 52 weeks. But providing additional 'peaking' capacity to meet an uneven train path profile is something that increases the costs to Aurizon, and consequently to a producer, because it requires that there will be periods when resources are not needed and are therefore idle.

While QR doesn't provide an annual tonne commitment to customers, it derives the contracted paths / week entitlement from the customer's annual tonnage demand, and the rail operator's planned haulage operation. Typically, trade-offs get made between the above and below rail service. For instance, longer trains with higher payloads ensure the most efficient payload per service/path and naturally better payloads require fewer services/paths.

The characteristics of the WM system, including geography, standard of the track infrastructure, and its interaction with the Metropolitan system, limit the maximum train length and drive a higher number of services/paths to achieve the desired tonnage throughput. This increases the number of consists an operator requires as well as the cost of the overall service to the customer.

One other critical determinant of capacity is section run times and overall cycle or transit time for a service. Again, network characteristics such as susceptibility to buckling at high temperatures, resulting in speed restrictions, influence these times, as QR has noted in its proposal⁶³. Speed restrictions also contribute to higher fuel usage and carbon emissions for Aurizon.

Based on QR's forecast system coal tonnage for DAU3 of 9.6mtpa, and the fact QR established a queue for WM system capacity for the first time in 2022, Aurizon assumes QR has, or intends to, contract to 97 coal train paths per week on average over a year based on the existing capacity of the WM network and current operating parameters.

QR doesn't mention increasing the number of train paths / week, on average, available to coal services and has not produced a capacity analysis that confirms its assessment of WM system capacity sufficient for the forecast 9.6mtpa.

⁶² See cl.2.1(g)(i) Schedule D QR DAU3

⁶³ Queensland Rail, Draft Access Undertaking 3 (DAU3) Explanatory Document, 10 November 2023, p 26.

It also has not provided any quantification of the impact its proposed capital expenditure, maintenance and operating costs will have on the underlying parameters that determine the WM system capacity now. For example, is it targeting annual network availability of 48 weeks per year?

2.2.2 Capacity analysis assumptions

Aurizon conducted its own analysis of WM capacity to determine its above rail resourcing requirements when volume demand picked up in 2022-2023. Using the RACE tool and key planning assumptions, including availability of 15 consists for the system, the analysis confirmed ~9.6mtpa could be *scheduled* in the WM system provided the network was available 46 weeks per year.

This analysis did not include an assumption for system losses.

Typically, a system loss rate, based on historical performance of each element of the supply chain including:

- above rail resourcing (i.e. labour and rolling stock including location of crew change facilities and rollingstock depots),
- mine (i.e. load out capacity and rate),
- port, and
- QR constraints,

is applied to arrive at a realistic *delivered* tonnage assessment.

When Aurizon applies a 15 percent system loss rate, assuming all other assumptions remain the same, the delivered tonnage drops to around 8mtpa. To achieve ~9.6mtpa delivered with a realistic loss rate, the network would need to be available 52 weeks of each year.

Recommendation

Aurizon considers that QR needs to be more transparent about WM system capacity and the changes its proposed capital expenditure and maintenance program is targeting.

1. Aurizon recommends that QR publish the assumptions on which it has based its assessment of WM system capacity, including:
 - Network availability in weeks per year (i.e. 46 – 48 – 50 – 52)
 - Number of paths per week (return) between WM system coal mines and Port of Brisbane (i.e. 97)
 - Reduced number of paths per week (return) available between November and March for the Summer Timetable
 - Assumed network availability losses from heat restrictions during hot weather and rainfall events based on historical data and forecasts of climate change impacts going forward
 - Passenger peak constraints in the Metropolitan system
 - Assumptions on other variables that influence cycle time and therefore system capacity (e.g. number of consists operating in the system, consist payload, port unload rate, mine load rate including whether the impact of the new balloon loop at New Acland stage 3 has been included)

- The historic system loss rate for WM system and any difference between that rate and the rate assumed by QR for the assessment of 9.6mtpa.
2. Utilising the assumptions that Aurizon proposes QR disclose in the recommendation above, Aurizon recommends QR:
 - compile a range of key measures critical to network reliability and availability performance. **See Boxes 2 and 3 for suggested examples**
 - establish the current performance of the network against those key network reliability and availability measures (i.e. establish the current performance levels of the network in relation to transit time and closures etc),
 - demonstrate how the network would perform if volume increased to 9.6mtpa
 - nominate the future performance that it believes is required for the network to achieve forecast tonnage demand (scalability would be advantageous). This would involve explaining what performance levels QR considers are necessary for the network to support 9.6mtpa.
 3. Aurizon recommends that QR consult with all stakeholders on the performance level measures outlined and seek agreement on a range of key measures critical to network reliability and availability performance that QR will report against.

Box 2

Example 1: network reliability and availability measure – track speed during summer heat restrictions

Heat restrictions apply from mid-November to mid-March and all trains on the Malu to Miles section are slowed to a maximum speed of 40kph (from 60kph) when temperatures reach 32°C, and are stopped altogether when temperatures reach 35°C. These restrictions are additional to the summer timetable limited hours of operation.

QR advises that the impact of reducing max. track speed to 40kph for this section of track increases return transit time between Macalister (New Wilkie mine) and Columboola (Cameby Downs mine) by 8 hrs which increases overall cycle time to Port by ~30%. This puts network capacity at risk during the summer months.

QR notes that *“If appropriate investment is not undertaken during DAU3 term, the full forecast 9.6mtpa will not be able to be railed.”*⁶⁴

Aurizon notes that heat restrictions have long impacted network availability and for many years investments have been justified by QR on the grounds of reducing the impact of heat restrictions. We have been told that those works were significant in scope and geographical area, and as such while the track response to temperature extremes should be improved, they could not be quantified. Aurizon questions if QR cannot demonstrate a change from its works, how can it justify the expenditure on the ground of system reliability benefits?

Presumably QR has undertaken analysis to determine how much it needs to reduce the impact of heat restrictions by to achieve throughput of 9.6mtpa and developed its program of works accordingly. This is the type of information Aurizon believes should be available as part of a robust evidence-based business case for expenditure.

QR needs to clearly state what it is committing to achieve with expenditure earmarked for programs addressing heat restrictions. Is it aiming to remove heat restrictions altogether? Is it aiming to increase the max. speed that coal services will be allowed to operate at? Is it aiming to increase the trigger temperatures at which speed restrictions kick in? Presumably it isn't aiming to maintain the current performance standard because that will not result in the increase in network availability and reliability that QR states it requires.

By way of example: *Heat restrictions are an indicator of the current network availability and reliability performance. The current performance reflects the above triggers (40kph when temperatures reach 32°C, no services when temperatures reach 35°C). For FY23 heat restrictions were applied in the WM system on 72 days, resulting in delay/cancellation time.*

QR has calculated that it will need to reduce the number of days the WM system is impacted by heat restrictions to 50 days to provide 9.6mtpa throughput. QR will consider a range of options to achieve this: (a) upgrade its rail heat monitoring system⁶⁵ (b) undertake track and formation strengthening work on the remaining black soil sections of the WM system so that heat restrictions will not be implemented unless and until temperatures reach 38°C. This work will be undertaken progressively to allow heat restrictions to be reduced on a section once works on that section are complete. QR will measure and report on heat restriction impacts.

⁶⁴ Queensland Rail, Draft Access Undertaking 3 (DAU3) Explanatory Document, 10 November 2023, p 26

⁶⁵ Aurizon Network has reduced heat restrictions on its network by improving heat monitoring systems to measure the temperature of the rail as opposed to the air. QR should consider less 'capex heavy' options as part of its planning.

Box 3

Example 2: network reliability and availability measure – network recovery time from high rainfall events

QR notes that its capex programs are targeting increasing resilience, addressing asset failure risks and reducing current operational restrictions including 30mm rainfall events that require closure of Toowoomba Range⁶⁶.

While there is no way to control the weather, QR can influence the ability of its network to continue operating safely in the face of unpredictable weather. QR can also influence the efficient recovery of the network after such events by, for instance, ensuring it is resourced to commence recovery at the earliest possible opportunity.

In Part 1, section 5 of this submission Aurizon has recommended changes to QR's current KPI for measuring urgent and emergency possessions to ensure it clearly reports the impact on train services. One way that QR could demonstrate that its programs are delivering better network reliability and availability would be to measure and report on the impact on train services (time lost) from these types of constraints.

Another useful measure for access holders would be any QR delay in assessing and reopening the network. Aurizon is aware that after a rainfall event QR will often not send crews out to inspect and certify the track fit for traffic until several hours after first opportunity (e.g. first light on the morning after heavy rainfall). This is often due to QR or contractor resourcing constraints.

By way of example:

Rainfall events impact network availability and reliability performance. QR closes the Toowoomba Range if it measures 30mm over a 24-hr period. QR sends out crews to inspect, repair and certify the track is fit for use as soon as it is safe to do so. For FY23 rainfall events closed the WM system on X days, resulting in delay/cancellation time of X hrs. The average time taken by QR to declare the network open again after a rainfall closure event is X hrs.

To improve the track availability and reliability, QR is undertaking works to the Toowoomba Range to increase the rainfall closure trigger from 30mm to 40mm and is improving its resourcing and capability to inspect and reopen the network after a rainfall event.

2.3 West Moreton system performance

2.3.1 QR planning process

In addition to the geo-political and climate-change risks listed above, and the technical limitations inherent in the WM network that QR has documented in its proposal, coal services using the WM system face the challenge of operating through the Metropolitan network.

The interaction of coal services with high volume and frequency passenger services introduces complexity that is not present in other QR networks. Priority is given to passenger services in the event of any conflicts in day of running, and during passenger peak hours⁶⁷ no coal services are scheduled through the Metropolitan network. If coal trains are running late due to, for example, heat restrictions imposed on the WM network, they will be held to give a passenger service priority. Coal,

⁶⁶ Queensland Rail, Draft Access Undertaking 3 (DAU3) Explanatory Document, 10 November 2023, p 26

⁶⁷ Morning peak = 05:00 - 09:00, and evening peak = 15:00 – 18:00

and freight in general, acknowledges that passenger services will always be the priority on the suburban commuter network.

More recently, significant extended closures on the Metropolitan system flowing from the Cross River Rail (CRR) project have also impacted the scheduling and provision of coal services through the Metropolitan system.

Cross River Rail Project

CRR is a \$5.4 billion 10.2 km rail line between Dutton Park and Bowen Hills, which includes 5.9 km of twin tunnels under the Brisbane River and the CBD. It will deliver 4 new underground stations at Boggo Road, Woolloongabba, Albert Street and Roma Street, and new above ground stations at Exhibition, Pimpana, Merrimac and Hope Island. Seven suburban stations are being rebuilt between Dutton Park and Salisbury, and new train stabling facilities are being built at Clapham Yard and Mayne Yard.

The southern area of CRR includes the southern tunnel portal which merges into the existing QR Metropolitan network at the intersection of multiple passenger rail lines and the freight line utilised by WM coal services travelling between Rosewood and Port of Brisbane.

The Cross River Rail Delivery Authority (CRRDA) was established in 2019 to lead the development, procurement, and delivery of the CRR project. Early works started in 2017 and construction commenced in 2019.

To avoid impacts on passenger services as much as possible, CRR extended possessions have been scheduled in blocks of between 5 – 18 days during school holiday periods. Within these bookends, there will usually be some periods where the track is wheels free entirely, some periods where no overhead is available, but services can run on forms, and some periods where access is available for freight services in certain windows (e.g. between 18:00 and 6:00). This level of detail is typically not known until close to the actual closure or possession.

First trains were expected to be operational in 2024, and until mid-2023, the CRRDA was advising that the project was on track. In June 2023, CRRDA advised stakeholders it had undertaken a re-baselining of its work program due to a range of impacts including the supply chain issues created by the war in Ukraine, resource constraints emerging from the COVID pandemic, and flooding events. As a result of this exercise, CRRDA estimated construction would continue until 2025, with commissioning likely to occur in 2026 after extensive testing.

How does CRR impact coal services

The MTP is QR's document that reflects the network capacity required to satisfy:

- all **Train Service Entitlements** (including all contracted coal train services), as well as passenger services allocated train paths, and
- time allocated for Regular Planned Possessions.

Non-coal freight (i.e. grain and livestock services) typically aren't contracted but will run as ad hoc services that are included in the DTP.

In Part 1, section 4 of this submission Aurizon recommends amendments to the Train Planning Principles in Schedule F DAU3 – the NMP, to clarify the process that QR follows in the WM system, including:

- referring to the Supply Chain Calendar for the WM system as the Western Corridor Alignment Calendar (**WCAC**); and
- recognising the role played by rail operators in the planning process, including the placing of orders for customers, the reviewing of the MTP, WCAC and 18 week forecast plan with pathing, and the scheduling of the DTP, with a timeline for each activity included and clear recognition of dispute resolution processes to ensure customers have an ability to enforce their right to train services/paths.

This part of QR's planning process has been brought into focus most recently in the WM system because of:

- recommencement of railings from three mines requiring additional coal services/paths to be scheduled, and
- significant extended network closures on the Metropolitan system flowing from the CRR project.

As the network has been operating in low tonnage mode, QR has largely been able to manage the impact of closures and possession constraints on network availability (including from CRR) and continue to schedule and deliver contracted tonnes.

Once volumes rise there will be less flexibility to schedule around and recover from such closures.

CRR possessions do not fall clearly within the existing terminology of the NMP: they are not Urgent or Emergency Possessions, they are project-related and ideally should be planned into the MTP well in advance. Aurizon believes that the greater the impact of a possession on the availability of the network the longer the notification period should be and the opportunity for alternatives to be raised and considered by operators and customers.

The category of Ad Hoc Planned Possession, which QR introduced in AU2, to cover planned possessions occurring at irregular intervals, appears to capture CRR closures. Ad hoc planned possessions aren't included in the MTP but in the WCAC, along with track closures, 'no train' periods, network maintenance and recent changes to the network. Aurizon thinks that this kind of possession should be part of the MTP and not relegated to a secondary planning document like the WCAC.

The current NMP provide that QR must notify affected parties (this includes Aurizon as the rail operator as well as the mines who hold access rights) of any modification to the MTP or to schedule an Ad Hoc Planned Possession at least 3 months prior to the modification. If the modification will result in an access holder's scheduled train services not being met in accordance with their train service entitlement, QR must obtain the access holder's agreement (not to be unreasonably withheld).

As discussed under the **QR capacity analysis** heading above, the train service entitlement of access holders in the WM system is set out generally as a commitment to a number of train services/paths per year. QR will translate this entitlement into a timetabled service at least 3 months prior to operation but outside this time an access holder may only have an entitlement to an amorphous bundle of train services/paths within a broad period (typically a calendar year).

In this circumstance, it isn't clear whether an access holder could 'reasonably' refuse to accept an ad hoc planned possession that, for instance, reduces network availability for a particular month by 18 days, if QR asserted it could schedule replacement or catch-up services throughout the remainder of the calendar year. In the current circumstances QR may, in all good faith, believe that it can make up services later, but it may subsequently receive notification from CRR that additional closures are needed.

This level of variability also demands Aurizon maintain higher 'peak' capacity in the system to perform 'catch up' for large network closures.

This is the position that WM customers are currently being put in with extended closures for the CRR project, and Aurizon considers there is a likelihood these types of scenarios will continue into the term of DAU3 given the scope creep evident with the CRR project and the planning for the 2032 Olympic Games in Brisbane.

As noted above, in Part 1, section 4 of this submission Aurizon has commented on QR's proposal to delete cl.2.4 from the NMP. Based on our involvement with the closures associated with CRR, Aurizon is strongly convinced that cl.2.4 should remain in the NMP.

We also consider additional transparency and rigour is required for the scheduling of any Regular and Ad Hoc Planned Possessions because there is a lack of specificity around the definition of an access holder's access entitlement that could leave access holders exposed.

As noted earlier, given the amount of infrastructure work being undertaken to, or adjacent to, the QR Metropolitan network, and the possible increase in volumes, Aurizon considers there will be more instances where QR needs to obtain the approval of a customer before modifying the MTP or adding an Ad Hoc Planned Possession.

2.3.2 Aurizon mitigation efforts

The impact that CRR has had on the WM coal services has largely been mitigated to date due to the investment of significant time and money by Aurizon.

The most recent initiative was implemented in January 2024 during a 3-week closure for CRR that would have prevented coal services from accessing the Port of Brisbane. Aurizon staff identified a possible alternative route through the Brisbane city network. To its credit, QR was open to the suggestion from Aurizon and a joint team worked to conduct a risk assessment and develop a proposal for the 'Hole in the Wall' route via Central Station, Bowen Hills, Exhibition to Fisherman Islands.

To prepare for the January closures, Aurizon carried out numerous trials on the QR network, undertook route competency for drivers, and amended load tables and other items within the operating arrangements that Aurizon has with QR.

The 'Hole in the Wall' route allows Aurizon to keep running services for coal customers during a time when the usual route was not available due to CRR and it will be used again for future closures. The costs for undertaking this work have been borne by Aurizon (primarily) and QR and it is an example of the type of risk that customers and coal hauliers operating on the WM network face.

Recommendation

Aurizon **recommends** that:

- When QR sets out the key assumptions on which its network capacity analysis is based, it includes its assessment of likely system losses from infrastructure projects as well as an assumption on how evenly spaced those system losses are likely to be. Aurizon notes that historical data may not be the best indicator of future losses given CRR is the largest infrastructure project in Queensland history, and the works program for the 2032 Olympics is also likely to be significant.
- QR considers the risk of disruption that customers and operators on its WM network face because of significant infrastructure works affecting the Metropolitan network. This creates

uncertainty and pushes costs onto operators and customers. QR should recognise this cost shifting in the analysis of its costs of providing access to coal services.

- QR clarify that an access holder’s ‘Train Service Entitlement’ as referenced in the NMP for WM system coal services is the entitlement to a number of train services/paths per year, pro-rated across the available monthly and weekly periods within that year. In other words, QR’s obligation under an access agreement is not just an annual one.

This is intended to make it clearer when a modification or addition being proposed by QR will result in an access holder’s scheduled train services not being met in accordance with their train service entitlement.

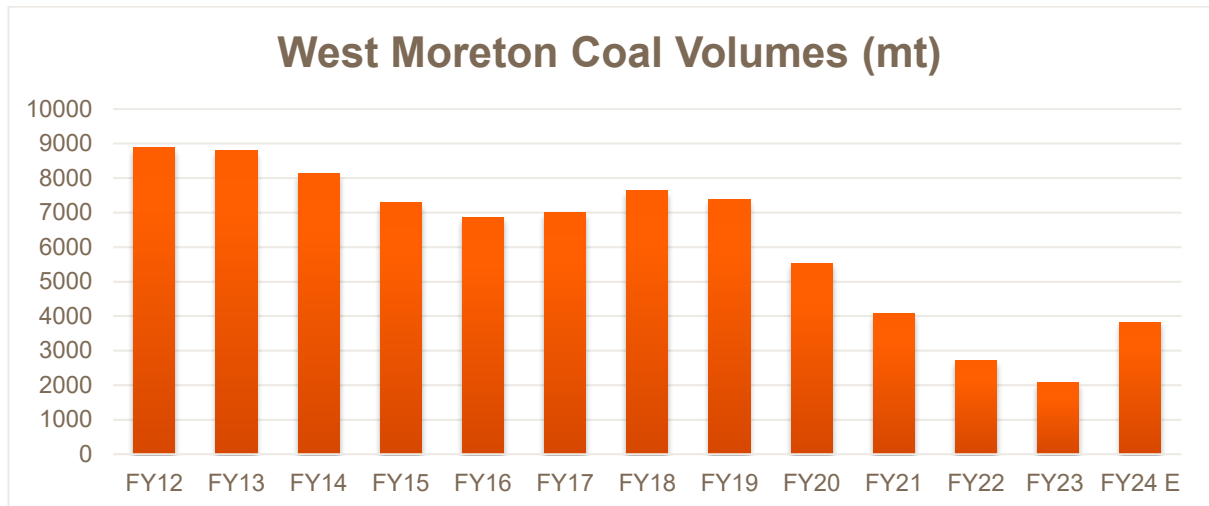
3. Total revenue requirement inputs

3.1 Volume forecast

There has been significant movement in volume demand in the WM system over the past three years – mostly because of the legal challenges to New Acland Stage 3 and the unprecedented price levels reached in 2022 because of the convergence of soaring global coal demand and supply shortages.

As QR has noted, and as Aurizon’s own record of historical coal tonnage railed in WM shows (Table 11) the system has never railed anywhere near the maximum forecast coal system tonnage assumed by QR for DAU3 planning purposes - ranging from 7.4mtpa on 1 July 2025 to 9.6mtpa by October 2026, and remaining at this level until 30 June 2030.

Table 11 Historical coal tonnages railed in West Moreton



As to whether expected growth in tonnes proceeds as QR assumes, there are at least two outstanding matters that should be factored in: firstly, an appeal by **OCAA** of the Queensland Government’s decision to grant a water licence to New Acland Coal; and secondly, New Wilkie Energy entering voluntary administration on 27 December 2023, and receivership on 8 January 2024. The mine has been put into care and maintenance and its future operation is currently uncertain. It may be possible for the volumes from New Wilkie mine to be transferred to another mine, or in other words, for the total system demand to remain at 9.6mtpa (or thereabouts) but for the coal to come from another mine or mines in the system.

Forecast coal volumes will remain unreliable until these issues are settled.

QR has historically maintained its revenue requirement is predominantly fixed and not variable dependent on volume. Most recently, QR's capex, operating expenditure (**opex**) and maintenance spend under AU2 remained high irrespective of the change from the high-volume scenario (9.1mtpa) to the low-volume scenario (2.1mtpa). Table 12 summarises how the forecast volume has influenced QR's underlying building blocks over time.

Table 12 Volume impact on costs

	AU2		DAU3
Volume	9.1mtpa	2.1mtpa	9.6mtpa
Capex (5 yrs)	\$159.4m (FY21 \$s)	\$144.5 (FY21 \$s)	\$346.9m (FY26\$s)
Opex (5 yrs)	\$48.7m (FY21 \$s)	\$41.2m (FY \$s)	\$85.3m (FY26\$s)
Maintenance (5 years)	\$140.9m (FY21 \$s)	\$101.8m (FY21 \$s)	\$172.5m (FY26\$s)

Conversely, QR's primary justification for the unprecedented increases in its costs is its expectation that the production of coal will increase from current levels.

It is worth reflecting on how QR's view of the capacity available to coal has changed over the regulatory periods and how this has been used to apportion QR's costs for sustaining the WM infrastructure, to its benefit and other rail users.

For the 2008 and 2016 access undertakings, QR allocated costs to the coal services reflective of their share of the system capacity being 87 paths of a total 113 available⁶⁸. For the 2020 access undertaking QR said that 97 paths were available, and it increased the allocation of common network costs to coal based on the higher (97 path) constraint⁶⁹. Even in its revised, low-volume price proposal, QR allocated costs according to a limit of 97 train paths available for coal services, notwithstanding it had not contracted to that level and was unlikely to do.

The QCA, after confirming that the Queensland Department of Transport and Main Roads no longer applied the 87 path constraint for coal, accepted that it was appropriate for costs to be allocated on the basis of 97 paths, reflecting the capacity available for coal train services, including spare available capacity. The QCA noted:

We consider that allocating fixed common costs according to capacity available to coal services to contract is appropriate, because it provides Queensland Rail with the best chance to generate adequate revenue to meet its efficient costs over time (ss.138(2)(b), (g), 168A(a)). It is also in the interest of access seekers and holders, to the extent that the share of fixed common costs that coal services are expected to underwrite reflects the share of capacity that they are able to contract (and no more) (ss.138(2)(e), (h)). In balancing the interests of all parties, this approach promotes the economically efficient use of, operation of, and investment in the network (s.138(2)(a)).⁷⁰

Against this history, it seems disingenuous for QR to claim for DAU3 that the WM network needs significant, record capital and maintenance expenditure to provide capacity for 9.6mtpa of coal and 97

⁶⁸ Section 8.3.1 of QCA, Queensland Rail's Draft Access Undertaking, decision, June 2016: 121-126

⁶⁹ Queensland Rail, sub. 2:11 and 16

⁷⁰ QCA, Queensland Rail 2020 draft access undertaking, Decision February 2020, p59

paths. As customers have already been paying for 97 paths of capacity it would appear that coal's share of network costs has been overstated for the current regulatory period.

Recommendation

Aurizon **recommends** that:

- QR's approach for DAU3 reference tariffs should include closer consideration of the fixed and variable proportion of the planned activities and costs/expenditure. Ideally, some degree of scalability should be applicable to both the activities and the costs.
- QR consider an annual planning process involving QR, customers and operators, that:
 - reviews the expected volume demand,
 - reviews and confirms the capital expenditure and maintenance plans, and
 - determines whether the WM reference tariff should be adjusted.
- The QCA consider whether there should be a deduction from the LCA for an over-recovery of network costs from coal services throughout AU2.

3.2 Capex

The proposed capex for DAU3 is \$326.9m based on forecast volume of 9.6mtpa. This is 127% (real) higher than the capital expenditure allowance in AU2.

By comparison, AU2's capital expenditure allowance was between 3% and 15%⁷¹ higher than the capital expenditure allowance in AU1. QR proposed 2 capital expenditure scenarios for AU2 – the first based on forecast tonnes from only Cameby Downs mine (2.1mtpa) and the second based on forecast tonnes from both Cameby Downs and Jondaryan mines (9.1mtpa). QR's proposed capex for the 9.1mtpa scenario was \$159.4m ((FY21 \$s).

Aurizon does not consider QR's current proposal provides a sufficient level of disclosure for customers to understand what it is they are being asked to pay for, and why this is so much higher than the capex anticipated for 9.1mtpa in 2000. The proposed capital expenditure tables in QR's DAU3 Capital Expenditure Submission⁷² are so heavily redacted as to preclude an assessment of the prudence and efficiency of the planned projects. QR has provided its reasoning for proposed works, and by and large this is consistent with previous capital expenditure submissions, focusing on the state of the aging network and its unsuitability for a heavy haul traffic. But again, the amount of redaction of cost information ensures that it fails to provide a compelling and transparent business case for the proposed increases in capex.

Additionally, and irrespective of the redaction, there appears to be no consideration given by QR to the volume uncertainty in the WM system and how its plans could be adjusted to accommodate fluctuating demand. There are no alternative options outlined and/or explanation provided for why these options were discounted by QR through its planning.

⁷² Attachment 2: Queensland Rail's Detailed West Moreton System DAU3 Capital expenditure Submission, p 19: Queensland Rail, Draft Access Undertaking 3 (DAU3) Explanatory Document, 10 November 2023

Aurizon recognises that QR has proposed the inclusion of a new reference tariff trigger in Schedule D, however, this seems more of a reactive than proactive response. And it assumes that the proposed capex approach is already prudent and costs efficient, and only a variation in volume will trigger a reconsideration of that approach. As discussed below, that has not been established.

Another critical weakness of QR's approach lies with its apparent lack of customer consultation (and therefore lack of regard to customers' preferred approach to spending).

More specifically, with respect to the prudence and efficacy of QR's proposal against the three elements of scope, standard and cost.⁷³

I. **Scope – what is QR's justification for the works proposed? Are they needed?**

The degree of uncertainty inherent in the WM coal market casts considerable doubt over some of QR's assumptions including the forecast contract volume.

Furthermore, QR isn't proposing to increase coal network capacity through its expenditure, rather it aims to *reduce operational risk, optimise maintenance costs, and increase the confidence of the supply chain to deliver the full record coal raiing demand during DAU3*⁷⁴.

Importantly for customers, QR doesn't specify what the current level of operational risk is, or what level of operational risk it will achieve via its proposal.

While QR's rationale for expenditure is to improve the *reliability* and *availability* of its network, it fails to provide quantitative justification for its proposed works. It claims to have signed up to the record forecast tonnage of 9.6mtpa based on the existing capacity of the WM network and current operating parameters. Yet it hasn't produced any capacity analysis to back up its assessment of investment in capital and increases in maintenance and operating expenditure.

Aurizon has provided recommendations above under **cl.2.2.2 Capacity analysis assumptions**, aimed at eliciting greater transparency from QR on these issues.

It is essential that QR, customers and other stakeholders work together to develop the main indicators for network reliability and availability.

Given customers are paying for the proposed improved network reliability and availability, Aurizon expects that QR has already undertaken customer consultation and obtained some support for the proposed expenditure. However, there is no mention of this in QR's proposal. Nor is there discussion around the consideration of alternative options.

⁷³ Although not all the expenditure proposed by QR is flagged for climate change mitigation or adaptation, climate change does account for most risks associated with the WM coal supply chain and the QCA has confirmed that its overall assessment framework for climate-related spending is broadly the same as its assessment framework for other types of spending proposals. Consequently, Aurizon has considered key points made by the QCA in the September 2023 Guidelines on climate change related spending. Whether QR's proposal for DAU3 WM reference tariffs:

1. Aligns with a coherent and credible medium-long term strategy for infrastructure investment reflecting consultation with customers and clear objectives.
2. Is supported by a robust business case that demonstrates the need for the spending, shows customers were consulted, and sets out how options were considered and shows the cost is efficient.

⁷⁴ Queensland Rail, Draft Access Undertaking 3 (DAU3) Explanatory Document, 10 November 2023, p 9

Aurizon's experience of consultation and engagement by QR on DAU3 was very limited. Although QR professed the desire to engage, there was no opportunity for consultation on its WM reference tariff proposal and the rationale behind it before it was submitted with the QCA. Aurizon met with QR twice to discuss DAU3 in the first half of 2023 but the significant increase in WM reference tariffs was not raised at either meeting.

Aurizon acknowledges that it is not the access holder for coal services in WM and QR may have focussed its consultation efforts in that area instead. However, Aurizon is party to the tripartite access agreements and a member of the coal supply chain. Its expertise is relied upon by customers who understand that optimising the interactions between above and below rail operations results in the best service offering.

In addition, Aurizon has significant resources and capital invested in coal haulage in the WM system. While Aurizon's assets are more portable than QR's, the bespoke nature of the rollingstock required for the WM system to meet the physical infrastructure limits reduces redeployment flexibility. In addition, the time and cost required to recruit, train, and retain train drivers qualified to operate services through both the WM and the Metropolitan systems is substantial. Aurizon has invested heavily in the regrowth of the WM coal system.

II. Standard – what works are being proposed by QR? Are they of an appropriate standard and not over-designed (particularly regarding alternative options)?

As noted above, QR hasn't provided a business case that clearly demonstrates the nature and level of the proposed works are appropriate⁷⁵.

There is also an excessive level of confidentiality claimed by QR in the supporting material, particularly as regards capital, maintenance, and operating expenditure. The amount of redaction makes assessment of the nature and reasonableness of expenditure impossible. Consequently, while QR has advised it requires significant increases to its capex, opex and maintenance costs to achieve the forecast system tonnage of 9.6mtpa, it is unclear what that means in terms of the current and future performance standards of the network.

III. Cost – what is the cost and how was it determined by QR? Is the cost efficient for the works done? Was consideration given to less costly options and why were they discounted?

QR does not consider all costs and risks associated with its expenditure proposals. Its proposal is very much internally focussed as evidenced by the fact that it hasn't outlined any less costly options for consideration by customers.

Aurizon considers that once QR has established the key measures critical to network reliability and availability performance, as recommended above, it will be able to provide broader consideration of options and identify less capital-intensive opportunities to achieve service improvements. For example, more intensive monitoring of the network to more closely target when speed restrictions or closures could be applied, rather than automatically applying blanket speed restrictions during the summer timetable period.

The QCA has recognised that an appropriate assessment of efficient cost will consider all costs and risks associated with an expenditure proposal, encompassing both private and social costs⁷⁶. It also

⁷⁵ QCA, Guideline - Climate change related spending, September 2023; and QCA, Final Position Paper – Approach to climate change related expenditure, September 2023

⁷⁶ QCA, Final Position Paper – Approach to climate change related expenditure, September 2023, p 36

notes that while it encourages regulated businesses to reach agreement with users on planned expenditure proposals it is possible a consensus will not be reached. In this case, differences of view need to be addressed in the regulated businesses' proposal and an explanation provided as to how it takes the costs and benefits accruing to different stakeholders into account⁷⁷.

Recommendation

Aurizon **recommends** that:

- Once the key measures and performance standards for the network to achieve the forecast volume demand are known, QR should ensure its proposed capital projects align with the agreed service level outcome, and provide information to stakeholders about:
 - how each element of the capex contributes to those agreed service levels
 - what alternative options were considered by QR and the reasons why they were not pursued, and
 - what happens if capex doesn't achieve the agreed network service levels and there is a capacity shortfall.

This information is intended to allow customers to decide if QR is aiming for the level of service they are willing to pay for, and to assess any trade-offs they can accept due to their own risk preferences. It will also allow them to measure the success or otherwise of investments – something that should be transparent to them.

- QR investigate interest in forming an industry group to evaluate and approve the scope, benchmarks, and costs of QR's maintenance and capex plans on a regular basis. Consideration should be given to establishing a similar group to the Rail Infrastructure Group (RIG) established under Aurizon Network's UT5, and the Rail Capacity Group (RCG) established under ARTC's Hunter Valley Access Undertaking. This industry group would inform QR on their preferences as users of the network so that QR develops its capex program to achieve the desired outcomes.

3.3 Maintenance costs

QR has proposed an increase in maintenance expenditure (+62% real from AU2) driven by the increased system tonnage.

By comparison, maintenance costs for DAU2 were estimated by QR to be on average +8.7% higher per annum in real terms than the AU1 maintenance allowance approved by the QCA despite the volume forecast for AU1 being more than 3 times higher than the forecast for DAU2.

In its explanatory document⁷⁸, QR notes that maintaining the WM system to enable efficient movement of services and minimise closures and speed restrictions will be critical to achieving the forecast coal volume throughout. The tonnage increase will impact QR's variable maintenance costs

⁷⁷ Ibid, p 42

⁷⁸ Queensland Rail, Draft Access Undertaking 3 (DAU3) Explanatory Document, 10 November 2023, p 9

by increasing costs proportionally to the increased usage, driven primarily by wear and degradation of the track⁷⁹.

For AU1, the QCA estimated of the fixed and variable proportion of QR's maintenance activities on the WM system, based on a consultant's assessment of tonnage dependent maintenance activities. The QCA's approach provided a weighted average fixed to variable split of 57.3% fixed and 42.7% variable for AU1. The QCA's same approach produced a lower fixed proportion estimate for DAU2 of 54.4% fixed and 45.6% variable.

QR proposes using the above splitting of maintenance costs into fixed and variable categories to allocate maintenance costs to coal (as opposed to non-coal users of the WM system).

Recommendation

Aurizon recommends that:

- QCA's approach to assessing the fixed and variable proportions of QR's maintenance activities be undertaken with QR's DAU3 maintenance budget to determine the proportionate reduction in costs from lower coal tonnage.
- QR consult supply chain stakeholders on its final proposed maintenance plan and costs to understand their risk appetite and preferred options or preferences for maintenance spending.
- As noted above for the capex program, QR investigate interest in forming an industry group to evaluate and approve the scope, benchmarks, and costs of QR's maintenance and capex plans on a regular basis. This would arguably prevent scenarios where QR plans maintenance over a large part of the network and across multiple years, only to achieve a network standard at the end of the works that there is no longer any demand for.

3.4 Opex

QR has proposed an increase in opex (+89% real from AU2) driven by large increases in corporate overhead and other expense categories that QR considers were significantly understated in AU2. By comparison, the operating expenditure QR proposed for DAU2 was +23% higher per annum in real terms than the annual operating expenditure allowance included in AU1.

In December 2023, QR reported⁸⁰ that its actual opex for West Moreton in 2022-23 (\$12.5m) exceeded the AU2 efficient cost estimate (\$7.6m) by \$4.9m due to:

- an additional \$2.4m being dedicated to train control resources and
- higher than forecast coal volumes (2.2mt v 2.1mt).

Given the volume disparity was only 100,000 tonnes, it is surprising that QR has not explained why it needed to spend an extra \$2.4m on train control resources just for the WM system.

Aurizon considers that much of QR's overhead and other expenses are driven by the high management intensity Metropolitan system and the complexity of managing the construction phase of

⁷⁹ Queensland Rail, Draft Access Undertaking 3 (DAU3) Explanatory Document, 10 November 2023, p 39.

⁸⁰ Queensland Rail, 2022-23 Annual Performance Report, QR Access Undertaking 2, December 2023, p.8

CRR and future infrastructure projects. During the DAU3 period, QR will need to incorporate the new CRR sections into the management of its existing network and none of these costs should be allocated to coal services on the WM system.

Further, Aurizon is concerned that the allocative approach used by QR to assess actual opex may not result in allocated costs that align with a bottom up estimate of the costs that would be incurred for WM coal services. This is particularly the case where costs are allocated on a network usage basis (eg gtk or train km).

Recommendation

Aurizon **recommends** that:

- An independent review of QR's 'bottom up' assessment of train control costs be undertaken to assess what would be a reasonably efficient allowance for a coal only system.
- A 'bottom-up' review be undertaken of QR's management and infrastructure administration expenses to assess what would be a reasonably efficient allowance for a coal only system.

3.4 Other inputs and impacts

3.4.1 Accelerated depreciation and stranded assets

AU2 does not include an accelerated depreciation approach, however, in its Final Decision on DAU2 the QCA noted *that an appropriate accelerated depreciation profile would likely be sufficient to address longer term stranding risks that West Moreton coal faces*⁸¹.

As such Aurizon accepts that such an approach may be suitable in the circumstances to address QR's asset stranding risk. However, Aurizon challenges the validity of QR's claim to both accelerated depreciation and maintenance of a short-term volume risk uplift in its cost of debt on the grounds that this compensates QR twice for the asset stranding risk it faces.

Ultimately, the most appropriate approach to determining QR's recovery profile in the transition towards a net zero carbon emissions future is likely to be negotiated and agreed between QR and its coal customers.

3.4.2 Building blocks build up

As mentioned above, Aurizon considers QR's proposal lacks the necessary transparency expected from a regulated business submitting building block derived prices. At a minimum QR should submit a table of the proposed revenue and building block components for each year of the regulatory period (Table 13⁸² and is a good example), and roll-forward of the RAB (Table 14⁸³ is a good example).

⁸¹ QCA, Queensland Rail 2020 draft access undertaking, Decision February 2020, p 50

⁸² Ausgrid, 2024-29 Regulatory Proposal, for submission to the Australian Energy Regulator, 31 January 2023, p 48

⁸³ Ibid, p 53

Table 13 Example presentation of revenue and building block components

Figure 4.1.1 Proposed revenue and building block components for the 2024-29 period (\$m, nominal)

	FY25	FY26	FY27	FY28	FY29	Total
Return on capital	1,060.9	1,109.1	1,159.8	1,210.3	1,263.0	5,803.2
Return of capital	72.0	105.8	141.1	157.5	143.3	619.7
Opex	486.2	509.2	527.9	547.7	567.8	2,638.9
Efficiency Benefit Sharing Scheme (EBSS)	153.5	206.9	63.7	(5.5)	0.0	418.6
Capital Efficiency Sharing Scheme (CESS)	(0.2)	35.6	36.6	37.6	38.7	148.4
Demand Management Innovation Allowance Mechanism (DMIAM)	1.6	1.8	1.7	1.8	1.8	8.6
Shared assets	(2.9)	(3.1)	(3.5)	(3.5)	(3.6)	(16.6)
Tax allowance	19.2	18.9	18.4	18.9	18.0	93.4
Revenue requirement	1,790.4	1,984.1	1,945.8	1,964.8	2,029.1	9,714.2

Table 14 Example presentation of RAB values

Figure 4.4.1 Annual RAB values over 2024-29 (\$m, nominal)

	FY25	FY26	FY27	FY28	FY29	2024-29 period
Opening RAB	18,545.9	19,222.3	19,840.0	20,429.5	20,994.1	18,545.9
Net capex	748.4	723.4	730.6	722.1	711.0	3,635.6
Straight line depreciation	(605.2)	(658.3)	(711.4)	(744.8)	(746.8)	(3,466.5)
Inflation on opening RAB	533.1	552.6	570.3	587.3	603.5	2,846.8
Closing RAB	19,222.3	19,840.0	20,429.5	20,994.1	21,561.8	21,561.8
Closing RAB - \$m, real FY24	18,685.2	18,746.7	18,764.3	18,744.1	18,713.0	18,713.0

In addition, the revenue table should show the impact of revenue adjustments from prior regulatory periods so it would be reasonable to expect QR to include a line item which shows the years the LCA is in use, the accrued shortfall and the amounts recovered.

Recommendation

Aurizon recommends QR provide:

- A summary of the building block components and maximum allowable revenue for each year of the DAU3 term.

- Access to the redacted information in the explanatory material relating to capital, maintenance and operating expenditure for individual projects.