
Review of Aurizon Network's rebate mechanism

23 March 2022

The Queensland Competition Authority is considering recommending that no changes be made to the rebate mechanism established under clause 7A.6 of Aurizon Network's 2017 access undertaking (UT5). The reasons are set out in this draft decision.

The rebate mechanism

The rebate mechanism¹ requires Aurizon Network to pay an annual financial rebate to users who are affected by a failure on Aurizon Network's part to meet its performance standards.

A rebate is payable to an end user when the independent expert (IE) identifies there has been a performance shortfall caused by an Aurizon Network performance breach.^{2 3} To assist the IE, UT5 requires that Aurizon Network provide the IE with comprehensive and detailed information on network performance, including all source and underlying information and data.⁴

To date, the IE has identified performance shortfalls resulting from Aurizon Network performance breaches, and one round of annual rebates was paid to affected end users.

On 8 December 2022, we received a request⁵ to review whether the rebate mechanism has achieved defined rebate objectives. The objectives relate to the information and support Aurizon Network provides for the IE to understand end users' outcomes and Aurizon Network's performance and to make decisions on rebate amounts, as well as the timely provision of any rebate to eligible end users.⁶

Should we consider that the rebate objectives are not being materially met we must determine whether amendments can be made to UT5 to ensure the objectives are achieved.⁷ If Aurizon Network fails to implement our recommended amendments (or alternative arrangements agreed to by a majority of end

¹ UT5, cl. 7A.6.

² Where Aurizon Network has breached an obligation under UT5 or an access agreement, acted inconsistently with the approved maintenance strategy and budget other than as permitted, or failed to comply with the system operating parameters.

³ UT5, cls. 7A.6(b), and the definitions of 'AN Performance Shortfall' and 'AN Performance Breach' in Part 12.

⁴ UT5, cl. 10.8.2.

⁵ UT5, cl. 7A.6(f).

⁶ UT5, cl. 7A.6(g).

⁷ UT5, cl. 7A.6(j).

users) in a timely way, the rebate mechanism will cease to apply, and Aurizon Network's approved WACC will be reduced.⁸

Our review is to be completed by 30 June 2023.⁹

Consultation

On 7 January 2023, we notified stakeholders that we had received a request to review the rebate mechanism and invited submissions from stakeholders. We received submissions from the Queensland Resources Council (QRC), the Coal Network Capacity Co (the IE) and Aurizon Network. These submissions are available on our [website](#).

We have taken these views into account in making our draft decision.

Assessment

We are required to assess whether the rebate objectives set out in UT5 have been met in a material way. To assist with this assessment, and in line with the approach adopted by stakeholders and the information provided in submissions, we have considered each objective in turn.

1. Provision of comprehensive and transparent information, and support by Aurizon Network for the IE's work in relation to the determination of the rebate

We consider that the rebate mechanism has materially met the first objective. The information provided to date was sufficient to identify performance breaches, calculate a rebate that provides Aurizon Network with an incentive to meet its performance standards, and compensate users who were affected by performance shortfalls. Aurizon Network is providing raw data from its systems to the IE on a monthly basis, which appears to meet reasonable requirements for transparency.

Aurizon Network noted that it has provided the IE with comprehensive information on network performance (to the extent known by Aurizon Network), including all source information and data as required by clause 10.8 of UT5. Aurizon Network considered that it had met this objective.¹⁰

The IE said that there has been positive and transparent engagement with Aurizon Network for the 2021–22 rebate process. However, the IE noted that there was some train order information that it considered Aurizon Network may not be capturing in its current scheduling and planning processes and that this was relevant to the root cause analysis as required in objective 2.¹¹

The QRC's view was that this rebate objective was not being met. It suggested that protocols be put in place for the IE to have direct access to information to enable assessment by end users. The QRC's understanding was that there is not a clear record of end user demand such that the IE is unable to determine if end user train service entitlements (TSEs) were unable to be ordered, or ordered but not provided.¹²

From discussions with the IE and Aurizon Network, it is clear that calculating the rebate is a highly complex process, where room for improvement remains. Aurizon Network and the IE continue to work

⁸ UT5. cls. 7A.6(k), (l), (n).

⁹ However, Aurizon Network confirmed that if the QCA does not meet that target date, the consequential actions under this process will continue to apply and be deemed to have effect from that date (i.e. there is a back-dating mechanism) (Aurizon Network, [Response to QCA RFI](#), question 38, 23 July 2019, p. 12).

¹⁰ Aurizon Network, [Submission to QCA Request for Stakeholder Views on the Rebate Mechanism](#), January 2023, p. 2 (Aurizon Network submission).

¹¹ Coal Network Capacity Company, [QCA review of the performance rebate mechanism](#), February 2023, p. 2 (IE submission).

¹² QRC, [Review of Rebate mechanism](#), February 2023, p. 3 (QRC submission).

collaboratively on further data requirements to calculate the rebate on a more detailed basis in future. This is discussed further in our assessment of the second objective.

We note the QRC's view that apparent information gaps—for example, on user orders provided to above-rail operators—constituted a material failure by Aurizon Network to provide comprehensive and transparent information. However, this information is not required to identify a performance shortfall by Aurizon Network, nor is it required to calculate the rebate amount.

2. Accurate, reliable and timely root cause analysis of the reasons why an end user's TSEs are unable to be ordered, are ordered but not provided, or are not utilised

We do not consider that the rebate mechanism materially meets this objective.

From discussions with Aurizon Network and the IE, it is clear that undertaking a comprehensive root cause analysis is an inherently complex task due to the systems involved, and there may be multiple reasons why an end user's TSE is unable to be ordered, provided, or is not utilised.

All stakeholders identified a key information gap in understanding why end user demand is not able to be presented to Aurizon Network and/or fully captured by Aurizon Network. For example, Aurizon Network noted that it has information on TSEs that have been ordered by above-rail operators. As such, it may not know why an above-rail operator failed to place an order for a TSE for a particular end user, as this information is subject to commercial arrangements between end users, above-rail operators and terminals. While Aurizon Network identified this as a gap in the information that it can make available to the IE¹³, it did not consider that this constituted a failure to materially meet the rebate objective.

The IE said that it was able, on the information it had, to identify end user TSEs that were ordered but not provided, including the root cause and responsibility—but it was not able to validate this information using third-party information.¹⁴ It also noted that many of the factors it is required to consider are relevant to a coal system or network—which can make it difficult to assign an Aurizon Network performance breach at an individual train service level.¹⁵

The IE suggested options to improve the transparency and effectiveness of the information it uses in its rebate assessments.¹⁶ These included additional reporting of underlying end user demand, making the quantum and status of orders more transparent to end users, and expanding the cancellation or delay reason codes for root cause analysis.¹⁷ The QRC also pointed to opportunities to improve the scope, quality and timing of information being made available to the IE.¹⁸

We note that the IE currently provides extensive information at an overall and system level on network performance, including root causes (Figure 1). This includes the number of trains:

- requested
- scheduled
- cancelled
- that were provided in addition to schedule and/or contract requirements

¹³ Aurizon Network submission, p. 3.

¹⁴ The IE said it relied on the robustness of the existing monthly reconciliation process (where access holders, managed by their rail operators, can dispute Aurizon Network's responsibility allocation).

¹⁵ IE submission, p. 3.

¹⁶ The IE also suggested the possibility of assessing Aurizon Network's performance and any rebate payable at a coal system level, to better align with the assessment of an Aurizon Network breach.

¹⁷ IE submission, p. 4.

¹⁸ QRC submission, pp. 4–5.

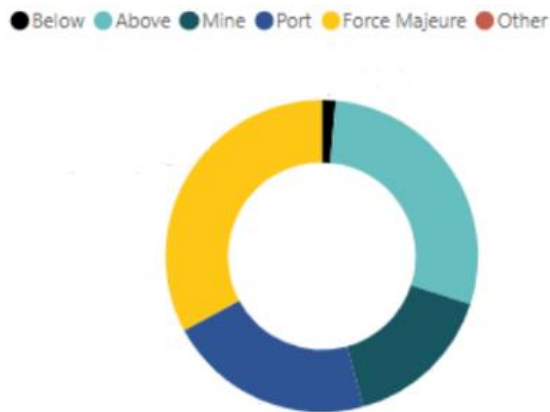
- that ultimately proceeded—this information includes a comparison against contracted amounts.

Figure 1 Train service numbers and categories (anonimised chart from IE reporting)



The IE also provides information for items such as cancellations (Figure 2) and trains requested but not scheduled.

Figure 2 Sample breakdown of cancellations (anonimised chart from IE reporting)



The IE provides commentary where categories are broken down into further subcategories (such as track maintenance and repair, and track defect). The number of trains affected is provided for each subcategory type. For example:

‘Below Rail’ cancellations ... across the network from X to X. A majority of the cancellations (X) occurred on X system. Overall, X and X cancellations were allocated to ‘Track Maintenance and Repair’ and ‘Obstruction/Damage/Failure/Malfunction of OHTWE (Overhead traction wire equipment)’ categories respectively.¹⁹

The IE also provides comparisons for each coal system of:

- requested trains compared to contract
- requested trains compared to scheduled trains
- actual trains compared to scheduled trains.

In addition to these overall reports, the IE provides individual end user reports containing similar information, but with data specific to the user, as well as information on the delays and their causes, and measures of payload levels. In addition, users can download information for specific train services.

This provides a range of information for users on end results. But, as the IE noted, areas for improvement remain, in terms of transparency around the impact of scheduling, and in particular around supply chain constraints caused by Aurizon Network's optimisation and scheduling systems.

The optimisation and scheduling systems must solve a multi-factor problem to produce a train schedule that maximises the overall usage and capacity of the network. The factors include constraints specified by external parties such as above-rail operators, mines and ports, as well as below-rail constraints (such as possessions for maintenance and network capacity constraints). Due to the interactions between these constraints and time schedules, it is possible that a particular order may not ultimately be scheduled due to multiple factors, and it can be difficult to specify which factor, or combination of factors, were responsible for a particular order failing to be scheduled.

The IE said that having greater clarity on maintenance and supply chain restrictions would be useful to determine potential impacts on performance rebate outcomes.²⁰

We understand that Aurizon Network is developing further reporting on the impacts of constraints on scheduling of TSEs, which will provide greater transparency for users and potentially improve the accuracy of reporting by the IE. We understand Aurizon Network will be consulting with both the IE and users in developing these reports.

3. Timely and effective provision of an individual rebate to end users calculated in accordance with clause 7A.6(b) in circumstances where an end user has received less than their TSEs in a year due to an Aurizon Network performance breach.

The QCA considers that the rebate mechanism has materially met this objective. While there was a delay in the IE finalising the rebate amounts, this is explained by this being a complex process being undertaken for the first time, especially given the difficulties observed in undertaking the root cause analysis. Aurizon Network issued receipts and paid amounts within the UT5 timeframes.

Draft decision

At users' request, we have assessed the operation of the rebate mechanism in its first year.

We note that:

- (1) Aurizon Network has received a financial penalty for failing to meet performance standards, providing an incentive to meet their performance standards
- (2) rebates have been provided to end users receiving less than their TSEs in the year due to an Aurizon Network performance breach.

However, we consider that the rebate mechanism has not met the defined rebate objectives in a material way. While Aurizon Network provided adequate information and support to the IE (where this was available to Aurizon Network) and provided rebates to users in line with UT5 requirements, we consider that there are significant issues in relation to the accuracy and reliability of root cause analysis given existing systems and processes.

The identified issues appear to be due to the relative newness of the rebate calculation and the level of complexity of the systems that need to be analysed in its calculation. Discussions with Aurizon Network and the IE indicate that there is a high level of engagement between the parties to improve the application of the rebate mechanism.

²⁰ IE submission, p. 2.

Data frequency

The timeliness of data provision by Aurizon Network to the IE was raised as an issue. However, based on the information at hand we do not consider that requiring Aurizon Network to provide the IE with more frequent, or contemporaneous, information would be cost effective, or materially improve the rebate assessment compared to that achieved in 2021–22.

Root cause analysis

Root cause analysis appears to be a particular weakness with the current arrangements identified by QRC and the IE. However, we have not identified, nor received any suggestions for, amendments to UT5 that could improve the root cause analysis.²¹ We also note that as the review is to consider the likely materiality of the extent to which the rebate objectives are not being met, the wording of UT5 implies that the rebate assessments will involve some degree of judgement by the IE. While accuracy will improve as further reporting is developed, given the complexity, there will likely be some unavoidable margin of error in the attribution of root causes.

Information on user requests and train operator orders

The QRC and IE both considered that having more information on the interactions between rail operators end users—for example, user requests to above-rail operators—could assist considerations under the rebate mechanism. We do not consider it appropriate to make amendments to UT5 that are intended to resolve matters arising under other commercial arrangements. In any event, it is not clear that requiring Aurizon Network to provide this information could be practically implemented (to the extent that this information is not available to Aurizon Network) or directly relevant to assessing a performance breach by Aurizon Network or determining the resulting rebate. As the QRC noted, users are already able to provide this information to the IE to incorporate into reporting.

Conclusion

It does not appear that the drafting of UT5 is proving a barrier to the rebate mechanism achieving its objectives in a material way—the first round of rebates have been calculated and paid, systems are under active development to further improve the process and, as the IE reports, there appears to be a positive working relationship with Aurizon Network. At this point, the issues appear to be related to implementation and initial teething problems, rather than the existing UT5 requirements.

As such, we are considering not recommending any changes be made to UT5 at this time.

Way forward

We invite stakeholders to provide feedback on our draft decision. Should stakeholders have specific amendments to UT5 that they consider will help promote the rebate objectives, these should be provided along with the reason(s) why these amendments would promote the achievement of the rebate objectives.

We invite submissions from stakeholders by 19 April 2023.

²¹ While the IE suggested expanding the cancellation and delay cause reason codes for root cause analysis, these are defined in the system rules.