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Annex AD

**QR National Network – UT4 Maintenance – 2012
Assessment Survey to Ports and Mines – Results,
12 June 2012**



QR NATIONAL NETWORKS

UT4 MAINTENANCE – 2012 ASSESSMENT SURVEY TO PORTS & MINES - RESULTS



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1. EXECUTIVE SUMMARY

The 2012 UT4 Maintenance - Assessment Survey to Ports & Mines was designed to gain feedback from Ports and Mine managers concerning their perception so current and desired performance of the coal network components (ie Port and Shipping Asset, Train Operations (Above Rail), Below Rail Infrastructure and Mine load-out Infrastructure) in relation to reliability, availability and safety. Respondents were asked to rate importance of reliability, availability and safety independently as a way of determining an importance weighting of their perceptions of current performance and their priorities for improvement across the four coal network components.

A total of ten (10) responses were provided to the survey, which was developed using SurveyMonkey® and distributed to a mailing list of port and mine managers by email. One response was not fully completed, meaning that there was useful data provided across the question for only nine (9) responses.

All respondents considered Reliability and Safety to be critical. Availability was critical for all but two respondents, both of whom rated this aspect as important. Overall, the consistency of responses made the idea of weighting the responses to other questions largely irrelevant.

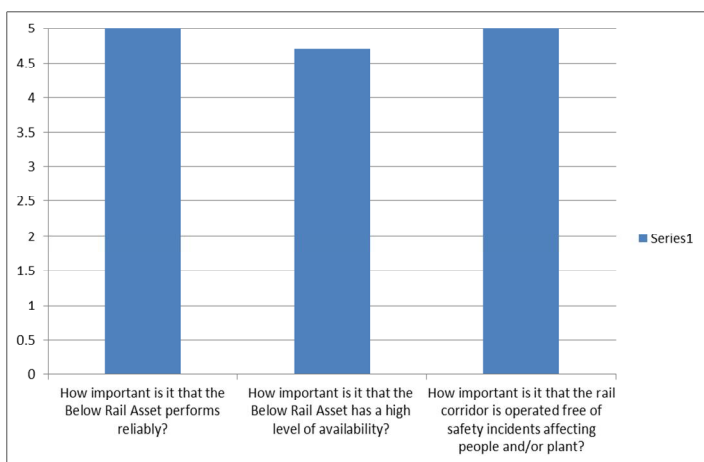


Figure 1. Relative importance of Reliability, Availability and Safety

Current Performance

Current performance for Reliability, Availability and Safety were rated highly across all coal network components. Coal Load-out rated slightly down on reliability, while Below Rail rated consistently highly across all three dimensions when compared to the others.

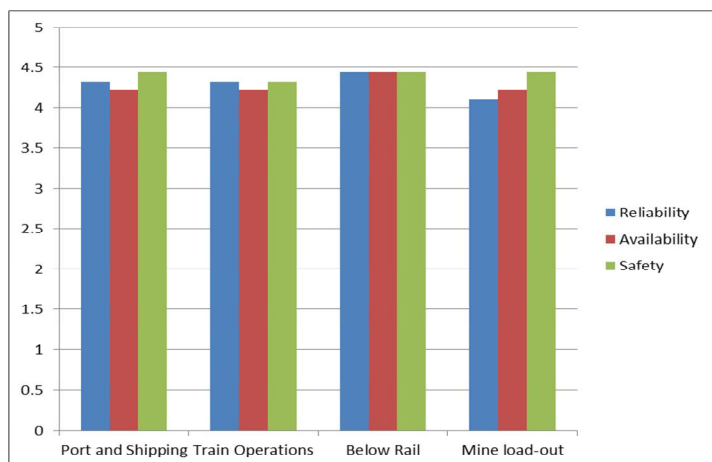


Figure 2. Rating of current performance across major coal network components



Improvement Priority

Opinions concerning improvement priorities showed more variability than the perceptions of current performance. Overall, the preference to improve reliability was consistently higher than either Availability or Safety for Ports and Shipping, Train Operations and Below Rail. After that Safety was indicated to be of a higher priority than Availability.

At a detailed level, respondents were more inclined to indicate that it is critical to improve both Below Rail Reliability and Availability - see Figure 8 and Figure 9 below.

The priorities for improvement in Coal Load-out facilities were generally rated below those for the other network components and in these facilities improvements in Safety were rated slightly ahead of Reliability which was in turn rated well above the need to improve availability.

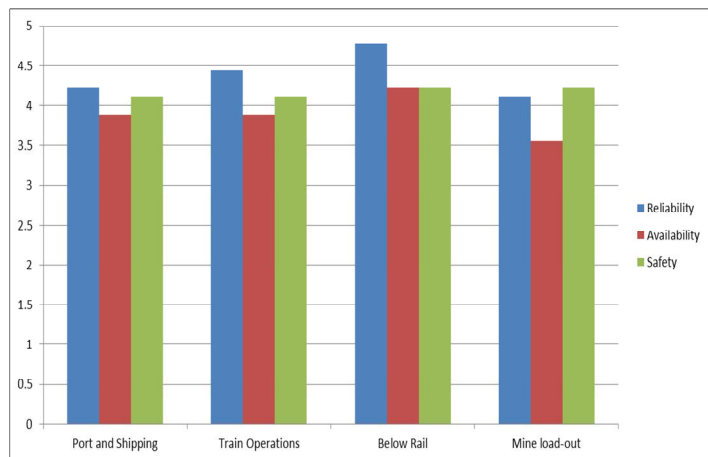


Figure 3. Improvement priorities for Reliability, Availability and Safety across major coal network components

Conclusion

The low level of responses¹ to this survey makes it difficult to reach firm conclusions across all of the stakeholders involved in the CQCN. However, if the responses received are representative of the opinions held by the industry stakeholders then it can be assumed that there is a high level of focus on all three dimensions of Reliability and Availability and Safety, with slightly more emphasis on improving the Reliability and Availability of the Below Rail asset as opposed to the other major components in the coal chain (ie Ports and Shipping, Train Operations and Mine Load-out).

Comments appended to the survey responses pointed to a desire for QR National to:

- Improve asset availability/ reliability, as this would have a significant impact on whole of coal chain performance
- Work towards reducing the number of speed restrictions throughout the network
- Ensure future infrastructure requirements are identified and steps taken for it be put in place as a matter of priority ie ahead of time and not on a catch up basis.

¹ It is of note that the last time a similar survey was conducted during the UT3 submission process there was no response at all.



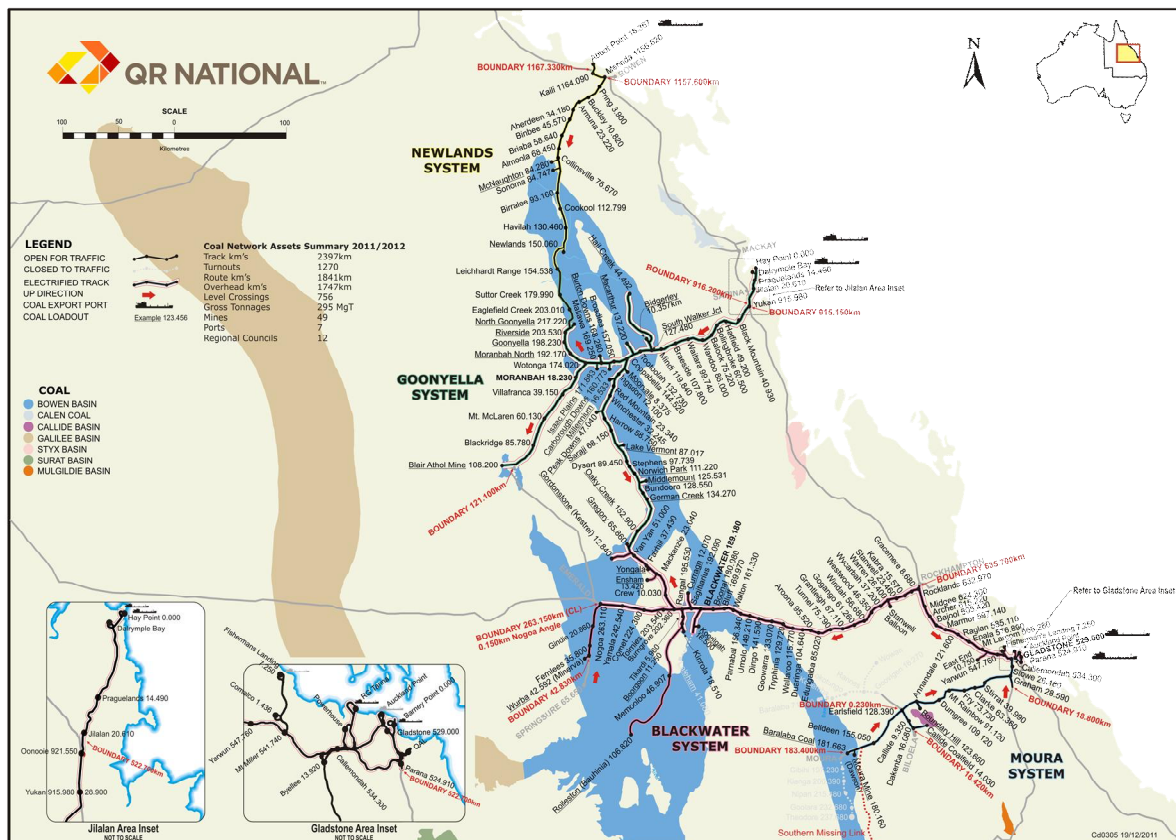
2. BACKGROUND

This survey of miners, ports and power stations was conducted to inform QR Network Pty Ltd's Draft Access Undertaking (DAU) for the Queensland Competition Authority (QCA), as required by the Queensland Competition Act 1997 (the Act) in regards to its regulatory pricing determination for the ensuing four years.

The Central Queensland Coal Network (CQCEN) is operated by QR National as a vital shared infrastructure supporting the transportation of coal between mines, ports and power stations in Central Queensland. The CQCEN has been developed over 145 years and maintained on engineering specifications designed to best practice and meets the requirements of the Transport Infrastructure Act (TIA) and Transport Rail Safety Act.

Its rail infrastructure in the CQCR consists of a major heavy-haul coal network spanning more than 2,665 kilometres serving coal ports at Gladstone, Mackay and Bowen and includes the:

- > Moura System (Moura to Port of Gladstone)
- > Blackwater System (includes lines from Rolleston, Minerva, and Gregory, through Blackwater to Port of Gladstone)
- > Goonyella System (includes lines from Gregory, Blair Athol, Goonyella and Hail Creek to Port of Hay Point and Dalrymbal Bay at Mackay)
- > Newlands System (Newlands to Port of Abbot Point).



QR National engages with its CQCEN customers through a number of forums ranging from Senior Leadership Team meetings with key customer executives, regular operational level forums and commercial negotiations. This Assessment Survey was designed to provide an opportunity for QR National's CQCEN customers to indicate their perceptions of the current performance and priorities for improvement of the Below Rail component of the coal network infrastructure in relation to other network components (Port Operations, Train Operations and Mine load-out) against the major dimensions of Reliability, Availability and Safety.



3. METHODOLOGY

The Assessment Survey was designed as an electronic format survey using SurveyMonkey® as the delivery and collation tool.

Questions were divided into four sections designed to elicit feedback from mines and ports commercial managers as to their ratings of the importance and performance of Reliability, Availability and Safety the CQCIN

1. Importance to the customer's business of Reliability, Availability and Safety
2. Current Supply Chain Performance
3. Improvement Priority
4. Additional Feedback (Optional)

A full list of the survey questions is attached in Appendix A.

Apart from the free form open feedback questions, respondents were asked to rate their responses to all questions using the following a scale²:

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

To aid with the analysis this scale was interpreted numerically as a 1-5 responses enabling the calculation of averages and weighted combinations such as performance or improvement priority weighed according to importance. However, given the uniformity of responses to the Importance questions, such a weighting exercise was largely moot.

Definitions

Reliability is defined as: The ability of the asset to operate in a manner that enables the efficient transportation of coal from mine to port ie. meeting cycle times within Overall Track Condition Indexes and without faults resulting in train delays.

Availability is defined as: The ability of the asset to enable coal transportation at any time.

A Safety incident to people and plant could include any of the following that is attributed to be a failure of the Below Rail Asset infrastructure or safety practices: • Injury or death to workers on the corridor • Injury or death to public, operators or mine staff crossing the corridor • Injury or death to rollingstock crew • Damage to infrastructure and the environment resulting from collision, derailments and de-wirements.

² The original intent was for questions in the Performance section to feature a scale labelled Outstanding, Good, Adequate, Needs improvement, Poor, and N/A. However, the released version featured the Importance related scale on all questions.



4. RESULTS

a) Importance of Below Rail Asset performance (Questions 1-3)

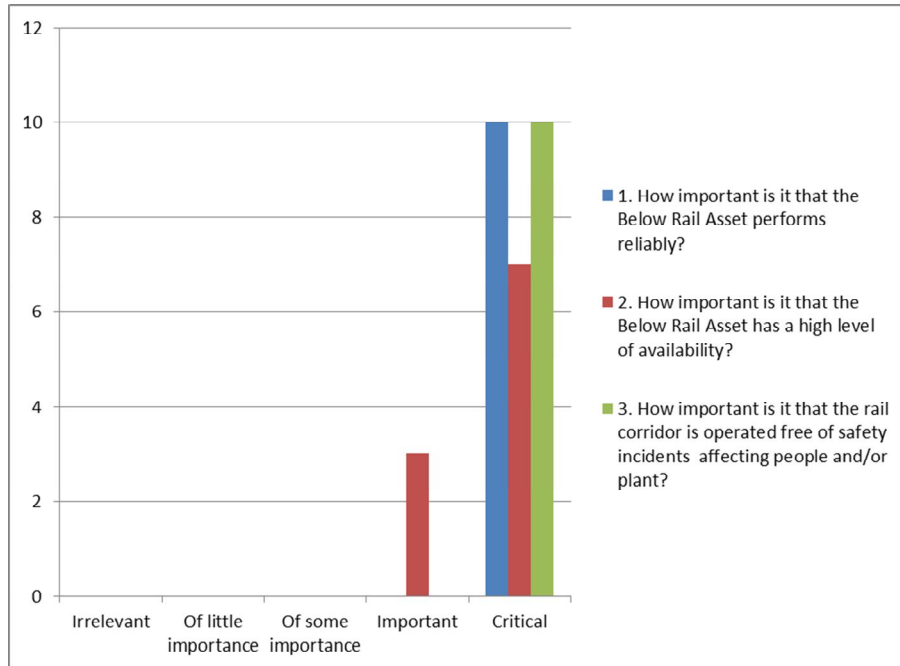


Figure 4. Importance of Below Rail asset performance

b) Current Supply Chain Performance (Questions 4-15) -

i) Reliability

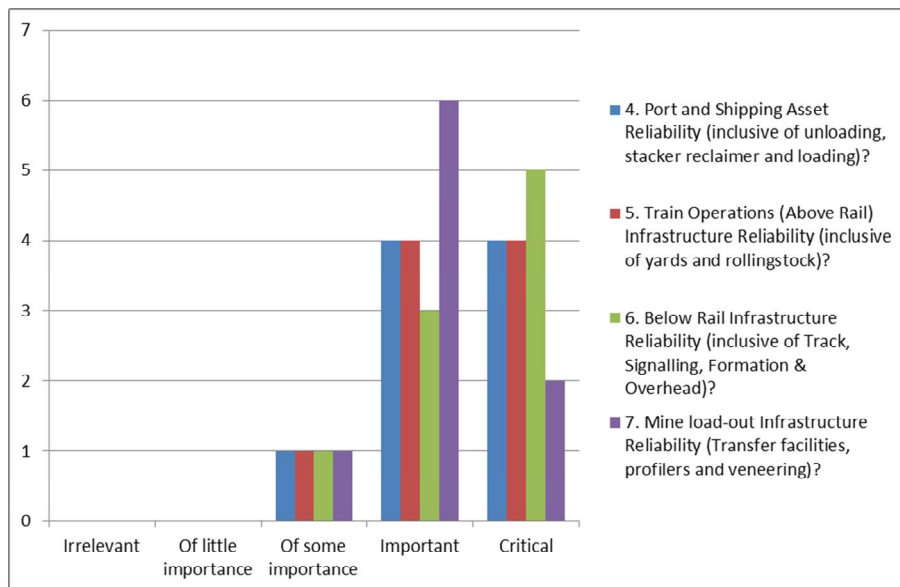


Figure 5. Current Supply Chain Performance - Reliability



ii) Availability

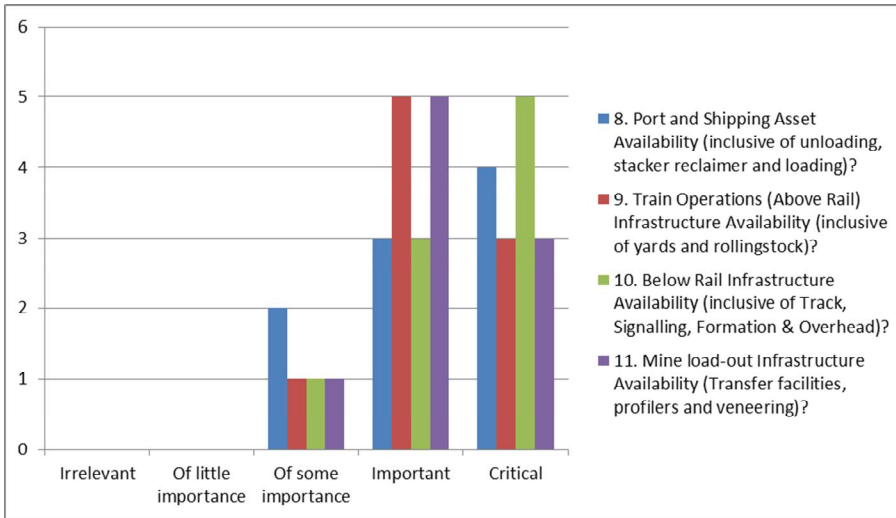


Figure 6. Current Supply Chain Performance - Availability

iii) Safety

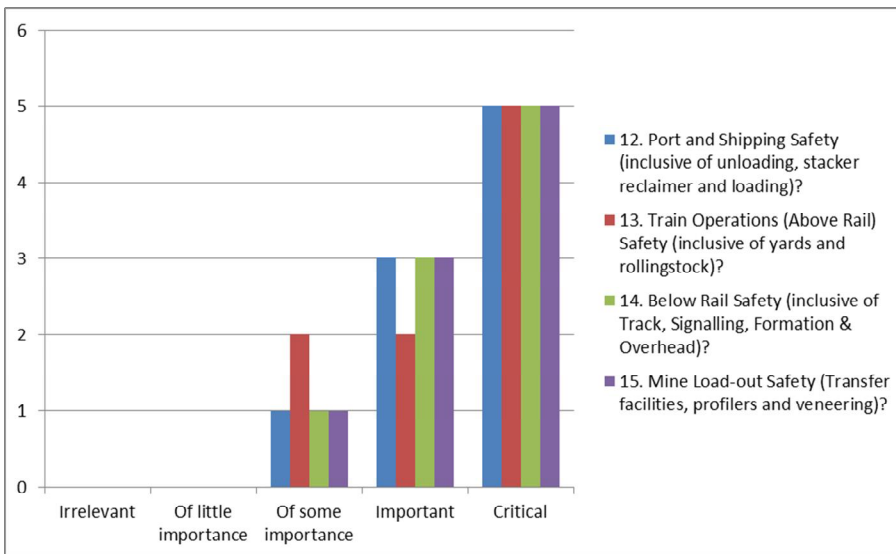


Figure 7. Current Supply Chain Performance - Safety



c) Supply Chain Improvement Priority (Questions 16-27)

i) Reliability

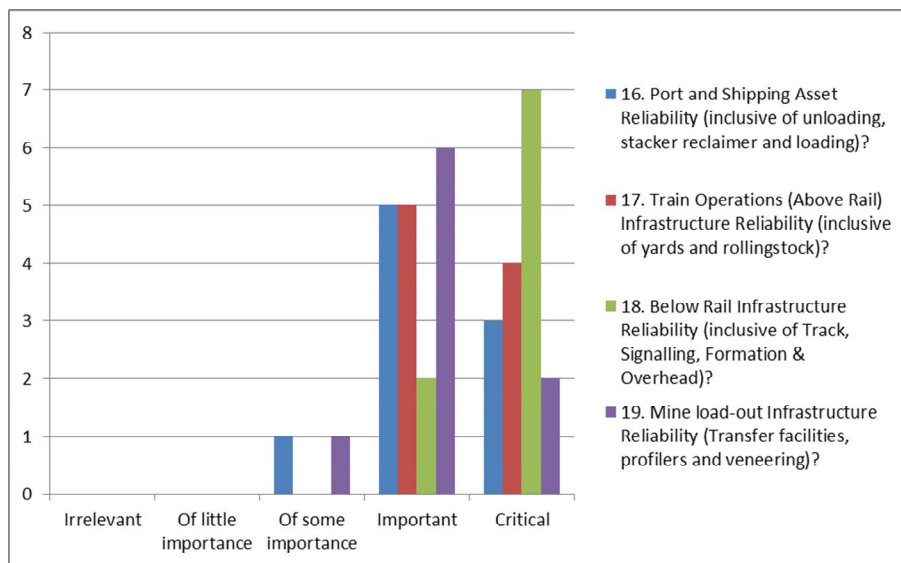


Figure 8. Supply Chain Improvement Priority - Reliability

Comments:

- Q16. Port productivity is not the key bottleneck in the process. In general, if QR can deliver the coal to the port, the port will always put it on a ship in a reliable and efficient manner.
- Q17. Inconsistencies in above rail performances with track outages and derailments have cause our mines significant issues. Standardisation of train type would also assist in availability and time to react on any unused or cancelled consist.
- Q18. QRN should work towards reducing the number of speed restrictions throughout the network and improved track availability.
- Q18. The improvement in monthly maintenance is a noteworthy highlight. Our site contribute significant funds for the maintenance of the line from site to Emerald and I simply do not see the level of funds commensurate with the maintenance spend.

ii) Availability

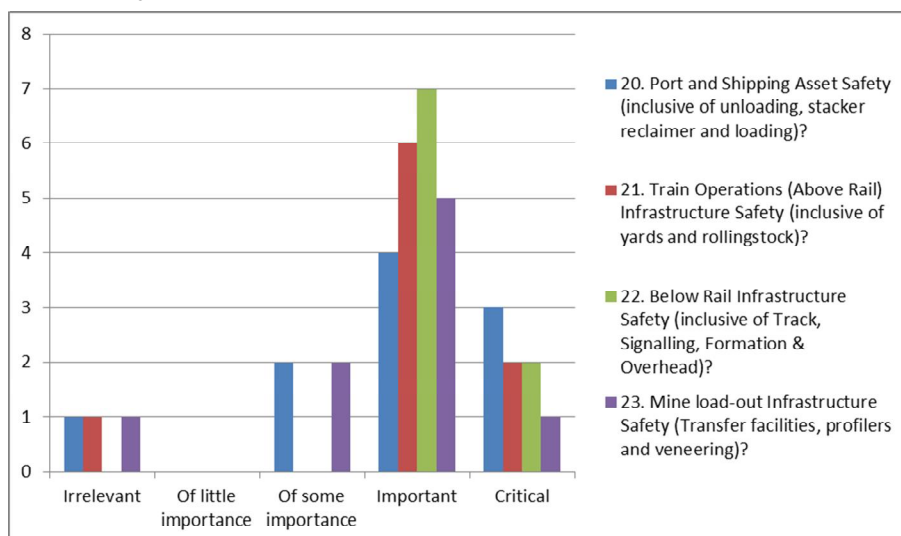


Figure 9. Supply Chain Improvement Priority - Availability



Comments:

- Q20. Unloading facilities need to have sufficient buffers within their operation (stockpiles additional unloader capacity) to ensure that unnecessary infrastructure costs are not incurred upstream of the unloader to cater for variability in Port operations.
- Q23. Potentially more alignment and rigour around availability of coal at loaders prior to movement of shipment to ensure that longer term planning can occur.

ii) Safety

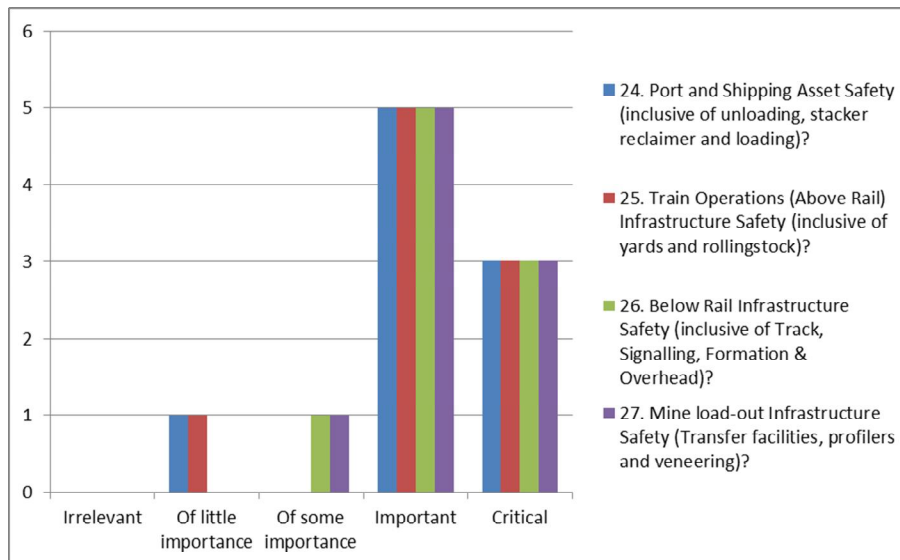


Figure 10. Supply Chain Improvement Priority - Safety

d) Overall Comments

- Critical requirement is for QRNN to ensure future infrastructure requirements are identified and steps taken for it be put in place as a matter of priority ie ahead of time and not on a catch up basis.
- Strength: track asset owner thus the ability to make a change; Area for improvement: asset availability/ reliability would have a significant impact on whole of coal chain performance as track is the middle link between port and mine.
- Please keep these surveys succinct in the future. Allot of repetition in this survey and not directed to the key issues.



APPENDIX A. SURVEY QUESTIONS



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Network Asset Performance Industry Expectations

QR National Network (QRNN) is currently preparing its Undertaking for submission to the QCA. To assist with the submission QR National Network would appreciate your views on the relative importance, current performance and improvement priorities for the Below Rail Asset in the context of its role in achieving your business goals and performance objectives.

Please take a few minutes to fill out this confidential survey. QR National Network welcomes your feedback and thanks you for your participation.

The following survey should take no more than 10 minutes to complete.

Importance to your business of Below Rail Asset performance (Questions 1-3...

In terms of your businesses outcomes (earnings, stakeholders, return to owners), how would rate the importance of the following Asset Performance attributes:

***1. How important is it that the Below Rail Asset performs reliably?**

Reliability is defined as: The ability of the asset to operate in a manner that enables the efficient transportation of coal from mine to port ie. meeting cycle times within Overall Track Condition Indexes and without faults resulting in train delays.

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

***2. How important is it that the Below Rail Asset has a high level of availability?**

Availability is defined as: The ability of the asset to enable coal transportation at any time.

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

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***3. How important is it that the rail corridor is operated free of safety incidents affecting people and/or plant?**

A Safety incident to people and plant could include any of the following that is attributed to be a failure of the Below Rail Asset infrastructure or safety practices:

- **Injury or death to workers on the corridor**
- **Injury or death to public, operators or mine staff crossing the corridor**
- **Injury or death to rollingstock crew**
- **Damage to infrastructure and the environment resulting from collision, derailments and de-wirements.**

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Current Supply Chain Performance (Questions 4-15) - Reliability

In terms of current performance levels over the past 3 years, how would you rate the Coal Supply Chain Asset performance in terms of reliability:

***4. Port and Shipping Asset Reliability (inclusive of unloading, stacker reclaimer and loading)?**

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

***5. Train Operations (Above Rail) Infrastructure Reliability (inclusive of yards and rollingstock)?**

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

***6. Below Rail Infrastructure Reliability (inclusive of Track, Signalling, Formation & Overhead)?**

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

***7. Mine load-out Infrastructure Reliability (Transfer facilities, profilers and veneering)?**

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Current Supply Chain Performance (Questions 4-15) - Availability

In terms of current performance levels over the past 3 years, how would you rate the Coal Supply Chain Asset performance in terms of availability:

***8. Port and Shipping Asset Availability (inclusive of unloading, stacker reclaimer and loading)?**

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

***9. Train Operations (Above Rail) Infrastructure Availability (inclusive of yards and rollingstock)?**

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

***10. Below Rail Infrastructure Availability (inclusive of Track, Signalling, Formation & Overhead)?**

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

***11. Mine load-out Infrastructure Availability (Transfer facilities, profilers and veneering)?**

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Current Supply Chain Performance (Questions 4-15) - Safety

In terms of current performance levels over the past 3 years, how would you rate the Coal Supply Chain Asset performance in terms of safety:

*12. Port and Shipping Safety (inclusive of unloading, stacker reclaimer and loading)?

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

*13. Train Operations (Above Rail) Safety (inclusive of yards and rollingstock)?

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

*14. Below Rail Safety (inclusive of Track, Signalling, Formation & Overhead)?

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

*15. Mine Load-out Safety (Transfer facilities, profilers and veneering)?

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Supply Chain Improvement Priority (Questions 16-27) - Reliability

In terms of importance across the supply chain for your business goal and objectives, how would you rate the need to improve reliability as a priority:

***16. Port and Shipping Asset Reliability (inclusive of unloading, stacker reclaimer and loading)?**

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Please provide any comments about Port and Shipping Asset Reliability (inclusive of unloading, stacker reclaimer and loading), including any particular strengths or opportunities for improvement.

***17. Train Operations (Above Rail) Infrastructure Reliability (inclusive of yards and rollingstock)?**

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Please provide any comments about Train Operations (Above Rail) Infrastructure Reliability (inclusive of yards and rollingstock), including any particular strengths or opportunities for improvement.

*18. Below Rail Infrastructure Reliability (inclusive of Track, Signalling, Formation & Overhead)?

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Please provide any comments about QR National Network's Below Rail Infrastructure Reliability (inclusive of Track, Signalling, Formation & Overhead), including any particular strengths or opportunities for improvement.

*19. Mine load-out Infrastructure Reliability (Transfer facilities, profilers and veneering)?

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Please provide any comments about Mine load-out Infrastructure Reliability (Transfer facilities, profilers and veneering), including any particular strengths or opportunities for improvement.

Supply Chain Improvement Priority (Questions 16-27) - Availability

In terms of importance across the supply chain for your business goal and objectives, how would you rate the need to improve availability as a priority:

***20. Port and Shipping Asset Availability (inclusive of unloading, stacker reclaimer and loading)?**

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Please provide any comments about Port and Shipping Asset Availability (inclusive of unloading, stacker reclaimer and loading), including any particular strengths or opportunities for improvement.

***21. Train Operations (Above Rail) Infrastructure Availability (inclusive of yards and rollingstock)?**

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Please provide any comments about Train Operations (Above Rail) Infrastructure Availability (inclusive of yards and rollingstock), including any particular strengths or opportunities for improvement.

*22. Below Rail Infrastructure Availability (inclusive of Track, Signalling, Formation & Overhead)?

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

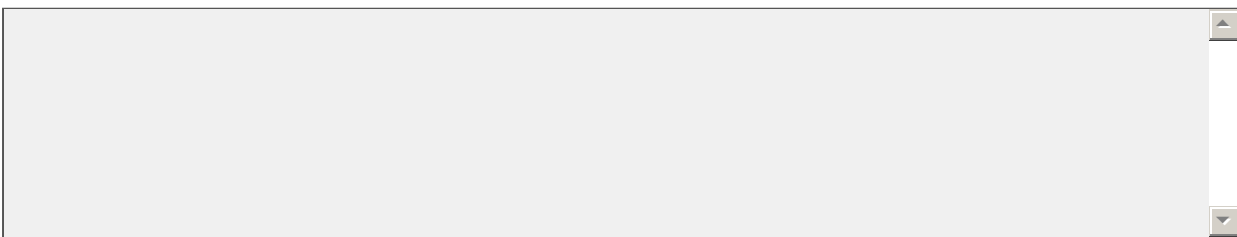
Please provide any comments about QR National Network's Below Rail Infrastructure Availability (inclusive of Track, Signalling, Formation & Overhead), including any particular strengths or opportunities for improvement.



*23. Mine load-out Infrastructure Availability (Transfer facilities, profilers and veneering)?

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Please provide any comments about Mine load-out Infrastructure Availability (Transfer facilities, profilers and veneering), including any particular strengths or opportunities for improvement.



Supply Chain Improvement Priority (Questions 16-27) - Safety

In terms of importance across the supply chain for your business goal and objectives, how would you rate the need to improve safety as a priority:

*24. Port and Shipping Safety (inclusive of unloading, stacker reclaimer and loading)?

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Please provide any comments about Port and Shipping Safety (inclusive of unloading, stacker reclaimer and loading), including any particular strengths or opportunities for improvement.

*25. Train Operations (Above Rail) Safety (inclusive of yards and rollingstock)?

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Please provide any comments about Train Operations (Above Rail) Safety (inclusive of yards and rollingstock), including any particular strengths or opportunities for improvement.

*26. Below Rail Safety (inclusive of Track, Signalling, Formation & Overhead)?

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Please provide any comments about QR National Network's Below Rail Safety (inclusive of Track, Signalling, Formation & Overhead), including any particular strengths or opportunities for improvement.

*27. Mine Load-out Safety (Transfer facilities, profilers and veneering)?

- Irrelevant
- Of little importance
- Of some importance
- Important
- Critical

Please provide any comments about Mine load-out Safety (Transfer facilities, profilers and veneering), including any particular strengths or opportunities for improvement.

Additional Feedback (Optional) (Question 28)

28. Please provide any comments about QR National Network's performance, including any particular strengths or opportunities for improvement.