

Quarterly Maintenance Cost Report

October – December 2019

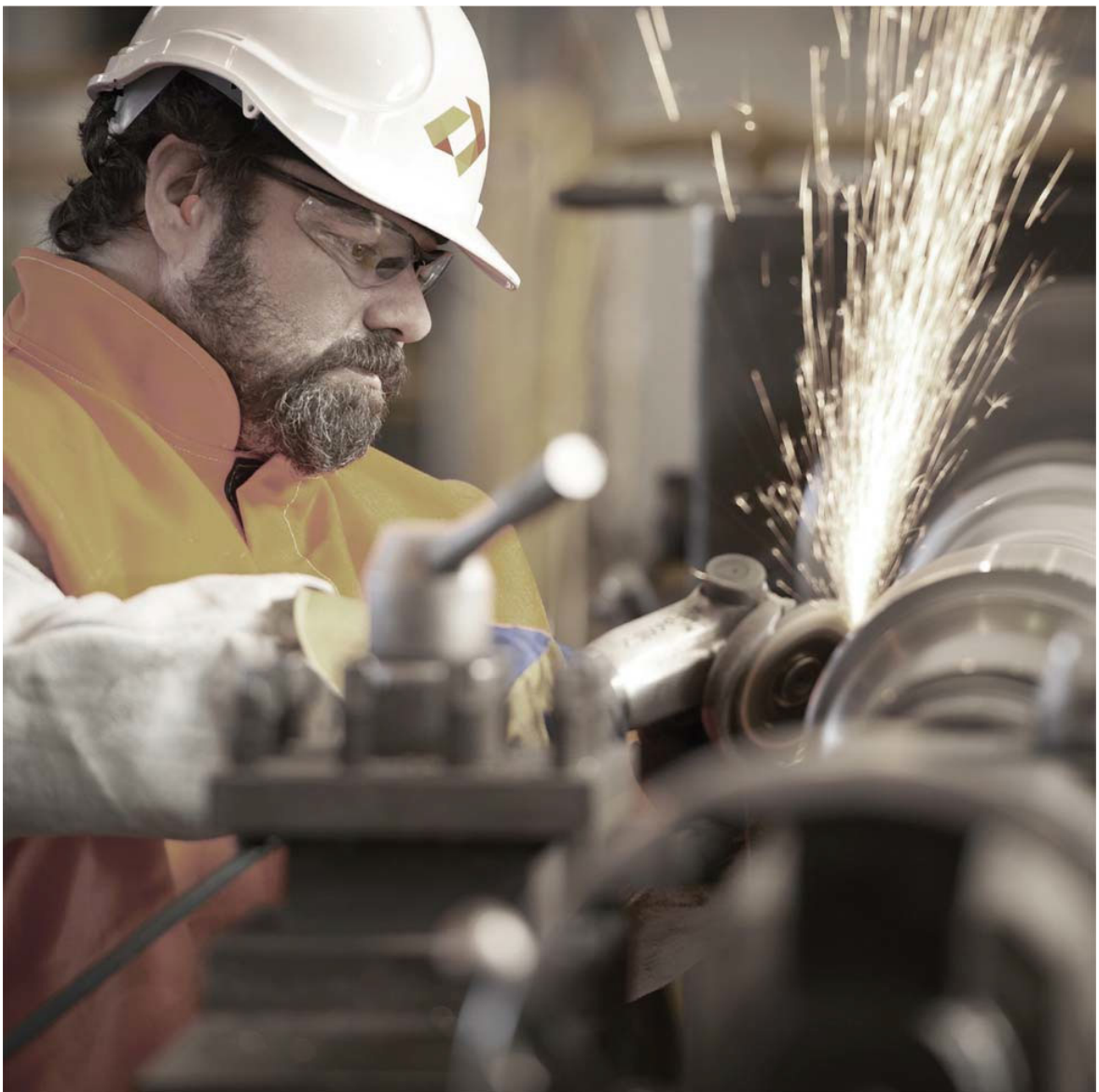


Table of Contents

| | |
|---|----|
| 1.0 Report Contents | 3 |
| 2.0 Network Performance Metrics | 4 |
| 2.1 Safety | 4 |
| Injury Reporting Metrics | 4 |
| Major Reportable Safety Incidents | 5 |
| 2.2 Network Reliability | 6 |
| Coal Carrying Train Services | 6 |
| Dewirements | 7 |
| Derailments | 8 |
| Derailments with a cost of recovery exceeding \$100,000 | 9 |
| Temporary Speed Restrictions | 9 |
| Below Rail Cancellations | 10 |
| Overall Track Condition Index | 10 |
| Below Rail Transit Time | 11 |
| 3.0 Maintenance Performance | 12 |
| 3.1 General Maintenance | 12 |
| Track Defects | 12 |
| Work Orders vs Maintenance Completed | 12 |
| 4.0 Network Maintenance Costs | 13 |
| 4.1 Overall Maintenance Costs | 13 |
| Total Direct Maintenance Cost - CQCN | 13 |
| Direct Maintenance Cost by Activity | 14 |
| Direct Maintenance Cost by System | 15 |
| 4.2 Mechanised Maintenance | 20 |
| Ballast Undercutting | 20 |
| Rail Grinding | 21 |
| Resurfacing | 23 |

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1.0 Report Contents

On 19 December 2019, the Queensland Competition Authority (**QCA**) issued its final approval of Aurizon Network's revised 2017 Access Undertaking (**Revised UT5 DAAU**).

The Revised UT5 DAAU provides for enhanced reporting arrangements to be progressed through the provision of information to the Independent Expert in accordance with Part 10. Given the timing of the QCA's approval, Aurizon Network and its customers agreed that the reporting arrangements under the Revised UT5 DAAU would commence with effect from 1 January 2020, on the proviso that Aurizon Network would comply with the reporting obligations which existed prior to approval of the Revised UT5 DAAU for the period until 31 December 2019.

This report has, therefore, been prepared in accordance with the provisions of clause 10.3.2 (c) of the 2017 Access Undertaking approved by the QCA on 18 July 2019 and is provided to the QCA on this basis.

This report provides transparency around Aurizon Network's maintenance performance by comparing scope delivered and costs incurred for the quarter, October to December 2019 (**Reporting Period**), to the QCA's decision in relation to Aurizon Network's 2017 Draft Access Undertaking issued on 6 December 2018 (**QCA's 2018 Decision**). The forecast scope and costs within the QCA's 2018 Decision were published as annual totals. To provide a meaningful comparison for the Reporting Period, the FY2020 totals provided in the QCA's 2018 Decision have been apportioned to the Reporting Period based on Aurizon Network's annual budget, which is phased quarterly. Please note that some variances may exist due to rounding.

This information is provided for the four coal systems in the Central Queensland Coal Network (**CQCN**); Blackwater, Goonyella, Moura, and Newlands.

It should be noted that the Goonyella to Abbot Point Expansion (**GAPE System**) is not a geographically distinct coal system. Rather, it is akin to an expansion tariff required to facilitate the pricing arrangements attributable to GAPE Train Services. The scope of the GAPE project included significant infrastructure upgrades in the Newlands system, which are utilised by all GAPE and Newlands Train Services. Similarly, all GAPE Train Services utilise existing Newlands system infrastructure. As a result, Newlands and GAPE are treated as a single system for this report.

Some of the data in this report will also be included in Aurizon Network's Quarterly Performance Report, which will be published at the following link:

<http://www.aurizon.com.au/what-we-deliver/network/network-downloads>.

2.0 Network Performance Metrics

2.1 Safety

Safety is Aurizon Network's core value. Aurizon Network aspires to be world class in safety through its journey to ZEROHARM, which has delivered tangible benefits in terms of safety performance and safety culture. ZEROHARM comprises:

The logo for ZEROHARM, with 'ZERO' in a larger, bold, orange font and 'HARM' in a smaller, regular, orange font.

- ZERO incidents;
- ZERO injuries;
- ZERO work-related illnesses; and
- ZERO environmental incidents.

Injury Reporting Metrics

Aurizon Network's strong safety performance directly benefits the coal supply chain by:

- > reducing the number of unplanned system interruptions; and
- > allowing Aurizon Network to maximise productive time within maintenance track possessions.

This ultimately promotes greater network reliability through a more effective and productive asset maintenance regime.

Aurizon's primary injury reporting metrics include the:

- > Total Recordable Injury Frequency Rate (**TRIFR**), which measures the number of incidents per million person-hours worked; and
- > Lost Time Injury Frequency Rate (**LTIFR**), which measures the number of lost time injuries occurring in a workplace per million hours worked.

To continue the journey to becoming world leading in safety, Aurizon Network revised its injury definitions from 1 July 2017. The key changes include:

- > the inclusion of contractors in all injury metrics;
- > widening the scope of total recordable injuries to include all restricted work injuries; and
- > expanding the definition of 'Lost Time Injuries' such that it captures any lost day of work following the injury¹.

Figure 1 Illustrates the TRIFR for Aurizon staff since June 2011, as compared with the LTIFR.

¹ The previous definition of 'Lost Time Injuries' only captured instances where the injury impacted the next rostered shift.

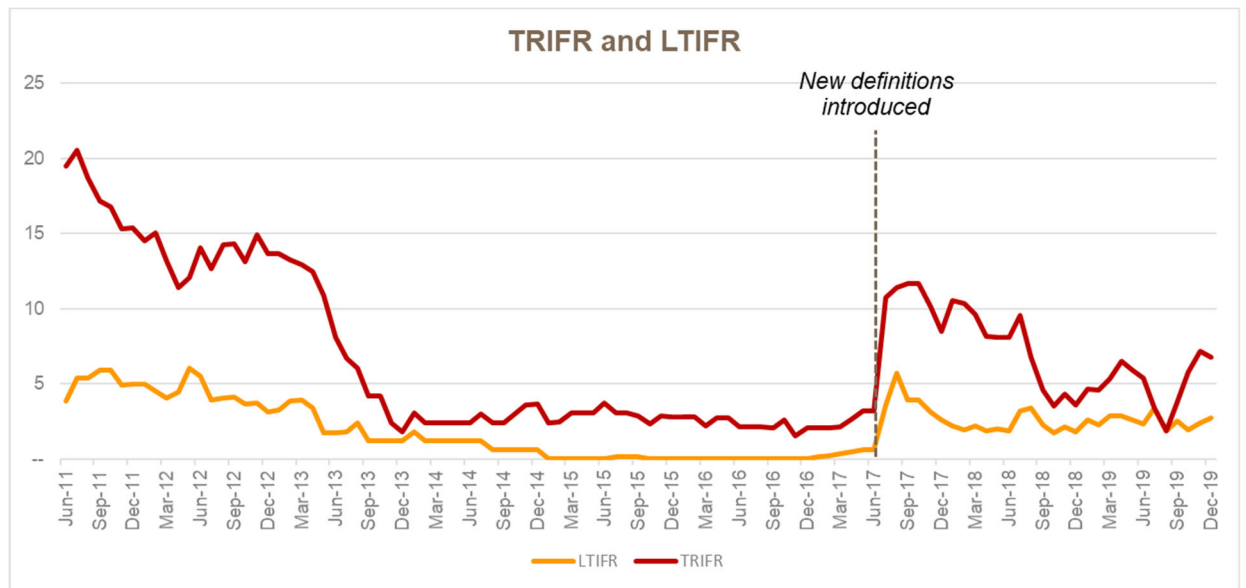


Figure 1 – TRIFR and LTIFR

Major Reportable Safety Incidents

Aurizon Network confirms that there was one major reportable safety incident reported to the Safety Regulator during the Reporting Period.

| Safety incidents reported to the Safety Regulator | Blackwater | Goonyella | Moura | Newlands | GAPE |
|---|------------|-----------|-------|----------|------|
| October – December 2019 | -- | -- | 1 | -- | -- |

Table 1 - Number of major reportable safety incidents reported to the Safety Regulator in the quarter

2.2 Network Reliability

Coal Carrying Train Services

Table 2 provides a measure of the throughput achieved by each coal system, for each month within the Reporting Period. It presents the aggregate Gross Tonne Kilometres (**GTK**), Net Tonnes, Net Tonne Kilometres (**NTK**) and Electric Gross Tonne Kilometres (**eGTK**) for Coal Carrying Train Services.

| Coal Carrying Train Services | Blackwater | GAPE | Goonyella | Moura | Newlands |
|------------------------------|------------|-----------|------------|-----------|-----------|
| October 2019 | | | | | |
| GTK'000 | 3,371,643 | 649,384 | 3,344,178 | 282,481 | 183,529 |
| Net Tonnes | 5,799,462 | 1,258,967 | 10,322,066 | 1,083,333 | 878,357 |
| NTK'000 | 2,081,577 | 403,778 | 2,110,484 | 174,916 | 113,008 |
| eGTK'000 | 2,533,074 | -- | 3,177,657 | -- | -- |
| November 2019 | | | | | |
| GTK'000 | 3,090,008 | 923,338 | 3,058,177 | 237,891 | 272,238 |
| Net Tonnes | 5,436,295 | 1,825,570 | 9,380,659 | 873,839 | 1,306,017 |
| NTK'000 | 1,919,504 | 571,620 | 1,923,505 | 144,131 | 168,221 |
| eGTK'000 | 2,366,865 | -- | 2,879,484 | -- | -- |
| December 2019 | | | | | |
| GTK'000 | 3,275,106 | 758,029 | 3,618,844 | 316,856 | 271,510 |
| Net Tonnes | 5,695,377 | 1,545,823 | 11,087,454 | 1,190,951 | 1,275,756 |
| NTK'000 | 2,034,090 | 470,465 | 2,268,717 | 196,392 | 167,657 |
| eGTK'000 | 2,529,924 | -- | 3,378,150 | -- | -- |

Table 2 - Coal Carrying Train Service Performance

Dewirements

The number of dewirements recorded for each quarter since Q2 FY2010, are shown in **Table 3** below.

There were no dewirements during the Reporting Period.

| Number of Dewirements | Blackwater | Goonyella |
|-----------------------|------------|-----------|
| Jul-Sept 2010 | -- | 2 |
| Oct-Dec 2010 | -- | -- |
| Jan-Mar 2011 | -- | 2 |
| Apr-Jun 2011 | -- | -- |
| Jul-Sep 2011 | -- | 1 |
| Oct-Dec 2011 | 1 | -- |
| Jan-Mar 2012 | 1 | 1 |
| Apr-Jun 2012 | 1 | 1 |
| Jul-Sep 2012 | 1 | -- |
| Oct-Dec 2012 | -- | -- |
| Jan-Mar 2013 | -- | -- |
| Apr-Jun 2013 | -- | 1 |
| Jul-Sep 2013 | 1 | -- |
| Oct-Dec 2013 | 1 | -- |
| Jan-Mar 2014 | -- | -- |
| Apr-Jun 2014 | -- | 1 |
| Jul-Sep 2014 | -- | 2 |
| Oct-Dec 2014 | -- | -- |
| Jan-Mar 2015 | -- | -- |
| Apr-Jun 2015 | -- | -- |
| Jul-Sep 2015 | -- | -- |
| Oct-Dec 2015 | -- | -- |
| Jan-Mar 2016 | -- | -- |
| Apr-Jun 2016 | 1 | -- |
| Jul-Sep 2016 | -- | -- |
| Oct-Dec 2016 | -- | 1 |
| Jan-Mar 2017 | -- | 1 |
| Apr-Jun 2017 | -- | -- |
| Jul-Sep 2017 | -- | -- |
| Oct-Dec 2017 | 1 | 1 |
| Jan-Mar 2018 | 2 | 1 |
| Apr-Jun 2018 | -- | -- |
| Jul-Sep 2018 | 1 | -- |
| Oct-Dec 2018 | -- | -- |
| Jan-Mar 2019 | -- | -- |
| Apr-Jun 2019 | -- | -- |
| Jul-Sep 2019 | -- | -- |
| Oct-Dec 2019 | -- | -- |

Table 3 - Number of Dewirements

Derailments

A Derailment occurs where one (or more) rolling stock wheel(s) leave the rail or track during railway operations. The number of derailments recorded for each quarter since Q2 FY2010 is outlined in **Table 4** below. There were four (4) derailments during the Reporting Period; one in the Blackwater System, two in the Goonyella System and one in the Moura System.

| Number of Derailments | Blackwater | Goonyella | Moura | Newlands |
|-----------------------|------------|-----------|-------|----------|
| Jan-Mar 2011 | 7 | 7 | 6 | 1 |
| Apr-Jun 2011 | 3 | 8 | 1 | 2 |
| Jul-Sep 2011 | 3 | 7 | 3 | 3 |
| Oct-Dec 2011 | 5 | 2 | 1 | -- |
| Jan-Mar 2012 | 9 | 5 | 4 | 1 |
| Apr-Jun 2012 | 5 | 7 | 3 | 4 |
| Jul-Sep 2012 | 6 | 6 | 3 | -- |
| Oct-Dec 2012 | 4 | 6 | 3 | 1 |
| Jan-Mar 2013 | 3 | 6 | 2 | -- |
| Apr-Jun 2013 | 3 | 1 | 1 | -- |
| Jul-Sep 2013 | 5 | 4 | 3 | -- |
| Oct-Dec 2013 | 4 | 2 | -- | -- |
| Jan-Mar 2014 | 6 | 3 | 4 | 1 |
| Apr-Jun 2014 | 2 | 3 | -- | 1 |
| Jul-Sep 2014 | 2 | 8 | 2 | -- |
| Oct-Dec 2014 | 5 | 3 | -- | 1 |
| Jan-Mar 2015 | 2 | 4 | -- | -- |
| Apr-Jun 2015 | 2 | -- | -- | -- |
| Jul-Sep 2015 | -- | 1 | -- | -- |
| Oct-Dec 2015 | 2 | 3 | -- | -- |
| Jan-Mar 2016 | 8 | 2 | -- | -- |
| Apr-Jun 2016 | 1 | 3 | 1 | -- |
| Jul-Sep 2016 | -- | 1 | -- | 2 |
| Oct-Dec 2016 | -- | 2 | 1 | -- |
| Jan-Mar 2017 | 2 | 1 | 1 | -- |
| Apr-Jun 2017 | -- | -- | -- | -- |
| Jul-Sep 2017 | 3 | 1 | 1 | 1 |
| Oct-Dec 2017 | 2 | 2 | 1 | -- |
| Jan-Mar 2018 | 3 | -- | -- | 1 |
| Apr-Jun 2018 | 1 | 6 | -- | -- |
| Jul-Sep 2018 | 1 | -- | -- | -- |
| Oct-Dec 2018 | 2 | 1 | 1 | -- |
| Jan-Mar 2019 | -- | 2 | -- | -- |
| Apr-Jun 2019 | 2 | -- | -- | -- |
| Jul-Sep 2019 | 4 | 1 | -- | -- |
| Oct-Dec 2019 | 1 | 2 | 1 | -- |

Table 4 - Number of Derailments

Derailments with a cost of recovery exceeding \$100,000

During the Reporting Period, there were no derailments in which the cost to Aurizon Network of recovery exceeded \$100,000.

Nevertheless, during the Reporting Period, Aurizon Network incurred financial 'settlement' costs in relation to derailments that occurred in prior reporting periods. For transparency, these are also outlined in the table below.

| Derailment Incident | Date | Location | Cost (\$) |
|---------------------|------------|---------------|-----------|
| IR19-04139 | 19/04/2019 | Callemodah | 134,060 |
| IR19-02631 | 10/03/2019 | Dalrymple Bay | 1,412,944 |
| IR19-08779 | 3/09/2019 | Tikardi | 527,154 |

Table 5 - Derailments with a cost of recovery exceeding \$100,000

Temporary Speed Restrictions

Imposed Temporary Speed Restrictions (TSR) indicate the level of controlled defects on the Network and Removed TSR indicate maintenance undertaken by Aurizon Network to remove operational constraints. TSR are put in place to ensure levels of operational safety are maintained during, for example, track maintenance work.

Figure 2 below shows the number of TSR imposed on and removed from the network within each quarterly reporting period since FY2010.

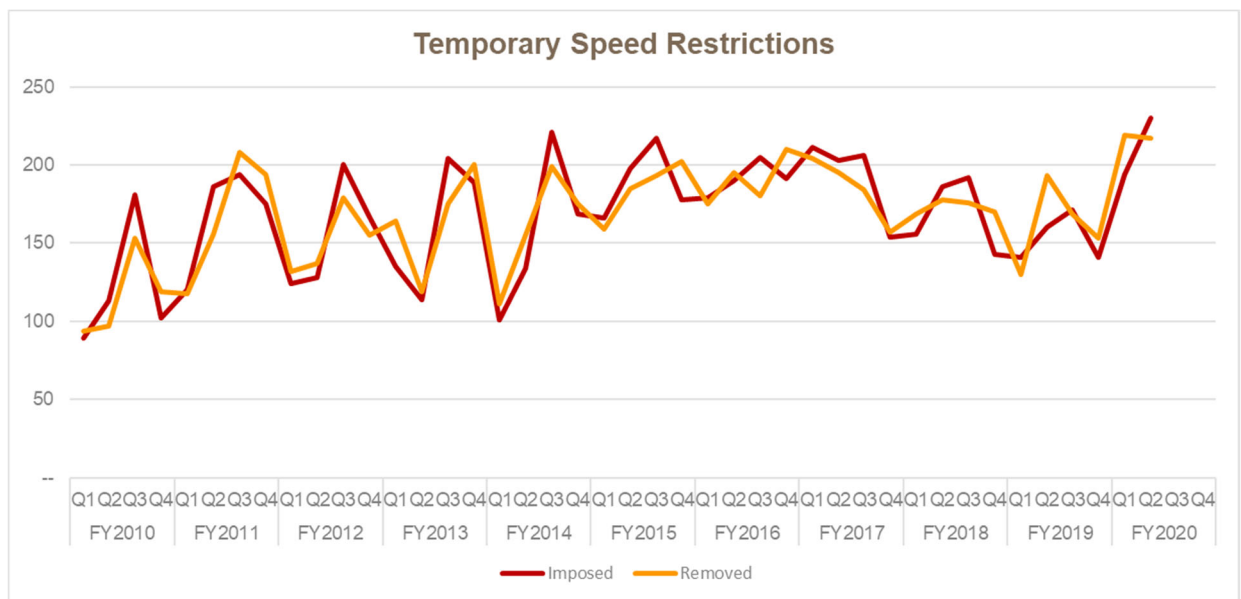


Figure 2 - Temporary Speed Restrictions Imposed and Removed

Below Rail Cancellations

Figure 3 below illustrates the percentage of train services cancelled due to a Below Rail cause.

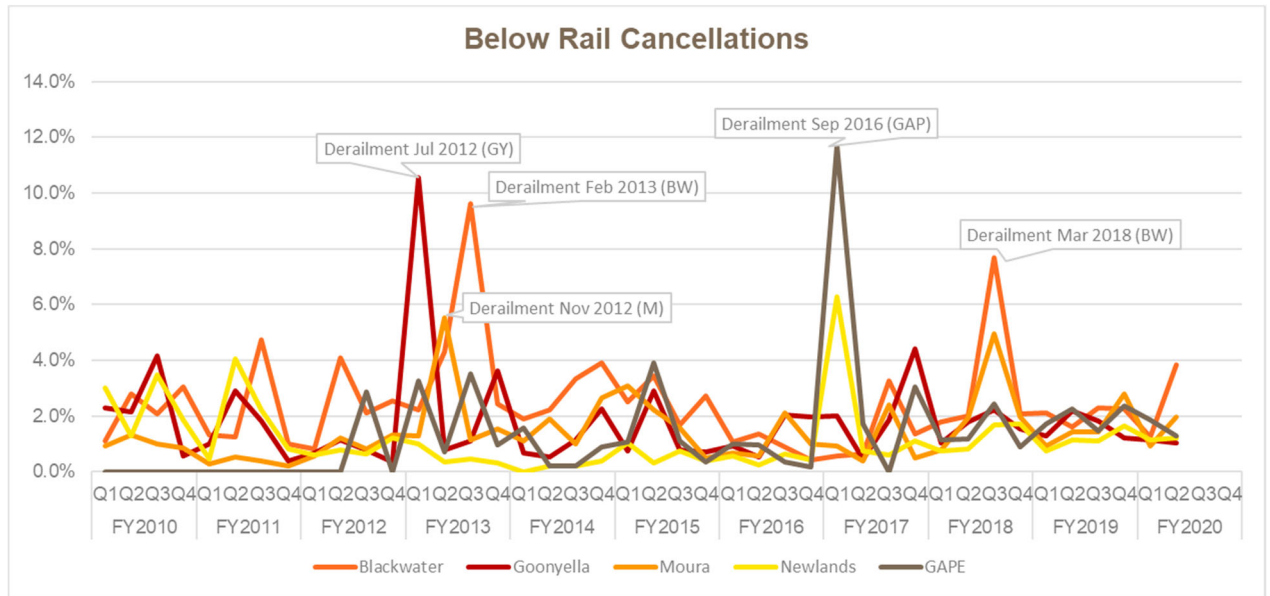


Figure 3 - Percentage of Cancellations due to a Below Rail Cause

Overall Track Condition Index

The Overall Track Condition Index (OTCI) is a measure of quality of the network for each Coal System. It provides a general indicator of track geometry variation over time. The index is calculated from data captured by track recording vehicles and is used by Aurizon Network to monitor trends in track condition. An OTCI that is trending downwards is indicative of improving track quality. Conversely, an OTCI that is trending upwards may indicate that the track condition is either deteriorating or is being managed in a way that is 'fit for purpose' as determined by the Rail Infrastructure Manager.

Please note that the OTCI values presented below reflect an average over a defined length. It cannot reflect all the variations in track quality which may exist within a coal system. Consequently, it should be interpreted as an indicator of abnormality.

Table 6 provides the OTCI for the Reporting Period.

| Overall Track Condition Index | Blackwater | Goonyella | Moura | Newlands |
|-------------------------------|------------|-----------|-------|----------|
| Oct-Dec 2019 | 29.9 | 28.1 | 27.8 | 22.7 |

Table 6 - Overall Track Condition Index

Below Rail Transit Time

Below Rail Transit Time (**BRTT**) is an indicator of operational performance of each Coal System. The BRTT includes the following:

- > Section Running Times;
- > Delays from scheduled train path in the daily train plan that can be directly attributed to Aurizon Network but excludes cancellations, delays resulting from compliance with a passenger priority obligation and delays resulting from a force majeure event;
- > Time taken in crossing other trains; and
- > Delays due to operational constraints:
 - directly caused by the activities of Aurizon Network in maintaining the CQCN; or
 - due to a fault or deficiency in the CQCN provided such delays are not contributed to by a railway operator or force majeure events.

Table 7 below outlines this performance measure for each individual coal system during the Reporting Period.

| Below Rail Transit Time % | Blackwater | Goonyella | Moura | Newlands | GAPE |
|---------------------------|------------|-----------|-------|----------|------|
| Oct-Dec 2019 | 113% | 105% | 126% | 117% | 115% |

Table 7 - Below Rail Transit Time Percentage

The BRTT for all coal systems was within the respective requirement during the Reporting Period. This outcome is indicative of a well performing, fit for purpose network.

3.0 Maintenance Performance

3.1 General Maintenance

Track Defects

Aurizon Network's Network Asset Management System (**NAMS**) uses notifications to request works where a track defect has been identified. The following data in **Table 8** represents the number of Notifications which have been raised for rectification during the Reporting Period.

| Rectification Period | Number of Notifications |
|----------------------|-------------------------|
| Under 30 days | 2,258 |
| 30-90 days | 1,298 |
| 90 days and over | 688 |
| Total | 4,244 |

Table 8 – Number of Notifications

Work Orders vs Maintenance Completed

The number of Work Orders Created is compared with the number of Maintenance Tasks Completed, for the Reporting Period, in **Table 9** below.

| Work Order type | Number of Work Orders Created | Number of Maintenance Tasks Completed |
|-----------------|-------------------------------|---------------------------------------|
| Immediate | 1,634 | 1,717 |
| Corrective | 2,910 | 4,170 |
| Preventive | 8,986 | 9,217 |
| Total | 13,530 | 15,104 |

Table 9 - Work Orders vs Maintenance Completed

Depending on the severity of the defect, work orders created during the Reporting Period may be scheduled for execution over varying time horizons, for example, immediate, 1 week, 3 months or 12 months etc. Consequently, the number of maintenance tasks completed for the quarter will not necessarily match the number of work orders created.

Similarly, please note that the data relating to the:

- > number of work orders created; and
- > maintenance tasks completed,

includes planned maintenance tasks (e.g. inspections). These tasks are periodic in nature, and do not have a corresponding Number of Work Orders Created; hence there were more Work Orders created than Notifications raised.

4.0 Network Maintenance Costs

This section outlines Aurizon Network's actual maintenance performance for the Reporting Period in terms of costs incurred for CQCN maintenance activities and scope delivered for mechanised maintenance activities.

This report compares Aurizon Network's actual maintenance cost and scope to the forecasts outlined in the QCA's 2018 Decision. It should also be noted that the QCA's 2018 Decision does not present costs on a quarterly basis. To facilitate a comparison for the Reporting Period, the annual costs outlined in the QCA's 2018 Decision have been apportioned in line with Aurizon Network's maintenance budget phasing for FY2020.

4.1 Overall Maintenance Costs

Total Direct Maintenance Cost - CQCN

The total direct maintenance costs incurred during the Reporting Period is shown in **Figure 4** below. For comparative purposes, actual costs for the Reporting Period are compared to both the QCA's 2018 Decision and the costs incurred during the same quarter in the previous financial year.

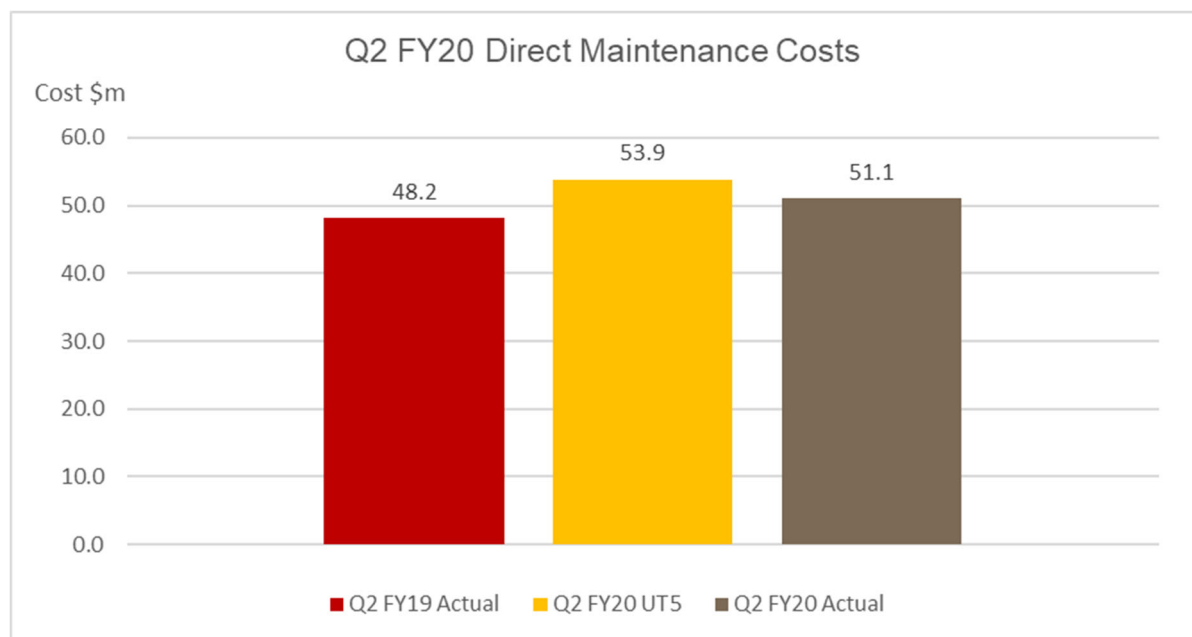


Figure 4 - Total Network Direct Maintenance Cost

Aurizon Network's direct maintenance expenditure for the Reporting Period was \$51.1m; an amount of \$2.8m or 5% lower than the apportioned QCA 2018 Decision and 6% higher than Q2 FY2019.

In comparison to the apportioned QCA's 2018 Decision, Aurizon Network's main underspend was impacted by Mechanised Ballast Undercutting, Resurfacing, Signalling and Structures maintenance activities, offset by overspends in General and Rail Grinding.

Mechanised Ballast Undercutting variances in scope by quarter is driven by timing differences when the regulatory forecasts are set and when the work is planned for execution. Mainline Undercutting is ahead 7kms of scope for the Reporting Period due to the Newlands closure being moved from August 2019 (Q1) to October 2019 (Q2).

The \$0.3m underspend in Resurfacing is due to reduced scope completed in both mainline and turnouts for the Reporting Period. Resurfacing is planned to complete the full scope for FY20.

An underspend in Structures maintenance was attributable to prioritisation of other maintenance tasks during the Reporting Period.

The overspend in the General category relates to On Call Indirect costs which were previously held at the activity level. Asset Management was also higher than the QCA's 2018 Decision due to the introduction of a new resource management and planning tool in Network Asset Management which has identified certain team tasks directly associated with maintenance reliability and support, fault investigation and repair.

Direct Maintenance Cost by Activity

Figure 5 below identifies the total direct maintenance costs incurred during the Reporting Period by activity, in comparison to the apportioned QCA 2018 Decision and the same quarter in the previous year.

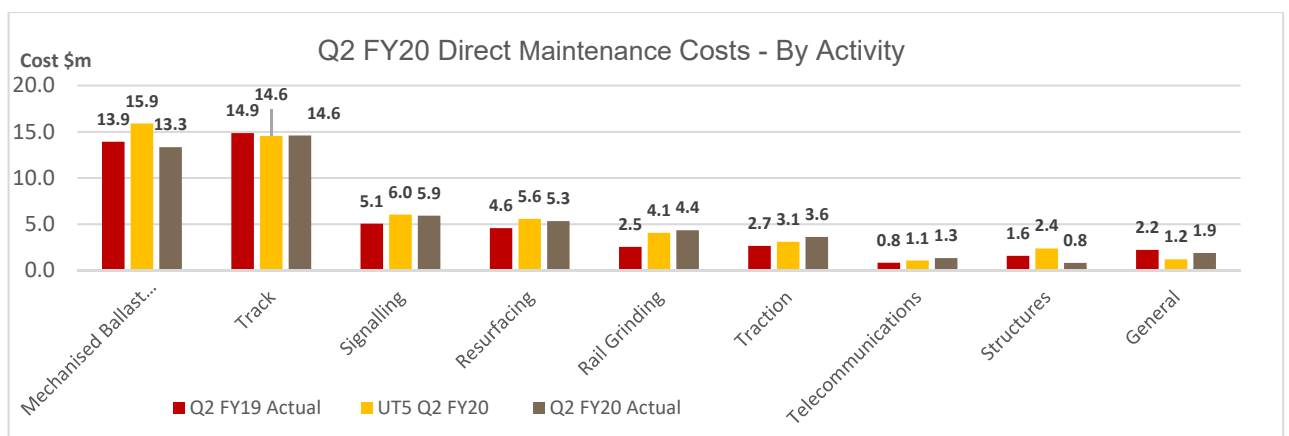


Figure 5 – Direct Maintenance Cost by Activity

A comparison of the actual Gross Tonne Kilometres (GTK) railed during the Reporting Period, relative to the forecast GTK from the QCA's 2018 Decision is outlined in Figure 6 below.

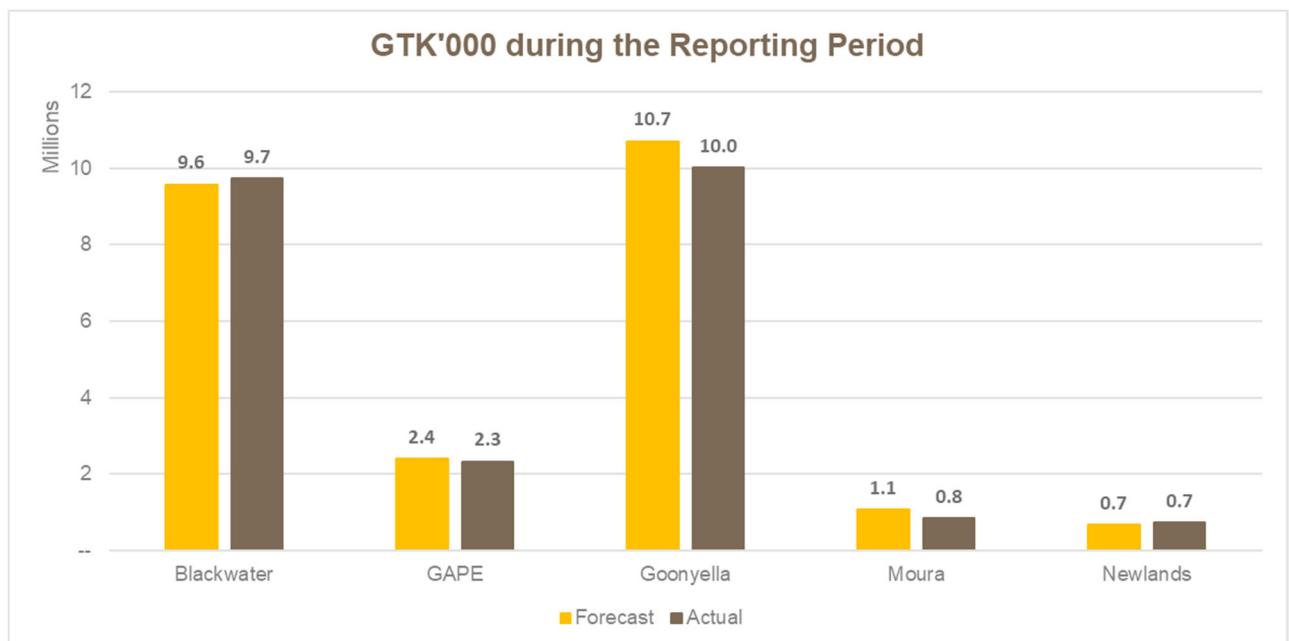


Figure 6 - Forecast GTK vs Actual GTK

Direct Maintenance Cost by System

The direct maintenance cost incurred for the Reporting Period compared against the apportioned QCA's 2018 Decision and the same quarter in the previous year is shown below for Blackwater (Figures 7 and 8), Goonyella (Figure 9 and 10), Moura (Figure 11 and 12) and Newlands (Figure 13 and 14). These costs are broken down per activity for the separate systems.

Blackwater

The direct maintenance costs incurred during the Reporting Period for the Blackwater system was \$22.9m which was 13% lower than the apportioned QCA's 2018 Decision for the same period and 12% lower than the second quarter in the prior year.

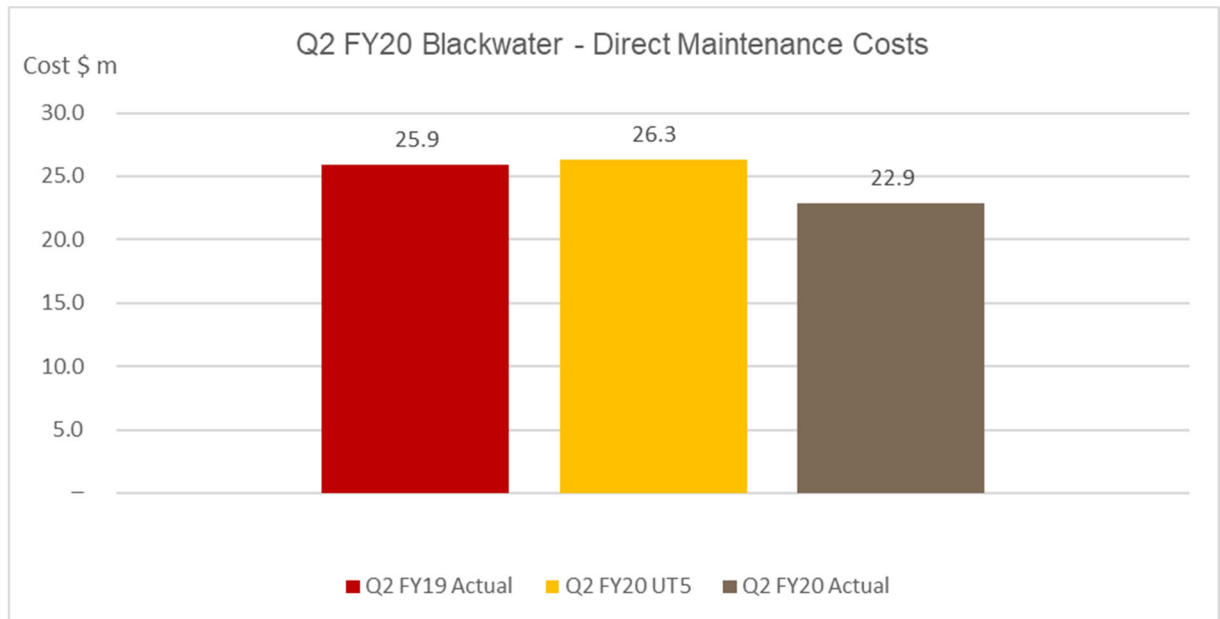


Figure 7 – Blackwater Direct Maintenance Cost

The main underspends in comparison to the apportioned QCA 2018 Decision were in Mechanised Ballast Undercutting and Structures maintenance, with overspends in Track, Traction and General categories.

A change in track access between systems is the main driver behind lower scope completed in Blackwater compared to the QCA's 2018 Decision for the Reporting Period in Ballast Undercutting and Resurfacing activities.

Lower spend in Structures maintenance activities included lower levels of culvert cleaning and drainage maintenance.

Higher spend in the Traction category is due to an increase in preventative maintenance to improve resilience of the Traction Infrastructure.

There were overspends in Rail Repair driven by the need to rectify defects identified using the latest available information.

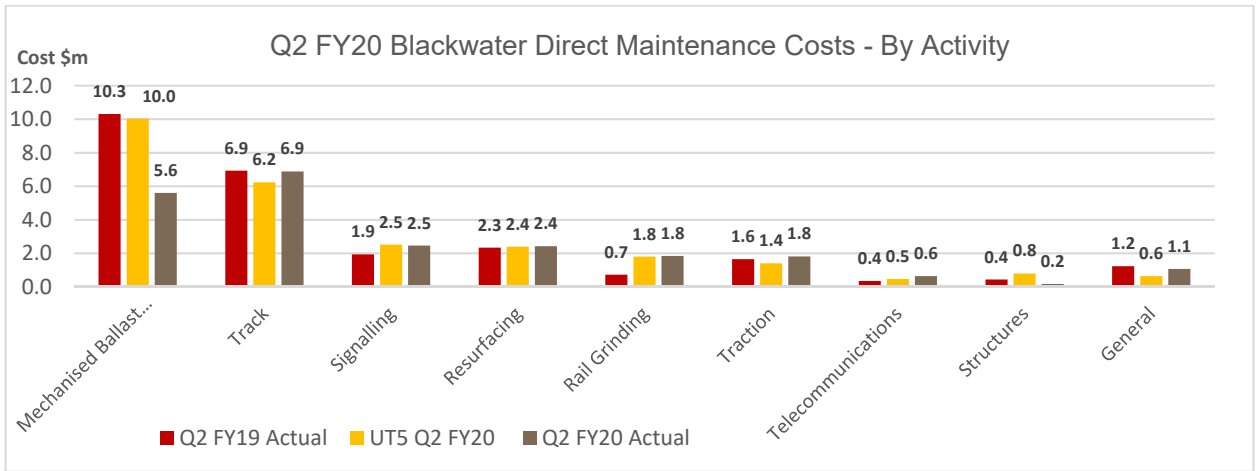


Figure 8 - Blackwater Direct Maintenance Cost by Activity

Goonyella

The direct maintenance costs incurred during the Reporting Period for the Goonyella system was \$16.7m, which was \$1.4m, or 8% lower than the QCA's 2018 Decision apportionment. This represents a \$1.3m, or 8%, increase from the comparative period in FY2019.

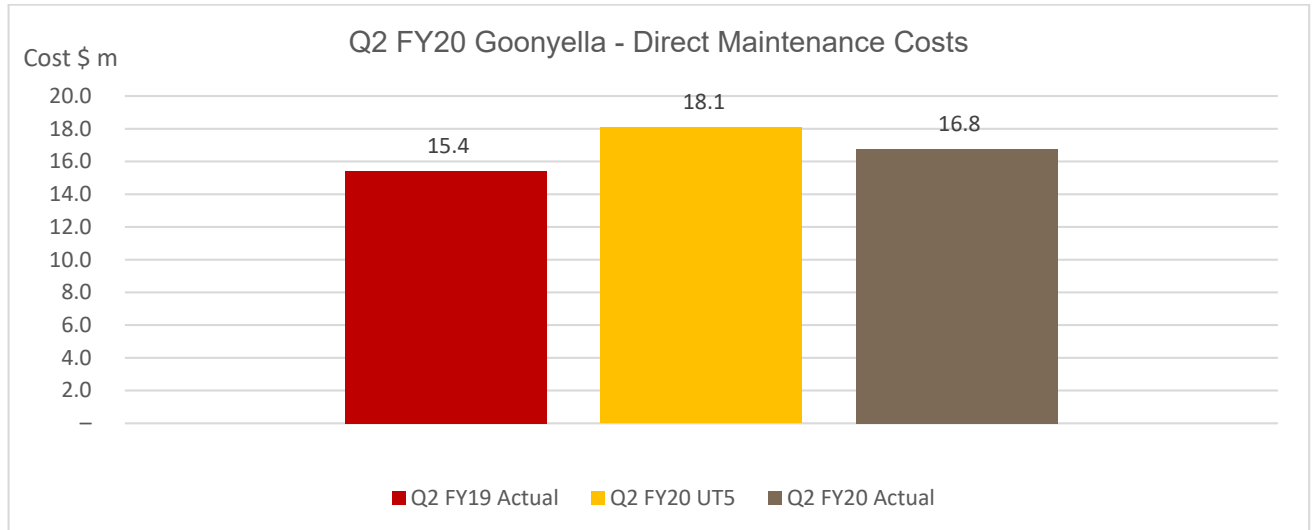


Figure 9 - Goonyella Direct Maintenance Cost

Goonyella's maintenance cost by activity is shown in **Figure 10**. The underspends against the QCA's 2018 Decision are attributable to Resurfacing maintenance, Structures maintenance, Track maintenance, Rail Grinding and Signalling maintenance activities. For Track maintenance there was underspend in Maintenance Ballast and Sleeper Management.

Resurfacing underspend during the reporting period was caused by resurfacing plant assisting with works in the Newlands closure, as the closure was moved from August to October 2019.

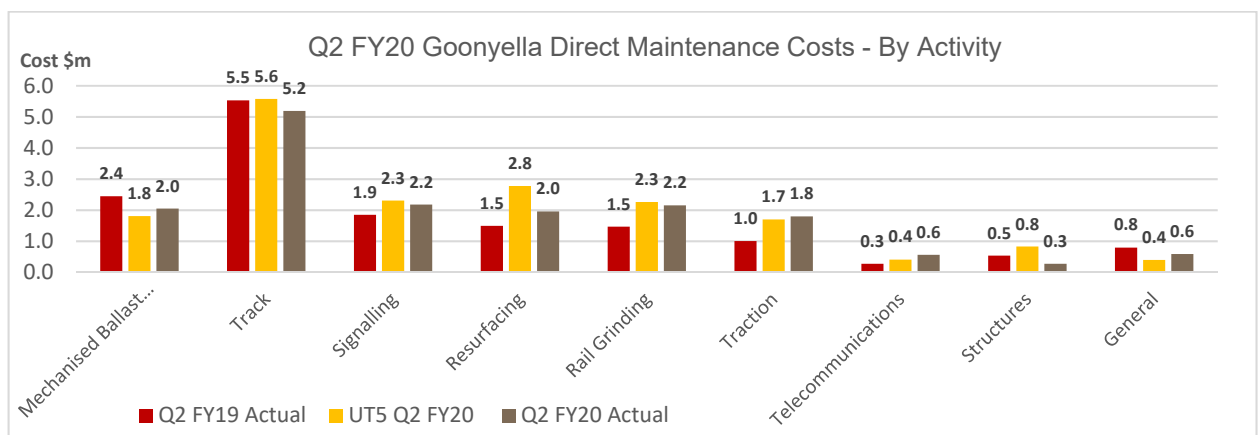


Figure 10 – Goonyella Direct Maintenance Cost by Activity

Moura

The direct maintenance costs incurred during the Reporting Period for the Moura system was \$4.6m, which was \$2.1m lower than the QCA's 2018 Decision and \$1.2m higher than the comparative period from the previous year.

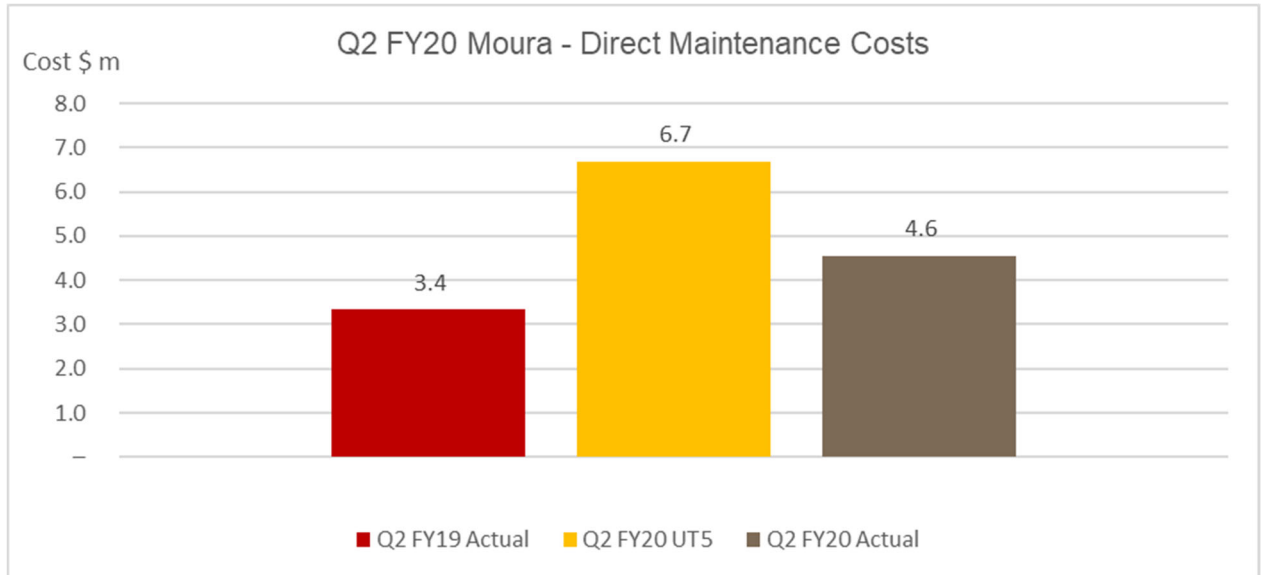


Figure 11 - Moura Direct Maintenance Cost

The primary contributor to the underspend against the QCA's 2018 Decision was Mechanised Ballast Undercutting, mainly due to the timing of activities compared to the apportionment of the QCA's 2018 Decision.

Ballast undercutting costs were well below the apportioned QCA's 2018 Decision for Moura, as works were completed within a 72-hour system closure in one location for both mainline and excavator undercutting. Moura resurfacing costs were above the apportioned QCA's 2018 Decision due to increased scope completed in mainline resurfacing.

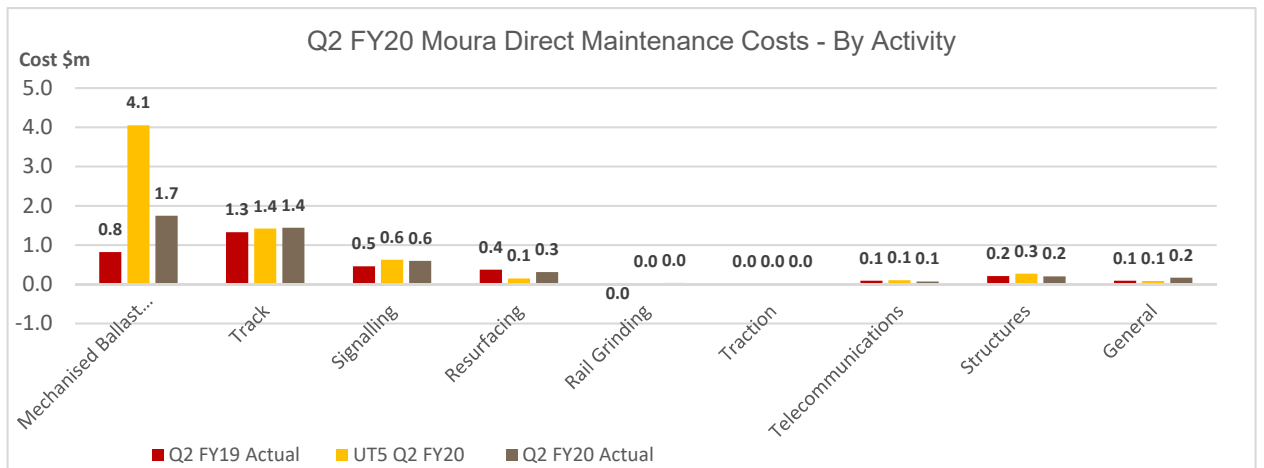


Figure 12 - Moura Direct Maintenance Cost by Activity

Newlands

The direct maintenance costs incurred during the Reporting Period for the Newlands system was \$6.9m, which was \$4.1m higher than the QCA's 2018 Decision apportionment and \$3.3m higher than the comparative period from the previous year.

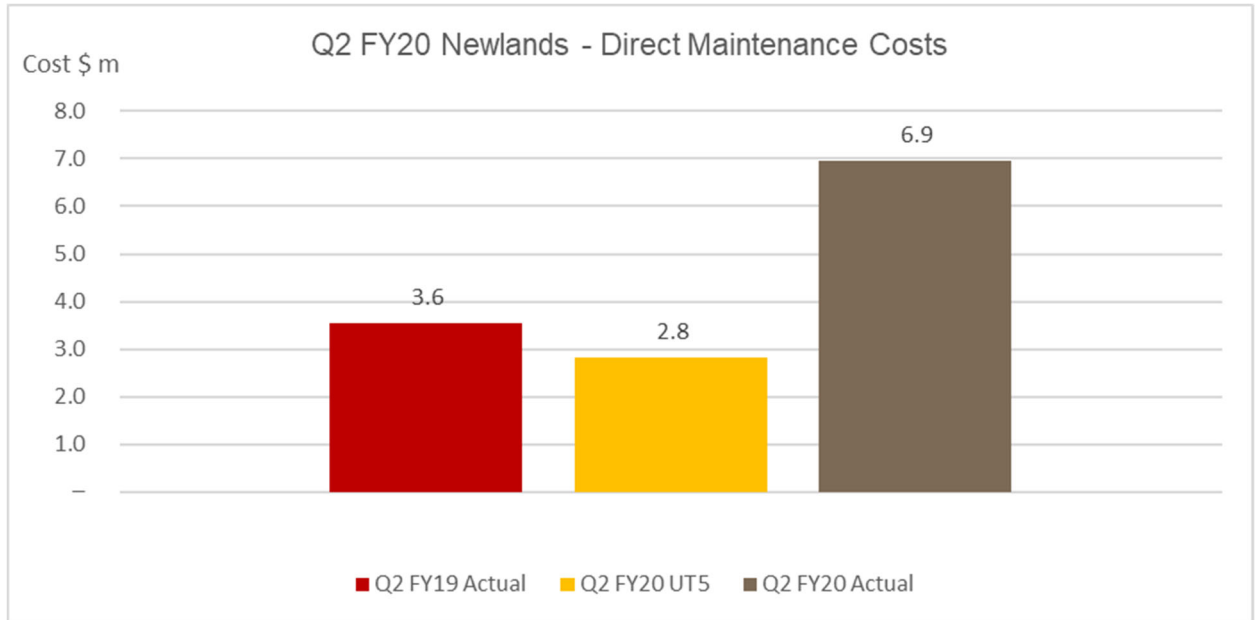


Figure 13 - Newlands Direct Maintenance Cost

The primary contributors to the overspend against the QCA's 2018 Decision were Mechanised Ballast Undercutting and Resurfacing activities. This was primarily due to the Newlands closure being rescheduled from August 2019 (Q1) to October 2019 (Q2).

Underspend in Track Maintenance is due to Maintenance Ballast and Fire and Vegetation management.

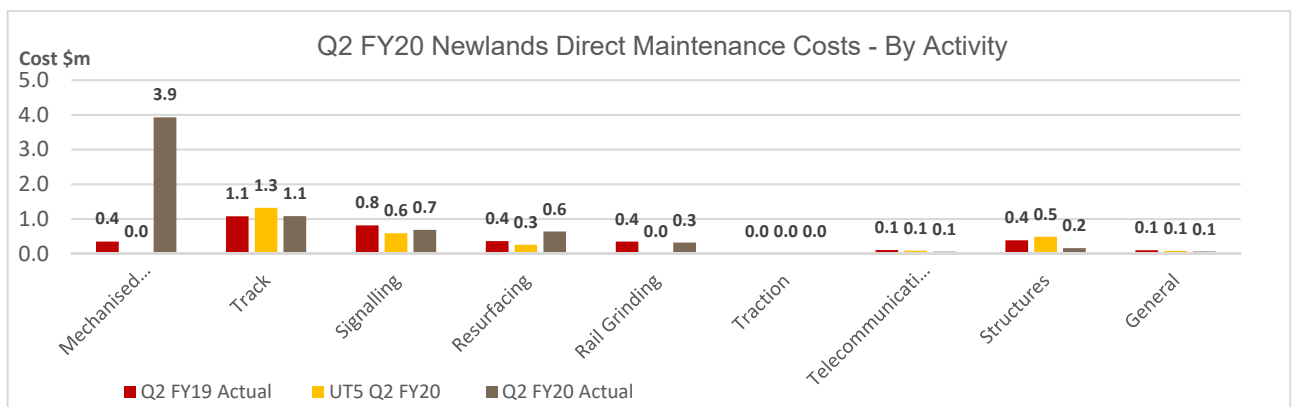


Figure 14 - Newlands Direct Maintenance Cost by Activity

4.2 Mechanised Maintenance

Mechanised maintenance works utilise mechanical machinery and comprise the following categories: Ballast Undercutting, Rail Grinding, and Resurfacing. Mechanised maintenance scope performance for the Reporting Period is outlined in more detail below. Please note that QCA's 2018 Decision scope for each coal system is typically set in advance of the regulatory period. The distribution of actual scope between systems is based on a detailed assessment by Aurizon Network's engineers and planners, who prioritise scope based on asset condition and criticality. Consequently, variances may exist due to timing differences between when the scope is set for regulatory purposes and when it is planned for execution.

Ballast Undercutting

Ballast Undercutting by system for the Reporting Period is shown below in **Figure 15** and **Figure 16**, in terms of both linear kilometres and number of turnouts.

During the Reporting Period, change in track access between systems caused actual scope to differ. Total mainline undercutting for Q2 is 7kms ahead and 1 turnout behind the apportioned QCA's 2018 Decision.

Differences in scope and costs in the Newlands system are primarily due to the system closure being rescheduled from August 2019 to October 2019. The ballast undercutting team have delivered 27% of the FY2020 mainline undercutting scope with Newlands exceeding planned scope due to increased access.

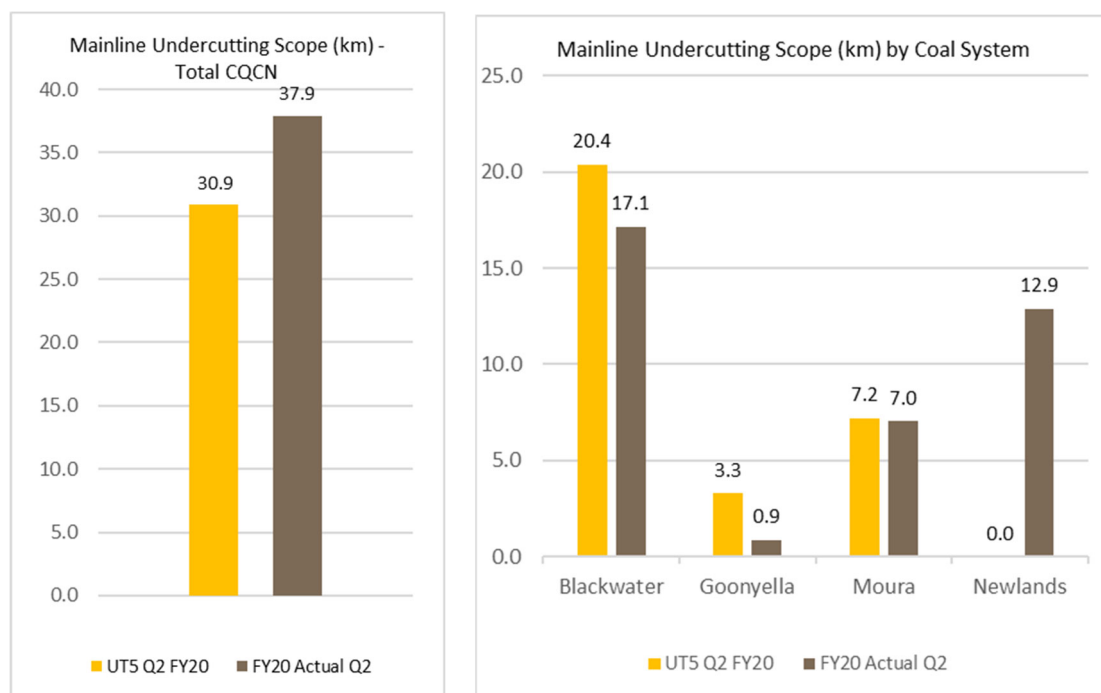


Figure 15 – Mainline Ballast Undercutting scope by System

The Turnout Ballast Undercutting compared with the apportioned QCA's 2018 Decision is shown in **Figure 16**

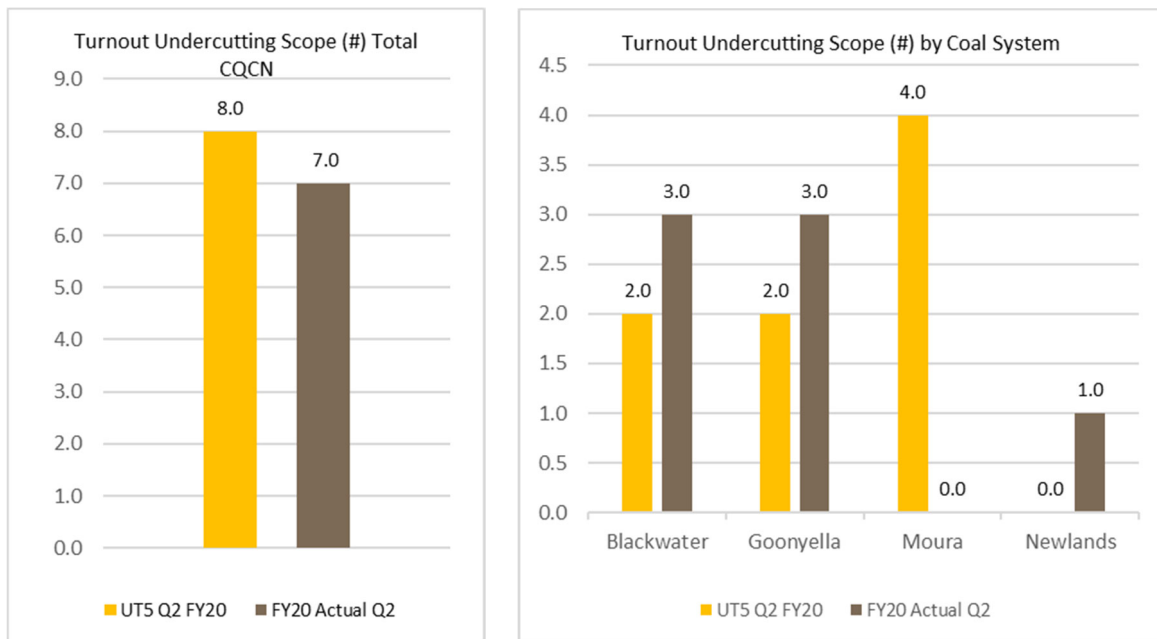


Figure 16 - Ballast Undercutting (Turnouts) by System

Figure 16 above presents Turnout Undercutting scope achieved in comparison to the apportioned QCA's 2018 Decision for the Reporting Period. The ballast undercutting team completed a total of 7 turnouts during the Reporting Period. Variances of scope at a system level is due to changes in track access from the QCA's 2018 Decision apportionment.

Rail Grinding

Mainline Rail Grinding by system for the Reporting Period is shown in **Figure 17** below. During the Reporting Period, 903kms of Mainline Grinding scope was delivered, ahead 90.94kms against the apportioned QCA's 2018 Decision. This is due to timing of planned access in the beginning of calendar year, compared to confirmed track access which happens much later in the calendar year. Therefore, the Program changes across the months but total scope is still targeted to be completed for the full year.

During the Reporting Period, Rail Grinding completed 177 turnouts; 13 turnouts behind the apportioned QCA's 2018 Decision for Q2. 60% of the total Turnout Grinding scope for FY2020 has been completed YTD.

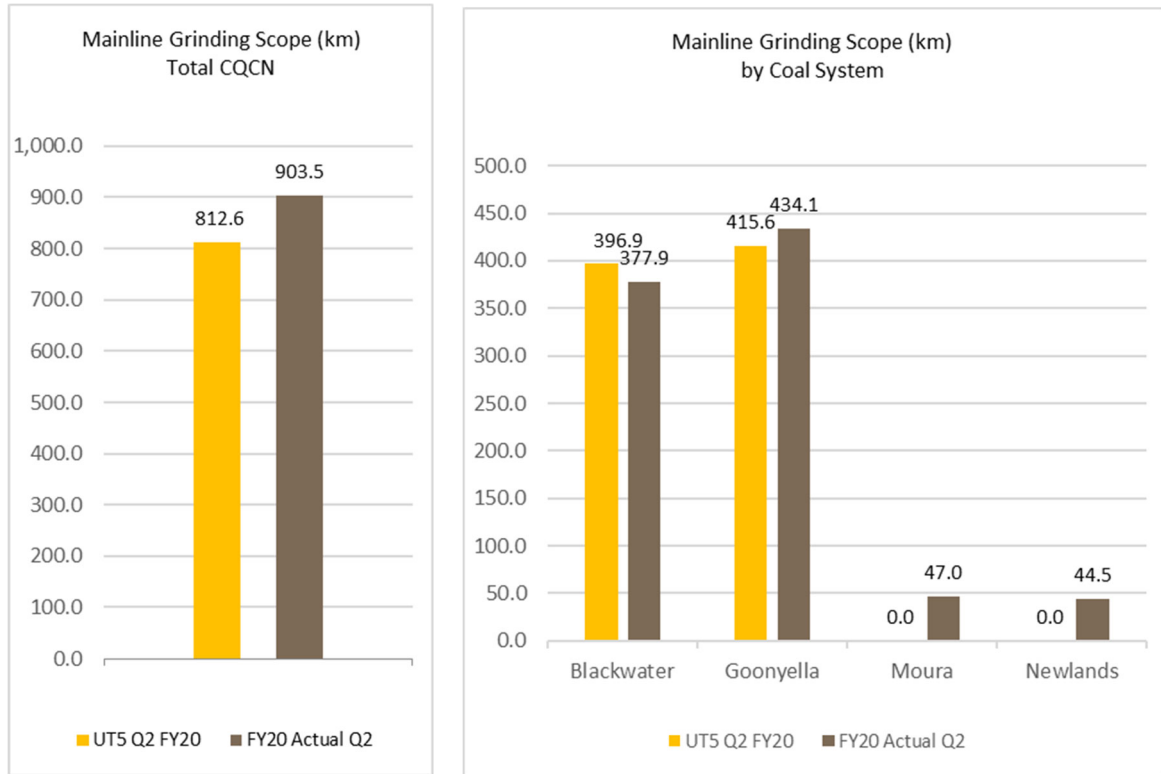


Figure 17 - Rail Grinding (Mainline) by System

Rail Grinding (Turnouts) by system for the Reporting Period is shown in **Figure 18** below.

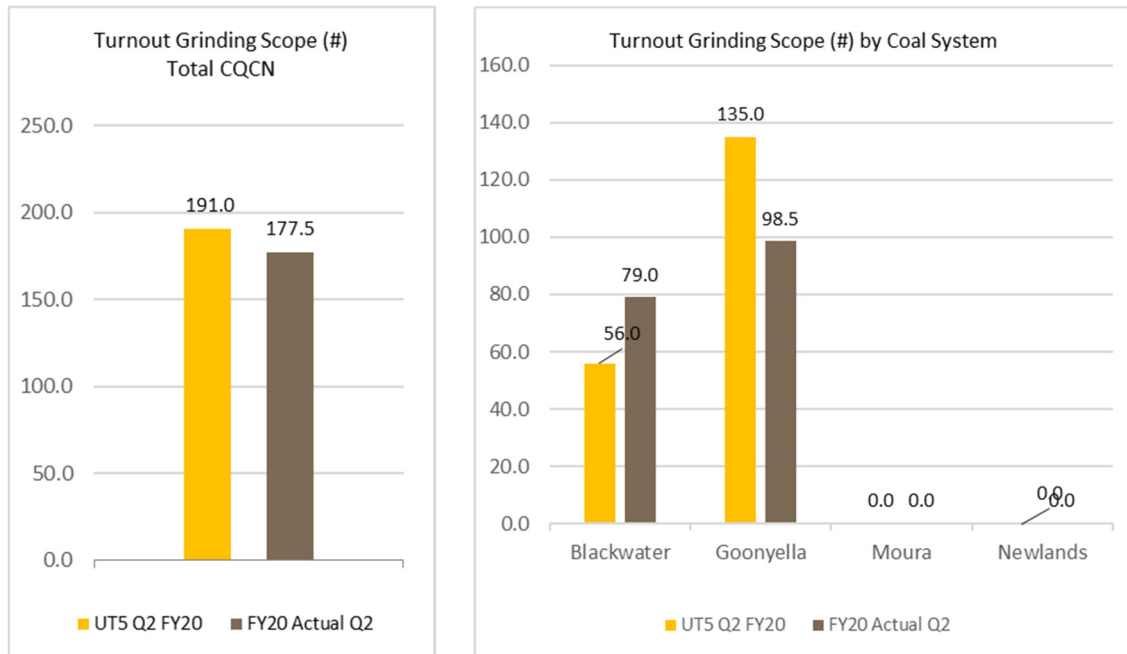


Figure 18 - Rail Grinding (Turnouts) by System

Resurfacing

Resurfacing (Mainline) by system for the Reporting Period is shown below in **Figure 19**. During the reporting period, Aurizon Network delivered 415km of Mainline Resurfacing. This result was primarily driven by the following per system:

- > Scope in Blackwater was unable to be achieved in Q2 as works planned in December were moved to later months in financial year.
- > Scope was not met in Goonyella as works were rescheduled for later in financial year.
- > Increased scope in Newlands due to the system closure being moved from August 2019 to October 2019.

During the Reporting Period, the Resurfacing team delivered 19% of the total QCA's 2018 Decision Mainline scope for FY2020.

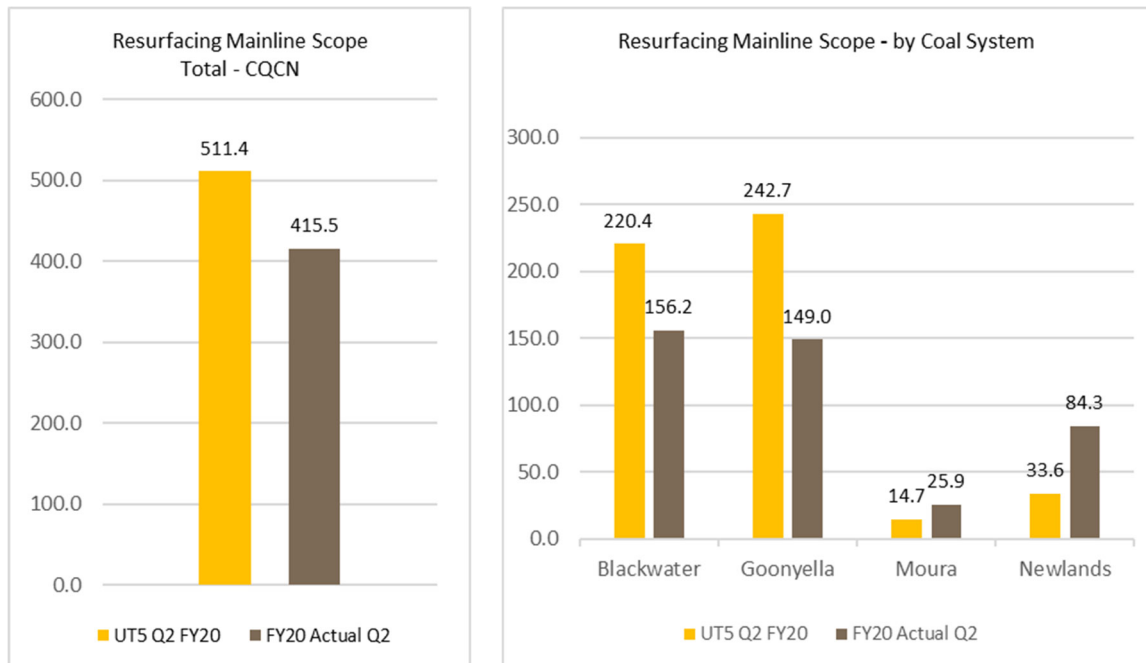


Figure 7 - Resurfacing (Mainline) by System

Resurfacing (Turnouts) by system for the Reporting Period is shown below in **Figure 20**.

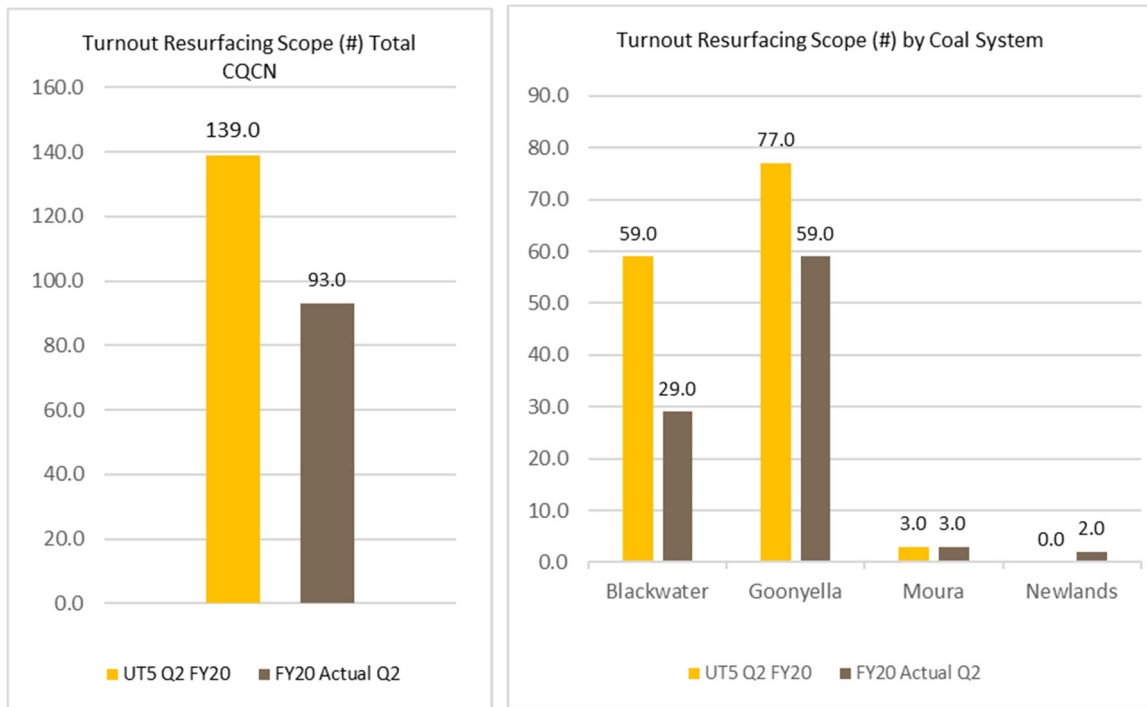


Figure 20 - Resurfacing (Turnouts) by System

During the Reporting Period, Resurfacing completed 93 turnouts; 46 turnouts less than the apportioned QCA's 2018 Decision. The strategy for completing Resurfacing turnouts has changed for FY2020 when compared to previous years. Scope is now evenly planned across the months in contrast to previous years where the majority of scope was completed in the earlier months of the financial year. Resurfacing is planned to meet full scope for FY20.