



ONRSR Guideline

Safety Performance Reporting



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1 Introduction

1.1 Purpose

Section 103 of the Rail Safety National Law (RSNL) requires accredited rail transport operators to submit a Safety Performance Report (SPR) to the Office of the National Rail Safety Regulator (ONRSR) within six months after the end of a reporting period.

ONRSR has prepared this guideline to provide guidance on what information should be contained in the SPR and the reporting timeframes. ONRSR has also developed an example SPR as an attachment to this document that illustrates the type of information that should be contained in the SPR.

1.2 What is a Safety Performance Report?

The SPR is an annual report that must be prepared by accredited rail transport operators and submitted to ONRSR detailing the operator's safety performance over a reporting period.

The SPR must be prepared in a form approved by ONRSR and must contain certain information as outlined in section 2 below.

The SPR should be used to demonstrate to ONRSR the effectiveness of an accredited rail transport operator's Safety Management System (SMS) in managing risks associated with railway operations. It provides an operator the opportunity to describe the safety performance being achieved; and identify what is being done to maintain or improve this performance in context with the scope and nature of the operator's railway operations and in meeting the RSNL duty to ensure, so far as is reasonably practicable, the management of risks to safety associated with these railway operations.

1.3 Who is required to submit an SPR?

All accredited rail transport operators must submit an SPR to ONRSR.

Rail transport operators that are not accredited, but are registered rail infrastructure managers, should submit an annual activity statement. Further details are available on the ONRSR website at the following link: [Annual Activity Statements](#).

1.4 When must an SPR be submitted to ONRSR?

Accredited rail transport operators have six months after the end of each reporting period to submit the SPR to ONRSR (see section 103(2) of the RSNL).

The reporting period, which relates to a financial year or other agreed period, and due date of the SPR, are outlined on the rail transport operator's Notice of Accreditation.

2 Contents of an SPR

2.1 What should an SPR look like?

Under section 103 of the RSNL, the SPR must be in a form approved by the Regulator.

ONRSR recognises that an SPR may also be used by an operator for internal governance purposes, therefore the scope of detail and the format should be determined by an operator in accordance with their SMS, providing that the SPR contains information required under section 103 of RSNL.

2.2 What information should an SPR contain?

The SPR must contain the following:

- > a description and assessment of the safety performance of the rail transport operator's railway operations;
- > comments on any deficiencies in, and any irregularities, in the railway operations that may be relevant to the safety of the railway;
- > a description of any safety initiatives in relation to the railway operations undertaken during the reporting period or proposed to be undertaken in the next reporting period; and
- > any other information or performance indicators prescribed by the national regulations for the purposes of this section.

In accordance with the *Rail Safety National Law National Regulations 2012* (National Regulations), the SPR must also include a summary of outcomes from the review of the SMS that rail transport operators are required to undertake under section 102 of the RSNL.

As a guide, ONRSR would expect an SPR to include:

- > an operational overview of the scale and scope of the railway operations undertaken with a focus on significant changes or influences to highlight to the Regulator any variance from previous reporting periods;
- > a summary of key rail safety risks including any risks that have emerged from the previous reporting period and how they are being managed;
- > a description of strategies the rail transport operator is undertaking to assure itself the controls for key rail safety risks are being implemented as intended and are effective;
- > an assurance that the SMS review has been undertaken in accordance with RSNL and commentary of the outcome of the review and any changes to the SMS;
- > commentary and supported data analysis on the effectiveness of reviews of legislation plans and programs in relation to:
 - security management plan (s.112 RSNL);
 - emergency management plan (s.113 RSNL);
 - health and fitness program (s.114 RSNL);
 - drug and alcohol program (s.115 RSNL);
 - fatigue risk management program (s.116 RSNL).
- > commentary on the operator's responses to significant occurrences/events and key internal control assurance activities;
- > overview of Category C occurrences and how emerging trends have been treated;
- > using key performance indicators determined by the operator (refer to section 2.3 below), commentary and analysis of the occurrence data reported into the National Rail Safety Database including measures being taken to address any adverse trends or variance;
- > commentary on any safety initiatives being undertaken by the operator;
- > commentary on any future operational changes or challenges that may impact on the risk profile of the operator or may result in a future notification of change or variation to accreditation; and
- > a clear endorsement of the SPR by an appropriate office holder and/or board prior to submission to the Regulator.

An example SPR that provides practical tips and sample commentary is attached to this Guideline.

2.3 What key performance indicators should an operator use?

As outlined in section 2.2 of this document, ONRSR expects the SPR to include commentary and analysis of occurrence data using key performance indicators that have been developed under the rail transport operator's SMS in accordance with the National Regulations.

Schedule 1, clause 9 of the National Regulations requires a rail transport operator to:

- > use key performance indicators to measure safety performance and the effectiveness of the SMS; and
- > have systems and procedures to collect, analyse, evaluate and communicate safety information.

ONRSR expects an operator will select appropriate key performance indicators, have systems in place to collect and verify the quality of data, demonstrate that the data is being analysed and understood and it is being used to support improved rail safety performance.

Further information on the use of key performance indicators is available in the [ONRSR Guideline – Safety Management System](#).

2.4 Additional reporting requirements in NSW

Additional reporting requirements apply to rail transport operators operating in NSW who have been issued with a sub-delegation to appoint drug and alcohol testing authorised persons and issue them with identity cards. As part of the SPR, these operators are required to report on the:

- > number of authorised persons currently appointed;
- > number of appointments made in the year;
- > number of appointments terminated in the year; and
- > current training provider and training arrangements.

3 ONRSR use of an SPR

The SPR allows ONRSR to assess each accredited rail transport operator's safety performance over the reporting period including the effectiveness of their SMS.

This information assists ONRSR in scoping its regulatory interactions with each operator under the ONRSR Work Program and helps identify emerging safety issues which may require ONRSR to issue safety communications or undertake safety initiatives to promote rail safety in Australia.

Further information on how ONRSR regulates is available in the document [The ONRSR Way](#).

4 Lodgement of an SPR

As outlined in section 1.4 of this guideline, the SPR must be submitted to ONRSR by the date stated on the rail transport operator's Notice of Accreditation.

A SPR and Category C occurrence reports should be submitted to ONRSR via the ONRSR Portal.

5 Further Information

Further information is available on ONRSR's website at the following link: [Safety Performance Reporting](#).

Queries regarding SPR lodgement dates and details on the Notice of Accreditation should be made through email to ONRSR National Office at operations@onsr.com.au.

For smaller and less complex rail transport operators including tourist and heritage operators, ONRSR has developed a range of [SMS Modules to assist when developing or reviewing an SMS](#).

SAFETY PERFORMANCE REPORT

ABC Rail Company

2020-2021 Financial Year



DISCLAIMER: The information contained within this sample Safety Performance Report is for demonstration purposes only. Any references to dates, events, data, organisation names and roles is fictitious. The scenarios and events outlined within this document are intended to provide relatable examples to assist with preparation of future Safety Performance Reports.

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1 Purpose

The purpose of this report is to provide a description of the ABC Rail Company's safety management performance for the 2020-2021 financial year. This report is submitted to the Office of the National Rail Safety Regulator (ONRSR) as per the requirements of section 103 of the *Rail Safety National Law (RSNL)*. The report addresses:

- > monitoring of ABC Rail Company's safety performance;
- > understanding of the reasons for the identified level of performance;
- > identification of implications to operational rail safety; and
- > changes to risk controls (planned or underway) necessary to maintain or improve safety performance.

2 Operational Overview

Describe the extent of railway operations undertaken by the operator with a specific focus on significant changes that may have occurred or influenced these operations. This is intended to give the Regulator a view of what may have been different from previous operational periods.

ABC Rail Company owns and operates a freight rail network extending from the Southern Freight Terminal (SFT) in Adelaide, South Australia, through the Great Northern Freight (GNF) rail corridor to the Darwin Port Freight Terminal (DPFT) in the Northern Territory. ABC Rail Company transports freight via rail for export to Australia's trading partners and transports imported freight via rail to support Australia's defence, manufacturing and technology sectors. This includes the transportation of dangerous goods, bulk material and intermodal container freight.

ABC Rail Company is accredited under *RSNL* as a Rail Infrastructure Manager (RIM) and a Rolling Stock Operator (RSO) in the jurisdictions of South Australia and the Northern Territory.

On 26 July 2020, ABC Rail Company provided a written Notification of Change to ONRSR outlining details of a track upgrade on a section of the GNF rail corridor that would facilitate an increase in permitted track speeds, higher axle loading limits and train frequency (subject to demand).

Details of the Notification of Change are contained within the submission made to ONRSR; however, it can be summarised as an upgrade from 47kg/m rail to 60kg/m rail to an 800km section of track on the GNF rail corridor in the far north of South Australia. This is the final stage of the ABC Rail Company rail upgrade project and as a result, the entire GNF rail corridor is 60kg/m rail and therefore will support increased axle loads of 25 tonnes at an increased speed from 80km/h to 90km/h. Additionally the upgraded track will enable an additional 25% increase in frequency of services subject to additional demand. The changes were implemented from 31 August 2020 in accordance with the ABC Rail Company risk management, change management and systems engineering processes, all of which are elements of the ABC Rail Company Safety Management System (SMS).

3 Summary of Key Rail Safety Risks

Identify the key or top rail safety risks for the organisation. This should include the top ongoing risks for the operator and any risks that have emerged over the previous reporting period. This does not need to be a comprehensive list but provide a summary of where the immediate and ongoing risk management efforts of the operator are being targeted.

ABC Rail Company has in place a comprehensive and robust risk management system that is supported by leading risk management software and the *ABC Rail Company Risk Management Framework*. The ABC Rail Company safety and risk team provides validated data, reporting and advice to the ABC Rail Company Audit and Risk Committee which regularly assesses risks, evaluates controls and determines appropriate risk ratings. These are reported quarterly to the ABC Rail Company Executive Board to support informed decision making.

In relation to key rail safety risks for ABC Rail Company, a summary is highlighted below:

- > **Fatal or serious injury to an ABC Rail Company worker** – This includes any ABC Rail Company rail safety worker, contractor, corporate employee and visitor to ABC Rail Company workplaces. Key focus areas include driving road vehicles, rail safe working and the handling of dangerous goods. ABC Rail Company has numerous controls in place using the hierarchy of controls which manages risk so far as is reasonably practicable (SFAIRP). This is a key focus of every ABC Rail Company employee as part of a zero-harm philosophy. Key controls include:
- Safeworking rules and procedures;
 - Dangerous goods handling procedures;
 - Mandatory 5-star ANCAP safety ratings for all ABC Rail Company road vehicles;
 - Mandatory defensive driving training for all ABC Rail Company employees that are required to drive road vehicles as part of their duties; and
 - A rolling 5-year ABC Rail Company SMS internal audit program.
- > **Collisions between rolling stock** – This includes train to train collisions, train to road rail vehicle (RRV) collisions or RRV to RRV collisions. This is a key risk for ABC Rail Company, despite having confidence there are several effective engineering controls in place to manage risk SFAIRP and prevent collisions or minimise the consequences of a collision. It is acknowledged that although assessed as having an extremely low likelihood, a collision involving an ABC Rail Company train that is transporting dangerous goods may result in an event with catastrophic consequences. This is a key focus area for the planning, implementation and evaluation of ABC Rail Company emergency management exercises with key stakeholders as per the *ABC Rail Company Emergency Management Plan*. Key controls include:
- Automatic Train Protection (ATP) systems installed on ABC Rail Company's rail network;
 - Locomotive and wagon design standards that meet or exceed applicable standards;
 - Training and Competency standards for all rail safety workers including train crews and train controllers; and
 - A rolling 5-year ABC Rail Company SMS internal audit program.
- > **Derailments** – This is a key risk for ABC Rail Company based on analysis of recent occurrence data combined with the transportation of dangerous goods. ABC Rail Company has many controls in place to manage risks SFAIRP. Derailments are a key focus area for the planning, implementation and evaluation of ABC Rail Company emergency management exercises with key stakeholders as per the *ABC Rail Company Emergency Management Plan*. Key controls include:
- High frequency ultra-sonic testing (increased from every 6 months to 3 months);
 - Track maintenance procedures that meet or exceed required engineering standards;
 - Training and Competency standards for all rail safety workers including train crews and train controllers; and
 - A rolling 5-year ABC Rail Company SMS internal audit program.
- > **Terrorism / Network Security** – Given ABC Rail Company's role as an owner and operator of a rail network, transporting sensitive freight that supports both State and National economic and defence interests, ABC Rail Company has identified terrorism / network security as a key risk. As required by the *ABC Rail Company Security Management Plan*, ABC Rail Company frequently liaises with relevant state and federal law enforcement agencies to plan, implement and evaluate security exercises and testing of the *ABC Rail Company Security Management Plan* and interface arrangements. Key controls include:
- The *ABC Rail Company Security Management Plan*;

- Interface Security Agreements or Memorandum of Understanding agreements with relevant state and federal law enforcement agencies;
- ABC Rail Company CCTV network and security control centres based at SFT and DPFT; and
- A rolling 5-year ABC Rail Company SMS internal audit program.

As outlined in section 5.3 of this Safety Performance Report, ABC Rail Company has identified an emerging threat that may pose an additional risk to ABC Rail Company operations, primarily in the area of network security. That is a rising trend in internal security related occurrence data involving unauthorised access to the ABC Rail Company rail network using drones. ABC Rail Company is currently liaising with relevant law enforcement agencies to identify and evaluate additional controls that may be available to industry.

ABC Rail Company recognises that the emergence of this technology may provide significant opportunities to enhance the safety and effectiveness of rail operation functions including asset surveying, asset condition monitoring and incident response / investigations.

ABC Rail Company has also scheduled risk assessment workshops with relevant stakeholders to identify and assess available risk treatment options, determine the appropriate risk ratings and demonstrate that related risks are being managed SFAIRP.

ABC Rail Company will raise this emerging issue for further industry discussion at the next National Rail Safety Convention.

4. Summary of Control Assurance Activities and Strategy

Provide a brief description of strategies undertaken to assure senior management that the controls for the key rail safety risks are being implemented as intended and are effective.

ABC Rail Company has developed a three lines of defence assurance strategy which addresses the implementation and effectiveness of the controls for all key rail safety risks. This strategy involves the development of front line assurance activities by managers directly responsible for the implementation of the controls within the operational business units (1st line of defence); an assurance program developed and implemented by the corporate central safety team which targets controls for the highest ranked risks across the entire business (2nd line of defence); and an annual external audit program undertaken by an independent third party auditor (3rd line of defence). The ABC Rail Company has appointed XYZ Independent Auditors Pty Ltd to undertake external compliance activities of the assurance program for 2021/22.

As described in further detail below, ABC Rail Company undertook 12 internal audits and 36 internal compliance inspections. A copy of the 2020/21 assurance program is attached to this report.

5 Review of the Safety Management System

Summarise the planned or triggered actions that were undertaken to review the effectiveness of the safety management system, including the legislated annual review (s.102 of the RSNL), and commentary on the findings of such reviews and what changes have been made/initiated in the safety management system as a result of the reviews.

In accordance with RSNL s102, s99(3) and RSNL National Regulations 16 and 17, ABC Rail Company's SMS Review Committee met on 31 July 2021 to conduct the annual review of the ABC Rail Company SMS.

Members of the committee include, ABC Rail Company Executive Directors, ABC Rail Company Director Safety, ABC Rail Company Director Risk & Audit, ABC Rail Company WHS committee representatives, employee representatives and representatives of the National Federation of Railway Workers (NFRW).

SMS review workshops were held with all relevant workers on 5 July 2021 and 15 July 2021. All workers were notified of the SMS review and had access to provide any feedback via the ABC Rail Company SMS review online feedback system. This system was introduced in October 2020 following feedback from the SMS review for 2019 / 20.

The SMS review for the reporting period examined items outlined in *RSNL* National Regulation 17(3) including but not limited to:

- > the outcomes of ONRSR's regulatory interactions with ABC Rail Company,
- > the notifiable occurrences of ABC Rail Company and the incident response and investigation process;
- > the outcomes of the rolling 5-year ABC Rail Company SMS internal audit program; and
- > the effectiveness of improvements of the ABC Rail Company SMS that have been implemented as a result of the previous SMS review.

The SMS review confirmed that ONRSR had undertaken three compliance inspections and one audit of ABC Rail Company's railway operations during 2020 / 21. There were no outstanding Non-Conformance Reports (NCR's) and all three of the ONRSR observations provided to ABC Rail Company have been recorded in the ABC Rail Company Corrective Action System (CAS) and reviewed by the ABC Rail Company safety and risk team. It is noted that these ONRSR observations did not formally require a response from ABC Rail Company however it is confirmed they were received, recorded and considered for action as part of the ABC Rail Company continuous improvement processes.

As part of the SMS, ABC Rail Company manages a rolling 5-year ABC Rail Company SMS internal audit program that uses a risk-based approach to implement an annual planned program of internal audits, compliance inspections and occurrence data analysis. The program also includes reactive elements related to incident notification, incident investigations and external regulatory interactions. This SMS internal audit program is designed to ensure that all elements of the ABC Rail Company SMS as per Schedule 1 of the *RSNL* National Regulations is examined in thorough detail and no element is not examined in a 5-year period.

Each year, the ABC Rail Company Risk & Audit Committee utilises a risk-based approach to prioritise core focus areas for the year's program. For the year 2020 / 21, the core focus areas included:

- > Emergency management;
- > Security management;
- > Governance and internal control arrangements;
- > Safety culture; and
- > Safety performance measures.

For the year 2020 / 21, ABC Rail Company undertook 12 internal audits and 36 internal compliance inspections in addition to 6, level 1 Incident Cause Analysis Method (ICAM) incident investigations and 25 level 2 local incident investigations. All corrective actions arising from these assurance activities were recorded in the ABC Rail Company CAS, monitored by the ABC Rail Company safety and risk team and relevant reports submitted to the ABC Rail Company Risk & Audit Committee and ABC Rail Company Executive Board.

An internal audit of ABC Rail Company incident notification processes conducted in January 2021 identified one occurrence of a rolling stock irregularity on 4 December 2020 that was reported to ONRSR as a Category B occurrence (notification within 7 days) rather than a Category A occurrence (immediate notification). The internal audit also identified 4 instances where a Category B Rolling stock irregularity was not reported to ONRSR but was rather included as a Category C occurrence in the annual Category C occurrence data submission to ONRSR via the portal.

ABC Rail Company notified ONRSR of this issue on 19 January 2021. Further review by the ABC Rail Company safety and risk team identified human error as a contributing factor. A manager made an incorrect interpretation of *ONRSR's Notifiable Occurrence Reporting Requirements* and provided a direction to staff that was identified as being incorrect. In addition, ABC Rail Company created corrective action reference number: 2020-056 regarding the provision of additional training on *ONRSR's Notifiable Occurrence Reporting Requirements*. All ABC Rail Company supervisors and managers have been provided this training during May 2021 and it is now a mandatory requirement for all supervisory and management roles.

Throughout 2020 / 21, as per the ABC Rail Company Investigation Procedure, ABC Rail Company undertook a Level 1 ICAM investigation for several Category A occurrences including a derailment in far north South Australia on 3 July 2020, and 4 collisions between rolling stock and a person that resulted in a fatality (suspected to be self-harm). Further details of these occurrences are covered in section 5.1.

Key corrective actions arising from the ABC Rail Company internal investigations of these occurrences include:

- > An increase in the frequency of ultrasonic testing from 6 monthly intervals to 3 monthly intervals (Derailment on 3 July 2020 – Corrective action 2020-044);
- > An internal compliance inspection program to evaluate the existing visual track inspection program (Derailment on 3 July 2020 - Corrective action 2020-045);
- > Coordination of a funding agreement with the South Australian State Government to conduct emergency management exercise 'Containment 2021', held on 21 February 2021 (Corrective action 2020-046);
- > The creation of an interface agreement between ABC Rail Company, South Australia Police and the operators of a new mental health facility constructed near the SFT in June 2020. The intent of the agreement is to facilitate the early notification and management of risks associated with patients attempting to enter the rail corridor and self-harm (Investigations related to Category A fatal collisions between rollingstock and a person – Corrective action 2020-052); and
- > A joint initiative between ABC Rail Company and the local council resulting in the upgrading of footpaths and the installation of signage and rail corridor fencing in a 2km section of track from the SFT extending in a northern direction. This is supported by upgraded CCTV surveillance technology monitored in the ABC Rail Company network control centre at SFT (Investigations related to Category A fatal collisions between rollingstock and a person Corrective action 2020-053).

As a result of the previous ABC Rail Company SMS review in 2019 / 20, 2 new initiatives were introduced during 2020 / 21:

- > Enhanced consultation and stakeholder engagement in the review of the ABC Rail Company SMS with the introduction of the ABC Rail Company SMS review online feedback system which facilitates confidential employee feedback. An employee satisfaction survey conducted on 1 August 2020 demonstrated that this initiative had a significant uptake and utilisation rate; and
- > A CCTV security upgrade and installation of enhanced motion detection systems at the SFT and DPFT undertaken in September 2020 to address an identified rising trend in security related occurrences at these facilities. This has contributed to a significant reduction in security related occurrences in 2020 / 21 (further details in section 4.1).

ABC Rail Company is committed to safe rail operations, managing risks SFAIRP and building a safety culture that drives continuous improvement. ABC Rail Company is confident that there are robust internal assurance processes in place to ensure the ABC Rail Company SMS is reviewed

annually and as required in response to significant occurrences and internal / external assurance activities.

5.1 Effectiveness of Legislated Safety Plans and Programs

Provide commentary, supported by data analysis as appropriate, on the effectiveness of the legislated plans and programs in mitigating (or eliminating) the relevant risk, changes to the risks and any changes to these plans or programs that have been undertaken during the reporting period. The legislated plans and programs include the:

- > security management plan (s.112 of the RSNL);
- > emergency management plan (s.113);
- > health and fitness management program (s.114);
- > drug and alcohol management program (s.115); and
- > fatigue risk management program (s.116).

5.1.1 Security Management Plan

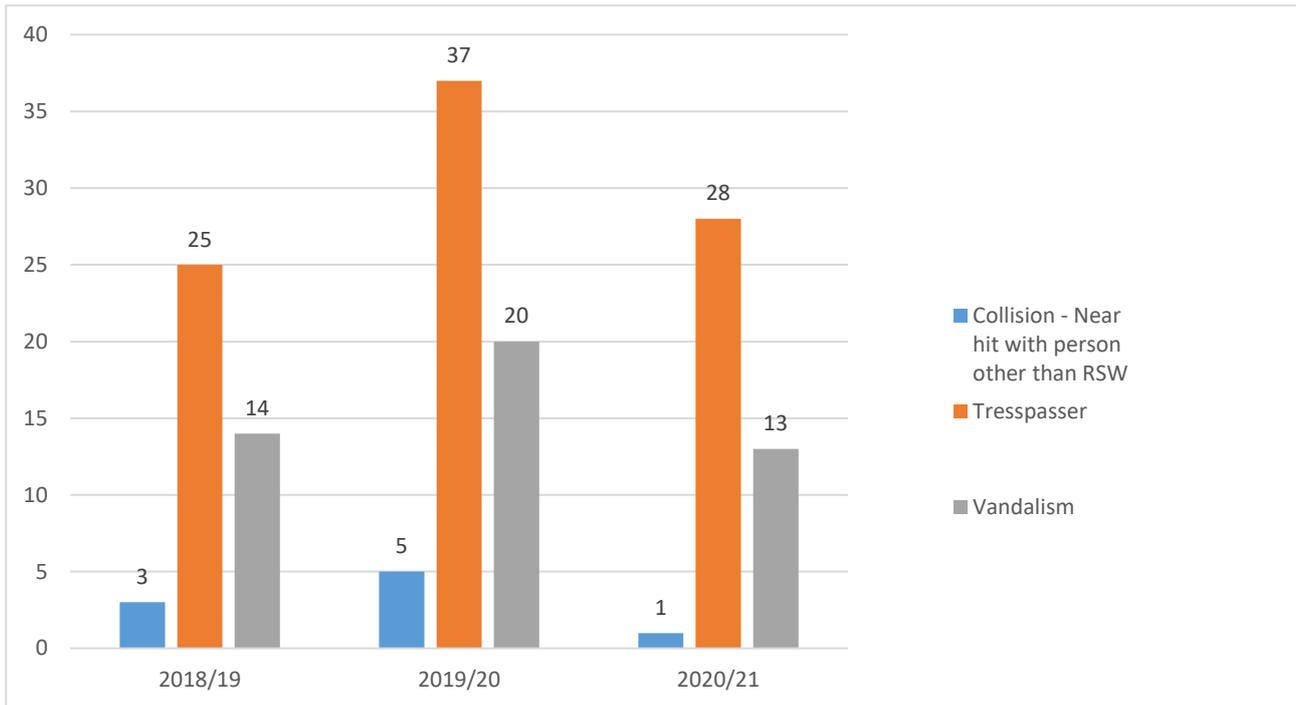
In relation to the *ABC Rail Company Security Management Plan*, ABC Rail Company confirms that the plan is in place, it is reviewed annually as part of the ABC Rail Company SMS review and following significant security related incidents, security management exercises or an increase in the Australian National Terrorism Threat Level.

ABC Rail Company is currently liaising with Northern Territory Police and emergency service agencies to plan an in-field multi-agency security exercise 'Security 2021' to be held at the DPFT in November 2021. This exercise will include the testing of the *ABC Rail Company Security Management Plan* including scenarios related to threats of terrorism and sabotage of rolling stock loaded with dangerous goods. A summary of key outcomes of this exercise will be provided in the ABC Rail Company 2021 / 22 Safety Performance Report.

In addition to data requirements to support mandatory notification of occurrences to relevant regulatory bodies, ABC Rail Company collects and analyses internal security related occurrence data including near misses with trespassers, trespassers in the rail corridor / premises and vandalism. Figure 1 and Graph 1 below shows selected security related occurrence data for the previous 3 years including normalised data. Positive variance is displayed in green text and negative variance is displayed in red text.

	2018/19	2018/19 N (per 100,000 train km travelled)	2019/20	2019/20 N (per 100,000 train km travelled)	2020/21	2020/21 N (per 100,000 train km travelled)
ABC Rail Company Network Security						
Collision - Near hit with person other than RSW	3	0.12	5	0.19	1	0.04
Trespasser	25	1	37	1.4	28	1.08
Vandalism	14	0.56	20	0.75	13	0.5

Figure 1 – Selected internal security related occurrence data for 3 years.



Graph 1 – Selected internal security related occurrence data for 3 years.

As shown in Figure 1 and Graph 1 above, there was a significant increase in security related occurrences in 2019 / 20 from 2018 / 19. As outlined in section 4 above, following the review of ABC Rail Company’s SMS in 2019 / 20, a significant capital investment was undertaken in September 2021 to upgrade security at the SFT and DPFT. ABC Rail Company believes that these upgraded security measures have contributed to the reduction in security related occurrences in 2020 / 21.

ABC Rail Company will continue to analyse internal security related occurrence data, evaluate the effectiveness of the *ABC Rail Company Security Management Plan* and provide commentary in the 2021 / 22 Safety Performance Report.

5.1.2 Emergency Management Plan

In relation to the *ABC Rail Company Emergency Management Plan*, ABC Rail Company confirms that the plan is in place, it is reviewed annually as part of the ABC Rail Company SMS review and following significant emergencies or the conduct of emergency management exercises.

As outlined in the 2018 / 19 Safety Performance Report, in November 2018, ABC Rail Company conducted a multi-agency in-field emergency management exercise ‘Stranded 2018’. This exercise simulated the destruction of track by flooding, resulting in the isolation of a loaded freight train containing dangerous goods in a remote location in far north South Australia.

Following the derailment of an ABC Rail Company freight train in far north South Australia on 3 July 2020, ABC Rail Company liaised with the South Australian State Government and on 1 September 2020, reached a funding agreement to plan and conduct a multi-agency in-field emergency management exercise. ABC Rail Company liaised with the State Government Central Exercise Writing Team (CEWT) to plan and conduct the emergency management exercise ‘Containment 2021’. The exercise was conducted on 21 February 2021 and provided an opportunity to test the *ABC Rail Company Emergency Management Plan* and relevant interface arrangements with emergency service agencies.

Following the exercise, A debrief workshop was held on 6 March 2021 and attended by all relevant stakeholders. In summary feedback was the exercise was well planned and implemented resulting in greater collaboration between ABC Rail Company and emergency service agencies. The debrief

workshop enabled the identification of three corrective actions for emergency service agencies that were provided in writing to the State Interagency Incident Management Committee. There was one corrective action attributed to ABC Rail Company:

- > ABC Rail Company to ensure online dangerous goods manifests are made available to Emergency Services through the secure ABC Rail Company customer portal (Corrective Action number 2021-005).

ABC Rail Company will continue to evaluate the effectiveness of the *ABC Rail Company Emergency Management Plan* and provide commentary in the 2021 / 22 Safety Performance Report.

5.1.3 Health and Fitness Management Program

In relation to the ABC Rail Company Health & Fitness Program, ABC Rail Company confirms a *ABC Rail Company Rail Safety Worker Health and Wellbeing Framework* is in place which conforms with the National Transport Commission's (NTC) National Standard for Health Assessment of Rail Safety Workers. The program is monitored by an ABC Rail Company Health & Wellbeing Coordinator and quarterly reporting is provided to the ABC Rail Company Risk & Audit Committee and the ABC Rail Company Executive Board.

Health assessments of ABC Rail Company rail safety workers are conducted by a third-party contractor AUSCHECK, a large organisation that performs health services for many rail transport operators across Australia.

As at the end of the 2020 / 21 reporting period, the ABC Rail Company had:

- > 246 Category 1 Safety Critical Rail Safety Workers; and
- > 45 Category 3 Safety Critical Rail Safety Workers

The ABC Rail Company has an internal database that allows the monitoring of the currency of health assessments and provides the Health & Wellbeing Coordinator with alerts requiring action prior to expiry. This provides an effective control to ensure that the currency of health assessments for ABC Rail Company rail safety workers is maintained.

An internal compliance inspection conducted on 22 May 2021 verified that all ABC Rail Company rail safety workers had correct and current health assessments.

5.1.4 Drug and Alcohol Management Program

In relation to the *ABC Rail Company Drug & Alcohol Management Program (DAMP)*, ABC Rail Company has a DAMP as part of the SMS. Drug & Alcohol testing of ABC Rail Company rail safety workers is undertaken by a third-party contractor, D&A Test Australia. Drug and Alcohol testing arrangements include:

- > all rail safety workers involved in Category A notifiable occurrences (upon notification to ONRSR confirmation is made as to whether ONRSR or ABC Rail Company's contractor will conduct drug and alcohol testing);
- > as per ABC Rail Company's show cause testing requirements outlined in section 7.2 of the DAMP; and
- > as per ABC Rail Company's random Rail Safety Worker Drug & Alcohol testing program requirements outlined in section 7.3 of the DAMP.

For the 2020 / 21 reporting period:

- > there were 18 Category A notifiable occurrences reported to ONRSR. This resulted in drug & alcohol testing of 48 ABC Rail Company rail safety workers. All results were negative except one occurrence resulting in a positive reading for a prohibited substance which was confirmed by laboratory analysis. The ONRSR occurrence record was updated via the ONRSR portal to reflect these details. The rail safety worker involved was disciplined in accordance with the ABC Rail Company DAMP and HR procedures;

- > there were 3 'show cause' Drug & Alcohol tests of ABC Rail Company rail safety workers conducted. Of those, 1 resulted in a refusal to undertake testing. The rail safety worker involved in that occurrence was disciplined in accordance with the ABC Rail Company DAMP and HR procedures.
- > there were 250 random Drug & Alcohol tests conducted of ABC Rail Company rail safety workers as part of the ABC Rail Company random Rail Safety Worker Drug & Alcohol testing program. There were no positive results.

A monthly breakdown of drug and alcohol testing of rail safety workers conducted by ABC Rail Company as part of the DAMP is provided to ONRSR in the submission of monthly reporting data through the ONRSR Portal. The ABC Rail Company DAMP is reviewed as part of the ABC Rail Company SMS review.

5.1.5 Fatigue Risk Management Program

In relation to the *ABC Rail Company Fatigue Risk Management Program (FRMP)*, ABC Rail Company has a FRMP in place which is managed by the ABC Rail Company safety and risk team. Internal audits and compliance inspections on the FRMP are included in the ABC Rail Company SMS internal audit program.

ABC Rail Company collects and analyses internal occurrence data relating to breaches of the ABC Rail Company FRMP including work scheduling breaches. Figure 2 below shows occurrence data related to work scheduling breaches of the FRMP over a 3-year period including normalised data. Positive variance is displayed in green text and negative variance is displayed in red text.

	2018/19	2018/19 N (per 100,000 train km travelled)	2019/20	2019/20 N (per 100,000 train km travelled)	2020/21	2020/21 N (per 100,000 train km travelled)
Work Scheduling breach of the FRMP.	6	0.24	7	0.26	3	0.12

Figure 2 – Internal data – Work scheduling breaches of the FRMP.

As shown in Figure 2 above, in 2020 / 21 there has been a reduction in the number of work scheduling breaches of the FRMP from 7 to 3. ABC Rail Company believes this improvement has been due the implementation of an upgraded rostering software package that was introduced in July 2020.

6 Safety Performance Review

Commentary on the operator's safety performance is intended to provide the Regulator with an overview of how the operator is monitoring the performance of its risk management controls and addressing issues that are identified through this monitoring.

6.1 Response to significant occurrences/events

Describe the operator's response, in terms of changes or improved safety controls (safety management system) to any significant occurrences or events that are likely to be of interest to or are being monitored by the Regulator.

The ABC Rail Company safety and risk team is responsible for incident notification, incident response / investigation functions, data occurrence analysis and implementing the ABC Rail Company SMS internal audit program. All data intelligence, investigation findings, non-conformance reports, corrective actions and safety learnings are reported to the ABC Rail Company Risk & Audit Committee and the ABC Rail Company Executive Board to support informed decision making.

The ABC Rail Company is committed to a safety culture that drives continuous improvement where learnings are identified and shared within the organisation following an adverse event, and corrective actions are implemented to mitigate the risks of reoccurrence.

All corrective actions are entered into the ABC Rail Company CAS and monitored for implementation by the ABC Rail Company safety and risk team. The ABC Rail Company CAS is regularly within scope of the ABC Rail Company SMS internal audit program to provide additional assurance that corrective actions are implemented and effective in managing risks SFAIRP. The ABC Rail Company safety and risk team also conducts occurrence data analysis to identify trends or anomalies. Reports are regularly provided to the ABC Rail Company Risk & Audit Committee which reviews risks, evaluates treatments and determines risk ratings in accordance with the *ABC Rail Company Risk Management Framework*.

Following the derailment of an ABC Rail Company freight train in far north South Australia on 3 July 2020, ABC Rail Company conducted a level 1 ICAM investigation. The key details include:

- > There was significant damage to 2 locomotives, 39 freight wagons and 3km of track;
- > The derailment was likely caused by a broken rail;
- > There were identified deficiencies in ABC Rail Company preventative maintenance and reactive maintenance processes that did not readily detect degraded track conditions at the point of derailment; and
- > There was a delay in notification to emergency services and obtaining details of the dangerous goods manifest. This resulted in a delay of approximately 3 hours for emergency service agencies to establish the protective cordon around the incident site. It is acknowledged this could have had adverse safety implications had there been an uncontained release of dangerous goods, particularly if the derailment occurred in an urban environment.

As outlined in section 4 of this Safety Performance Report, corrective actions implemented by ABC Rail Company following the derailment include:

- > An increase in the frequency of ultrasonic testing from 6 monthly intervals to 3 monthly intervals. (Corrective action 2020-044);
- > An internal assurance program to verify and evaluate the adequacy and effectiveness of the ABC Rail Company visual track inspection process (by Track Inspectors on foot and RRV). (Corrective action 2020-045); and
- > Coordination of a funding agreement with the South Australian State Government to conduct emergency management exercise 'Containment 2021' held on 21 February 2021 (Corrective action 2020-046).

The effectiveness of these corrective actions will be monitored and analysed, and commentary will be included in the ABC Rail Company Safety Performance Report for 2021 / 22.

During the first 6 months of 2020 / 21, ABC Rail Company notified ONRSR of 4 Category A occurrences of a collision between rolling stock and a person resulting in a fatality. These all occurred in the rail corridor in the vicinity of the SFT. Individual incident investigations and coordination with South Australia Police and the Coroner's office confirmed they were incidents involving acts of self-harm. This represented a significant increase in the occurrence rate for this occurrence type and on 11 January 2021, the Director Safety requested a level 1 ICAM investigation to be undertaken to identify if there were any systemic safety deficiencies, likely causes for the increase in occurrences and possible measures to mitigate the risk of future occurrences.

The level 1 ICAM investigation undertaken by ABC Rail Company found that:

- > 3 or 75% of the occurrences involved persons that had absconded from a mental health facility that was recently opened and located in close vicinity to the SFT; and

- > The footpath, signage and rail corridor fencing extending 2km to the North from the ABC Rail Company SFT was ineffective in deterring trespassers from entering the rail corridor. Corrective actions implemented by ABC Rail Company following the investigation include:
 - > The creation of an interface agreement between ABC Rail Company, South Australia Police and the operators of a new mental health facility constructed near the SFT in June 2020. The intent of the agreement is to facilitate the early notification and management of risks associated with patients attempting to enter the rail corridor and self-harm (Corrective action 2020-052); and
 - > A joint initiative between ABC Rail Company and the local council resulting in the upgrading and / or installation of footpaths, signage and rail corridor fencing in a 2km section of track from the SFT extending in a northern direction. This is supported by upgraded CCTV surveillance technology monitored in the ABC Rail Company network control centre at SFT (Corrective action 2020-053).

The effectiveness of these corrective actions will be monitored and analysed, and commentary will be included in the ABC Rail Company Safety Performance Report for 2021 / 22.

6.2 Safety Performance – National Safety Data

Provide commentary on the safety performance as indicated by the data reported into the National Rail Safety Database – this should provide description of anomalies, adverse or improving trends that appear in the data and actions that may be being considered or taken in response to the identified performance decline or improvement.

Given that the Regulator will have access to the data that the operator has submitted to the National Rail Safety Database under the Cat A/B and C reporting requirements, the intent of this section of the report is to provide the operator with the opportunity to demonstrate to the Regulator that any trends or spikes in the performance data are understood and are being addressed.

ABC Rail Company has internal processes in place to collect, monitor and report internal occurrence data to support mandatory notification requirements to regulatory bodies including ONRSR. That includes Category A, B and C occurrence notifications to ONRSR as per *RSNL* and the *ONRSR Notifiable Occurrence Reporting Requirements*.

From further analysis of 2020 / 21 occurrence data undertaken by the ABC Rail Company safety and risk team, ABC Rail Company believes there is merit in providing additional commentary to ONRSR on occurrence data for the following occurrence types:

- > Track Irregularity;
- > Rolling Stock Irregularity;
- > Level Crossing Irregularity;
- > Load Irregularity; and
- > Proceed Authority Exceeded.

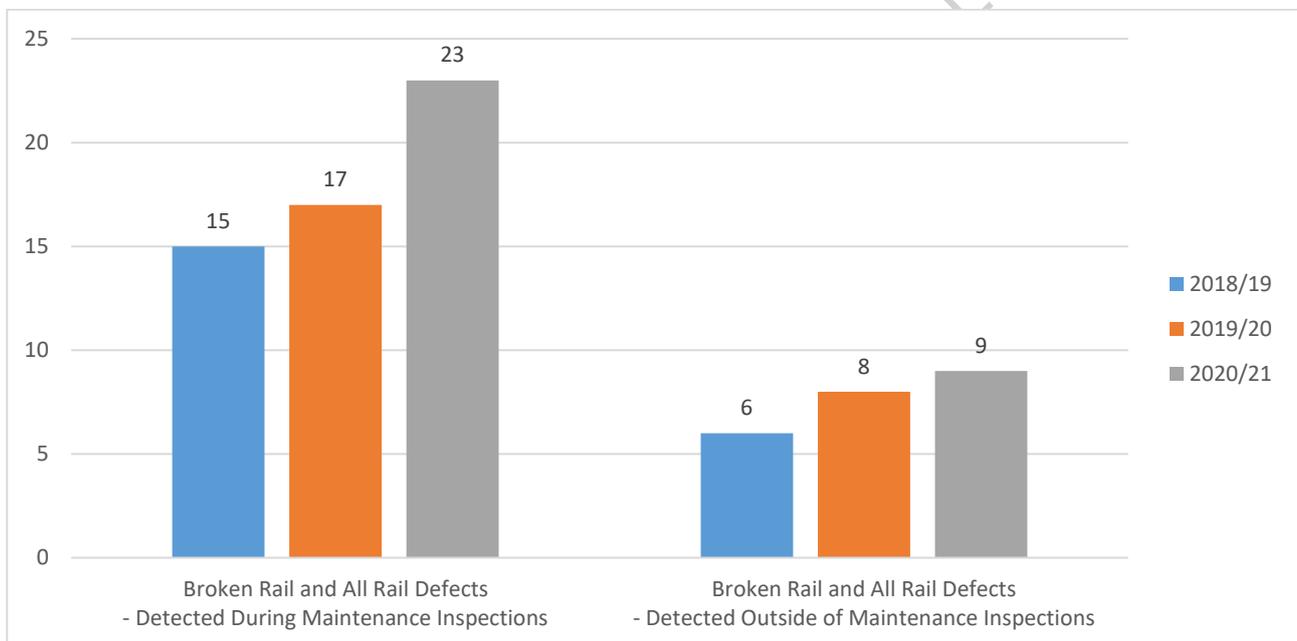
Where relevant additional data and graphs are provided to provide additional context.

6.2.1 Track Irregularity

In relation to the category of track irregularity, the relevant data is outlined in Figure 3 and Graph 3 below:

	2018/19	2018/19 N (per 100,000 train km travelled)	2019/20	2019/20 N (per 100,000 train km travelled)	2020/21	2020/21 N (per 100,000 train km travelled)
Track Irregularity						
Broken Rail and All Rail Defects - Detected Outside of Maintenance Inspections	6	0.24	8	0.3	9	0.35
Broken Rail and All Rail Defects - Detected During Maintenance Inspections	15	0.6	17	0.64	23	0.88

Figure 3 – Occurrence data – Track irregularity - Defects detected during maintenance / outside maintenance.



Graph 3– Occurrence data – Track irregularity – Defects detected during maintenance / outside maintenance.

Figure 3 and Graph 3 above shows an increasing trend in the number of occurrences related to broken rail and rail defects, detected both during and outside of maintenance inspections and resulting in operational speed restrictions.

It is noted that as outlined in section 4 of this Safety Performance Report, following the derailment on 3 July 2020 and subsequent level 1 ICAM investigation, ABC Rail Company implemented an increased frequency of ultrasonic testing (Corrective action 2020-044) and an internal assurance program to evaluate the adequacy and effectiveness of the visual track inspection process (Corrective action 2020-045).

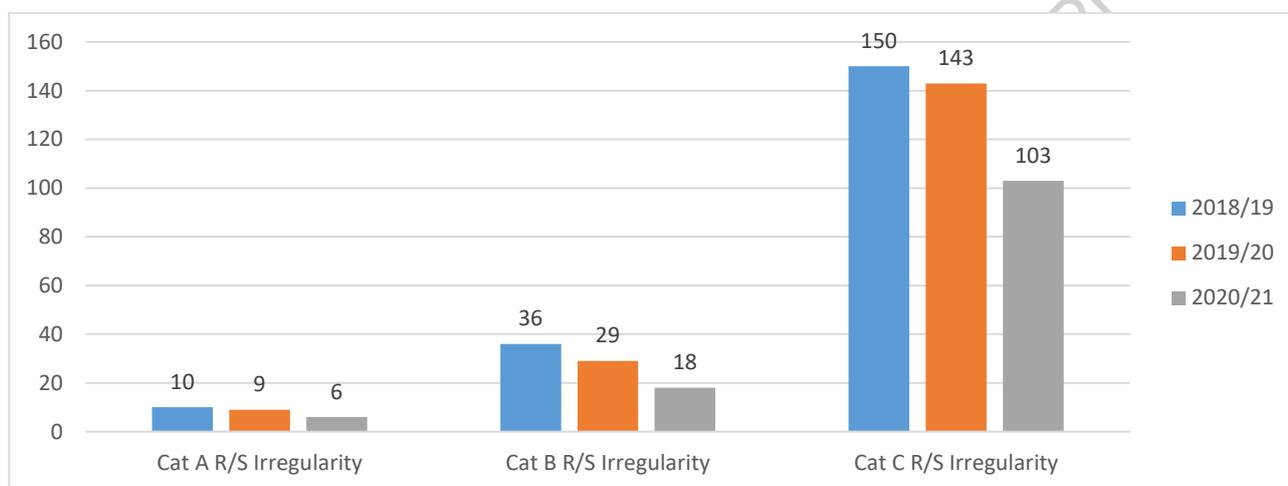
ABC Rail Company will continue to monitor these occurrence trends, evaluate the effectiveness of existing controls and provide commentary in the 2021 / 22 Safety Performance Report.

6.2.2 Rolling Stock Irregularity

In relation to the occurrence type: rolling stock irregularity, the relevant data is outlined in Figure 4 and Graph 4 below:

	2018/19	2018/19 N (per 100,000 train km travelled)	2019/20	2019/20 N (per 100,000 train km travelled)	2020/21	2020/21 N (per 100,000 train km travelled)
Rolling Stock Irregularity						
Cat A R/S Irregularity	10	0.4	9	0.34	6	0.23
Cat B R/S Irregularity	36	1.44	29	1.09	18	0.69
Cat C R/S Irregularity	150	6	143	5.4	103	3.96

Figure 4 – Occurrence data - Rolling stock irregularity.



Graph 4 – Occurrence data - Rolling stock irregularity – All categories.

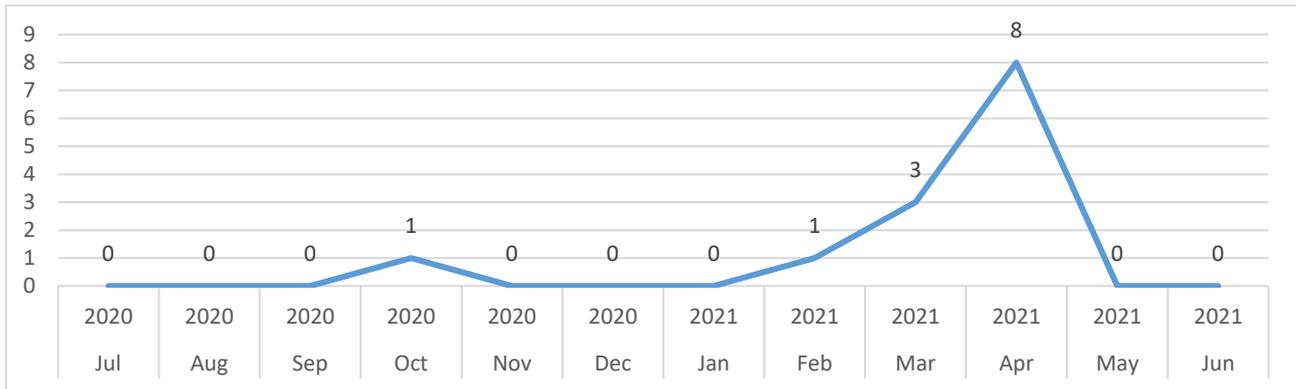
The data in Figure 4 and Graph 4 shows there has been a reduction in the number of rolling stock irregularities across all categories over the previous two corresponding reporting periods.

Internal analysis undertaken by the ABC Rail Company safety and risk team identified that the primary reason for this improvement was the introduction, in July 2019, of 100 Next Gen class freight wagons to the ABC Rail Company rolling stock fleet as part of its *Rolling Stock Asset Management Plan*. Subject to necessary procurement arrangement and approvals, it is anticipated that ABC Rail Company will commence negotiations for the next phase of the upgrade program in early 2022. This will involve:

- > the acquisition of another 100 Next Gen class freight wagons to ABC Rail Company's rolling stock fleet;
- > the phasing out of all ABC Rail Company's legacy freight wagon fleet; and
- > the acquisition of 6 new diesel electric locomotives which will replace 50% of ABC Rail Company's locomotive fleet, with the remaining 50% to be upgraded by June 2024.

It is anticipated that these significant capital investments in rolling stock undertaken by ABC Rail Company will enhance the safety of rail operations and result in further improvement in occurrence data trends related to the category of rolling stock irregularity.

Despite an overall positive trend in occurrence data related to the category of rolling stock irregularity, the ABC Rail Company safety and risk team identified an anomaly in Category C occurrences as a result of an administrative failure that allowed defective rolling stock to remain in service. This data is in the monthly breakdown Category C occurrence data submitted annually to ONRSR via the portal. As shown in Graph 5 below, for the month of April 2020, there was an increase in the number of Category C occurrences for the category of rolling stock irregularity from 3 to 8.

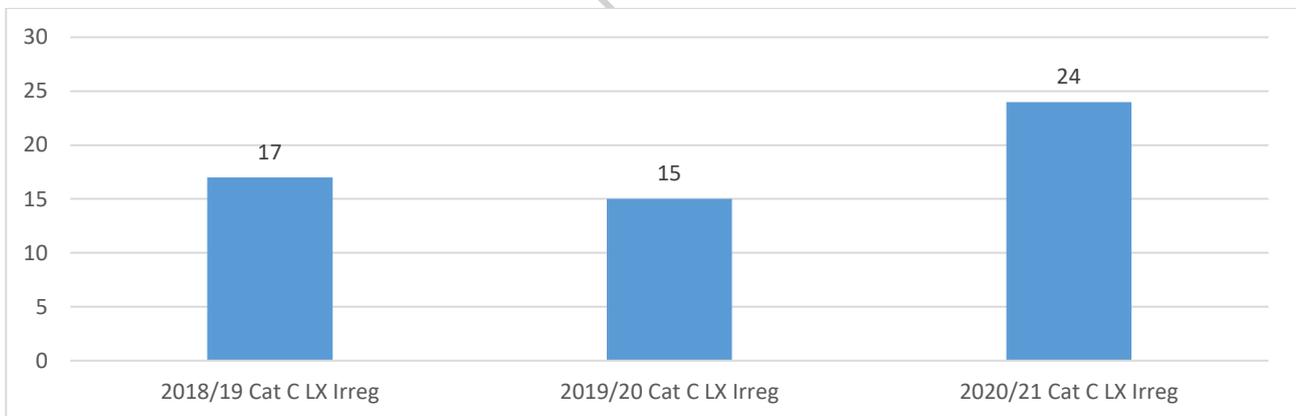


Graph 5 – Occurrence data - Rolling stock irregularity – Category C.

Further investigation by the ABC Rail Company safety and risk team identified a discrepancy with a procedure covering fault reporting and rectification. This contributed to 8 instances where faults were reported with legacy class freight wagons however, they remained in service rather than be repaired at the maintenance facility at DPFT. All affected freight wagons were taken out of service, inspected, repaired where required and re-certified for service. The procedure has since been amended, approved and a rolling stock notice issued to all maintenance staff communicating the amended procedure. A compliance inspection including this procedure within scope will be conducted as part of the ABC Rail Company SMS internal audit program. ABC Rail Company will continue to monitor occurrence data and provide further commentary in the 2021 / 22 Safety Performance Report.

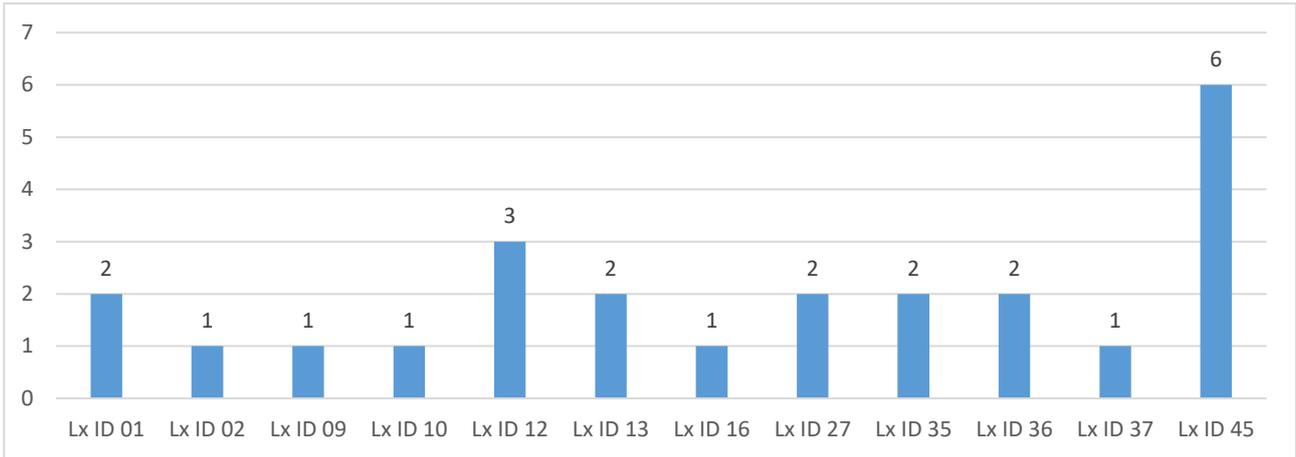
6.2.3 Level Crossing Irregularity

As evidenced through ABC Rail Company’s annual Category C occurrence submission to ONRSR through via the portal, for 2020 /21, ABC Rail Company reported 24 Category C occurrences in the occurrence type: Level crossing irregularity. This is shown in Graph 6 below:



Graph 6 – Occurrence data – Level crossing irregularity – Category C.

Graph 6 shows an increase in 2020 / 21 from 15 to 24 Category C occurrences. ABC Rail Company safety and risk conducted further analysis of data and identified that of those 24 occurrences, 6 or approximately 25% of all occurrences involved a level crossing location approximately 7km South of the DPFT (Lx ID 45), where issues were reported with partial operation of level crossing warning lights. This is shown in Graph 7 below.

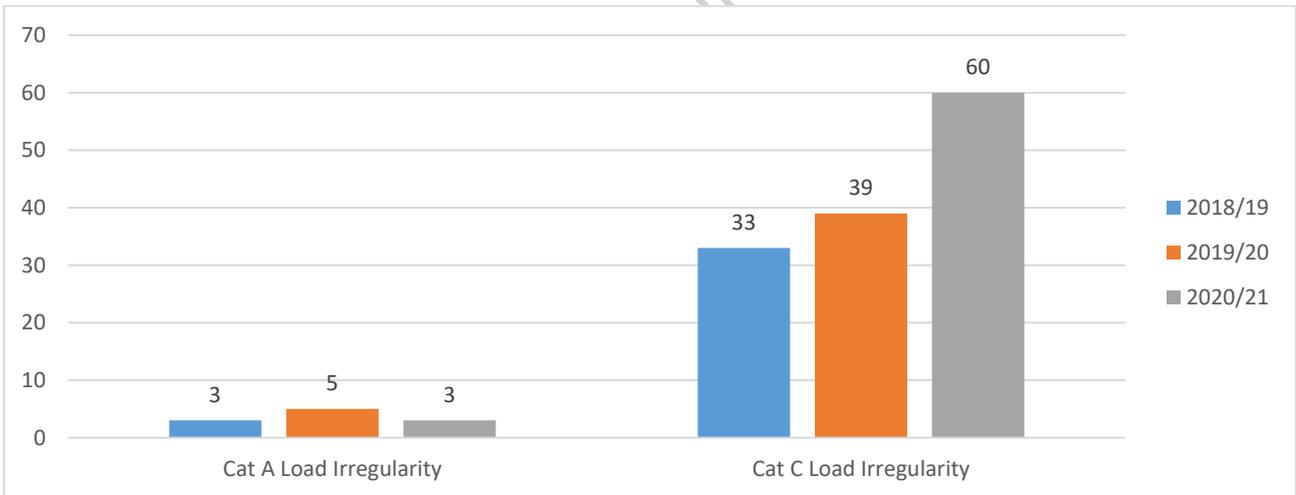


Graph 7 – Occurrence data – Level crossing irregularity – Category C – Selected level crossing ID's.

Following the identification of this anomaly, ABC Rail Company signal technicians inspected all equipment at Lx ID 45 and a suspected fault with a component was identified. ABC Rail Company liaised with the component suppliers to rectify the fault. The components at Lx ID 45 were replaced, tested and certified fit for service and ABC Rail Company will monitor occurrence data related to this issue.

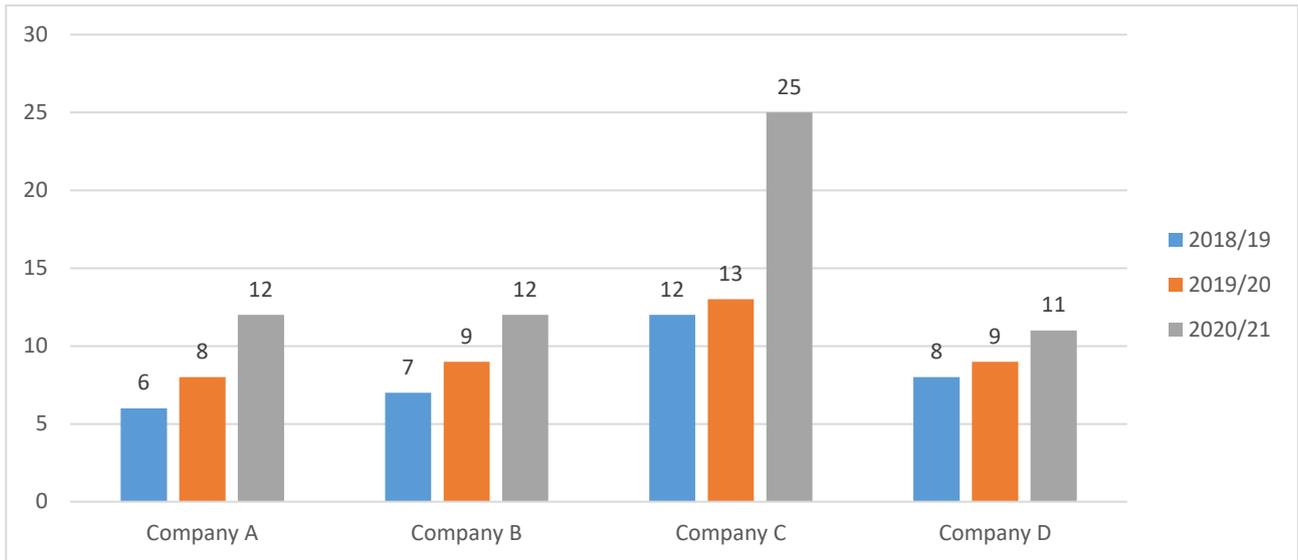
6.2.4 Load Irregularity

For 2020 / 21, ABC Rail Company reported 63 occurrences to ONRSR for the occurrence type: Load Irregularity. This is shown in Graph 8 below:



Graph 8 – Occurrence data – Load Irregularity – Category A and C.

The ABC Rail Company safety and risk team conducted an internal review of load irregularity occurrence data for 2020 / 21 and identified that 60 or approximately 94% of those occurrences were Category C occurrences. Of those 60 Category C occurrences, ABC Rail Company identified that 25 or approximately 42% involved reports of ineffective / loose load restraints on specialised intermodal containers transporting timber construction materials from one customer, a manufacturer in South East of South Australia. These specialised intermodal containers are loaded by the manufacturer at their facility and transported via road to the SFT where they are loaded onto rail services to the DPFT for export. The breakdown of these Category C load irregularities by customers is shown in Graph 9 below (Company C):



Graph 9 – Occurrence data – Load Irregularity – Category C – Sorted by customer.

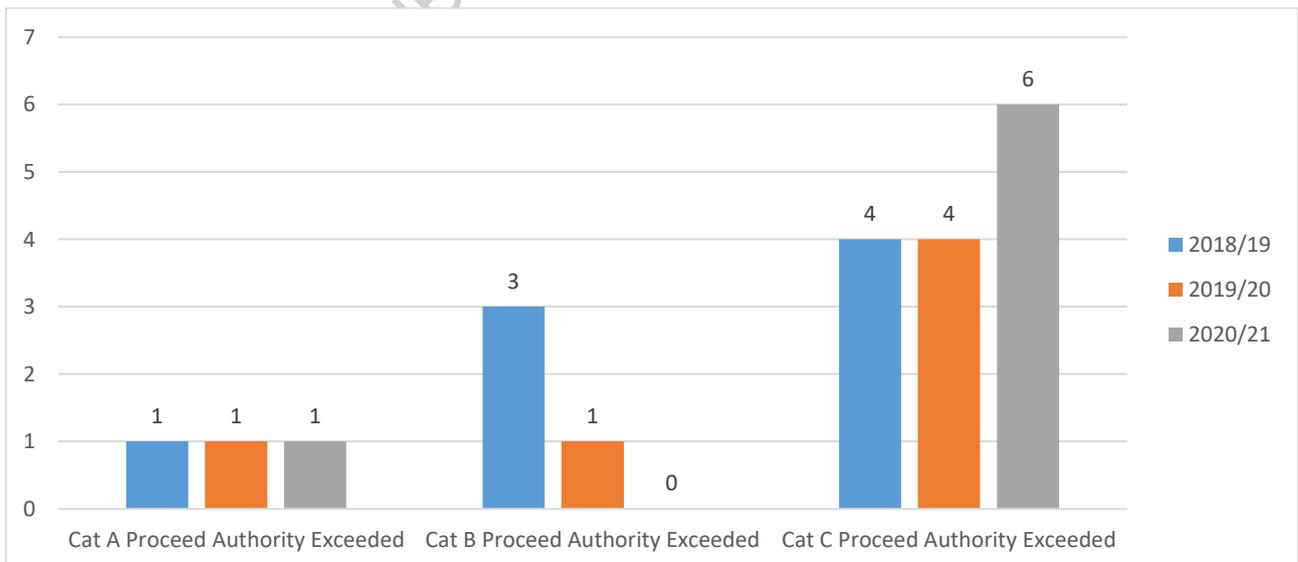
The ABC Rail Company liaised with the manufacturer following identification of this issue and reached mutual agreement to provide an additional centre load restraint for each container.

Graph 9 also indicates a rising trend in Category C load irregularity occurrences involving other customers. ABC Rail Company has made this change a requirement for all customers and the *ABC Rail Company Freight Loading Manual* has been updated accordingly. ABC Rail Company has notified all customers of the change and the relevant internal pre-departure inspection checklists have been updated to ensure the additional loading restraint is present.

ABC Rail Company will schedule a compliance inspection related to this issue as per the ABC Rail Company SMS internal audit program. ABC Rail Company will also monitor occurrence related data for this matter.

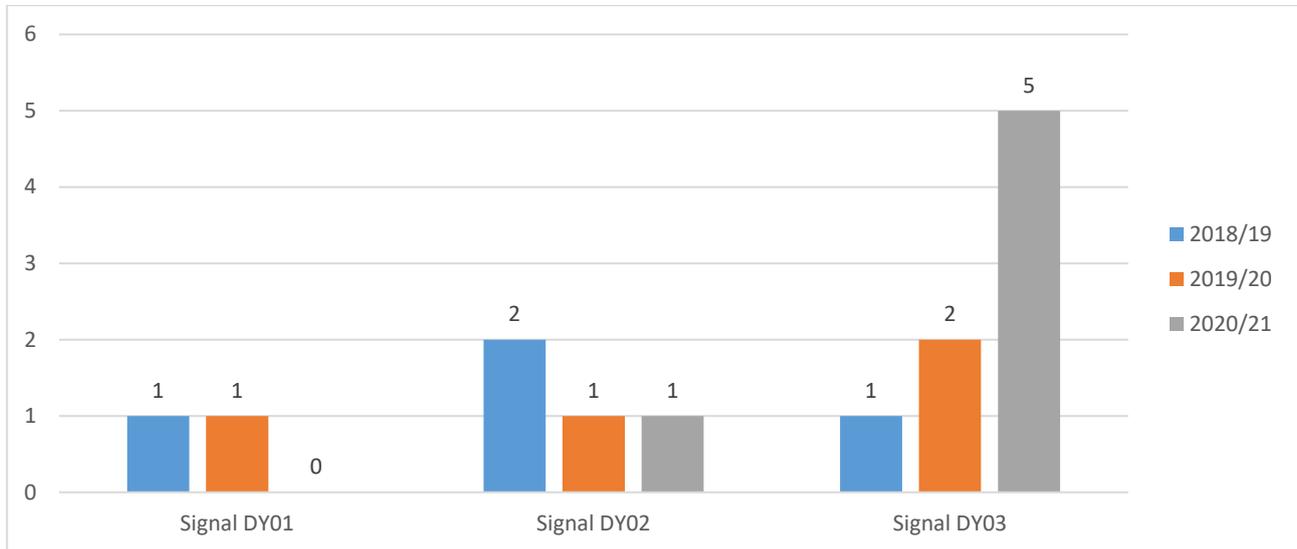
6.2.5 Proceed Authority Exceeded

During 2020 / 21, ABC Rail Company reported 7 occurrences to ONRSR for the occurrence type: Proceed Authority Exceeded. This is shown in Graph 10 below:



Graph 10 – Occurrence data – Proceed Authority Exceeded – All categories.

As shown in Graph 10, for 2020 / 21 there was no change in Category A occurrences for this type and a reduction in Category B occurrences. The number of Category C occurrences rose from 4 to 6. The ABC Rail Company safety and risk team identified that of those 6 Category C occurrences, 5 were SPAD's at one signal within the DPFT where the train remained within the yard (signal DY03). This is shown in Graph 11 below:



Graph 11 – Occurrence data – Proceed Authority Exceeded – Category C – Sorted by Signal ID

Further investigation by the ABC Rail Company safety and risk team identified a potential signal sighting issue at Signal DY03 related to legacy incandescent signal lamps and redundant signage. This was identified to have increased the risk of SPAD's at this location. A decision was made to upgrade all DPFT signals from incandescent lamps to LED's and to remove the redundant sign. ABC Rail Company will monitor occurrence data related to this issue.

6.3 Other

The above elements do not provide a full coverage of safety risk management performance, so opportunity will also exist for the operator to provide commentary, supported by analysis as appropriate, on any other safety issue that has been identified and are being addressed. Again, this is intended to demonstrate active management of other significant safety issues by the operator.

As outlined in section 3 of this Safety Performance Report, ABC Rail Company has identified an emerging threat that may pose an additional risk to ABC Rail Company operations, primarily in the use of drones and associated risks for security and safety.

ABC Rail Company recognises that the emergence of this technology may provide significant opportunities to enhance the safety and effectiveness of many aspects of rail operations. Further risk assessment workshops will be conducted and will include emergency service agencies.

ABC Rail Company intends to raise this emerging issue for further industry discussion at the next National Rail Safety Convention.

7 Safety Initiatives

Describe any significant safety initiatives that will be developed and/or implemented during the coming reporting periods that may not have been covered in the above.

At the June 2021 Board Meeting, the ABC Rail Company Executive Board approved the plan to implement 'Project - See something Say something', a safety initiative to encourage timely and accurate incident notification through internal reporting channels and therefore to the appropriate authorities. It is forecast that in the initial phase, this may result in an increase in occurrence notifications both internally and where required, to ONRSR. ABC Rail Company will closely monitor this occurrence data and will respond to any identified trends or safety issues as per the provisions in the ABC Rail Company SMS. ABC Rail Company believes this is a positive initiative that will support enhanced evidence-based risk management and decision making. Outcomes of this initiative will be reported to ONRSR in future Safety Performance Reports.

8 Future Operational Challenges

Describe any future operational changes that are being considered, or have been confirmed, or any external factors impacting railway operations that are likely to significantly change the risk profile of the operator. This is intended to provide the Regulator with an awareness of changes that are likely to be associated with future notification of change or variations to accreditation.

The following details are subject to due diligence and appropriate regulatory approvals. ABC Rail Company is currently in the initial scoping phase on significant expansion and vertical integration of its transport and logistics operations via acquisition of an existing rail transport operator and a port operator on Australia's eastern seaboard. Further details will be provided to ONRSR as required under RSNL in due course.

9 Endorsement for Submission

Provide clear endorsement of the content of the report prior to submission to the Regulator by an appropriate office holder within the rail transport operator.

The 2020/21 ABC Rail Company Safety Performance Report has been authorised for distribution by the Director Communications ABC Rail Company and endorsed by the CEO and Board of ABC Rail Company on 28 August 2021.

10 Appendix

Include additional information as necessary.