



# National Rail Safety Data Strategy 2018 - 2022

# BACKGROUND

The first national strategy for rail safety data was released in October 2008 by the National Transport Commission (NTC) and contained actions under three strategic themes to address identified issues to improve quality and availability of rail safety data.

The rail industry has matured significantly since that time including regulatory responsibility now being undertaken nationally by the Office of the National Rail Safety Regulator (ONRSR).

All stakeholders and in particular ONRSR, the Australasian Railway Association (ARA), Rail Industry Safety and Standards Board (RISSB), Australian Transport Safety Bureau (ATSB) and rail transport operators continue to recognise the importance of consistent, quality and accurate data when making decisions relating to rail safety. This new strategy is based on the themes of the original strategy which remain applicable to continuing to improve data quality and availability.

# VISION

To have consistent, quality and accurate national rail safety data that is readily available to stakeholders when making decisions relating to rail safety.

# PURPOSE

Quality data is essential for making decisions and managing risks to rail safety. While the responsibility of the primary stakeholders identified in this strategy vary significantly they all have a common goal of improving rail safety in Australia.

ONRSR, ARA, RISSB and industry have worked together to develop this strategy to provide a mechanism for identifying and focusing on the safety data needs of key stakeholders, facilitating improvements in the quality, timeliness, sharing and use of data, without unnecessary regulatory burden.

## CURRENT ISSUES

While progress has been made since the NTC's strategy of 2008 - 2010, a number of issues remain as the need for high quality, timely data increases.

As the rail industry matures, data analytic tools advance and IT platforms are enhanced, the opportunity arises to review the current approach and re-shape it to meet the requirements for risk-based regulation and good safety decision making. The following areas of concern have been raised:

- = Whether the right data is being reported for the right purpose and collected by the right organisation;
- = Whether the data is being reported and collected in an appropriate timeframe;
- = Potential duplication of data being reported and collected and whether this can be streamlined;
- = The quality of data;
- = Efficiency of the reporting and collection of data and whether this be improved;
- = Sharing of and access to national data to better meet the needs of stakeholders;
- = Reporting burden as a result of uniform reporting requirements irrespective of type or scope of operations;
- = Legal requirements/constraints for the collection and sharing of data between stakeholders.

## OBJECTIVES

To ensure that rail safety data:

- = Meets the identified needs of governments, industry and other primary stakeholders;
- = Supports the data needs of secondary stakeholders;
- = Supports good decision-making about rail safety;
- = Guides actions to improve rail safety;
- = Provides timely, accurate and relevant information about rail safety performance;
- = Reduces regulatory burden on industry.

# STAKEHOLDERS

## Primary

- = Australasian Railway Association (ARA)
- = Australian Transport Safety Bureau (ATSB)
- = Governments and Ministers (state and federal)
- = Office of the National Rail Safety Regulator (ONRSR)
- = Rail Transport Operators (RTO)
- = Rail Industry Safety and Standards Board (RISSB) as owner of the Australian Rail Risk Model (ARRM)

## Secondary

- = Australasian Centre of Rail Innovation (ACRI)
- = Australian Level Crossing Assessment Model (ALCAM) National Committee
- = Association of Tourist and Heritage Rail Australia (ATHRA)
- = National and jurisdiction level crossing committee
- = TrackSAFE
- = Other industry specific committees as appropriate

# STRATEGIC THEMES

The strategy has three themes which contain actions to address the identified problems and to improve rail safety data:

## 1. BETTER FOCUSED NATIONAL DATA

The national data ONRSR currently holds and collects is a combination of legislative requirements under the *Rail Safety National Law* (RSNL) along with data previously collected by jurisdictional regulators.

The occurrence reporting requirements have been slightly refined by ONRSR during the past few years, including publication of the Notifiable Occurrence Reporting Requirements document in 2017; however a full review of all reporting requirements (including occurrences) has not been undertaken since ONRSR's inception.

RISSB has developed and released the ARRM, the population of which relies on rail safety data. Data is also required to populate the ALCAM as well as other reports and analysis undertaken by other committees.

As we move forward into a more challenging time of risk-based operations and regulation, where systems and expectations are changing rapidly, it is essential to have better focused national data available. Technology is developing rapidly and will provide greater capacity and options to support better focused national data and the sharing of this data to ensure an accurate understanding of the current, short and long term trends in rail safety in Australia. Better focused national safety data will support good rail safety decision making.

In order to achieve better focused national data, the following actions will be undertaken to ascertain stakeholder data needs, including **what** data is need **when**.

### Action 1.1 Determine legislative reporting requirements of ONRSR.

The collection of relevant data by ONRSR will continue to be required to maintain oversight of rail safety performance.

*ONRSR to identify its requirements, including timing, in line with its risk-based approach to regulation.*

**Action 1.2** Specify the national data that is required to meet the needs of RTOs, the ATSB, Governments and Ministers (state and federal) and RISSB.

*ATSB, industry and RISSB representatives will identify their data requirements, including timing, and develop a recommended data set as the high level national data set.*

**Action 1.3** Specify who is responsible for reporting collecting and managing the agreed data set (in part or as a whole).

*Once all data requirements are identified, agreement is to be reached on who will collect and manage the data.*

## **2. BETTER DATA QUALITY**

Improving the quality and timeliness of data will ensure its relevance and usefulness. The value of collecting data is limited if the quality, or perception of the quality, is that the data is unreliable, old or provides little value in reflecting the picture of rail safety.

With the commencement of ONRSR, standard reporting of notifiable occurrences and other data requirements has been improving. ONRSR provided clarification for industry on the data requirements through the publication of Reporting Requirements for Notifiable Occurrences in 2017; however the quality, timeliness and efficiency in the collection of data by ONRSR still requires enhancing to provide better quality national data to all stakeholders and alignment with other data being collected.

In order to achieve better data quality, the following actions will be undertaken to ascertain **how** data is reported, captured and shared.

**Action 2.1** Reporting requirements of ONRSR to be tailored as appropriate for specific sectors of the rail industry.

*Recognising the different risk profiles and operating environments of the rail industry, one size fits all reporting is to be challenged and aligned to the data required to enable ONRSR to be an effective risk-based regulator.*

*With the finalisation of actions under theme 1, ONRSR will provide supporting documentation and systems to support high quality data being provided.*

**Action 2.2** Identification of how richer information (e.g. chain of events, contributing factors and other relevant information) can be efficiently reported, captured and shared amongst stakeholders.

*A broader approach than just top event occurrence reporting is required to be undertaken as part of this strategy. ONRSR, industry and other stakeholders will explore the most effective way to report, capture and share data between themselves and others in relation to chain of events, contributing factors and other relevant information.*

**Action 2.3** Specify the means of collection and validation of the national data sets required by stakeholders.

*The means of collection and validation of different national data sets required by different stakeholders is to be appropriate ensuring enough time is provided to support the quality of the data being provided.*

**Action 2.4** Revise the RSNL to reflect the outcomes from actions as required.

*As a result of the outcomes of work undertaken under this strategy, ONRSR will progress through the Transport and Infrastructure Council required changes to RSNL and Regulations.*

### 3. BETTER CONSISTENCY AND COMPARABILITY

The effective use of the national data set to drive improvements to rail safety decision making will only be possible through a data set that delivers consistency and comparability of data collected from multiple sources.

In order to achieve better consistency and comparability of data, the following actions will be undertaken to determine **how** technology can be utilised to improve consistency and availability for stakeholders.

**Action 3.1 Improve consistent interpretation and application of rail safety data.**

*How rail safety data is classified, recorded and reported also affects the quality of the data. With new technologies available to assist in this area an essential part of this strategy is to identify relevant technologies and develop training and education material to assist operators in fostering an enhanced reporting culture that provides accurate data to ONRSR.*

**Action 3.2 Better rail safety data available to stakeholders.**

*A lot of rail safety data is collected by many different stakeholders but the efficient and effective sharing of this data is not currently meeting the needs of stakeholders. There are many reasons for this which will be identified and addressed by this strategy.*

**Action 3.3 Agree technical solutions to assist in the delivery of the outcomes of this strategy.**

*Technology has moved past the need for a single consolidated database. It will be necessary to identify where relevant data should be held and how this will be made available.*

## IMPLEMENTATION

The National Rail Safety Data Strategy will be supported by an action plan, developed by the Steering Committee, which will contain activities, responsibilities and timeframes required to achieve the strategic themes.

Once outcomes are agreed, consideration will also be given to a timeframe for implementation of the changes including any legislative changes that may be required.