

Safety Management System Modules

Element 9 – Safety Performance Reporting

What and Why

The law says that rail operators must have a way to measure the effectiveness of the Safety Management System. Although it states that operators must use Key Performance Indicators (KPIs) to measure safety performance, it is up to the operator to determine which KPIs they want to use.

By developing KPIs that are appropriate to the specific business, operators are able to identify trends, as well as areas of potential safety improvement.

KPIs are simply an agreed measure of something, and there are some principles that should be considered when deciding how to measure performance. The main principle to consider is that any performance measure should be SMART. That is, that any measure to be recorded should be Specific, Measurable, Achievable, Realistic and Timely. For each KPI being developed, it may be of benefit to check that each of these applies.

The law also requires certain types of safety performance reporting that must be provided to ONRSR. Details of these are provided in an ONRSR Guideline for Safety Performance Reporting.

How

Operators can decide what additional things that they want to measure that will demonstrate that their operations (and safety management system) are delivering safe outcomes.

A document in the SMS that describes the measures selected by the operators will provide guidance and instruction to those who are required to collect or report data.

Procedures within the SMS describe the process and data to be included in the Safety Performance Report including details of approval /endorsement by the governing body.

Processes for updating data should be included in procedures and some operators will develop spreadsheets and graphs to help with data analysis.

Traditionally, operators have used a number of “lag” indicators. These are measures of events that have already happened and are usually negative and are based on measures that an operator would prefer not to have. Examples include:

1. Number of accidents or incidents in a year;
2. Number of person/ train interface incidents in a year;
3. Number of derailments in a year;
4. Number of proceed authorities exceeded in a year;
5. Number of Non-Conformances from external audits a year;
6. Number of corrective actions recorded from internal audits in a year.

A demonstration of a positive safety culture would be the use of positive “lead’ KPIs. These are measures of goals that support a proactive approach to safety.

Examples could include:

1. 100% completion of pre-start checks are conducted;
2. 100% adherence to periodic infrastructure inspection schedules;
3. 100% adherence to periodic rolling stock inspection schedules;
4. All health assessment renewals completed on time;
5. All rail safety worker competencies are renewed on time;
6. All identified interface agreements are reviewed every 2 years;
7. Every interface agreement has an associated risk assessment;
8. All internal audits are carried out as scheduled in the audit schedule;
9. The annual review of the SMS is carried out as scheduled;

It is essential that operators select measures that are appropriate to them. An operator who has no level crossings would not benefit from a KPI that measures the number of level crossing incidents.

Rather than a random selection of measures, operators should review risk assessments /risk registers and develop measures that will assist in managing the greatest risks for those operations.

It is not essential to have a large number of KPIs. For smaller less complex operators, it is more beneficial to have a smaller number of KPIs that are true measures of the effectiveness of the SMS.

Results of performance measures can be posted on noticeboards so that all members, rail safety workers contractors and visitors can understand the safety performance of the operations.

Where standard industry KPIs are used, it may be appropriate to investigate and apply any criteria from relevant Australian Standards.

Any agreed safety KPIs used to measure the effectiveness of the SMS should be included in the Safety Performance Report.

A centralised register or document should be created to capture safety performance results as they occur.

A year on year comparison of performance could be developed and included in Safety Performance Reports.

Who

The Executive Committee/Board should endorse KPIs to be applied as part of their governance obligations.

The Executive Committee /Board should endorse the Safety Performance Report before it is submitted to ONRSR.

Managers and Supervisors should make sure that all relevant people know what data is being collected and why.

Managers and Supervisors should review the results of safety measures at regular management meetings to identify trends or initiatives to improve safety.

Everybody who performs work for the operator should be able to see regular safety performance measures.

Everybody should understand the process to capture safety data, and who should be advised.

When

The Safety Performance Report frequency is included in each operators Notice of Accreditation.

For ease and currency, safety measures should be updated on a regular basis, such as monthly or quarterly, depending on the frequency of the operations.

Safety performance should be discussed at volunteer and rail safety worker briefings, tool box talks and any other team type meetings.

List of relevant documents (internal)

Element 8 – SMS Review

Element 23 – Management of Notifiable Occurrences

Element 23 – Appendix A - Example Spreadsheet for Notifiable Occurrence reporting

Safety performance measures procedure

Management of Notifiable Occurrences

Links (external)

Available on the ONRSR website (www.onrsr.com.au)

- ONRSR Safety Performance Reporting Guideline
- Rail Safety National Law

[RISSB website](#)

Various private safety websites for example (and not endorsed by ONRSR)

- > [SAI Global](#)
- > [Safework Australia – Disease and Injury Statistics](#)

Appendices

A. Example Annual Safety Performance Report (available from www.onrsr.com.au)