

Safety Management System Modules

An introduction to the Modules

Background

ONRSR acknowledges that the Tourist and Heritage sector of the rail industry in Australia is diverse, both in the scope and nature of operations, but also when considering infrastructure and rollingstock assets, geographic location, the level of interaction with other operators, and the number and type of safety interfaces.

As such, ONRSR has included the sector as one of its national priorities and has commitment from ONRSR's Chief Executive and Executive Team to support the sector.

Although a number of tools are available to the sector, there is an acknowledgement by both industry and ONRSR that 'one size does not fit all', and ONRSR is now developing a framework (See Appendix A) for use by smaller Tourist and Heritage operators that may have less-complex operations.

These operations are typically represented by some or all of the following criteria¹:

- > operate on a branch line or isolated line, without other rail operators on the same track,
- > have a small uniform fleet of rollingstock,
- > operate at slow speeds of less than 40 km/h,
- > manage a yard or sidings only may carry passengers,
- > are often run by volunteers and have a limited and changing workforce,
- > are usually smaller and everyone and everything is in one general location,
- > often have limited resources.

Legal Requirements

The RSNL sets out the legal requirements that all rail transport operators must meet to demonstrate they are managing the safety of their railway operations. Key to this is a Safety Management System (SMS).

An SMS is a living, breathing set of policies and procedures that describes how safety is managed in an organisation. It should be appropriate for the organisation that is using it and components of it should be used on an everyday basis.

The law outlines twenty-nine (29) elements that should be addressed. Together these elements should provide an overall description of what an operator does to manage safety risks.

Each operator will have a unique SMS, depending on the nature and scope of their operations – a section car operator will have a different SMS to an operator of rail motors.

Although some hazards will exist across all operators, regardless of the scope of their operations, the risk and associated controls will vary accordingly.

¹ As defined at the T&H workshop, September 2019

Modules

In response to feedback from the Tourist and Heritage sector, and supported by further stakeholder engagement, ONRSR has now developed a number of individual modules which will provide support to the sector to meet their regulatory obligations.

These modules have been developed as a mechanism for less complex operators and provide information as to how the sector can customise and combine modules to develop a safety management system that is specific and appropriate to the scope and nature of their operations and their accreditation.

It should be noted that the modules are not to replace existing Safety Management systems that are in place, are effective and are in use to manage safety. They are provided as a guide to smaller less-complex operators who may require additional support in developing an appropriate SMS.

The modules can be used as a checklist to assist smaller less-complex operators to assess their existing SMS and identify areas of potential improvement.

Format

In the first instance, template modules have been developed, with a single module for each of the twenty-nine (29) SMS elements. The format of the modules is based on the following principles:

Some of the prescribed elements interface, and to assist operators, mapping of these interfaces is included as an Appendix to this document.

What and Why

Details of the operator's obligations and why this element of an SMS is important.

How

What ONRSR expects from a smaller less complex rail operator.

Who

Information on roles and responsibilities under the law, as well as suggestions for good practice.

When

Indictive timelines, discussion points to consider timeliness of actions.

List of relevant documents (internal)

Types of internal documents that should be in place so that the SMS is a living suite of documents which is in use every time operations occur.

Links (external)

List of relevant external documents that are useful guidance or support materials for the sector.

Depending on the element, modules may contain:

- > thought provokers/ questions for consideration;
- > details of mandatory requirements;
- > scalable options to identify appropriate responses;
- > example suggested documents for inclusion in an SMS, or information about what documents should include.

Implementation

1. Develop scope and nature statement.
2. Establish risk management program – design or adopt a risk matrix with appropriate descriptors for Likelihood and Consequence for the scope and nature of the operations.
3. Provide training or awareness for others in the risk assessment methodology.
4. Develop procedures and risk assessment templates that meet contemporary risk management requirements.
5. Perform risk assessments for key areas of the business, with key people who are knowledgeable and have relevant skill sets. A logical approach may be to risk assess each discrete operation or component of the operations. Examples could be:
 - > Multiple risk assessments for each single operation from start to finish including the stages of operations – rail safety worker sign on, light up, train preparation, train inspection, shunting and marshalling, operating train from start to end of journey and anything that can go wrong, on boarding and offloading customers, stabling and rail safety worker sign off.
 - > Same as above for specific train configurations
 - > Maintenance risk assessments – by category of assets (Rollingstock and locomotives), in workshop and in field, by different categories of maintenance, including use of tools and equipment, skills of rail safety workers etc.
 - > By above and/or below rail.
6. Whatever the approach, risk assessments should take into account the following:
 - > Governance and management – type of organisation, funding, constitution, board /committee requirements, Board /committee member skills and expertise, processes for information flow and decision making.
 - > Operations – location, frequency, time of operation, asset type and level of uniformity, different asset combinations for services.
 - > Rail safety workers required – above and below rail, maintenance, drivers, station masters, customer service attendants.

- > Fitness for duty - Identify classification of RSWs for health assessments, D&A management and fatigue management.
 - > Human Resources – structure and role development, Job /position descriptions, training requirements and competence.
 - > Maintenance – carried out internally or externally, types of rollingstock (trams, carriages, wagons, section cars, trolleys), locomotive types (diesel, steam, electric), workshop arrangements, tools and equipment, skill sets required.
 - > Emergency response and security.
 - > Incident notification and investigation.
7. Check that all aspects of the 29 elements are included in risk assessments.
 8. Review risk assessments to see if any additional controls can be added.
 9. Identify procedures required in light of the 29 elements required.
 10. Start to populate a document with the relevant headings that you will include.
 11. Create document control procedures including naming/numbering conventions.
 12. Identify and document mechanisms of consultation and appropriate stakeholders.
 13. Document procedures for review and consultation.
 14. Ensure ongoing consultation so that procedures are applicable, relevant and appropriate for the scope and nature of the operations.

SMS Structure

Each operator will define the structure of their own SMS, so that it complements and enhances the scope and nature of the operations. In contemporary safety risk management, a typical SMS structure is made up as a result of an initial organisational risk assessment which would identify the areas of risk experienced by that organisation. Each of these areas of risk would form part of a hierarchy of documents, that would typically look like this:

1. An overarching safety policy;
2. Several individual programs that reflect the key areas of risk in the operations;
3. Programs:
 - > will describe what the operator does to manage that aspect of their operations;
 - > may each have their own specific policy (eg Drug and Alcohol Management), although others may not;
 - > will refer to procedures and/or processes related to the subject matter;
 - > will refer to forms that are related to the subject matter.

Where an SMS is required under law, and that law has defined the requirements for the contents of the SMS, in order to comply the operator's SMS must contain details for each of those areas, as a minimum.

In Australia, it means that regardless of what else an operator wishes to have in their SMS, the 29 elements must be addressed in the SMS.

How those elements are presented are entirely up to the operator, and this document provides only one example of many options available to operators for their SMS. Each operator should establish an SMS structure that complements their own operations and approach.

Where an operator elects to use a typical SMS structure as that described here, the 'programs' can be created in a style or approach that complements the operations.

For example, an operator may choose to have individual programs for Drug and Alcohol Management, Fatigue Management and Health Assessments. Another operator may choose to combine all three (3) into a single program entitled "Fitness for Duty" that has a Fitness for Duty Policy (reflecting all three elements).

SMS structure is traditionally formed as a result of an initial risk assessment. Taking the approach described in the "implementation" section of this document, the results of the initial risk assessment should assist in identifying any additional areas of risk (and ultimately, any additional programs) that must be controlled.

For ease, an example of a typical SMS structure is included at Appendix B of this document.

Appendices

- A. Inter-relationship of SMS Modules
- B. Example of a typical SMS Structure

Appendix A – Introduction to SMS Modules (Inter-relationship of SMS Modules)

As indicated in this document, a number of modules are related and can be grouped together within areas of commonality. This diagram provides a high-level representation of these groupings.

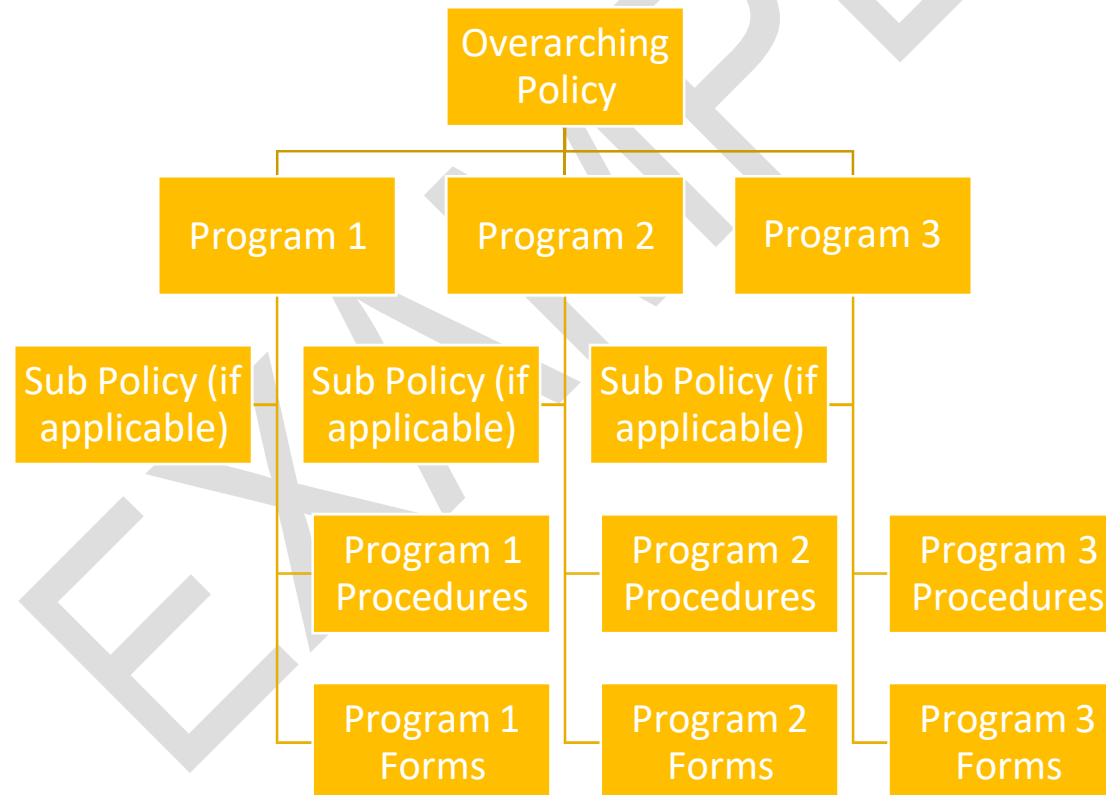
	Area	Grouped Elements
Processes for Implementation & Management	Structure and Responsibility	Management Responsibilities Governance and Internal Controls Resource Availability
	Competence Management	RSW Competence Human Factors Training and Instruction
	Information Management	Safety Interface Coordination Consultation
	Documentation	Internal Communication Document Control Arrangements Written SMS
Operational Activities	Operational Arrangements and Procedures	Regulatory Compliance General Engineering & Operations System Safety Procurement & Contract Management Human Factors Process Control
	Operational Risk Management	Health & Fitness Drug and Alcohol Fatigue Risk Management Manage Notifiable Occurrences Safety Interface Coordination Risk Management Asset Management
	Emergency & Contingency Response	Emergency Management Risk Management Safety Interface Coordination Security Management
Processes for Design and Improvement	Monitoring	Data Collection and Analysis Accident and Incident Reporting Safety Audit Arrangements
	Organisational Learning	Review of SMS Management of Change Corrective Action Safety Performance Measures
	Management of Risk	Regulatory Compliance Risk Management Management of Change Asset Management Safety Interface Coordination Human Factors
	Leadership	Safety Policy Safety Culture Safety Performance Measures Governance and Internal Controls Management Commitment (Safety Policy)

Appendix B – Example of a Typical SMS Structure

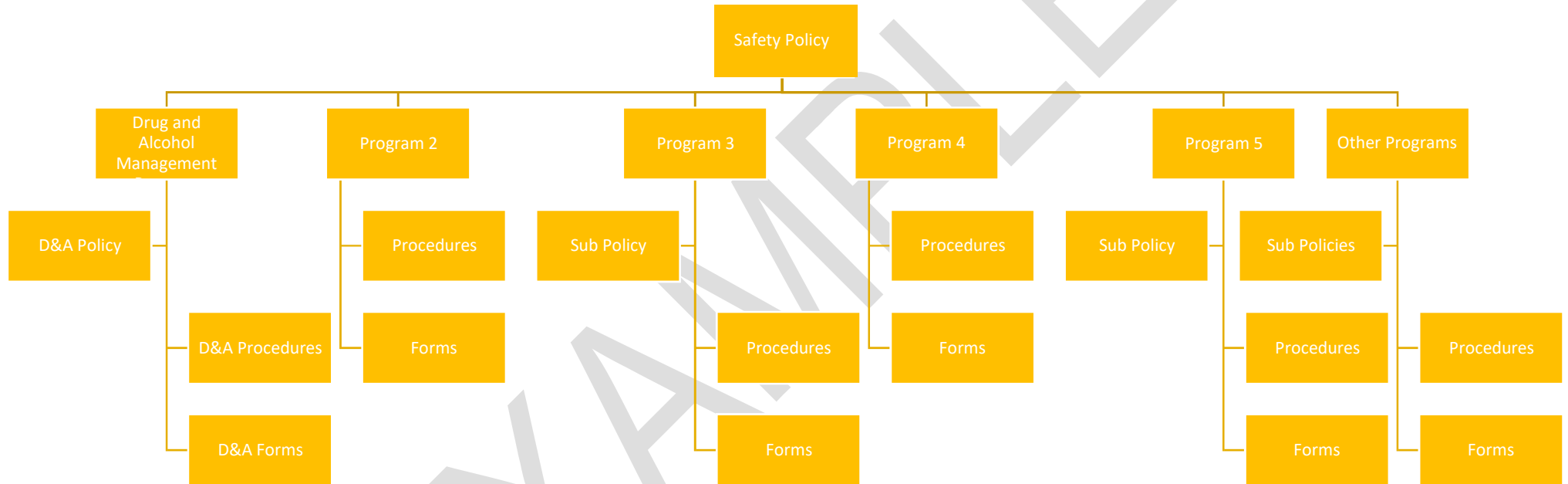
1 Introduction

This document is to provide members of the Tourist and Heritage sector with an example of one of many typical contemporary SMS structures for consideration when designing or reviewing their organisation's Safety Management System. Each organisation should determine the structure of their own SMS to manage specific risks appropriate to their own operations.

2 Example Typical SMS Structure



3 Example of expanding out a SMS Program (Drug & Alcohol Management)



What and Why

A Safety Policy is an overarching document that clearly and simply states the commitment to safety by the most senior body/person in the organisation. It is the cornerstone of the Safety Management System.

Commitment to the policy is usually demonstrated by the signing of the policy either the Chairman of the Board, the President or the entire Executive Committee, depending on the structure of the operator's business.

A safety policy should align with other organisational policies, and should include references to:

- Developing or maintaining a positive safety culture
- The continuous improvement of safety and the SMS, by the operator.

Strong safety leadership is a key component in developing a positive safety culture, and this starts with a clear and concise policy that reflects how safety is regarded in the organisation.

How

Safety policy can be developed in a number of ways, depending on the size and complexity of the organisation.

There are a number of indicative steps traditional to policy making:

1. Identify the need – in this case the need is a legal requirement;
2. Delegate responsibility to a person or group to take responsibility for its development;
3. Gather information – what legal requirements need to be met, are there existing templates that can be used, who can provide guidance?
4. Draft the policy – make sure that the wording and complexity are appropriate for those who have to implement and understand the policy;
5. Consult – with key stakeholders, e.g. members, volunteers, board members, subscribers, etc;
6. Finalise /Endorse – who will approve the policy? What is the process to do this?
7. Consider procedures – what procedures and/or forms will be required to support the policy?
8. Implement – how will it be communicated? Is training/awareness required?
9. Monitor and Review – as part of normal SMS review or when changes occur in the operations as necessary.

A policy will generally have the following headings:

- **Statement of Commitment** – what the promise from the leaders?
- **Purpose** – what is the reason for the policy?
- **Scope** – What is covered by the policy and what isn't;
- **Accountabilities and Responsibilities** – What are the expectations from various workgroups? the Board, the management team, rail safety workers, volunteers, contractors and visitors?
- **Endorsement** – sign off by the most senior leader or leadership group. Depending on the level of complexity, all workers may sign a copy of the policy.

Once implemented, signed copies of the safety policy should be made available in various work locations including operational areas. This will enable everyone who attends those locations to see what the operator's policy is and what the expectations of them are.

Who

The development of the safety policy should be collaborative and include input /endorsement from the Executive Committee/ Board.

The policy should clearly describe the operator's expectations of various work groups that perform work on the operator's behalf.

Everyone who performs work for the operator is expected to comply with the policy.

When

Policies are normally reviewed by senior leaders at least once a year or following an incident.

Consultation should occur with key stakeholders when policies are reviewed.

List of relevant documents (internal)

All SMS Elements

[General Safety Duties under the RSNL](#)

Links (external)

[ONRSR Website](#)

[ONRSR Website – Legislation](#)

[ONRSR Website – Safety Management Systems](#)

[SAI Global](#)

Appendices

A. [Example Safety Policy Template](#)

Document Name:	Safety Policy
Document Number:	P- 0000X

1. Scope

2. Statement of Commitment

3. Responsibilities and Accountabilities

The Executive Committee/Board are responsible for

Managers and Supervisors are responsible for ...

Rail Safety Workers, Volunteers, Contractors and Visitors are responsible for

4. Internal Communication

This policy will be signed and displayed in locations so that it is accessible to all persons, including rail safety worker, volunteers, visitors and contractors.

Signed: _____

Date: _____

Title: *President /Chairman*

Next Review Date: _____

Version No	xx	Version Date:	xx/xx/xx
Approved By:	President, Executive Committee		

What and Why

Safety Culture is not easily defined but can be described as “The way that we do things around here” when we think about safety.

Safety culture can be positive or negative and is a result of the level of importance that people working in an organisation put on safety. A positive safety culture will result when the majority of people have strong safety beliefs, values and attitudes. A negative culture will result when this is not the case.

A strong positive safety culture is usually led from the top and this results from strong leadership and the commitment from senior roles and has some key components:

- Focus on safety leadership and commitment;
- Role of managers in safety
- Consultation and communication with all persons who are impacted by safety;
- Encouraging open and honest communication and feedback without recourse;
- Actively considering the behaviour of people and the impacts of those behaviours (human factors);
- Seeking and recognising opportunities for safety improvement, and
- A willingness to devote resources to safety.

Safety culture is only one component of a SMS but underpins and reinforces the necessary behaviours of everyone who works in the organisation. Without a positive safety culture, the SMS will become ineffective, and incidents and accidents will increase.

How

Safety culture can be hard to measure, although some larger more complex operators use specialist culture surveys.

Safety culture can be demonstrated through a number of consistent actions – how things are done, rather than what is done.

Examples could include:

- Constant awareness and recognition of opportunities to improve safety at safety meeting, volunteer briefings, tool box talks etc.;
- Senior management roles ‘walking the talk’;
- A demonstrated commitment by all at the organisation that safety is everyone’s responsibility regardless of their role or position;
- Safety boards have copies of safety policies countersigned by the majority of members/rail safety workers;
- Responsible persons checking that there has been a response to incidents reported;
- Volunteers, contractors, visitors and employees are all treated the same with respect to safety;
- There is open communication at the organization;

- There is a genuine “just culture” (i.e. one which recognises that mistakes can and will be made, but that processes must be tolerant of those errors – either preventing them or limiting their consequences). A response to an incident should focus on how the railway’s systems allowed the mistake to occur NOT on the individual who made the mistake). NOTE: This does not preclude each individual’s responsibility with due diligence. Recklessness is not excused under a just culture and the individual would be held accountable for their actions.
- People take opportunities to improve safety (e.g. changes to safety procedures to increase safety are proposed and accepted);
- Safety concerns of people are recorded, acknowledged, acted on, and closed-out and monitored by responsible persons;
- A willingness to invest in safety, for example, personal protective equipment (PPE) is provided to all workers with the strict requirement that it is to be worn onsite;
- Dedicated safety roles are created;
- Genuine effort by all levels of the operations to report all incidents & near hits/misses;
- All notifiable occurrences as defined in the Rail Safety National Law are reported to ONRSR;
- Inductions for new starters includes a dedicated section on safety to set the benchmark for safety culture from the start;
- Volunteers or others who continually behave in an unsafe manner are no longer welcomed by the operator;
- People across the operations at various levels confirm that the organisation openly encourages safety feedback from all levels and issues can be reported without retribution.

Who

Safety is everyone’s responsibility.

The Executive Committee/ Board will set the agenda and make decisions in the interests of the organisation, but with a considered approach to safety.

As the most senior group, the Executive Committee/ Board may wish to sign off on these procedures as part of their governance processes.

Managers and supervisors all demonstrate their commitment to safety by complying with the SMS and showing safety leadership at all times.

All rail safety workers, volunteers, contractors and visitors all actively contribute to safety improvement, encourage safe behaviour and report all incidents and occurrences in a timely manner.

When

Safety culture is a measure of behaviour and attitude and is aligned with cultural values and beliefs. A consistent commitment to safety should be a priority for everyone who works in the organisation, regardless of their role.

List of relevant documents (internal)

All SMS Elements

Notifiable Occurrences reporting procedures

Incident Investigation procedures

Links (external)

[ONRSR Website – The ONRSR Way](#)

[ONRSR Website – Guideline - Small isolated line heritage operations – Safety Management System \(SMS\)](#)

[ONRSR Website – Guideline - Safety Management System](#)

[ONRSR Website – Rail Safety National Law](#)

Appendices

None

What and Why

It is essential that the governing body of any operator has sufficient knowledge to manage their rail operations. If there is no governing body, then the duty of sufficient knowledge falls to the person(s) managing the railway operations.

'Sufficient knowledge' includes that they understand:

- what risks have been identified, and to question and query the management of those risks;
- whether or not the operator is compliant with its obligations under the law.

This includes that they are able to determine:

- whether or not the safety management system (SMS) is working effectively, and
- that risks are being identified, assessed and managed so far as is reasonably practicable; and
- that risk controls put in place to manage safety are regularly reviewed and updated accordingly.

The governing body must also implement systems and procedures to ensure that decisions or directions made by them that affect rail safety are being implemented effectively.

How

There is a management group/committee which meets regularly to ensure they are aware of the risk profile of the railway operations and continually monitor the risks to ensure that they are being effectively managed.

Minutes of these meetings are documented and kept.

A governance process is documented for ensuring Board/Committee decisions are implemented such as meeting notes and actions arising with follow up at the next meeting. This could include descriptions about the hierarchy of authorities for board /management decisions. An example could include, that the Board approves the annual insurance renewal, not the General Manager.

There may an additional risk or safety committee that also reports to the management group/ Executive Committee or Board. Meeting notes from this sub-committee could be tabled at Board meetings for review and information.

Things to be considered include:

- How do the instructions of the management group/committee get communicated to those who must implement those instructions?
- How does information about safety related matters flow from those who implement the system up to the management group/committee?

A dedicated report is tabled at committee/board meetings that includes details on safety aspects such as, and as appropriate:

- Changes to risk and controls;
- Incidents and accidents (including any investigations and findings);

- Details of notifiable occurrences;
- Relevant safety performance reports to identify trends, which could include, but not be limited to:
 - Drug and alcohol test results;
 - No of incidents by type/location or workgroup;
 - Lost time injuries or medically treated injuries.
- Results of any safety audits or inspections (internal and external);
- Updates on any identified non-conformances;
- Changes to operations within the operator's accreditation;
- Any proposed changes to the operator's accreditation or material internal changes;
- Changes in legislation that may impact the operator;
- Any other item that could impact the safety performance of the operator.

Other papers may be tabled at committee /Board meetings reporting on other aspects of the business, such as:

- Status of locomotive and/or rollingstock assets for operability;
- Status of track maintenance and repairs;
- Financial reports including updates on insurance and financial capacity;
- Updates on governance obligations.

In addition to the workshop ONRSR has produced a [short video](#) on the important role Tourist and Heritage operators' Board members have in relation to safety culture and risk within their organisations.

Who

Any Executive Committee / Board or other governing group must ensure that they understand their legal governance obligations. They should also ensure that they have 'sufficient knowledge' to fulfil their legal obligations.

Managers and Supervisors should also understand that they have personal as well as professional obligations under the law.

All Rail Safety Workers are required to comply with the contents of any SMS, to identify opportunities for improvement, to follow reasonable instruction and to keep themselves safe, while not endangering others. It is essential that safety culture is positive and supports reporting from the ground upwards in structured and transparent process.

These obligations should be clearly articulated in job /role descriptions and included in inductions so that all position holders are clear on the expectations of their roles.

When

Committee /Board meetings should be set up on a regular basis that is appropriate to the scope and nature of the operations. Monthly Board meetings may be appropriate for a larger complex operator while a smaller less complex operator on an isolated track that operates only on public holidays may have quarterly meetings.

Ultimately, the frequency of meetings should be determined by the Board, who should satisfy themselves that the timing will allow them to be sufficiently informed about the safety of the operations.

Operators may elect to have a dedicated Executive Committee/Board meeting for the review of the SMS. Others may elect to review components of the SMS on a regular basis over an agreed period.

List of relevant documents (internal)

SMS Modules – All.

Board Meeting Standing Agenda template

Board Meeting minutes template

SMS Review Agenda

Company Constitution

Links (external)

www.asic.com.au

www.acnc.gov.au

<https://www.onrsr.com.au/news-and-events/t-and-h-sector-workshops-update>

Appendices

A. Governance and Internal Controls – Defining Nature and Scope

Appendix A – Governance and Internal Controls (Defining Scope and Nature)

1 Introduction

The first step in developing a Safety Management System (SMS) for any organisation is to understand the scope (extent) and nature (type) of their proposed operations.

It is important for the Board /Executive Committee to work with key managers in the organisation to clearly articulate what the scope and nature are, as this will set the boundaries for all safety policies and procedures contained within the SMS.

It is also a useful exercise to ensure that everyone understands exactly what is being done, when and how, and will also stimulate discussion about a number of other business-related aspects, including;

- How to manage risk, and what can the business bear;
- Business and operational strategy;
- Type and appropriateness of insurance;
- Manning and resourcing;
- Funding maintenance activities.

A robust discussion about the scope and nature of operations is of great importance and will contribute significantly to the development of an SMS that is appropriate for the operations, underpinned by good risk management principles.

2 Defining Scope and Nature

Each SMS must describe how a specific operator manages the risks specific to their operations. It is therefore important that the scope and nature of the proposed operations is clearly described so that the SMS can be accurately assessed specifically for the operations for which it has been developed.

Depending on the complexity of the operations, this may be a very simple description, consisting of only a few short paragraphs.

Items to consider when describing the scope and nature of the operations include:

- The purpose of the railway operations – why operate?
 - Passenger experience?
 - Static displays;
 - Demonstrations as part of a museum display;
- The type of network rules (safeworking system) used to control and co-ordinate the movement of rolling stock, including but not limited to:
 - Staff and Ticket;
 - Train Orders;
 - Work on Track;
 - Pilot Orders;
 - Block Working;
 - Proceed Authorities;
 - Complying with another Rail Infrastructure Manager's network rules;
 - Independent Network Controller or localised Station Master;
 - Role of the Controller;
- The type and number of rollingstock intended to be used in the operation;

- Single or multiple trains at once;
 - Consistent or varied fleet of locomotives and /or rollingstock;
 - Steam locomotives, rail motors, trolleys, trams or something else;
 - Diesel or electric;
 - Single or multiple carriages;
 - Consistent or varying carriage types;
- How often trains will run;
 - Daily, weekly, monthly or annually;
 - What does that mean for maintenance – who will maintain, where and when?
- The geographical boundaries of the operations – where will operations occur;
 - Main line;
 - Isolated line or siding;
- The physical railway infrastructure:
 - Location;
 - Length of infrastructure being operated;
 - Bridges;
 - Station Buildings and Platforms;
 - Level crossings and how they are protected (active or passive).
- Local environmental factors such as:
 - Landscape – valleys and mountains, bush or city;
 - Significant geotechnical characteristics – tunnels, bridges, excavation, clearances, dams, buildings, roads?
 - Extreme/seasonal weather conditions – floods, bushfires, drought, heat, or cold?
- Limits and restriction of the operations. For example, track speeds, axle loads.
- How operations are funded (in general terms, to demonstrate the organisation's capacity to deliver safe operations);
 - Member donations;
 - Government grants;
 - Local or Council funding;
 - Self-Sustaining;
 - Corporate support;
 - Investors;
- Whether any activities are contracted out to other parties, and what arrangements will be in place to manage them.

Having a clear description of the scope and nature of operations means it is easier to determine if operators' risk assessments are appropriate for their particular circumstance.

It will also help operators (and ONRSR) when they are considering making changes to their operations and whether a variation to accreditation is required.

Safety Management System Modules

Element 5 – Management, Responsibilities, Accountabilities and Authorities

What and Why

One of the key components of a safe workplace is that everyone who works there understands what they are required to do, how to do it, what they have authority to do, and what the roles and responsibilities of others are.

This means that people are clear on what they can and cannot do and should normally operate within the bounds of those tasks/duties.

It is also important to identify and communicate how roles inter-relate. For example, if a fitter is authorised to repair a tram to a particular standard and a supervisor is authorised to certify that the tram is fit for purpose and safe to operate – are the descriptions of their authorities aligned in this way and clearly stated in position descriptions and procedures?

Procedures in the Safety Management System (SMS) should also describe how risks to safety are to be reported, and to whom. They should also describe the authorities that are given to roles which have safety responsibility and to the level that the authority is made.

The development of these types of documents and procedures is also a requirement under prevailing health and safety legislation.

How

A simple organisation chart should be developed which details the allocation of key safety roles and identifies those roles with specific responsibilities such as certification of rolling stock, or, being the contact person for the Office of the National Rail Safety Regulator.

An organisation chart should indicate roles not individuals as some people may perform safety work across multiple roles. Each role has a job /role description which details:

- Their responsibilities;
- Their accountabilities; and
- Level of authority.

The competency that is required to hold each position and carry out the role should be documented in the SMS. This might be as part of a job description or as part of a training or competency matrix/framework.

Some operators will have position holders sign their job description as confirmation of their understanding of their accountabilities and responsibilities.

Depending on the level of complexity, the operator may describe the responsibilities, accountabilities and authorities as part of the safety policy document.

Operators may develop a governance process which include describes the hierarchy of authorities for board /management decisions. An example could include, that the Board approves an annual insurance renewal, not the General Manager.

Who

All rail safety workers and people with safety responsibilities are expected to work within the limits of their authorities and only when competent to do so.

When

Organisational structure and changes to authorities and accountabilities should be considered as part of the risk assessment process, when a change that may affect rail safety occurs. For example, this would be of significant benefit as part of a change, such as when an operator introduces a new type of rolling stock not previously operated.

List of relevant documents (internal)

Element 2 – Safety Policy

Element 4 - Governance and Internal Controls.

Element 15 - Training and Instruction

Element 24 - Assessment of RSW Competence

Element 27 – Health and Fitness

Element 30 - Resource Availability

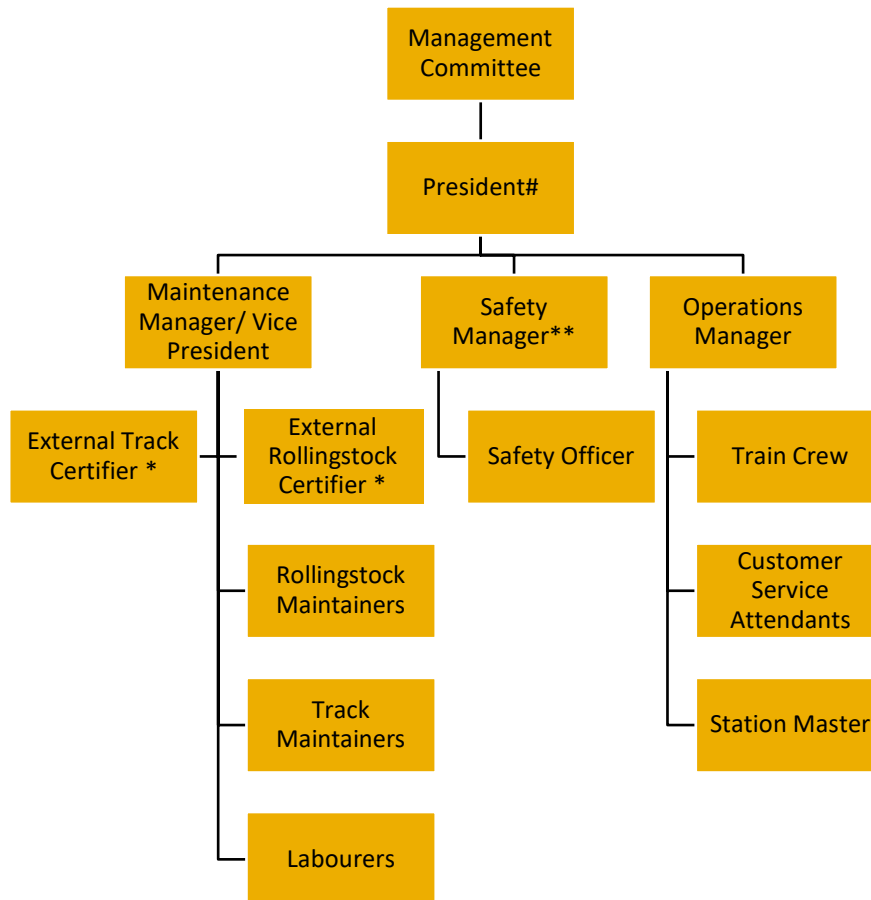
Links (external)

[ONRSR Website – Publications](#)

Appendices

- A. Example Organisation Chart
- B. Example Matrix of Responsibilities

Appendix A – Management Responsibilities, Accountabilities and Authorities (Example Organisation Chart)



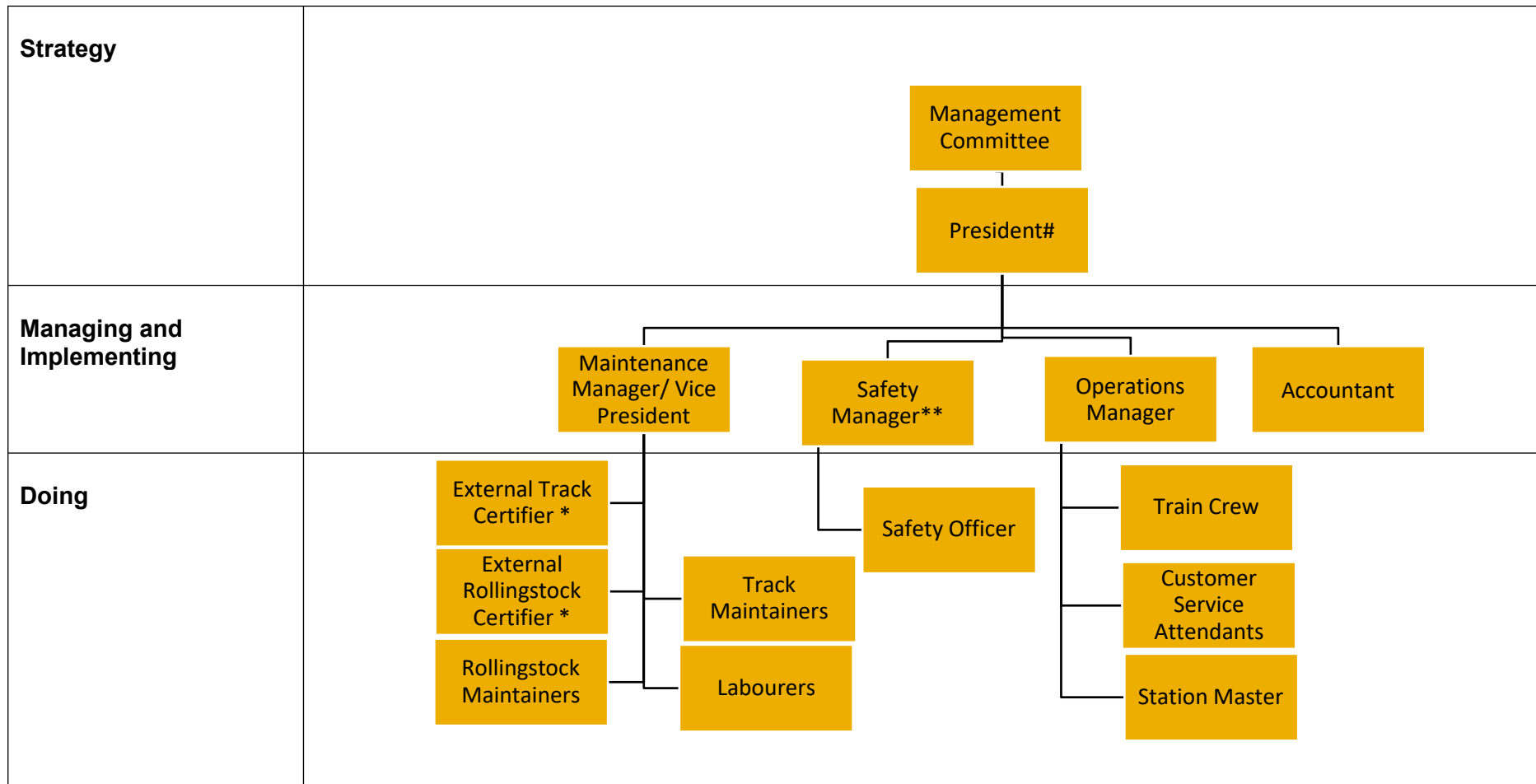
This role is the authorised contact person for the railway as described in the SMS.

* These roles are responsible for certification of track /rollingstock as described in the SMS.

** This role is responsible for the development and implementation of the SMS

Appendix B – Management Responsibilities, Accountabilities and Authorities (Example Matrix of Responsibilities)

This diagram provides an example structure that indicates which types of decisions are made by which roles.



This is an example table that may assist operators in determining roles and responsibilities.

Element	Rail Safety Workers	Admin Assistant	Safety Manager	Operations Manager	Maintenance Manager	President / GM	Committee Board
Safety Policy	Develop	Develop	Develop, Implement, Manage, Review, Approve	Manage, Review	Manage, Review	Manage, Review, Approve	Develop & Endorse
Safety Culture	Develop, Implement	Develop, Implement	Develop, Manage, Approve	Develop, Manage, Approve	Develop, Manage, Approve	Develop, Manage, Approve	Endorse
Governance & Internal Controls	Implement	Implement	Develop, Implement, Manage, Review,	Develop, Manage, Review	Develop, Manage, Review	Develop & Endorse	Develop & Endorse
Management Responsibility accountabilities and authorities	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Regulatory Compliance	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Document Control and Information Management	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Review of SMS	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Review & Endorse
Safety Performance Measures	Review & Implement	Review & Implement	Develop, Implement, Manage, Review,	Develop, Manage & Review	Develop, Manage & Review	Develop, Review & Approve	Review & Endorse
Safety Audit arrangements	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Review & Endorse
Corrective Action	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse

Element	Rail Safety Workers	Admin Assistant	Safety Manager	Operations Manager	Maintenance Manager	President / GM	Committee Board
Management of Change	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Review & Endorse
Consultation	Review & Implement	Review & Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Internal Communication	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Training and Instruction	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Risk Management	Review & Implement	Review & Implement	Develop, Implement, Manage, Review,	Implement, Manage & Review	Implement, Manage & Review	Implement, Review & Approve	Review & Endorse
Human Factors	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Procurement and contract management	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Review & Endorse
General Engineering & Operations System safety requirements	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Process Control	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Asset Management	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Interface Agreements	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse

Element	Rail Safety Workers	Admin Assistant	Safety Manager	Operations Manager	Maintenance Manager	President / GM	Committee Board
Notifiable Occurrences	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Review & Endorse
RSW Competence	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Security Management	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Emergency Management	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Health and fitness	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Drug and Alcohol	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Fatigue risk management	Review & Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Endorse
Resource Availability	Implement	Implement	Develop, Implement, Manage, Review,	Manage & Review	Manage & Review	Review & Approve	Review & Endorse

Safety Management System Modules

Element 6 – Regulatory Compliance

What and Why

All operators must maintain an up to date awareness of the Rail Safety National Law (RSNL) and other relevant safety legislation such as Work Health and Safety laws for the location where they operate.

By staying abreast of the requirements under the law, operators are able to demonstrate their governance obligations (See element 4 – Governance and Internal Controls). This approach also aides in ensuring that the safety management system (SMS) remains up to date and reflects current safety obligations under the law, ultimately resulting in a positive safety culture (See Element 3 – Safety Culture).

How

- The SMS could have a procedure that describes the processes applied by the operator to ensure that they are up to date with requirements under the law.
- Procedures could include lists of all legislation that applies to the operator and / or the particular procedure.
- This may be demonstrated in several ways, depending on the size and complexity of the operator.
 - This could include keeping a copy of the current Notice of Accreditation posted in a public place;
 - Having internal communication processes such as regular volunteer briefings or tool box talks where proposed and actual changes to safety are discussed;
 - Having a good understanding as to where codes of practice, guidelines and fact sheets relating to rail safety can be found;
 - Managers and supervisors know how to access the RSNL and Regulations.
- For a smaller less complex operator, this could be demonstrated by;
 - Regular reviews of the ONRSR website;
 - Active member of an industry association such as ATHRA, RISSB, ARA, COTMA, RTSA, RTAA etc, and receives regular legislative updates and newsletters;
 - Subscribing to regular newsletters from Safety Authorities from some or all states and territories;
 - Subscribing to government legislation databases;
 - Participating in industry initiatives;
 - Working with other industry members to share resources;
 - Executive Committee/Board meeting minutes reflect discussions about changes in legislation or associated publications, such as Codes of Practice, Guidelines and Fact Sheets.

Who

All persons who have access to the operator's site can access the Notice of Accreditation at any time;

All rail safety workers have access to and understand relevant parts of the SMS;

Managers and Supervisors discuss proposed and current changes to legislation in management meetings;

Managers and Supervisors consider the impacts on the SMS when regulatory change occurs;

Executive Committee/Board meeting minutes reflect discussions about changes in legislation or associated publications, such as Codes of Practice, Guidelines and Fact Sheets.

All rail safety workers are trained in (or made aware of) regulatory changes that impact the SMS as part of change management processes (Element 12 – Management of Change).

When

As part of ONRSR and/or NTC consultation processes.

Whenever changes impact the SMS.

List of relevant documents (internal)

All SMS Elements

SMS Review procedures

Regulatory Compliance procedure

Links (external)

[SafeWork Australia Subscriptions](#)

[WorkCover Queensland](#)

[WorkSafe WA](#)

[WorkSafe Tasmania](#)

[WorkSafe Victoria](#)

[SafeWork NSW](#)

[SafeWork SA](#)

[E-Safety Commissioner](#)

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

- [Safety Dimensions](#)
- [My OSH](#)

Appendices

None.



Safety Management System Modules

Element 7 – Document Control and Information Management



What and Why

Policies and procedures that make up the components of a safety management system are usually created after risk assessments have been completed. These risk assessments will have determined the correct and safest processes for people to follow.

A good SMS will have systems in place to review documents and forms periodically and as a result of the findings of an incident investigation, as well as changes to legislation.

It therefore follows that for an operator to ensure that people, and rail operations are safe, the most up to date procedures and/or policies should be followed.

Document control helps ensure people always have access to and use most recent version of any document, and following the most recent version will help people stay safe.

How

The simplest way to do this is to create a document control procedure, which includes:

- A naming /numbering convention for all documents, including policies, procedures and forms that are included in the SMS (See Appendix 1);
- A description of what documents are 'controlled', and this would normally be those that are 'safety records'. It is not essential to include all the operators processes in the safety management system if they do not relate to safety;
- A reference to a controlled document register;
- A statement of the process to create and record safety procedures/documents;
- A simple process that describes how documents are reviewed (and this could just refer to the SMS Review module of the SMS);
- Details of how changes to documents are communicated. This could also refer to the internal communication module of the SMS;
- A description on how these SMS documents are stored – electronically or physically. This should include a statement on how physical records such as completed forms are kept and for how long.

To ensure that the most up to date version of a document is recorded, a controlled document register should be developed:

- This can be created as a simple document that lists the document name, number, version number and version date.
- All controlled documents should be listed in that register (See Appendix 2).
- A number, a name, a version date and version number for each document should be created and recorded;
- Every time a document is amended, the register should be updated with the new details;
- Naming and numbering conventions may be kept simple. Each document should have its own number.

Things to consider include:

- Some operators create template documents so that all documents look the same;
- When documents are created from a template, such as a risk assessment or interface agreement, then they should also be allocated a number. Operators may wish to include a statement in the document control procedure about how these are numbered, and whether they have their own register;
- Some operators will allocate responsibility for certain documents to specific role holders. For example, the Operations Manager may be responsible for ensuring that all Operations procedures are up to date. In this instance, documents should also include details of that position holders title (use titles not personal names to prevent rework if people leave);
- Tracking who has paper or other copies of the SMS, procedures, work instructions, forms etc so that when they are changed, or updated they can be replaced with current versions;
- Putting procedures in place so that the SMS is not subject to un-authorised change;
- Making sure files are secure so that access to original controlled documents is limited;
- Staff need to know how to access current SMS documents – This could be by the posting of the most recent controlled document on a central noticeboard, tool box meetings, or by using the operator's website or volunteer management software;
- Some operators elect to have official versions of documents authorised/signed for use;
- Changes, removal and addition of documents to the SMS must be notified to all relevant persons, and the controlled document register is updated;
- Where documents are reviewed but not updated, it is advisable to keep a record of this so that operators can demonstrate that they have reviewed the documents in line with the SMS procedures;
- Official backup files should be kept of key safety documents where possible.

Who

Details of the roles and responsibilities for document control should be noted in job /role descriptions. However, generally:

The Executive Committee/ Board may wish to sign off on these procedures as part of their governance processes.

The role that has the responsibility for the implementation of the SMS should ensure that document control procedures detailed in the SMS are followed.

Managers and supervisors should ensure that the procedures actually being performed in the workplace are the same as the most up to date written procedures, and that all persons are aware of any changes to procedures since they last worked.

Everyone knows how to report errors in documents or procedures, and who to.

Only people who are authorised to change documents can change them.

Rail safety workers, volunteers and visitors have an obligation to follow current procedures. It is therefore essential that they are aware of them, and any changes that would impact them. This is particularly important if they have not attended the operator for a while.

When

Document control should be introduced when a SMS is developed. If, however, an SMS has been developed without document control arrangements in place, operators should adopt a risk-based approach to introduce a document control process into the SMS. In this case, operators should refer to the Element 12 – Change Management.

All newly created and approved documents should be included in the SMS.

Documents should be reviewed in line with the document control procedures and the SMS review process (which are linked).

Document Distribution is a vital part of document control. Even the best SMS document will be ineffective if it is not distributed correctly. Distribution goes beyond printing/posting on a web site and includes briefing and training of those who need to use it.

When documents are removed or deleted.

List of relevant documents (internal)

All SMS Elements

Document Review Procedure

Controlled Document Register

Interface Agreement Register

Links (external)

[ONRSR Website –SMS Guideline](#)

[ONRSR Website –Interface Agreements](#)

Appendices

- A. [Example Template for Controlled Document \(Portrait\)](#)
- B. [Example Template for Controlled Document \(Landscape\)](#)
- C. [Example Controlled Document Register](#)
- D. [Example Sign On Sheet](#)

Document Name:	
Document Number:	

Version No	Enter Version No	Version Date:	Enter Version Date
Approved By:	Job Title of the highest position in the organisation		

Document Name:	
Document Number:	

Version No	Enter Version No	Version Date:	Enter Version Date
Approved By:	Job Title of the highest position in the organisation		

Document Name:	
Document Number:	

Version No	Enter Version No	Version Date:	Enter Version Date
Approved By:	Job Title of the highest position in the organisation		

Document Name:	
Document Number:	

Version No	Enter Version No	Version Date:	Enter Version Date
Approved By:	Job Title of the highest position in the organisation		

Document Name:	Sign On Sheet – Rail Safety Worker
Document Number:	XX - XXXX

By signing on, and performing rail safety work, you are committing that the following statement is true and accurate:

I confirm that I am free of the influence of drugs and/or alcohol and am not suffering from fatigue. I am fit for duty and hold current competency to perform my role as a rail safety worker.

Date	Name	Sign On	Confirmatory Signature	Sign Off

Version No	Enter Version No	Version Date:	Enter Version Date
Approved By:	Job Title of the highest position in the organisation		

What and Why

Every operator must review its safety management system on a regular basis to ensure that it still complies with the law and is working effectively. The regulations state that the review should be at least once a year.

An SMS review should:

- Assess the effectiveness of the SMS, and identify areas of weakness with a view to rectify these;
- Assess the effectiveness of any changes since the last review;
- Review any notifiable occurrences and procedural breaches since the last review;
- Consider the results from any audits (internal or external);
- Consider the findings of any incident investigations;
- Review any issues that have arisen from any prohibition or improvement notices have been issued.

The review is required to be summarised and reported in the safety performance report to be submitted to ONRSR.

How

Operators may take different approaches to reviewing the SMS. Some will schedule regular document reviews, others will carry out a single annual review. Regardless of the approach taken to review the SMS, the procedure is likely to be the same as the objective will be the same, only the timeframe may change.

The procedure describing the process to carry out an SMS review should be documented as part of the SMS and included in the document control process.

The main steps for conducting an annual SMS review will include:

- Seeking input from stakeholders prior to starting the review on how the SMS can be improved, with a reasonable timeframe to respond (Refer to consultation processes in the SMS);
- Scheduling a meeting of the Executive Committee/ Board with sufficient time to work through the steps required under the law;
- It would be beneficial for key members of the management team who are responsible for the implementation of the SMS to attend any review meeting;
- Ensuring an agenda is issued and meeting notes are recorded;
- Review of feedback received from the stakeholders consulted prior to the review;
- Review of any notifiable occurrences since the last review and any findings of investigations;
- Assess the status of any audit findings since the last review;
- Review of any other SMS breaches and why they occurred;
- Review of the risk register for currency;
- Noting if any prohibition notices or improvement notices have been issued, and if so, what action has been taken;
- Establishing the process and responsible persons to update any procedures or risk assessments as a result of the findings of the review;
- Follow up in subsequent Committee/Board meetings on progress to any action plan.

Things to consider include:

- It is possible to agree different timeframes for review with ONRSR, once a risk assessment process has been carried out to determine a proposed alternate timeframe;
- The Executive Committee/Board should not be expected to know every document within the SMS, and they will rely upon the information provided to them together with the knowledge and skills of the key managers;
- Where a dedicated SMS Review will occur, operators could consider a standard agenda that details the process to be followed;
- Where the review is carried out over the period of a year, the SMS review procedure should clearly state this, and should include an indicative plan for review of the various components;
- There is nothing in the law that requires that the review is to include every document included in the SMS;
- Where actions are required, a plan should be developed to ensure that these are prioritised appropriately, with dates and responsible persons appointed;
- For ease, the operator may consider reviewing the annual audit schedule as part of the SMS review;
- Findings from SMS reviews must be reported in the operator's safety performance plan which is sent to ONRSR.

Who

The Executive Committee/ Board may wish to sign off on SMS Review procedures as part of their governance processes.

The Committee/Board are required to attend and participate in SMS review procedures to assure themselves that the SMS is working effectively, and any deficiencies are identified, and a plan developed for improvements.

Key managers should ensure that they have a full understanding of the operators SMS, and their own area of responsibility and accountability.

Responsibility for the management and implementation of the SMS should be included in job /role descriptions for nominated position holders.

When

There are several approaches that can be taken for a review of the SMS:

- Annual single review by key management group;
- Ongoing regular reviews scheduled throughout the year and included in board /committee meetings;
- Combination of both.

Each operator should determine which approach works best for them, taking into account their resources and the nature and scope of operations.

Where an annual single review is scheduled, a specific meeting should be scheduled.

Where regular reviews are carried out, the plan for these should be described in procedures for the SMS review and included in the SMS.

Smaller less-complex operators may wish to review the entire 29 elements of the SMS over a period greater than 12 months.

Where an operator wishes to seek agreement from ONRSR to conduct their SMS review over a period greater than 12 months, they should take a risk-based approach and ensure that the safety risk does not increase with a reduced scrutiny of the SMS. Operators could consider applying their Change Management procedures for a proposed change of this type.

List of relevant documents (internal)

SMS Documents

Element 3 – Governance & Internal Controls

Element 7 - Document Control & Information Management

Element 9 – Safety Performance Measures

Element 10 – Safety Audit Arrangements

Element 13 - Consultation

Element 16 – Risk Management

Risk Register

Links (external)

[ONRSR Website – Guideline - Safety Management System](#)

Appendices

A. [Example SMS Review Meeting Agenda Template](#)

Document Name:	SMS Review Agenda
Document Number:	XX-XXXX

Meeting Date & Time:	
Meeting Location:	
Attendees:	
Apologies:	

No.	What	Who
1	Welcome	President/Safety Manager
2	Purpose of the Meeting	President
3	Review Feedback from consultation	Safety Manager
4	Review audit / inspection results	All
5	Review incident investigation findings	All
6	Review any notifiable occurrences and/or procedural breaches	All
7	Review any notices from ONRSR	All
8	Review Risk Register	All
9	Review Audit Schedule for year	All
10	AOB	All

Version No	Enter Version No	Version Date:	Enter Version Date
Approved By:	Job Title of the highest position in the organisation		

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)

Document Name:	Safety Performance Report
Document Number:	R- 0000X

Insert Operator Name

Insert Logo here

Date of Safety Performance Report:

Period Covered:

For the purposes of guidance to users, italic text has been used for areas of assistance or for examples throughout this example template.

Version No	xx	Version Date:	xx/xx/xx
Approved By:	President, Executive Committee		

Document Name:	Safety Performance Report
Document Number:	R- 0000X

Table of Contents

1. Executive summary	2
2. General information	2
3. Description and assessment of safety performance for the reporting period	3
4. Deficiencies or irregularities in railway operations relevant to safety	3
5. Safety initiatives in the reporting period	3
6. Safety initiatives proposed for the next reporting period	4
7. The outcomes of the SMS review conducted during the reporting period	4
8. The review process and consultation	5

Version No	xx	Version Date:	xx/xx/xx
Approved By:	President, Executive Committee		

Document Name:	Safety Performance Report
Document Number:	R- 0000X

1. Executive summary

List key points describing how safety risks have been managed during the reporting period.

Keep this high level but identify any major highlights of the year and a statement about how the operator has performed against key safety measures.

2. General information

Accredited Operator Name:	
States and Territories where Accredited:	
Reporting Period Covered:	
Name and details of Contact:	
Endorsed by	

3. Description and assessment of safety performance for the reporting period

For simplicity, consider using tables and /or graphs to show performance against the safety measures. Explanations should be provided for each table /graph to provide details to support the performance or to explain where trends were identified, and any corrective actions taken.

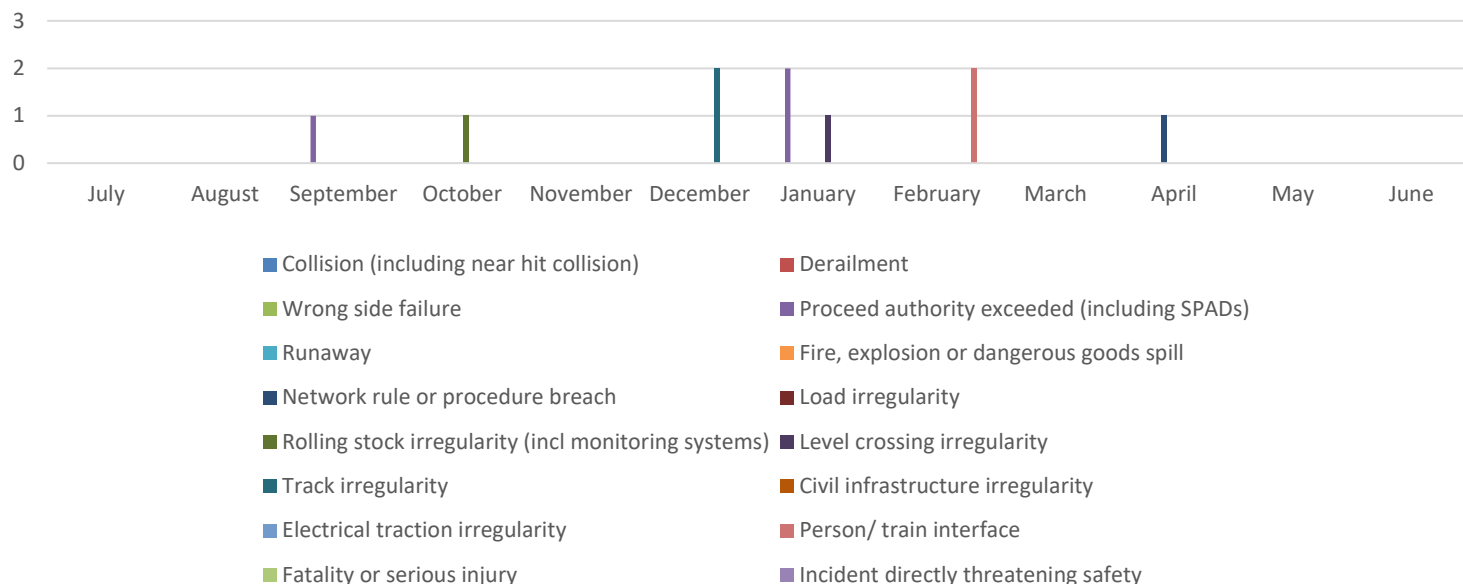
Examples could include:

Measure	202/22	2022/23
No of interface agreements reviewed	5	0

Explanation / Supporting Information

All interface agreements are reviewed every 2 years. Last year, every interface agreement was reviewed consistent with the SMS. As a result, and because no other changes impacted the identified safety interfaces, no reviews were conducted. It is anticipated that all interface agreements will be reviewed in the 2022/2023 reporting period.

Notifiable occurrences 2022 - 23

**Notifiable Occurrence Reporting:**

Measure	2021/22	2022/23
No of notifiable occurrences reported	16	10

Explanation / Supporting Information

There were 5 Category B occurrences overall.

There were 3 minor incidents where passengers slipped when alighting from the train, with no serious injuries. The first incident occurred in December and then two more in February, which showed a trend. On investigation we found that wet weather contributed to the slippery conditions and so we replaced the non-slip tread on the train exit. We haven't had any more slips.

There were no trends identified with the other Category B incidents which were all investigated. All corrective actions identified as part of those investigations were endorsed by the Committee and have been resolved.

This section should also include an overview of category C occurrences and how emerging trends have been treated. For example:

Measure	2021/22	2022/23
No of category C occurrences reported	-	5

Explanation / Supporting Information

There were 5 Category C occurrences overall.

In December we had an engineer inspect the track and over the course of the month two irregularities (involving horizontal alignment) were found as repairs and maintenance were undertaken. An operational restriction was put in place whilst the defects were fixed. The engineer then certified the track safety for our operations.

In January two Category C PAEs occurred in our maintenance yard (train did not leave the yard) which were due to a new volunteer starting. This prompted us to review and update our induction procedures.

4. Deficiencies or irregularities in railway operations relevant to safety

This section should include any identified failings of the SMS – examples could include where common risk controls have failed, where improvement or prohibition notices have been issued by ONRSR, or where the SMS has not been consistently implemented across the operations.

Deficiencies may also have been identified as part of the SMS review.

Where no deficiencies have been identified, note that the review occurred consistent with the SMS but that no deficiencies were identified.

5. Safety initiatives in the reporting period

The operator should include any safety initiatives that have been introduced during the year. This could include simple as well as complex initiatives. A short explanation of each initiative may also be included to explain the context of the change. Examples could include:

Issue of consistent PPE (colour and high visibility markings) to all rail safety workers;

Historically, the PPE policy did not prescribe a specific colour or style of high visibility marking. As part of a review of an incident last year, it was determined that standard high visibility PPE vests was to be issued to all rail safety workers. This project has now been completed and the PPE policy updated accordingly. Induction procedures have also been updated to reflect this requirement.

Changes to Tool Box Talk template to add a “Safety Share”;

Version No	xx	Version Date:	xx/xx/xx
Approved By:	President, Executive Committee		

Document Name:	Safety Performance Report
Document Number:	R- 0000X

In order to further improve safety culture, it was proposed that a “Safety Share” be included in each tool box talk session. Details of the subject are not recorded, simply that the discussion has occurred.

Changes to Network Rules

During this period, Network rules were changed in response to the removal of the level crossing at Smith Street, by the Regional Council. Due to the nature of the change, an abridged version of the Change Management procedure was used. All stakeholders were consulted, ONRSR notified as part of a Notification of Change, and all rail safety workers formally advised of the change. Network rules were amended accordingly and re-issued to all rail safety workers.

Risk assessments and registers were updated accordingly.

6. Safety initiatives proposed for the next reporting period

The operator should include any safety initiatives that may be introduced during the coming year. This could include simple as well as complex initiatives. A short explanation of each initiative may also be included to explain the context of the change. Examples could include:

Decommissioning of Rollingstock

As part of the asset management process, it has been identified that Carriage 1234 will no longer be fit for purpose. Due to the highly specialised nature of the carriage, and the limited access to replacement parts, as a result of a risk assessment, it has been determined that on its next maintenance event it will be decommissioned. All engineering and process control procedures will be complied with as part of the Change Management process.

7. The outcomes of the SMS review conducted during the reporting period

The operator should note the key findings and any actions or initiatives that were identified as part of the SMS review. The findings should reference

- Any findings of SMS audits, including any ONRSR audits;*
- Findings from ONRSR Compliance Inspections;*
- Results of investigations carried out after significant incidents /occurrences*
- Details of the responses issued to any ONRSR prohibition or improvement notices*
- Any identified opportunities for improvement to the SMS and the results of any feedback as part of the consultation processes.*

8. The review process and consultation

A description of the SMS Review process should be reported in this section. The process should conform with that described in the SMS and also comply with the SMS consultation procedures.

Version No	xx	Version Date:	xx/xx/xx
Approved By:	President, Executive Committee		

Document Name:	Safety Performance Report
Document Number:	R- 0000X

Safety Management System Modules

Element 10 – Safety Audit Arrangements

What and Why

All operators are required to assess that their Safety Management System (SMS) remains appropriate and effective. There are a number of ways that this can be done internally, which includes:

- SMS Review;
- Document or procedural reviews; and
- Internal Audits.

External audits may also be carried out **by** the operator and **on** the operator. Regulatory audits and compliance inspections are usually carried out by ONRSR.

Operators may:

- Have a contractor conduct the audits;
- Have someone from another rail operator conduct the audits;
- Audit contractors;
- Be audited by ONRSR;
- Be subject to compliance inspections by ONRSR;
- Be audited by other stakeholders such as suppliers of rollingstock or Rail Infrastructure Managers;

The best and most effective way to assess the SMS is to test it, and this is most commonly done by audit. The purpose of carrying out audits (separate from ONRSR's audits) is to check that the processes documented in the SMS are in fact being carried out.

Audits do not have to be intensive or include the entire SMS. The requirement to review the SMS does not mean every element has to be audited every year.

Although ONRSR will conduct its own regulatory activities, the operator should not use this as the only mechanism to audit the SMS.

How

Audits can focus on key components of the SMS, that is where the risk is highest, and test these are areas as a priority to ensure risks are being managed properly.

This means that the risk register, which has been developed should be the starting point for an audit schedule. As the risk register is reviewed and changes, so should the focus points for subsequent audits.

The law expects all operators to have an audit program. This can take the form of a documented procedure in the SMS that includes information about:

- Why audits are scheduled (so that they are not missed);
- How often, and when, audits are scheduled;
- Where to focus the audit based on the operator's risks;
- What the audit process is;
- Who is able to conduct audits;
 - are they independent from the area being audited?

- Do they have the skills and experience to audit?
- How audit findings are communicated, to whom and when;
- Whether an audit template is available;
- How audit findings are managed as corrective actions;
- Who should attend internal and external audits.

Examples of areas to audit may include:

- A check that trains are being operated according to the operating rules;
- Confirming pre-start checks and inspections of the rolling stock and infrastructure are being carried out and recorded;
- Confirming that detailed periodic inspections of infrastructure track, formation, drainage, bridges, level crossing equipment) and individual items of rolling stock are being carried out as scheduled;
- Checking health assessments are up to date;
- Records exist to demonstrate the training provided to and competency assessment of rail safety workers;
- Checking that any corrective actions or faults identified by routine maintenance inspections, previous audits, investigations or routine review have been implemented;
- A check that the effectiveness of the SMS is being reviewed and recorded;
- A check that the risk register is kept current.

Who

Audits should be carried out by people independent of the area being examined to remove any biases.

Auditors should have some skill and/or experience in the area that they are auditing so that they can ask relevant questions.

The Executive Committee/ Board may wish to include all audit reports in their regular meetings to fulfil their governance obligations.

Audits and corrective actions should be included in the SMS Review process.

All persons who are required to implement corrective actions should do so in line with Element 11 – Corrective Actions.

ONRSR will conduct a combination of Regulatory Audits and Compliance Inspections on the operator. The frequency and type of actions taken by ONRSR will depend on the operator's level of risk.

When

The audit schedule will note when audits are to be conducted. The audit schedule may be reviewed as part of the SMS review for ease.

Audits should be conducted as scheduled. This is seen as a commitment to safety and to contributing to a positive safety culture.

Audit reports/findings can be tabled at Executive Committee/Board meetings for endorsement and/or information.

List of relevant documents (internal)

Element 8 – SMS Review

Element 11 – Corrective Actions

SMS Audit Schedule

Links (external)

[ONRSR – Guideline – Small isolated line heritage operations – Safety Management System \(SMS\)](#)

[ONRSR Website – Guideline - Safety Management System](#)

[ONRSR Website – Rail Safety National Law](#)

[ONRSR Website – Compliance and Enforcement Policy](#)

[ONRSR Website – The ONRSR Way](#)

[ONRSR Website – Audits](#)

[ONRSR Website – Rail Safety Officer Visits](#)

[Workplace Health and Safety Queensland – SMS Audits](#)

Appendices

A. [Example Audit Schedule](#)

Document Name:	Safety Audit Schedule
Document Number:	XX -XXXX

This audit schedule gives details of planned audits in 20xx-20xx. Given the scope and nature of the operations, the audit schedule is based on a quarterly basis.

Location	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Operations		RSW Competence		
Workshop	Health & Fitness			
Track				Process Control
Office			Corrective Action	

The process to be followed for audits is described in the Safety Audit Procedure.

Version No	Enter Version No	Version Date:	Enter Version Date
Approved By:	Job Title of the highest position in the organisation		

What and Why

'Corrective Action' is the term given to any action that is identified as a weakness or deficiency in a Safety Management System.

Corrective actions can be identified from a number of sources, including but not limited to:

- Audits – internal and external
- Document /SMS review processes
- Incident Reports
- Investigation findings
- Risk Assessments
- Routine maintenance inspections of infrastructure and individual items of rolling stock
- Suggestions from people who work with the SMS or specific procedures.
- Anything that has occurred outside the organisation but could have an impact on the operations.

These are all items that require attention to improve or even maintain safety and should be tracked to make sure that they are resolved.

A register of corrective actions is an important tool to keep track of them, who will fix them and by when.

How

A Corrective Actions procedure should be developed and included in the SMS. The procedure should include details of:

- How Corrective Actions are identified – the source of the information such as audit or reports;
- How these actions are recorded;
- Who is authorised to enter information into the register;
- Where the register or a list of Corrective Actions can be found;
- How these actions are prioritised – and definitions of those priorities, for example:
 - High – Work has ceased until Action Item resolved
 - Medium – Work is ongoing with interim controls in place
 - Low – Work continues with increased vigilance;
- Priorities should include timeframes for resolution (i.e. High – within 1 month);
- The frequency of reviews of the register;
- How information on Corrective Actions is reported to the Executive Committee/Board for their information;
- The information about corrective actions that are included in the SMS review.

Who

Position /Role descriptions may include management of Corrective Actions as a responsibility of a specific role.

Corrective actions could be a standing agenda item at regular management meetings.

The Executive Committee/Board and management team should review Corrective Actions are part of the SMS Review.

All persons including volunteers and contractors should report any identified action areas to their supervisor or manager.

When

Corrective actions are indicative of a weakness in the SMS and should be treated seriously. Priorities defined in procedures should be complied with.

List of relevant documents (internal)

Element 4 – Governance and Internal Controls

Element 8 – Safety Audit Arrangements

Element 11 – Example Corrective Action Register

Element 13 – Consultation

Element 20 – Process Control

Links (external)

[ONRSR – Guideline – Small isolated line heritage operations – Safety Management System \(SMS\)](#)

[ONRSR Website – Guideline - Safety Management System](#)

[ONRSR Website – Rail Safety National Law](#)

Appendices

A. [Example Corrective Action Register](#)

[illegible]



Safety Management System Modules

Element 12 – Change Management



What and Why

It is important that changes are managed properly, with a consistent and structured approach that considers anyone who will be impacted by the change. Failing to consider all relevant stakeholders may result in an introduction of a change that adversely impacts safety.

Each operator is expected to have a component of their Safety Management System that describes how the operator manages change. This may take the form of a simple risk-based process that describes the steps to be taken.

The procedure should also include reference to the changes that are required to be reported to ONRSR. These are listed in Regulation 9 of the Rail Safety National Regulations, which also states when the change should be notified. The changes to be notified are:

1. A decision to design or construct, or to commission the design or construction of, rolling stock or new railway tracks
2. The introduction into service of rolling stock of a type not previously operated by the operator or the re-introduction into service of rolling stock not currently operated by the operator.
3. A change to a safety critical element of existing rolling stock.
4. A change to 1 or more of the classes of rail infrastructure used in the operator's railway operations.
5. A change to a safety standard for the design of rail infrastructure or rolling stock.
6. The decision to adopt a new safety standard for the design of rail infrastructure or rolling stock.
7. A change to the frequency of, or procedures for, the inspection or maintenance of railway infrastructure or rolling stock.
8. A change to the network rules relating to the conduct of the operator's railway operations.
9. A decision to introduce a new network rule relating to the conduct of the operator's railway operations.
10. A decision to change any work scheduling practices and procedures set out in the operator's fatigue risk management program
11. The replacement or a change in the contact details of any person appointed under regulation 8(b).
12. A change in the operator's name or residential address, or the operator's business or trading name, or in the case of a body corporate, a change in the name or registered business address of the body corporate.

How

A simple process can be considered when managing change with details of the process followed and captured in an SMS document. This will be a record of all the factors that have been considered:

Is the change material?

Operators should consider:

- Does the change impact the scope and nature of the accreditation held?
- Is the proposed change reportable to ONRSR?
- What is the impact/risk of the change?
- What are the impacts/risks if the change is not introduced correctly?
- What needs to be changed if a process or task is changed?

- Are changes to procedures required? – operating, maintaining, inspection, certifying.
- How to communicate the change to workers.

Examples could include:

1. Change to management/governance structure;
2. Change to the design of infrastructure or rolling stock (including changes to the design of their individual components);
3. Change to infrastructure and rolling stock inspection and maintenance practices;
4. Introducing a new item of rollingstock to service (including an item which has undergone extensive restoration from static display or a state previously unfit for purpose);
5. Changes to operating rules.

Identify who will be impacted by the change.

- Who needs to know about the change – internally and externally;
- Are new skills required? - Will training and competency assessment be required?
- Are new tools required

Managing the risk of change

Operators would be expected to carry out a risk assessment as part of considering the change. It would be reasonable to consider:

- What are the new risks that will be introduced by the change?
- Will current risks be changed?
- What needs to happen to manage new or existing risks?
- Who will be responsible for ensuring that controls are applied?
- How will success be measured?

Who

Operators should document all changes and risk assessments as safety records and ensure that the SMS is updated accordingly.

Demonstration of consultation with key stakeholders is an essential component of change.

Operators are required to submit notifications of some types of change to ONRSR. This also includes submission of an application to vary accreditation where the scope and nature of the accreditation is proposed to be changed.

The Executive Committee/ Board may wish to sign off on these procedures as part of their governance processes.

ONRSR may not respond to a notification of change, unless further information is required.

ONRSR will respond to an application to vary accreditation, and this may include a compliance audit or inspection if necessary.

When

Risk Assessments should be considered for all changes.

The operator should ensure that any reportable change is submitted to ONRSR within the appropriate timeframes using the notification of change form, or by submitting a variation to the operator's accreditation (if necessary). Where practicable, the change form or application for variation should be submitted through the ONRSR Portal.

Prior to the introduction of the change, operators should ensure that all related documents are updated and distributed accordingly, with appropriate training in place (as necessary).

List of relevant documents (internal)

Element 13 – Consultation

Element 16 – Risk Management

Risk Assessment Template

Change Management Plan

Links (external)

[ONRSR – Guideline – Small isolated line heritage operations – Safety Management System \(SMS\)](#)

[ONRSR Website – Guideline - Safety Management System](#)

[ONRSR Website – Rail Safety National Law](#)

[ONRSR Change Policy](#)

[ONRSR Portal](#)

[ONRSR Application to vary accreditation](#)

[ONRSR Application form for variation to accreditation](#)

Appendices / Examples

None

What and Why

It is essential that once an SMS is established, changed or reviewed, a key group of people must be consulted.

1. People likely to be affected by the SMS (principally rail safety workers);
2. Health and Safety Representatives;
3. Any union representing Rail Safety Workers; and
4. Any other rail transport operator with which the operator interacts. An example would be a RIM of the infrastructure that a rolling stock operator has access to (or vice versa).

Operators should consider if any other persons should could be included as part of the consultation process when considering the individual details of what is being reviewed, developed or changed.

How

There are generally four stages to consultation:

1. Providing information with details about what is being proposed, and the process that will be followed;
2. Seeking feedback from impacted persons or their representatives;
3. Reviewing feedback received; and
4. Responding to feedback and implementation of the change

The following are examples of consultation:

- Risk assessment is organised as part of the change management process, where key stakeholders are included in the discussions;
- Regular volunteer and/or operations meetings;
- Information on Notice Boards or websites seeking feedback from rail safety workers; and
- Emails to museum members or volunteers;

There is no set timeframe or approach for consultation. Workplace Health and Safety (WHS) laws often prescribe the essential components for consultation for each state or territory.

Who

Operators must keep a record of the opportunities you provided them for consultation, the suggestions they made and your evaluation of those suggestions.

WHS representatives should keep records of consultation processes as evidence of participation.

The Executive Committee/ Board may wish to sign off on these procedures as part of their governance processes.

ONRSR will review what steps were made to consult with key stakeholders when reviewing an operators SMS, applications (or variations) for accreditation, notifications of change, and may also include this in audits and inspections.

When

Consultation should occur when the management of change procedures are applied, and where changes to accreditation are considered. Good consultation usually results in improved safety outcomes and quicker take up of new initiatives/procedures.

List of relevant documents (internal)

Element 2 – Safety Policy

Element 8 – Review of SMS

Element 12 - Management of Change

Element 14 – Internal Communication

Links (external)

[ONRSR Website –SMS Guideline](#)

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

[Fair Work Ombudsman](#)

[SafeWork Australia](#)

Appendices / Examples

None

What and Why

Part of the success of a Safety Management System is that:

- it is used when undertaking daily tasks,
- it is understood by those that use it,
- the content is available to all that need to have access to it,
- incidents and accidents are reported internally.

This element refers to:

1. How operators ensure people who are to implement the SMS are aware of its content;
2. How incidents and accidents are reported within the operations;
3. How the operator communicates and provide information to everyone involved in the operations.

How

The key to achieving these outcomes can be by establishing standard procedures for communication amongst those who undertake work for the operator.

Such a procedure could include:

- Who needs to receive information about the SMS;
- A reference to the methods of consultation used by the operator;
- Mechanisms to communicate such as:
 - Safety policy is displayed on the noticeboard;
 - The steps to report an incident or accident (including the process for contractors);
 - Regular newsletters provide updates on the SMS or incidents that have occurred;
 - Procedures for incident reporting are displayed on noticeboards;
- The process to review document/procedural changes at Sign on;
- Inclusion of information in tool box talks;
- Discussions at Committee/Board meetings and volunteer briefing sessions;
- How changes are discussed at safety meetings;
- What items need to be reported to the Executive Committee or Board.

Who

A dedicated role could be nominated as the key contact for reporting incidents or accidents. This should be reflected in job/role descriptions and noted in the procedures for reporting.

The role that has the responsibility for the implementation of the SMS should ensure that internal communication procedures detailed in the SMS are followed.

Health and Safety representatives or Safety Managers may include information in their regular reports to the Executive Committee /Board.

The Executive Committee/ Board may wish to sign off on these procedures as part of their governance processes.

When

Examples of when internal communication should occur are provided here:

- Email groups could be set up for notification on specific subjects to specific work groups – e.g. changes to track procedures to track workers;
- New Job Safety Analysis are posted on noticeboards once developed;
- Findings of incidents/accidents could be posted once investigations are completed;
- Noticeboards could be updated to notify stakeholders of the results of a review of the SMS;
- Invitations to participate in consultation mechanisms, for events such as an SMS review, could be posted or emailed to subscribers as part of regular newsletters;

List of relevant documents (internal)

Element 13 – Consultation

Element 4 – Governance and Internal Controls

Links (external)

[ONRSR Website](#)

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

[Fair Work Ombudsman](#)

[SafeWork Australia](#)

Appendices

None

Safety Management System Modules

Element 15 – Training and Instruction

What and Why

This part of the SMS should describe how an operator provides training and awareness to rail safety workers on the content of the safety management system. It should also include details of how the SMS is implemented.

This **is not** the detail of how rail safety workers are assessed. That is covered elsewhere in the SMS (element 24 – Competence of Rail Safety Workers).

How

There is a procedure that describes how the operator provides training and/or awareness in the SMS. This may include a combination of one or more of the following:

- Delivery of an induction that includes an overview of the SMS;
- A written test is included with training/awareness sessions;
- Information about the SMS is included in regular volunteer /rail safety worker briefings;
- All affected workers are consulted when changing or reviewing the SMS;
- Any updates that require additional training are identified and training delivered as part of the change process;
- Refresher training is provided regardless of skill levels and /or experience;
- Records are kept for all training courses/awareness sessions;
- Discussions about procedures include details of the hazards and risks that exist as well as the controls that are used to eliminate or minimise them;
- Executive Committee/ Board reports provide updates on SMS training.

Who

Training materials are developed and/or delivered by people with the skills and experience.

All members including the Executive Committee/ Board participate and apply the knowledge learned at training/ awareness sessions.

Rail safety workers including contractors participate in training and/or awareness sessions.

All people comply with the procedures contained in the SMS.

When

Training/awareness in the SMS should occur before the rail safety worker can commence any rail safety work for the operator (including contractors).

Induction programs include SMS awareness training.

SMS training is included as part of the SMS Review process.

List of relevant documents (internal)

SMS Induction Program

SMS contents

SMS awareness training

Links (external)

[ATHRA Website](#)

Appendices / Examples

None

What and Why

Managing risk is all about understanding what can go wrong when undertaking an activity, the consequences if something happens while doing that activity, the likelihood of something going wrong and what can be done to prevent or reduce the likelihood and consequence if something does go wrong.

This includes how the rail operator minimises the consequences (i.e. managing or controlling the risk), and regularly monitoring and reviewing all those things to make sure that rail operations continue to be done safely.

Rail safety accreditation is based on several key criteria which are detailed in the Law and regulations. A rail operator must meet these criteria to gain accreditation to operate – in effect, the licence to operate a railway.

One of these criteria is that the operator must be able to demonstrate their competence and capacity to manage the risks to safety associated with its railway operations So Far As Is Reasonably Practicable (SFAIRP).

SFAIRP and its principles are defined in an ONRSR Guideline which can be found on the ONRSR website. Building a suite of actions assists in showing that the rail operator has taken all reasonable care to eliminate or manage its safety risks SFAIRP.

This element of the SMS describes how to go about identifying, assessing, eliminating (wherever possible), minimising and managing those risks to safety associated with railway operations, and which underpins all of the other elements of the SMS. For example, completing regular maintenance on rolling stock and track infrastructure, and ensuring the competency, health and fitness of rail safety workers are all 'controls' to prevent the 'risk' of a serious rail safety event, such as a derailment or collision.

Engineering standards and procedures for rolling stock and rail infrastructure, operational systems procedures, rail safety worker competency, health and fitness and fatigue management are all elements required as part of the SMS.

This element of the SMS should include:

- > Procedures and systems in place to identify, assess and manage risks – This involves eliminating or minimising the risks through the implementation of adequate controls;
- > A current risk register informed by the risk management activities conducted, that includes:
 - Likelihood, consequence and risk rating of each risk;
 - Controls used to manage the risks;
 - Details of who is responsible for managing those risks and implementing the controls;
 - Where in the SMS more details of the controls can be found;
 - Procedures for keeping the risk register current; and
- > Details of which controls were considered in risk assessments, but rejected for the management of risk and the reason each control was rejected;

- > Procedures in place for monitoring, reviewing and revising the adequacy of controls.

There is an International Standard for risk management (ISO 31000 Risk management – Guidelines), and many operators have adopted this standard as the basis for how they manage risk. If this is the case, operators must clearly demonstrate that they are following the details of the Standard by way of documented risk management processes and procedures within their SMS. If operators elect to use an alternate approach to risk management, they must be able to demonstrate why that approach is an acceptable alternative.

Contemporary safety management is based on good risk management practice and adopting risk management principles – if you eliminate or minimise safety risks, then safety performance will potentially improve.

How

This element of the SMS should describe the process that the rail operator follows when assessing and managing safety related risks.

As indicated, by documenting and following a robust risk process, rail operators are able to build a safety system that shows that they are managing risk SFAIRP. The safety system is developed from reasonable actions taken at a specific time to identify, assess, eliminate or manage risk in a way that was reasonably able to be done, using all available methods so long as the cost is not grossly disproportionate to the safety benefit gained.

Irrespective of risk rating, a risk is not mitigated to SFAIRP if there is more that can be reasonably done to control it. As part of the risk assessment process, people should always ask what more can be done to reduce the likelihood and consequence of a risk arising.

A systematic and logical SMS risk management procedure should describe how the operator:

1. Identifies Hazards and Risks – What can go wrong and why?
2. Helps the operator to work out what causes things to go wrong that will require managing;
3. Helps the operator analyse and assess the risks;
4. Identifies Hazards and Risks – What can go wrong and why?
5. Helps the operator to work out what causes things to go wrong that will require managing;
6. Helps the operator analyse and assess the risks;
7. Gives instruction to help the operator evaluate the risk and decide what to do next;
8. Advises that a plan should be developed for implementing additional controls (where they are necessary);
9. Describes how to communicate and consult about risk;
10. Describes how to check and review those identified risk levels, by monitoring and reviewing if controls are working properly;
11. Requires everything to do with risk management to be recorded and describes what is to be reported and to who.

See Appendix D for further detail on what a procedure should look like.

Who

Boards and/or Executive Committees should review organisational risk registers as part of their governance obligations.

Managers and Supervisors should understand the risk assessment process.

Managers and Supervisors should ensure that risk assessments are carried out for all rail related activities.

Attendees at risk assessments should have skills/competence and /or experience relative to the matter being risk assessed.

All rail safety workers should have some understanding of risk management and why it is relevant to them.

When

Where a risk committee exists, any new or reviewed risk assessments should be tabled for the information of the committee and possible approval and acceptance.

Whenever material change occurs (see Element 12 - Management of Change), including prior to commencement of new or changed operations.

As a component of developing or reviewing interface agreements.

When commencing an activity where the risk has not yet been assessed. That is, in any conditions where the safety risk has not previously been assessed.

Following an incident or accident, either internal or external, which might cause an operator to reconsider or re-evaluate its hazards and risks, or might identify a weakness in the operator's procedures or processes and system deficiencies.

As part of the SMS Review process (see Element 8 – SMS Review).

When risk controls change.

List of relevant documents (internal)

All SMS Elements

Risk Register template

Risk Assessment template

Interface Agreement template

Change management plan templates

Operator governance procedures

Links (external)

[ONRSR Website – Meaning of duty to ensure safety SFAIRP Guideline](#)

[ONRSR Website –SMS Guideline](#)

[ONRSR Website –Interface Agreements](#)

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

[Small Business Development Corporation \(WA\)](#)

[Australian Government - Business](#)

[SafeWork Australia](#)

[SAI Global](#)

Appendices

- A. Risk Matrices
- B. [Risk Assessment Template](#)
 - a. Summary
 - b. RA Template
 - c. Drop Down List
- C. [Risk Register Template](#)
- D. Additional procedural content

Appendix A – Risk Management (Developing a Risk Matrix)

1 Introduction

This document is being provided as part of a suite of modules developed to support Tourist & Heritage, and smaller less-complex rail operators demonstrate compliance with the requirements and obligations of the Rail Safety National Law and Regulations.

Each operator has a legal requirement to ensure safety through the elimination and minimisation of risk. To do this, operators should ensure that the descriptions used to assess risks are appropriate for their specific operations.

If this is not done, it will mean that the risks that are being assessed may not be appropriate to the specific operations and it is unlikely that the operator's risks will be managed properly. This will mean that there is an increased potential that people will be harmed, but also that the operator will not be able to show that they are meeting their legal obligations.

As compliance with rail safety legislation is based on the demonstration of competence and capacity to manage risks to safety associated with the railway operations, the operator may be subject to a range of enforcement actions from ONRSR, as a result of failing to demonstrate the required competence and capacity.

This document provides simple examples of likelihood and consequence ratings or measures to trigger discussion about the appropriate descriptors of these ratings that would be suitable for a less complex heritage rail operator. It should be noted that a qualitative approach to risk management is adopted – that is that the assessment of risk is subjective and based on the knowledge, experience and judgement of subject matter experts, and is therefore not based on a scientific, quantitative or mathematical approach.

An International Standard (ISO) for risk management exists (ISO 31000 Risk management - Guidelines) which provides guidelines on managing any types of risks faced by an organisation. This document (i.e. Appendix A) is based on the risk management principles as outlined in this standard.

2 Likelihood Rating

Likelihood is often also called Frequency or Probability.

Likelihood ratings will vary significantly by organisation. A larger metropolitan passenger rail operator has a much greater exposure to specific hazards and consequences due to the high frequency and high capacity nature of its operations (i.e. carrying hundreds of passengers on high-speed train services on dense lines) when compared with a smaller, less complex rail operator. A smaller, less complex rail operator generally carries less passengers, potentially on a single train trip on a given day at a lower speed and on a lower frequency line. It is therefore extremely important to have a likelihood range that is appropriate, and suitable for, the scope and nature of the operations performed.

There is no requirement to break likelihood into a set number of levels, though traditionally between 4 to 6 is considered reasonable and appropriate. The number of levels of likelihood must equal the number of levels of consequence.

In order to develop the descriptors that you will measure likelihood against, you should try to prepare a list that describes the likelihood/frequency of risks occurring in your operations and other like operations in Australia and possibly overseas. The list needs to be appropriate to your operations. Things to consider are:

- > *How long has the business been established?*
- > *How often have different types of incidents occurred in the past?*
- > *Other like or similar operators: How often have you heard of incidents that occurred that could also happen in your operation?*
- > *The frequency of your operations – Daily, Weekly, Monthly, Quarterly, Yearly?*
- > *What does your workforce look like?*
- > *How often can a risk occur before it affects the rail operator's capacity to operate?*

Some example likelihood ratings and descriptors for smaller, less complex rail operators are included here as a starting point for discussion and/or consideration. There is no intent for adoption of any, or all, of these examples - they are provided for information only.

Please note that no two examples are the same:

Example Likelihood Descriptors	Rating No
More than ten times a year	5
Between one and nine times a year	4
Once every two to five years	3
Once every five to ten years	2
Less than once every ten years	1

Example Likelihood Descriptors	Rating No
Expected to occur (multiple times a year)	5
Will probably occur (once a year)	4
May occur (once a year to five years)	3
Could occur (once every five - ten years)	2
Occurs only in exceptional circumstances (once in eleven or more years)	1

Example Likelihood Descriptors		Rating No
Almost Certain	Expected to occur most times operations occur	5
Very Likely	This has been known to happen in the past	4
Likely	It could happen. It is easy to imagine it happening. Hasn't happened to us but to other similar operators in Australia or overseas.	3
Unlikely	To occur it would take the failure of a number of controls	2
Rare	There is little or no chance of this occurring, and a significant number of factors would have to fail simultaneously	1

Example Likelihood Descriptors		Rating No
Almost Certain	Often Occurs / once a week	5
Very Likely	Could easily happen / once a month	4
Likely	Could happen or known to happen / once a year	3
Unlikely	Hasn't happened yet but could / once every 10 years	2
Very Unlikely	Conceivable but only on extreme circumstances / once in 100 years	1

Figure 1 – Example Likelihood Descriptors and Ratings

Rail operators that elect to mimic the likelihood descriptors in use by other organisations should ensure that they are appropriate to their own operations first and make adjustments accordingly.

3 Consequence Rating

Consequence is also often called Severity or Impact.

The severity or impact of consequences can differ significantly by organisation. For example, even though both a large, state-wide passenger operator and a smaller, less complex operator may experience the same consequence of multiple injuries resulting from a rail incident (e.g. derailment), the impact of this on the operators will vary significantly, including the associated financial loss.

An example could include a death of a person. This may result in the permanent closure of a smaller less-complex operator which would thus be 'Catastrophic'. A single fatality for a major metropolitan passenger operator would be considered a 'Serious' event which would not result in the operator ceasing operations.

Financial loss of \$250,000 may not be significant to a large, state-wide passenger operator but may lead to insolvency of a smaller T&H operator. Therefore, if one the consequence descriptors includes financial loss, it may be 'Major' or 'Catastrophic' for a small operator but only 'Medium', 'Moderate' or 'Serious' for a large operator.

All of these aspects need to be taken into consideration when developing the consequence descriptors, while retaining a focus on safety as the priority.

It is often recommended that consequence descriptors include multiple categories and therefore ways the operator may be adversely impacted, by the same hazard or risk. This could include a financial cost amount as well as a safety outcome (e.g. injuries and fatalities). Some larger, more complex operators may also include environmental outcomes, reputation outcomes (e.g. local or national media coverage), operational (e.g. delays or interruptions to services and operations) and legal / regulatory outcomes (e.g. penalties, accreditation impact) in their consequence descriptors, depending on their risk maturity.

There is no requirement to break consequence into a set number of levels, though traditionally between 4 to 6 is considered reasonable and appropriate. The number of levels of consequence must equal the number of levels of likelihood.

Think about all of the factors that would lead to the development of a list that describes the consequence/severity of risks occurring in your operations. The list needs to be appropriate to your operations. Remembering that this risk matrix is required to manage safety, things to consider are:

- > *What would be the impacts on the operations if there was:*
 - *A death or multiple deaths?*
 - *A single or multiple severe injury(ies)?*
 - *A significant rail related incident?*
 - *Is rail infrastructure still safe?*
 - *Can rollingstock still be used safely?*
 - *How long could we remain non-operational?*
 - *Workers Compensation Claims?*
 - *Significant damage to an asset?*
 - *Loss of an asset?*
 - *Are there other assets that can be used?*
 - *What response times for recovery would be needed?*
- > *What about reputational loss?*
 - *What would be the impacts from media fall out?*
 - *How would local media attention compare to national attention?*
 - *Would people stop coming?*
 - *How will you manage passenger safety?*
 - *What does that mean to the business?*
- > *What can the operations bear?*
 - *Financially? Ethically?*
 - *How much can the rail operator pay out if legal action is taken as a result?*
 - *What would be the financial limit before insolvency of the operator?*
 - *What is a catastrophic financial loss?*
 - *What impact has the loss of a life on operations and the operator?*
- > *What is the corporate insurance excess?*
 - *What would be the impact on premiums if a major incident occurred?*
 - *What are its limits of liability?*
 - *What can the business afford to pay over and above that covered by insurance?*
 - *Would claims be avoided due to the large excess?*
- > *Would the operations be able to continue? If not, what is the impact of down-time?*

Some example Consequence Ratings and Descriptors are included here as a starting point for discussion and/or consideration:

Consequences		
1	Insignificant	No Injuries / Minimal Financial Loss
2	Minor	First Aid Treatment / Medium Financial Loss
3	Moderate	Medical Treatment / Moderate Financial Loss
4	Major	Hospitalisation / Large Financial Loss
5	Catastrophic	Death / Massive Financial Loss

Consequences		
1	Insignificant	No Injuries / Financial Loss - Less than \$5,000
2	Minor	First Aid Treatment / Financial Loss - \$5,001 - \$9,999
3	Moderate	Medical Treatment / Financial Loss - \$10,000 - \$19,000
4	Major	Hospitalisation / Financial Loss - \$20,000 - \$49,999
5	Catastrophic	Death / Financial Loss - \$50,000 and over

Consequences		
1	Minor	Injury requiring First Aid treatment only. No lost time.
2	Medium	Injury requiring attention from medically qualified person. No lost time.
3	Serious	Life threatening injury requiring hospitalisation or medivac.
4	Major	Serious permanent disabling injury.
5	Catastrophic	A single fatality, or multiple fatalities.

Consequence	1	2	3	4	5
People / Safety	Minor injury or First Aid Treatment	Injury causing medical treatment	Serious injury causing hospitalisation	Life threatening injury or multiple severe injuries causing hospitalisation	Single or multiple deaths or multiple life-threatening injuries or severe permanent disabilities
Reputation	Unsubstantiated, low impact, low profile or 'no news' item	Substantiated, low impact, 'low news' profile	Substantiated public embarrassment, moderate impact, 'moderate' news profile	Substantiated, public embarrassment, high impact news profile, third party actions	Substantiated, public embarrassment, very high multiple impacts, widespread multiple third-party actions
Operation	Little Impact	Inconvenient delays	Significant delays to major operations	Non achievement of major operations	Non achievement of key objectives
Financial	< \$20,000	\$20,000 - \$150,000	\$150,000 - \$500,000	\$500,000 - \$2,000,000	>\$2,000,000

Figure 2 – Example Consequence Descriptors and Ratings

Rail operators that elect to mimic the consequence descriptors in use by other organisations should ensure that they are appropriate to their own operations first and make adjustments accordingly – a loss of \$2 million may be catastrophic to one operator, while a loss of \$20,000 is catastrophic to another. Consequences need to be real, relevant and applicable.

4 Risk Matrix

A risk matrix assists the operator in considering the relationship between likelihood and consequence to determine the overall level of risk. The matrix will show how the various combinations of likelihood and consequence work together to describe different levels of risk. There is no defined requirement for layout – i.e. consequence or likelihood to be in rows or in columns. This is at the discretion of the operator, though some studies show that consequence is better as the row, and likelihood the column.

When developing a risk matrix and what actions are required, questions to consider should include:

- > *What do we want this matrix to tell us and what do different risk level descriptions, and therefore the risks, actually mean to our operations?*
- > *Is this risk matrix practical and appropriate for our operations?*
- > *At what point does the risk become unacceptable or intolerable?*
- > *Are the levels of risk that we have compiled suitable for our operations?*
- > *What levels of sign off (if any) are required for various levels of risk?*
- > *Who is required to sign off, approve or accept different levels of risk?*
- > *What is the level of governance or management oversight that is required?*
- > *Do we have processes in place to approve / authorise higher risk activities?*
- > *How will risk levels be monitored? And by who and when?*

The operator should review the descriptors for each likelihood and consequence and consider how they will rate the risk if the various combinations are made. This step is a direct link to what the operator can bear – what risks can be ‘tolerated’ and which cannot.

Numbering of descriptors may be used to provide an indicative ‘risk score’. Again, there is not a set requirement as to how the score is calculated. Most operators will either multiply the score ($L1 \times C4 = 4$) or add them together ($L1 + C4 = 5$), or rank each box from 1 to 25 in order of priority.

The risk matrix is usually colour coded to visually indicate which combinations of likelihood and consequence are of higher or lower risk.

The risk score (or colour coding if used) should then link to actions to be taken and authorities to be applied for each level of risk, as indicated in the examples below:

Risk matrix with risk score:

		Likelihood				
		5	4	3	2	1
Consequence		Almost Certain	Very Likely	Likely	Unlikely	Rare
5	Catastrophic	25	20	15	10	5
4	Major	20	16	12	8	4
3	Moderate	15	12	9	6	3
2	Minor	10	8	6	4	2
1	Insignificant	5	4	3	2	1

Some operators choose to remove the numbers and add a description of the risk level:

		Likelihood				
		5	4	3	2	1
Consequence		Almost Certain	Very Likely	Likely	Unlikely	Rare
5	Catastrophic	Extreme	Extreme	Extreme	High	Medium
4	Major	Extreme	Extreme	High	Medium	Medium
3	Moderate	Extreme	High	High	Medium	Low
2	Minor	High	Medium	Medium	Medium	Low
1	Insignificant	Medium	Medium	Low	Low	Low

Risk matrix with risk priority ranking from 1 to 25:

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Catastrophic
Almost Certain	16	10	6	3	1
Very Likely	19	14	9	5	2
Likely	22	18	12	8	4
Unlikely	24	20	17	13	7
Very Unlikely	25	23	21	15	11

Figure 3 – Example Risk Matrices

Colour & Risk Score	Level of Risk	Action Required
1-3	Low	Due diligence must be applied to ensure all controls remain effective and continue as normal.
4-9	Medium	Monitor risk controls to ensure they remain effective and routinely consider new or additional control options.
10-15	High	Regular review of all risk controls and their effectiveness and consideration of new or additional control options to reduce risk. Management attention and sign off required to continue activity.
16-25	Extreme	Stop activity immediately – Actions must be taken to minimise the risk before activity can commence or continue – Board / Executive Committee approval required to continue or commence activity.

Figure 4 – Example Risk Action Table

It is very important to note that regardless of the level of risk, the operator must implement all controls that are reasonably practicable.

5 Next Steps

Once these initial steps have been followed and the risk matrix is developed, it should be formally adopted and integrated into the documented risk management procedures as part of the SMS. Then risk assessments can then commence.

It is essential that those who conduct or attend risk assessments understand what needs to be done, and why they are being done – they are not an administrative exercise but will help to build a safety culture and safer working environment, as well as demonstrating legal compliance.

Each operator should ensure that their procedures reflect what they do now, and not what they would like to do. Like all procedures, risk management procedures will be part of regular reviews and can change in line with changes in the operations.

Risk Assessment No.	
Reason for RA:	
Type of RA	
Location:	
Date:	

Attendees	Title / Role

Scope and Context - what is this about? What are we trying to achieve? Background? What's in & what's out of scope?

1. Identify Risks				2. Analyse Risks			
				Existing Controls			
Risk Assessment No.	ID	Risk Description What could go wrong?	Risk Owner Who is accountable for managing this risk?	Cause(s) What could cause this risk to occur?	Consequence(s) What are the potential impacts of the risk on the organisation & people involved ?	Control Description(s) What do we do now to manage the risk?	Reference to SMS Where can more detail on the control can be found?
RA1	1	<i>Derailment of passenger train</i>	<i>A. Person</i>	<i>1. Broken rail 2. Axle failure 3. Overspeed round bend</i>	<i>1. Harm to driver and passengers 2. Reputational damage 3. Damage to track</i>	<i>1. Track maintenance 2. Rolling stock maintenance 3. Driver route knowledge</i>	<i>1. Track Maintenance Plan (TMP1) 2. Rolling Stock Maintenance Plan (TMP2) 3. Route knowledge diagrams and training records (REF123)</i>
	2						
	3						
	4						
	5	Copy and paste the contents of each risk assessment into one document to create a risk register.					
	6						
	7						
	8	Enter the name or number of the risk assessment being copied over.					
	9						
	10	You can then sort by Level of Risk (column L or column T)					
	11						
	12	An example is included in red in row 4.					
	13						
	14						
	15						
	16						
	17						
	18						
	19						
	20						
	21						
	22						
	23						
	24						
	25						
	26						
	27						
	28						
	29						
	30						
	31						
	32						

[illegible]

Appendix D – Risk Management (Additional Procedural Content)

1 What can go wrong and why?

- Procedures should include all parts of the operations:
 - technical /engineering (e.g. maintaining rolling stock and rail infrastructure);
 - operations (e.g. operating passenger services on running days, shunting activities, etc.); and
 - organisational (e.g. governing, overseeing and managing the rail operator's business).
- Examples of what can go wrong will typically include:
 - collision – with rail infrastructure, with rollingstock, with people or animals;
 - derailment – on the mainline or within a siding;
 - fire and explosion – on rollingstock, around infrastructure (including buildings);
 - falls from height, slips & trips, electrocution;
 - exposure to fumes or smoke or hazardous materials, etc.

2 Helps an operator to work out what causes things to go wrong that will require managing

Some examples could include:

- a locomotive, carriage, trolley or tram breakdown or removal from service because of defective passenger doors or train parting;
- track and/or civil infrastructure needs repair or has spread;
- a runaway carriage;
- exceeding the limits of authority given;
- breaching a network rule/ safeworking procedure;
- an issue associated with fatigue, drugs and alcohol use, health and fitness, or even layout of the locomotive cab that could impact rail safety worker performance.

3 Helps the operator analyse and assess the risks

The procedures should:

- Describe how the operator assesses the degree of harm or consequence if the hazard occurs, with agreed definitions for differing levels of consequences;
- Describes how the operator assesses the likelihood/frequency of the hazard or risk happening, with agreed definition of differing levels of likelihood;
 - Use a documented matrix that shows the various combinations and what actions will need to be taken as a result, for each combination;
- States that the operator is to document all risk controls that were considered to eliminate or reduce risks:
 - those that are adopted; and

- those that are rejected and the reason why;
- States that the operator will consider what else can be done to minimise the risk, and if it is reasonable to do so:
 - What do other like operators do?
 - What is good practice?
 - What standards are available here and overseas? Are they appropriate?
- Instructs the operator to consider what other controls are available, suitable and effective to reduce the risk further; and
- Looks at the cost versus the benefit of the controls (i.e. the cost of additional controls to further reduce the risk is disproportionate to the safety benefit gained);

4 Gives instruction to help the operator evaluate the risk and decide what to do next

- How to check that the risk is managed SFAIRP - does more need to be done?
- Thinks about whether higher level risks need to be reduced further by adding more controls;
- Clarifies who is responsible for managing the various risks, and:
 - at what point they can decide that they have done all that can be reasonably be expected to be done to manage each risk; or
 - that the risk is so great it cannot be tolerated, and the activity must be ceased.
- How to set priorities for any additional controls that are still to be put in place;
- Shows the level of authority that is required to accept the risk – i.e. acceptance of those risks that are extreme or high can only be approved by the Board or Executive Committee?

5 Advises that a plan should be developed for implementing additional controls

- Once documented, the plan will be used to record and track who is responsible for implementing the plan;
- Includes:
 - due dates;
 - allocates responsibility for action; and
 - is updated regularly to show the current status of the control (e.g. not started, in progress, delayed).
- An example should be, the operator uses a short platform for one of its passenger services.

This means that a single carriage door does not line up with the platform at this station. The operator should assess various options to prevent passengers falling from this single carriage door onto the track.

This could include major civil works to extend the station platform to align with the maximum train length. The cost of these works would be quite significant. However, there may be other effective and cheaper options to prevent passengers from falling which include shortening the train by a carriage, or ensuring all passengers are supervised departing the train by alternate means (e.g. this may involve a guard or passenger service attendant manning the door or locking it while passengers are guided to use the front door of the carriage).

6 Describes how to communicate and consult about risk

- Procedures should be promoting awareness and understanding of risk throughout the operations at all levels of the operator's operations; and
- disseminates information to people responsible for implementing controls.
- Requires those who carry out risk assessment are competent to do so; and to ensure that they are attended by people who have the appropriate skills and qualifications to comment on the matter being assessed;

Examples could be:

- rolling stock maintainers and engineers participate in risk assessments about workshop activities;
- train crew are included in risk assessments about rail operations;
- all volunteers and staff are included in tool box talks in preparation for event days;
- the Board/Executive Committee has a dedicated risk sub-committee.

7 Describes how to monitor and review those identified risk levels

The risk management procedure:

- May include a requirement for higher risks to be monitored more closely or frequently;
- Ways to monitor could include:
 - audits (internal and external);
 - regular reviews of risk assessments; or
 - when changes occur;
 - as part of the SMS review process;
 - after an incident or near miss.
- Allocates responsibility to a specific role to ensure the risk register is kept up to date.

Examples could include an incident that occurs because a control failed:

- a guard failed to close a door and a passenger fell out;
- the driver wasn't competent and exceeded his authority;
- a maintainer certified the club car as fit for purpose when he didn't have the authority to do so;
- the locomotive was operated when maintenance had not been carried out when it was due;
- The platform signage was not clearly visible, and a customer fell onto the track.

8 Requires everything to do with risk management to be recorded, and describes what is to be reported and to who

The procedure could include provisions:

- for applying the procedure to the management of risk;
- Using agreed templates for risk assessment and consolidated risk register;
- Includes a formal process for escalation of risk, e.g. to the Board or Management Committee to assist with awareness and communication of risks across the operations;
 - resulting in a governance framework for the reporting of risk;
 - forms part of the requirement under the Law to report on the safety performance to:
 - inform those with responsibility and accountability for risk management activities,
 - and those who need to understand the risk profile of the railway operations carried out.
- Explains that following this approach will provide for adequate and safe decision making, including:
 - committing resources;
 - prioritising actions;
 - managing risks SFAIRP.

What and Why

'Human Factors' is the term that is used when we talk about what people do and why they do it.

Safety issues may arise when people may behave in certain ways that could be as a result of:

- Poor interaction with tools or equipment due to design, construction or engineering;
- Personal attributes – health (mental and physical), influence of drugs and/or alcohol etc.

By considering human factors, operators can:

- Reduce the likelihood of human error;
- limit the consequences of human error;
- increase the margin for safety; and
- increase efficiency and effectiveness.

The study of Human Factors has become more widely acknowledged in recent years and is worthy of some consideration given the design and age of heritage assets.

It would be expected that all operators acknowledge that human behaviour has an impact on safety, and that this aspect has been considered when identifying and managing safety risks.

How

Things that could be considered when thinking about human factors are that:

- Heritage assets were not designed with ergonomics in mind;
- Manual handling issues may arise from shovelling coal in a steam locomotive;
- Heritage station platforms may not compare with current standards;
- Track worker skills and experience may be appropriate for high speed mainline track, not heritage track;
- Volunteer labour may not fully comprehend the safety risk; and
- People can make mistakes when distracted, tired, poorly trained, etc.

This element could consist of a statement that notes that the operator considers human factors in all risk assessments, that humans are susceptible to:

- making mistakes and errors;
- behaving in certain ways; and
- risk controls that help manage human factors are also considered.

Who

When ONRSR conducts an audit, they will assess the operator's performance against the content of their SMS.

To demonstrate compliance, operators must do what they say that they do in their safety management system.

When conducting risk assessments, the operator should think about the following for any given circumstance:

1. How would a person normally react?
2. What sort of mistake can be made?
3. What can go wrong?
4. How likely it is someone will make the mistake?
5. What are the consequences if the mistake is made?
6. How do other risk controls prevent or limit the chances of a mistake being made?
7. How do other risk controls minimise the consequence of the mistake if it is made?

The Executive Committee/ Board may wish to sign off on these risk assessments or other relevant procedures as part of their governance processes.

When

Operators should consider human factors associated with every activity that is risk assessed.

List of relevant documents (internal)

Element 16 - Risk management

Element 27 - Health and Fitness

Element 28 - Drugs and Alcohol

Element 29 – Fatigue Risk Management

Links (external)

[ONRSR Website](#)

[ATSB Website](#)

Appendices

None

Safety Management System Modules

Element 18 – Procurement and Contract Management

What and Why

It is essential that procurement and contract management procedures consider safety aspects.

Under the law, all rail transport operators are held directly accountable and responsible for safety within the scope of their operations. Under both the rail safety law and prevailing workplace health and safety laws, it is not possible to contract out any safety responsibilities.

This means the rail operator is responsible when someone is contracted to do safety work

With this in mind, even smaller less-complex operators should understand what they need to do and how they can manage procurement and contractors.

If considering whether or not contractors are performing rail safety work, it is wise to further consider what is defined as rail safety work. Anyone who is engaged as a contractor to perform any of these tasks is considered to be a rail safety worker.

A contractor is someone who is not employed and who is engaged to perform rail safety work for a rail transport operator. This may be on a single or ongoing basis. There is no requirement for a physical 'contract' between the rail transport operator and the contractor, so long as there is an arrangement to do work.

Examples of contractors could include:

- An external maintainer engaged to maintain a specific locomotive type;
- A training organisation to perform competency assessments;
- An Engineer engaged to develop standards;
- A consultant engaged to certify track post maintenance works;
- An engineman engaged through a labour hire company on a short-term basis;
- An engineer who is de-commissioning a steam locomotive;
- A consultant who is facilitating operational risk assessments;
- A motor mechanic who is servicing a Road Rail Vehicle.

Contractors who are to perform rail safety work must also be able to demonstrate that they are Fit for Duty under the National Health Assessment Standard for Rail Safety Workers (see Element 27 Health and Fitness) before they are engaged to commence rail safety work.

In relation to procurement, rail transport operators should consider how and what they purchase and the impact on safety. For smaller less complex rail operators, this may be as simple as a statement on how safety is considered when buying products or services.

An example could be that the operator only purchases safety equipment or tools that comply with Australian Standards.

Larger more complex operators should consider:

- If, when and how they tender;
- What controls are in place when engaging contractors;

- The standards to which products or services should demonstrate;
- How the operator assures itself that the products or services are safe;
- How the performance of the contractor is monitored or assessed;
- Whether or not contractor audits are required.

How

As with all components of a Safety Management System, agreed procedures should be documented and included as part of the SMS. This procedure should describe how procurement and contractors are managed. These can be separate documents or combined.

The level of detail in the procedure will be relevant to the nature and scope of the operations.

Things for the operator to consider include:

- That equipment, parts, and consumables are fit for the intended purpose during sourcing;
- Whether there are specific specifications that safety critical components and equipment must meet?
 - If so, what are these?
 - Are they appropriate for the frequency and use in the current operations?
- Whether or not specific Australian Standards should apply, or whether standards are set by the Rail Infrastructure Manager that manages and controls the track.
- For components no longer manufactured, the operator should be able to demonstrate that they get “like for like”;
- Defining the limits for purchasing for each role within the organisation (See Appendix B);
- If contractors are not used to perform rail safety work, the operator may have a simple statement to support this position.

Rail Transport Operators and contractors must agree how they will manage safety while the work is being done. This could be through by either the:

- Contractor applying the relevant systems, procedures and reporting imposed by the operator’s safety management system; or
- Operator incorporating the contractor’s systems and procedures into its safety management system.

This is particularly important when the contractor does not normally perform rail safety work.

If using contractors, the operator should also consider:

- How to specify the work to be done, the standard to which it is to be completed?
- How to know that the contractor is competent, fit for duty and qualified to perform the work while on the operator’s network;
- The insurances that are held by the contractor;
- How to monitor the performance of contractors in delivering on the specifications;
- How consultation mechanisms can include contractors.

Whether expectations placed on the contractor’s performance may mean that they take shortcuts to meet financial and /or time constraints.

Who

The Executive Committee/Board may have agreed authorities in place for procurement as part of their governance processes.

Managers and Supervisors could have financial delegations included in their job /role descriptions or included in financial procedures.

They should also ensure that their direct reports have a clear understanding of the process for engagement of contractors and the conditions under which they must be engaged.

Rail Safety workers, volunteers and visitors should understand their obligations in relation to what and when they can procure goods, the conditions of procurement and any relevant standards. In addition, they should understand how their role interacts with contractors, and the operator's expectations of that interaction.

When

Procurement procedures should clearly define when and how they apply. Any person who is authorised to buy either services or products should apply these principles when considering procurement of any new or different items.

Every contractor that is engaged to perform rail safety work should be reviewed and assessed for qualifications/licences, competency, fitness for duty and insurance prior to engagement.

List of relevant documents (internal)

Element 13 - Consultation

Element 27 – Health and Fitness

Element 19 – General Engineering and Operations System Safety Requirements

Links (external)

[National Transport Commissions National Health Assessment Standard for Rail Safety Workers](#)

[ONRSR Website – Health and Fitness](#)

Other websites – not endorsed by ONRSR

[WA Government – Department of Finance \(Procurement Templates and Guides\)](#)

[Comcare Website – Contractor Management](#)

[Government of South Australia – State Procurement Board](#)

Appendices

A. [Example Procurement Register](#)

B. [Example Contractor Register](#)

C. [Example Contractor Letter](#)

Insert Logo here

Dear [Enter Name],

RE: Contract Work at [Enter Operator Name]

As part of our obligations under the Rail Safety National Law, we are required to ensure that all contractors are working safely and in accordance with our Safety Management System.

In order to perform contract work for [Enter Operator Name] we will require you to provide us with evidence of your current Public Liability Insurance and Professional Indemnity Insurance [Delete as necessary]. We will expect you to maintain relevant insurances for as long as you perform work for us.

If you are unable to do this, or if your insurance expires you will not be authorised to perform any work for us until you can demonstrate that your insurances have been renewed.

In addition, you will be required to participate in any training specific to the safety of our operations.

Due to the unique risks associated with rail, you may also be required to provide Safe Work Method Statements or Job Safety Analysis before commencing any safety related work. This will be discussed with you at the time.

While performing work on or around our rail operations, you will be required to follow the instructions of a nominated representative as required.

We look forward to working with you.

Yours sincerely,

NAME

JOB TITLE

Safety Management System Modules

Element 19 – General Engineering & Operations Systems

What and Why

The Safety Management System contains the technical engineering detail which describes the standards that railway infrastructure and rolling stock must meet to be considered safe for the railway operations.

It should also describe the acceptable tolerances before maintenance is required and when the item will be removed from service.

This module links closely with Element 20 – Process Control and Element 21 – Asset Management. For the purposes of this module, the content is focused on the requirements for Element 19.

How

Standards, procedures, test/checklists and engineering drawings are available for each asset and are included in the SMS.

Documents and standards used are appropriate to the asset(s) and the asset(s) operation and frequency of use.

Rail operators should ensure that standards and procedures that have been taken from other sources (or developed internally) have been reviewed and assessed by the responsible competent person(s) to be appropriate for the specific assets in use.

These are typical areas that should have appropriate technical/engineering standards:

- Rail Infrastructure
 - Track geometry, rails, sleepers, fixings, joints, ballast, formation, drainage;
 - Bridges, culverts, retaining walls, tunnels, station platforms, signals, level crossing equipment.
- Boilers
 - Original design drawings and specifications, current boiler operating manuals and management/maintenance plans.
- Rollingstock
 - Brakes, wheels, axles, suspension, bogie components, chassis, drawgear, couplings, doors, windows, securing internal items, safety systems and lighting.
- Operating Systems
 - Network (safeworking rules) which govern the movement of trains;
 - Shunting procedures, train examination and brake test procedures;
 - Operating procedures which describe the correct way of operating each class of rolling stock and signaling systems.

The following information should be documented for each asset to demonstrate compliance to the law:

- Asset description and location;

- Technical performance specifications and drawings. That is, the standard to which the asset must meet to be considered safe and fit for purpose for the railway operations;
- An appropriate inspection and maintenance schedule with appropriate maintenance procedures, tests and checklists;
- How the standards and inspection schedules have been determined to be appropriate for their particular scope of operations.

Who

Prior to adopting external standards, they should be reviewed for relevance and appropriateness by a qualified person. For example – Adoption of a main line state owned rail infrastructure manager, operating high speed trains would not be appropriate for a static display that operates passenger trains once a year at its annual fundraiser.

Only those with engineering skills/experience should amend /modify standards and supported by risk assessment.

The Board/ Executive Committee should review any risk assessments and proposals to change standards as part of their governance obligations.

When

Standards should be considered (and reviewed as necessary) when new rail assets are obtained.

Where material change occurs and/or risk assessments are conducted, relevant standards should be reviewed to establish that they are still appropriate and applicable.

Where standards are to be amended/modified, risk assessment with appropriately qualified persons should be carried out.

Managers and Supervisors should make sure that policies and procedures reflect the standards in place, and that they are met as part of regular operations.

Rail Safety workers should comply with safety procedures that require work to a specific standard, including contractors and volunteers.

List of relevant documents (internal)

Element 7 - Procurement and contract management

Element 11 – Corrective Action

Element 12 – Management of Change

Element 16 – Risk Management

Element 20 – Process Control

Element 21 – Asset Management

Element 24 – RSW Competence

Links (external)

[ONRSR Website – Road Rail Vehicles](#)

[ONRSR Website – Engineering Safety Management](#)

[ONRSR Website – Rail Locomotive Boilers Guidance](#)

[ONRSR Website – Asset Management](#)

Appendices

None

What and Why

Process Control is the name for the processes and procedures that a rail operator has in place to inspect its infrastructure and rollingstock to make sure that these assets meet the standards set, and that they are fit for purpose.

It also includes the processes for monitoring compliance with operational systems, such as:

- Operating rules and procedures (Safeworking systems /Network Rules);
- Maintenance of rolling stock and infrastructure has been done;
- Ensuring that only competent people are rostered/allocated and undertake rail safety work;
- Rostering /resource allocation of rail safety workers are fit to do so (drugs & alcohol, fatigue, health assessments).

To ensure that standards set as developed as part of Element 19 are being used by rail safety workers.

This module will focus on rollingstock and rail related assets. In addition, the complexity around what standards to set is explored in Element 19. This module refers **only to the inspection processes** for rail related assets.

The standards referred to here are those that have been defined in SMS Element 19 - General Engineering & Operations System safety requirements.

Infrastructure and rollingstock assets, like any other vehicle need to comply with engineering standards to ensure that they are safe whenever they are in use, and to reduce the opportunity of failure or breakdown.

An inspection regime typically involves a combination of:

- Pre-use (daily) inspections of the track and rolling stock to check for obvious defects which affect the safety of the day's operations; and
- Periodic detailed inspections which are conducted at varying frequencies depending on the age, amount of use and rate of deterioration of the infrastructure and rolling stock;
- With various inspection types carried out by rail safety workers with various levels of competency directly associated with those inspection activities.

How

A procedure contained within the SMS should describe the requirements for testing and maintenance of rail infrastructure and rollingstock assets.

Rail operators should include details as to:

- How they schedule inspections - at what level and by who;
- What exceptions exist if any?
- What tolerances exist to inspection periods, if any?

- The process as to certify inspections when additional levels of control are required (eg. a Fireman and Driver may conduct brake tests and certify the brakes fit for use, while an engineer or maintenance manager may have the competence to certify a locomotive after a 365-day service);
- Any specialist engineering and technical skills required to carry out periodic detailed inspections of some assets like bridges and level crossing equipment;
- What calibration and maintenance processes are required for all equipment used to inspect or test infrastructure or rollingstock;
- How test, inspection and maintenance records are kept to provide evidence of the condition of rail infrastructure or rolling stock. Refer to Element 7 – Document Control and Information Management. Records of all inspections form part of the maintenance history of an asset.

Records must be kept to confirm:

- The inspections have been carried out, and by who;
- The defects identified;
- The condition of the infrastructure/rolling stock (and any restrictions) has been reported to those responsible for the day's operation;
- That defects have been reported for rectification;
- That defects are prioritised and tracked until rectified;
- That maintenance work carried out on each asset (both routine and rectifying defects) is recorded (for example a maintenance log for each asset);

Record keeping will also assist rail operators as part of post incident investigations.

Operators should use internal auditing processes in Element 10 – Safety Audit Arrangements), to ensure that the standards that have been set are being met by Rail safety workers.

Who

Inspections and maintenance of safety rail related assets must only be performed by rail safety workers who have the appropriate and correct levels of competence to do the work.

This is particularly important for smaller less complex rail operators, who should assure themselves that any new rail safety workers hold the competencies required for their specific SMS. One size does not fit all.

The Board/Executive Committee may wish to review inspection and maintenance procedures to comply with their governance obligations.

The Board / Executive Committee and Maintenance Managers may seek regular exception reports for rail infrastructure and/or rollingstock maintenance.

All rail safety workers who conduct inspection/maintenance activities should ensure that they only work within the limits of their own competence.

When

All inspections and maintenance activities should be carried out within the timeframes and tolerances of the maintenance regime established for each piece of equipment/asset.

Audits of inspection and maintenance activities, as well as operational systems should be carried out consistent with the audit schedule (see Element 10).

List of relevant documents (internal)

Element 7 – Document Control and Information Management.

Element 10 – Safety Audit Arrangements

Element 11 – Corrective Action

Element 19 - General Engineering & Operations System safety requirements

Element 24 – rail safety worker Competence

Links (external)

[ONRSR Website – Asset Management Guideline](#)

[ONRSR Website – Road Rail Vehicles](#)

[ONRSR Website – Locomotive Boilers Guideline](#)

[ONRSR Website – SMS Guideline](#)

Appendices

None

What and Why

What and Why

All assets have a 'life cycle' from design through to disposal. Broken down, there are six phases in this cycle:

- Design;
- Construct;
- Test/commission;
- Operate;
- Maintain; and
- De-commission/dispose.

Asset management is important because it is the approach used by a rail operator to ensure that physical assets remain safe, fit-for-purpose, and commercially viable through each stage of the life of the asset. Good asset management also contributes to use of the asset, and ultimately, a good return on investment.

It is important that less complex operators develop asset management systems that are appropriate to the scope and context of their operations. For example, maintenance processes for a steam locomotive that was used daily after commissioning but is now only operated twice a month will vary significantly. Rail operators should consider the age and frequency of use of their assets when developing an asset management system.

There is a lot of cross over between this module and with Elements 19 and 20. For simplicity, this module will deal with how the operator will apply those standards during each phase of that cycle in general terms. Rail operators with more complex operations may wish to combine modules in their SMS that have significant commonality.

How

As with the other SMS modules, preparing and implementing a procedure that describes how the rail operator manages their rail assets through the life cycle is a demonstration of understanding of the management of those assets. Together, this will form an Asset Management Plan.

The law simply requires that an Asset Management Plan is in place that addresses all aspects of asset life-cycles. Taking into account the scope and context of rail operations, this may be a simple document that describes what is actually done.

As different risks will arise during each phase of the asset's life, and consistent with a risk-based approach, rail operators should carry out risk assessments to determine the best approach to managing rollingstock assets, infrastructure assets and their individual components.

The results of the risk assessments will form the basis of an asset management approach. Taking each stage of the life cycle separately, rail operators should consider the following as part of their risk assessments and address these in their procedures:

Design

- What are the operating parameters of the railway (axle load, minimum curve radius, track geometry tolerances, rolling stock outline, speed, visibility & braking performance)?
- Which standards apply to the item of rolling stock or infrastructure?
- What engineering drawings are available to confirm the specifications for the asset? (Refer to Element 19)
- What was the original life of the asset – how far that life is (age/use) is the asset?

Construct:

- How do you ensure what is built meets your design criteria?
- If not, what are the impacts of any modifications to the design criteria?
- If contractors are engaged, what processes are in place to manage them?
- How do you ensure the quality of the item being built?
- Is there a formal acceptance process that verifies that the item is fit for purpose and safe to use?

Test/Commission:

- What tests do you carry out to confirm the item meets the design criteria and is fit for purpose and safe to use?
- Is there a documented testing /commissioning process?
- Are test plans developed and used as part of the process?
- Is there a validation/verification process?

Operate:

- Under what conditions is the asset operated? This must be consistent with its design;
- Under what condition shouldn't the asset be operated?
- Does the use of the asset need to be modified or limited given its age, history of use and/or condition?
- Are there a set of operating procedures which describe the correct and safe way to operate the item?
- What training and assessment of competence is required to operate and maintain the asset?
- How are defects/faults detected and reported for rectification?
- When must the asset/item be removed from service due to a defect/fault?

Maintain:

- What are the inspection regime and maintenance schedules?
- How have you determined the inspection regime will adequately monitor the condition of the asset (Refer Element 20 - Process Control)?
- What are the maintenance tolerances and condemnable criteria (Refer Element 19)?
- What training and assessment of competence is required to inspect and maintain the asset?
- How are defects/faults reported and prioritised for rectification?
- How are defects/faults tracked until rectified?

- What records are kept demonstrating a history of inspections and maintenance carried out on the asset?

De-commission/Dispose:

- How is an item (or component) prevented from re-entering service?
- What re-qualification process is in place if an item or component is to re-enter services?
- What is policy on re-cycling components from de-commissioned rail assets?
- How will the item be disposed?

Who

The Board / Executive Committee may wish to review any resulting Asset Management Plan and Risk Assessments to demonstrate their governance obligations.

Risk Assessments should be attended by rail safety workers and other persons who have competence /qualifications and/or skills in engineering, maintenance and asset management.

Managers and Supervisors should ensure that asset management plans are developed and complied with as part of SMS compliance.

Only competent Rail Safety Workers should conduct rail safety work. i.e. construct, operate, maintain, or de-commission/dispose rail assets. (refer to Element 24, Appendix A – Definition of Rail Safety Work).

When

Compliance with law implies that an Asset Management plan has been developed and forms part of the SMS, and therefore was included in an application for accreditation.

Asset management planning is an essential component in ensuring safety, and as such, should be part of regular SMS reviews, and when changes occur.

All activities described in the Asset Management Plan should be carried out in the stipulated timeframes.

List of relevant documents (internal)

Element 7 - Procurement and contract management

Element 11 – Corrective Action

Element 16 – Risk Management

Element 19 – General Engineering & Operations System safety requirements

Element 20 – Process Control

Element 24 – RSW Competence

Links (external)

[ONRSR Website – Asset Management](#)

[International Standards Organisation – ISO 55000 Asset Management](#)

Appendices

None

Safety Management System Modules

Element 22 – Safety Interface Coordination

What and Why

Safety Interface Coordination is the process by which the activities of two (or more) organisations at an identified location are managed to ensure the safety of railway operations.

An Interface Agreement is a document that describes all the arrangements that are in place where this occurs. Examples are:

- Where a rolling stock operator operates on another's infrastructure (and vice versa);
- Level crossings;
- Road Crossings (public with Councils) or (private with landowners).

Many organisations have different names for the same type of document - An Interface Agreement is the same as an Interface Coordination Plan, a Safety Interface Coordination Plan and a Safety Interface Agreement.

Where interfaces exist, both (or all) parties come together to jointly assess the risks of the interaction of their operations. An Interface Agreement is the document which:

- Describes the interaction between the two or more organisations;
- The risks arising from that interaction;
- The ways in which those risks are managed;
- The responsibilities of each party (in other words which party is responsible for implementing each risk control);
- Provides the contact details of each party so each can report items requiring attention to each other;

Details the way in which the risks and the way in which they are controlled are periodically reviewed.

How

A procedure in the SMS should describe how safety interfaces are developed, managed, and reviewed.

This may include:

- A simple process for developing an Interface Agreement;
- A template document to be used as an Interface Agreement;
- The requirement to perform a risk assessment on the activities that occur at the interface location in line with the operator's risk management procedures;
- A numbering convention for Interface Agreements;
- A statement that describes how often they are to be reviewed. Interface agreements that are unlikely to change may have a longer review period than those that will;
- Details of if or when Interface Agreements may be included in audit schedules.

Operators are required to have a register that includes the details of all Interface Agreements.

In the case of level crossings, an Interface Agreement would be established between the road owner and the rail infrastructure manager (RIM) and would cover items such as:

- Description/identification of each level crossing;
- An assessment of the risks presented by the level crossing;
- Agreement on the type of protection provided at each level crossing (active/passive);
- Who is responsible for maintaining sight lines (a) in the rail corridor (b) the road corridor (e.g. vegetation control);
- Who is responsible for maintaining level crossing signs (a) at the level crossing (b) in advance of the level crossing;
- The boundaries for responsibility for maintaining the road surface;
- Who is responsible for maintaining road markings;
- What co-ordination is required when road works are required in the vicinity of the railway (and vice versa);
- Contact details of each party;
- Details of how often/when the agreement is reviewed.

Who

RIM's, private road owners and councils have mandatory obligations under the law to have interface agreements in place. Managers and Supervisors may have responsibility for ensuring that Interface Agreements are in place prior to commencement of operations.

The operator may include responsibilities for Interface Agreements in position/role descriptions;

The Executive Committee/Board may wish to endorse and approve Interface Agreements as part of their governance obligations.

The most senior person may wish to sign Interface Agreements as a representative of the operator.

Some operators obtain multiple signatories for Interface Agreements – operations, safety and governance.

When

Ideally, Interface Agreements should be in place prior to the commencement of operations.

Interface Agreements should be reviewed consistent with the timeframes provided in safety management system procedures, or when changes occur at the interface.

List of relevant documents (internal)

Element - 16 Risk Management

Interface Agreement Template

Example Interface Agreement Register

Links (external)

[ONRSR Website – Interface Agreements](#)

[ONRSR Website – Fact Sheet for Interface Agreements for Road Managers](#)

[ONRSR Website – Using the Interface Agreement Template](#)

[Transport for NSW – Interface Agreements](#)

Appendices

A. [Example Safety Interface Agreement Register](#)

Safety Management System Modules

Element 23 – Management of Notifiable Occurrences



What and Why

Details of what notifiable occurrences must be reported and when can be found in Regulation 57, and in Schedule 1A of the Regulations. There are a number of obligations that must be demonstrated by an accredited rail transport operator, and these also link with several other elements of the SMS, including, but not limited to, drug and alcohol management, corrective actions, and performance measurement.

For ease, references are included here, and details of the obligations will be included in each relevant element.

The notifiable occurrences prescribed by the RSNL are set out in the ONRSR Notifiable Occurrence Reporting Requirements guideline (available on ONRSR's website).

The obligations for all accredited operators are to have procedures in their SMS that:

- describe how they manage the scene of a notifiable occurrence
- advise how evidence is to be preserved;
- include how and when to report notifiable occurrences;
- provide instructions on how to determine which occurrences to investigate and how investigations are to be held.

Larger more complex operators will often split this element into two (2) components – Notifiable Occurrences and Incident Coordination.

Where operators share a network managed by another Rail Infrastructure Manager (RIM), they may be required under the conditions of their Access Agreements to adopt and comply with the RIMs procedures for incident coordination.

Regardless of where operators operate, they have an obligation to self-report all notifiable occurrences. That is, when operating on a RIMs network, two reports should be received by ONRSR – one from the RIM and one from the operator.

Where an operator is a RIM and a rolling stock operator, *only one report* is required.

How

Depending on the category of occurrence, the initial report may be verbal with a written report, or only a written report. Written reports are submitted to ONRSR via the ONRSR portal. The data that must be included is set out in the ONRSR Occurrence Data Submission Requirements guideline.

A procedure has been included in the SMS that describes how notifiable occurrences are managed, that includes information on:

- What a notifiable occurrence is;
- The details of the categories of occurrence;
- The process to report Category A, Category B and Category C occurrences, including timeframes to

report these;

- The 24/7 contact number for immediately reporting Category A occurrences;
- Details for reporting are included on noticeboards;
- Representatives who report occurrences understand the process to report them to ONRSR;
- Include a mechanism for occurrence reporting within the operations to prevent duplication of reporting – such as an incident reporting matrix;
- When drug and alcohol (D&A) testing is required;
- Who to contact to arrange D&A testing post incident;
- How and when to secure the incident site;
- How to determine if an investigation is required;
- The process to investigate an occurrence;
- the appropriate skills required by investigators to conduct impartial just culture investigations;
- the format and content of investigation reports;
- To whom the results are reported;
- How corrective actions are prioritised; and
- How corrective actions are tracked until resolved.

The organisation is receiving and acting on incident and near-hit reports received from all personnel and stakeholders.

An incident register/list is kept up to date. An example spreadsheet is included as Appendix A.

Staff are trained and aware of their internal reporting responsibilities (and external if they are to report to ONRSR). For example, induction includes going through the process of what that person must do if there is a notifiable occurrence.

Procedures for determining what incidents will be investigated by the operator, preserving evidence and determining who will conduct the investigation.

A nominated liaison with external investigators is determined, if necessary.

Corrective actions are registered and followed through.

Procedures specify who is to receive the investigation report and/or present to the Board/Executive Committee.

All investigation statements and information remain confidential, any learnings from the investigation shared across the organisation, and a just (no blame) culture exists across the operations.

Executive Committee/Board reports include details of notifiable occurrences, as well as a status on any actions by ONRSR and any corrective actions that are ongoing or completed;

A culture exists where Rail Safety Workers (including volunteers and contractors) remain on site until all post incident actions such as testing, statement writing, and initial interviews are completed.

A training course for statement writing has been developed and delivered to relevant people.

New risks or emerging trends established as part of investigations are reflected in the organisations risk register and associated risk assessments.

Who

All operators are expected to review all notifiable occurrences and decide on which they will investigate to and identify corrective actions to prevent re-occurrence.

Operators may elect to have a single point of contact, who is responsible for reporting occurrences to ONRSR, and this may be part of job/role descriptions.

Investigators have the necessary skills and tools to conduct a root cause investigation.

ONRSR may ask an operator to provide a copy of the investigation report and follow up the implementation of corrective actions.

The Australian Transport Safety Bureau (ATSB) or ONRSR (or both) may decide to conduct their own investigations, in addition to the operator's.

All Rail Safety Workers understand their post incident obligations in relation to drug and /or alcohol management.

All Rail Safety Workers understand the process that is to be followed after a notifiable occurrence.

All Rail Safety Workers have received appropriate training in statement writing.

Any reports requested by ONRSR are endorsed by the Executive Committee/ Board prior to submission.

All persons involved in the occurrence provide written statements about their own experience of the occurrence.

When

Those notifiable occurrences that are Category A must be immediately notified by telephone to ONRSR on **1800 430 888 (24 hours / 7 days)** with a follow up written notification to ONRSR within 7 days of becoming aware of the incident.

Drug and alcohol testing is to be conducted for specific Category A occurrences which are subject to mandatory post-incident testing within three (3) hours of the occurrence unless testing has been undertaken by a police office or the Regulator. The occurrences are:

- Collision (excluding attempted or suspected self-harm incidents)
- Derailment
- Proceed Authority Exceeded
- Runaway
- Network Rule or Procedure Breach
- Person / Train Interface

Category B occurrences must be notified in writing to ONRSR within 72hrs of becoming aware of the incident.

Category C occurrences should be submitted to ONRSR annually via the ONRSR Portal prior to the due date for the Safety Performance Report (which is on the notice of accreditation), with an overview included in the Safety Performance Report.

Investigation interviews are conducted as soon as possible to ensure all details are captured.

List of relevant documents (internal)

Element 5 - Management Responsibility accountabilities and authorities

Element 9 – Safety Performance Measures

Element 11 – Corrective Actions

Element 16 – Risk Management

Element 24 – Rail Safety Worker Competence

Element 25 – Security Management

Element 26 – Emergency Management

Element 28 – Drug and Alcohol Management

Procedure for Notifiable Occurrences

Investigation report template

Position /Role Descriptions

Training /Competency matrix

Safety induction

Corrective Actions procedures

D&A Management Plan

Links (external)

ONRSR Webpage – Reporting a Notifiable Occurrence (available from www.onrsr.com.au)

Appendices

A. Example Notifiable Occurrence Spreadsheet (available from www.onrsr.com.au)

Appendix A – Example notifiable occurrence spreadsheet

	Collision (including near hit collision)	Derailment	Wrong side failure	Proceed authority exceeded (including SPADs)	Runaway	Fire, explosion or dangerous goods spill	Network rule or procedure breach	Load irregularity	Rolling stock irregularity (incl monitoring systems)	Level crossing irregularity	Track irregularity	Civil infrastructure irregularity	Electrical traction irregularity	Person/ train interface	Fatality or serious injury	Incident directly threatening safety
July																
August																
September																
October																
November																
December																
January																
February																
March																
April																
May																
June																
Total																

How to Use

Enter the number of notifiable occurrences for the month as they occur.

Consider adding a comment using the Review Tab so that further details of the occurrence is visible.

Consider a numbering system for any notifiable occurrences to assist with filing (eg 001/2020)

Graphs are in the Graphs Tab

Graphs will be automatically updated as data is entered into the "Occurrence Data" tab

A new spreadsheet can be created for each year by "saving as" and deleting the previous year's data

Data from this spreadsheet can assist with the preparation of the Safety Performance Report

Safety Management System Modules

Element 24 – Rail Safety Worker Competence

What and Why

Anyone who performs rail safety work must be competent to do so. Rail safety work is defined in section 8 of the RSNL.

It includes those who drive & shunt rolling stock, signal trains, guards, those who inspect and/or maintain rolling stock and railway infrastructure.

Note: Competency must be assessed in accordance with relevant qualifications or units of competence recognised under the Australian Qualifications Framework (AQF), unless it is not reasonably practicable to do so.

It does not mean that assessments must be carried out by a Certificate IV Trainer Assessor so long as the competencies are not used in another organisation. It means that if the assessment is carried out by a competent person who is not part of a Registered Training Organisation, it means that the skills only apply internally. That is – they are not portable to another operator.

How

The SMS contains a procedure that includes:

- Evidence that the contents of the Australian Qualifications Framework has been reviewed to see if it is practicable to use this framework;
- Details of the skills and knowledge are required for each class of rail safety worker for them to safely perform the task at their organisation have been identified (See Example RSW Competence Spreadsheet);
- The competencies each class of rail safety worker at their organisation is required to hold before an individual is permitted to perform that work;
- A list (register) of rail safety workers detailing the rail safety work they perform and the competencies they hold (See example Competency Register);
- A reference to the training material or standard operating procedures which describe the correct way of performing various tasks and rail safety work;
- That there are two forms of assessment;
 - an On The Job practical assessment, and
 - an Off The Job written assessment.
- A statement that describes what skills and/or qualifications must be held by an assessor;
- How the performance of rail safety workers will be monitored (and any arrangements relating to periodic reassessment);
- Details of the types and form of training records that will be kept;
- How competency is linked to rail safety worker identification.

Things to consider:

- Competency assessment involves all forms of rail safety work, not just operations like driving and shunting. It includes performing inspection and maintenance work on the railway's infrastructure and rolling stock.
- Operators must also ensure that they have people with the relevant technical competence to:
 - Develop/change safety standards for rolling stock and infrastructure together with operating rules and systems;
 - Confirm engineering standards and inspection regimes for rolling stock and infrastructure are appropriate for the scope and nature of the operations; and
 - Certify the condition of the operator's rolling stock and infrastructure meets the standards the operator has set.
- Records of the training provided to each individual and the assessment of their competence and other relevant qualifications are retained.
- Each rail safety worker must also carry identification that can be used to confirm who the person is and to check their competencies with the operator.
- Records must have details of:
 - the rail safety training undertaken by each rail safety worker, including when the training was undertaken and its duration; and
 - the qualifications and competencies of each rail safety worker, including
 - the name of the organisation, or person, who conducted the training or re-training; and
 - the name and qualifications of the person who assessed the competence of the rail safety worker.

Rail safety workers must be trained to respond to normal, abnormal, degraded and emergency situations.

Who

Managers and supervisors must ensure that all rail safety workers are competent to perform their rostered type of rail safety work.

Rostering staff should ensure that rail safety workers are competent when rostered for specific tasks and that sufficient supervision is in place for less experienced /qualified persons.

The Executive Committee/Board may seek reports regarding rail safety worker competence to fulfil their governance obligations.

Assessors must understand the serious nature of competency assessment, and that they have a personal liability when they assess a rail safety worker as competent.

All organisations have an obligation under safety laws to provide training, instruction, supervision and tools to enable people to do work safely.

Rail safety workers have an obligation under safety laws to attend training, apply the knowledge, and to use tools for their intended purpose.

All rail safety workers are required to follow reasonable management instructions.

When

Operators are to determine when and how rail safety workers are to be trained and assessed.

The frequency of re-assessment of competence is often led by the Rail Infrastructure Manager of a shared network. Where this is not the case, the frequency is determined by the operator, and should take into account the risk associated with the task.

Operators may wish to develop mechanisms to reassess rail safety workers if they have been absent from the operators for a pre-determined period of time.

List of relevant documents (internal)

Element 7 - Document Control and Information Management

Element 10 – Safety Audit Arrangements

Element 15 – Training and Instruction

Element 16 – Risk Management

Element 19 - General Engineering and Operational Systems Safety

Element 20 – Process Control

Element 27 – Health and Fitness

Competency Register

RSW Role Competence

Links (external)

[ONRSR Website – Assessment of RSW competence Fact Sheet](#)

[ONRSR Website - Application of the QAF to rail safety worker Competence Assessment](#)

[ATHRA Website – Training Pathways](#)

Appendices

- A. [Example Competency Register](#)
- B. [Example Rail Safety Worker Competence](#)
- C. [Example Training Attendance Form](#)

										<div>- Enter the date that the person was deemed competent. - The Competency procedure will define how often this training has to occur. - Enter the expiry date of the competency.</div>	
Name of RSW	Position										
0	0	TLIF1001: Follow									
0	0	Expiry Date									
0	0	TLIF1001: On Job									
0	0	Expiry Date									
0	0	TLIF2080: Safely Access the Rail Corridor									
0	0	Expiry Date									
0	0	TLIF2080: On Job									
0	0	Expiry Date									
0	0	TLIF2010: Apply Fatigue Management strategies									
0	0	Expiry Date									
0	0	TLIF2010: On Job									
0	0	Expiry Date									
0	0	TLIF2018: Operate Fire Fighting Equipment									
0	0	Expiry Date									
0	0	TLIF2018: On Job									
0	0	Expiry Date									
0	0	TLID1001: Shift Materials safely using manual handling methods									
0	0	Expiry Date									

[illegible]

[illegible]

RSW Role		Induction Program		Expiry Date		SMS Awareness		Expiry Date		D&A Awareness		Expiry Date		Fatigue Awareness		Emergency Response		Safety Procedures		TLIF1001: Follow Safe Working procedures		TLIF2080: Safely Access Rail Corridor		TLIF2010: Apply Fatigue Management strategies		TLIF2018: Operate Fire Fighting Equipment		TLID1001: Shift Materials safely using manual handling methods		TLIS3058: Apply Safeworking Rules and regulations to rail functions		TLIC2078: Indentify and respond to signals and trackside signs		TLIE2007: Use Communication Systems		TLIC4074: Shunt Couple and Uncouple Rail Vehicles		TLIB3123: Apply awareness of motive power unit																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Steam Trainee																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

				×	×		TLIB3124: Apply awareness of Steam locomotive fundamentals
	×			×	×		TLIL3039: Assist with Train Operations
				×	×		TLIB4077: Inspect and prepare a heritage steam locomotive
				×	×		TLIC3031: Stable a heritage steam locomotive
				×	×		TLIC3073: Fire a steam locomotive
	×			×	×		TLIC3072: Conduct Duties of a heritage locomotive assistant
×		×		×			TLIB3019: Test train braking system
×		×		×			TLIB4079: Conduct a general train examination
		×		×			TLIC3030: Operate and monitor a heritage steam locomotive
	×	×	×				TLIB3123: Apply awareness of motive power unit
×	×	×	×				TLIB4076: Inspect and Prepare a heritage motive power unit
	×	×	×				TLIC3029: Stable a heritage motive power unit
×		×	×	×			TLIC4019: Drive train to operation requirements
×		×	×	×			TLIC4023: Operate train with due consideration of route conditions
×		×	×	×			TLIF4110: Respond to emergencies and abnormal situations when driving a train

Document Name:	Training Attendance Register
Document Number:	XX-XXXX

Training Course: _____

Trainer: _____

Description of Course (or attach copy of training course) _____

Date: _____

Trainer Signature: _____

Attendees Name

Signature

Version No	Enter Version No	Version Date:	Enter Version Date
Approved By:	Job Title of the highest position in the organisation		

What and Why

Each railway will be exposed to a different level of security risk. Operators must be able to show how they have assessed the security level that applies to their operations. The types of events to consider are theft, assault, sabotage, terrorism and other criminal acts. Other events may be relevant to specific operators depending on where and what they operate.

For the purposes of section 112 (Security management plan) of the Law, a Security Management Plan must include:

- a list of the security risks;
- description of the preventative and response measures to be used to manage those risks

a description of the policies, procedures and equipment and other physical resources needed to manage those risks.

How

Operators should conduct a risk assessment focused on security matters such as theft, assault, sabotage, terrorism and other criminal acts. The risk assessment should also consider:

- Any additional events that could occur (ie protesters or activists);
- What arrangements should be in place where an operator has an interface with another rail transport operator and how those arrangements are communicated, understood and incidents reported;
- How security incidents will be reported, recorded and responded to;
- What security roles are required and how will they be performed, and by who;
- How will the operator liaise with emergency services in the event of a security incident?
- How will the operator liaise with other operators or rail infrastructure managers in the event of an incident (if relevant);
- How and when will security measures be reviewed, and by who?

Once a risk assessment has been completed, operators should develop a plan that describes:

- The measures they have put in place to prevent and respond to the types of incidents listed above;
- Who to report reporting security incidents to;
- How incidents will be recorded, analysed and responded to;
- Who is responsible for performing security related roles;
- How those people have been made aware of their security related role and what they are expected to do;
- Who will liaise with external parties;
- How security arrangements will be reviewed.

Who

Operators should consider if a single point of contact for security incidents is required, and any details be included in the documented security plan. Details of these responsibilities should be included in the relevant job/role description.

Persons who have nominated security roles are expected to perform their duties in line with their job/role description and the procedures described in the security plan.

The Executive Committee/ Board may wish to sign off on the security plan as part of their governance procedures.

When

Security arrangements should be reviewed:

- As part of the SMS review;
- As part of regular document reviews and updates;
- Changes to any aspect of the security measures put in place;
- After a reported security incident;
- After analysis of any findings associated with an incident;
- as part of the normal risk assessment processes;
- Where there is an increase in the Australian National Terrorism Threat Level.

List of relevant documents (internal)

Element 8 – SMS Review

Element 26 – Emergency Management

Security plan

Security procedures – bomb threat, terrorist activity, environmental activists;

Job descriptions

Links (external)

[ONRSR – Guideline – Small isolated line heritage operations – Safety Management System \(SMS\)](#)

[ONRSR Website – Guideline - Safety Management System](#)

[ONRSR Website – Rail Safety National Law](#)

[RISSB Security Management Handbooks Vol 1 and 2](#) (membership required)

www.nationalsecurity.gov.au

Appendices

None

What and Why

There is no point waiting for something to go wrong before deciding how to respond to unwanted events. Knowing how to respond to an emergency significantly aids response times of emergency services and limit the potential consequences of the emergency.

The law requires all accredited operators to have a risk-based emergency management plan for their operations. There are a number of components to the plan which must be included.

These include that the plan is:

- Prepared in consultation with emergency services (and any other party) that are likely to attend an emergency;
- Kept up to date with the law;
- Provided to the relevant emergency services and others who are likely to attend;
- Tested;

Used when an emergency occurs.

How

All operators must therefore assess the types of emergencies that can occur at their operations and develop an Emergency Management Plan for inclusion in their SMS.

Types of emergencies to consider include (but are not limited to) derailment/rollover, collision (train to train, level crossing collision (vehicle/pedestrian), boiler failure and fire (on board train and in the rail corridor), crew or passenger medical emergency.

An Emergency Management Plan (EMP) should have several components and each of these is taken separately for simplicity:

- **Initial Response**
 - When are the emergency services summonsed?
 - Who contacts the emergency services?
 - How the location of the emergency will be accurately identified and communicated. Identifying the relevant information that must be communicated to the emergency services;
 - The immediate actions to be taken to assess the severity of the emergency;
 - The actions to be taken to prevent the emergency from becoming worse;
 - What assistance is immediately available to injured persons?
 - Evacuation plans. How will people be evacuated and to where?
 - What actions can be taken to prevent potential environmental damage?
 - What is the role each person plays during the emergency?
 - Who is the liaison with the emergency services and will provide them with all the information they reasonably require to be able to respond effectively? (This may not be the same persons who initially contacts the emergency services.)

- **Investigation**

- Investigations are included in Module 22 - Management of Notifiable Occurrences, as there are a number of processes involved in this;
- Rail operators may wish to refer to this module in their EMPs, or to combine the information about investigations into the EMP.

- **Recovery & Resumption of Services**

- Estimating the resources (and identifying where they will be obtained from) required to recover and remove damaged rolling stock, reinstate rail infrastructure and any other property damage.

Generally, the following must apply and operators should consider that:

It is often difficult for smaller less-complex operators to prepare emergency plans in conjunction with emergency services and other parties. To assist, document all attempts to involve emergency services in EMP development. Also ensure a copy of the Emergency Management Plan is sent to the regional/local emergency services with an invitation to provide feedback and test the plan:

- Council;
- Fire and Emergency services representatives;
- Local Area Command Police force; and
- Ambulance services –.

Rail operators should consider how their Emergency Management Plans fit with other parties plans, such as Councils or other interfaced rail infrastructure managers/operators.

A copy of the Emergency Management Plan needs to be readily available to those who may be required to implement the plan.

The plan must be tested periodically.

A copy of the plan should be provided to the emergency services and they should be invited to participate when you test the plan.

A copy of the Emergency Management Plan needs to be readily available to those who may be required to implement the plan and they must be trained in and practice implementing the plan. This involves testing the plan periodically.

A copy of the plan must be provided to the emergency services and they must be invited to participate when you test the plan.

The emergency management plans need not be long, but they must show that the main situations have been identified and plans are in place to deal with them if they arise.

The plan must be a compilation of the possible emergency scenarios and the actions to respond to these.

Possible emergencies must have been included in operational risk assessments, and controls identified to prevent occurrence. The details of these and immediate response steps to minimise the consequences must be included.

SMS procedures must include the process for the first person on site, who is to call the emergency services and to notify key persons within the organisation.

When operators are operating on a branch line controlled by a rail infrastructure manager, the RIM may require compliance to their emergency management processes. In this case, the operator must ensure that everyone is trained in that process.

Any response procedure must include a list of phone numbers and contacts for each type of emergency, for example, fire services, the gas/electricity company

Evidence that emergency services advice was sought in preparing the plan.

Accompanying procedures for keeping, maintaining and testing the plan.

Staff have been briefed on the plans and they are tested routinely in-house and with relevant emergency services.

The plan provides details of the roles and responsibilities of everyone who will be involved in the event of an emergency.

All employees, volunteers, contractors and external agencies have been provided with, or have access to, a copy of the plan.

Who

Anyone who performs any type of work for the operator on site must:

- Have access to the plan;
- Understand the plan;
- Be trained in and may be required to implement the plan.

Any person who has a role or responsibilities in plan should comply with those.

Emergency service organisations and other relevant bodies should have a copy of the plan.

The Board/Executive Committee and /or Risk Committee may want to review the EMP as part of their governance obligations.

Managers and supervisors should ensure that the plan is appropriate to the operations and is practical and communicated to all relevant parties.

Emergency services are likely to take control of the incident site when they arrive.

Once emergency services take control of a site, the operator must comply with their instructions regardless of the details in the plan.

When

The plan is tested as a suitable time with a frequency appropriate to the scope and scale of the operations.

List of relevant documents (internal)

Element 16 – Risk Management

Element 25 – Security Management

Links (external)

[ONRSR – Guideline – Small isolated line heritage operations – Safety Management System \(SMS\)](#)

[ONRSR Website – Guideline - Safety Management System](#)

[ONRSR Website – Rail Safety National Law](#)

[NTC Australian Dangerous Goods Code](#)

[Australian National Security Website](#)

[Australian Government \(Business.gov.au\) website – Emergency Management](#)

[Workplace Health and Safety Queensland](#)

[Australian Red Cross – Preparing an Emergency Plan](#)

[Safework NSW – Emergency Planning](#)

[Queensland Fire and Emergency Services - Emergency Planning](#)

Appendices / Examples

None

What and Why

All operators must have a Health and Fitness program that fulfils the requirements of the National Transport Commission's National Health Assessment Standard for rail safety workers.

This is to minimise the impact on safety on the rail network from the effects of the health or fitness of a rail safety worker. The National Standard (the Standard) provides a number of key provisions to assist members of the rail industry to comply. This includes the requirements to:

- Determine the risk category of the rail safety worker;
- Identify and 'accredit' a Health Professional to conduct health assessments for the operator;
- Provides standard forms to be used by industry and their accredited health professionals;
- Provides for pre-employment, periodic and triggered health assessments;
- Allows for the privacy of the rail safety worker.

The Standards provides for a Health Professional to determine one of the following when assessing the health and fitness of a rail safety worker. Full details of these are described in the Standard;

- Fit for Duty Unconditional;
- Fit for Duty Conditional;
- Fit for Duty Subject to Review;
- Fit for Duty Subject to Job Modification;
- Temporarily Unfit for Duty;
- Permanently Unfit for Duty.

Where a rail safety worker is determined to be either Temporarily or Permanently Unfit for Duty – they **cannot perform ANY rail safety work in the category in which they were assessed**. They must be removed from rail safety work with immediate effect as soon as the determination is made and until a review is conducted and they are confirmed as Fit for Duty (any one of the four options).

Where the results of the health assessment indicate that the rail safety worker can continue to do some form of rail safety work, a risk assessment should be carried out to see what type of rail safety work the rail safety worker can still do. An example may be that the rail safety worker is unfit to be a Driver but is still able to work as in the maintenance shed, as a maintainer (if they are competent to do so).

The Standard is administered by the National Transport Commission and is therefore outside the scope of ONRSR.

Some larger operators will group Health Assessments, Drug and Alcohol management and Fatigue management in one SMS document as process for managing "Fitness for Duty". These modules take a singular approach for ease of understanding.

How

Operators should first of all download the National Standard and the health assessment forms from the NTC Website (see Links) and review it for understanding.

Word versions of the forms can be obtained by emailing enquiries@ntc.gov.au.

The SMS should contain a procedure that provides detail on how the health and fitness of rail safety workers is managed. The procedure:

- Does not need to include the content of the Standard, but should reference the Standard;
- Should include some written confirmation of the rail safety worker roles within the operations and the category that is applied to each of those roles. This may be in the form of a simple table;
- Contains references to the risk assessment carried out to determine which categories rail safety workers fall into;
- Should describe the process for approving the Health Professionals used by the operator. This could be as simple as stating the that operator selects the Health Professionals from the Rail Industry Worker website and has a verbal discussion to confirm that they will undertake health assessments for rail safety workers to the Standard;
- Confirms that rail safety workers are not able to commence any type of rail safety work unless they have been certified as Fit for Duty under the Standard for that type of work;
- Explains the process for arranging and paying for health assessments;
- Describes the process to issue the correct forms to the Health Professional and the rail safety worker;
- Describes how the operator will manage triggered or periodic health assessments;
- Should described steps that are to be taken for each type of determination received from the health professional;
- Refer to the process and communication that will be applied where a rail safety worker is determined to be Unfit under the Standard;
- Should refer to a Health Assessment Register or Database where dates of assessments are recorded and updated. An example is included as Appendix A to this module;
- Includes details of how health assessment records are recorded and retained;
- Include processes for ensuring that rail safety worker contractors are fit for duty in compliance with the standard.

There are a number of steps that are required to be demonstrated by all operators. An operator must:

- Assess the risk category of the rail safety worker.
 - Section 5.1 and Figure 6 of the Standard provide guidance and a flowchart to assist in the assessment of the risks associated with the tasks carried out by the various types of rail safety worker. An example could be that the level of risk for a person who works in a workshop is likely to be less than a mainline train driver.
 - Figure 9 describes the Risk Assessment Process to be carried out;
- Determine how they will accredit health professionals;
- Arrange for pre-employment health assessments to be carried out prior to engagement as a rail safety worker;
- Ensure that any person who is “Fit for Duty Conditional” understands and conforms to those conditions when carrying out rail safety work;
- Should describe how to use the standard NTC forms, and how, and to whom the forms are issued.

Who

- All rail safety workers (including contractors) should understand their obligations and whether the need to be to be a holder of a current health assessment;

- Operations Managers & Supervisors should ensure that rail safety workers who require health assessments only perform rail safety work when deemed “Fit for Duty”;
- Safety Managers and Administrative Staff should make sure that health assessment records /registers/databases are kept up to date;
- All persons follow the procedures for organising, attending, managing and responding to health assessments as described in the Standard and the operator’s procedures.

When

- Category 1 and 2: Safety Critical Workers must have a pre- employment health assessment, then
 - every 5 years to age 50, then
 - every 2 years to age 60, then
 - every year.
 - They must have a health assessment conducted within 2 years after turning 50 years of age, and within 1 year after turning 60 years of age.
- Category 3: Around the Track Personnel in an Uncontrolled Environment must have a pre-employment health assessment, then
 - every 5 years from the age of 40 years.
 - Category 3 workers who have had a full health assessment less than 5 years before turning 40 (e.g. for pre-employment) may have their next periodic assessments scheduled 5 years from that date.
- Category 4: Controlled Environment do not require a health assessment.

List of relevant documents (internal)

Element 20 – Process Control

Health and Fitness for Duty procedure

Health Assessment Register

Health Assessment forms

Controlled document procedure

Links (external)

[National Transport Commissions National Health Assessment Standard for rail safety workers](#)

[ONRSR Website – Health and Fitness](#)

[ONRSR Website – Guideline - Safety Management System](#)

[ONRSR Website – Rail Safety National Law](#)

[ONRSR – Guideline – Small isolated line heritage operations – Safety Management System \(SMS\)](#)

[Rail Industry Worker Website – Authorised Health Professionals](#)

Appendices

A. [Example Health Assessment Register](#)

[illegible]

Safety Management System Modules

Element 28 – Drug and Alcohol Management

What and Why

All operators must prepare a Drug and Alcohol Management Plan (a DAMP), that describes the processes that they will follow to minimise the risk occurring from rail safety worker use of drugs and /or alcohol.

It is essential that operators prepare a DAMP that is appropriate to their specific operations and that the DAMP relates specifically to the risks that the operator has identified.

How

A DAMP is a document that describes the processes to be followed to manage drug and alcohol use for rail safety workers. It can consist of one or more documents, so long as it meets a number of prescribed criteria:

- Some operators may have a specific Drug and Alcohol policy, other will have an overarching safety policy that includes their 'zero tolerance' approach to drugs and alcohol use;
- The policy must be available to all rail safety workers so that there is a clear understanding of it;
- The DAMP must be developed as a result of risk assessment. Operators should consider the:
 - time of day and days of operation – for example: very weekend or once a month;
 - makeup of the workforce– is it primarily retired or people who are employed;
 - the general health and age of the workforce
 - the type of work is carried out by rail safety workers.
- As part of the initial assessment, operators should consider the levels of safety risk for each rail safety worker role so that they can determine which roles require higher levels of testing.
- Operators should also determine the number of rail safety workers to be tested annually;
- A drug and alcohol testing program must be developed, and testing can be carried out internally or by using external contractors;
- Sign on sheets can include a statement to confirm that rail safety workers are free from drugs and/or alcohol;
- Rail safety workers who use prescription medication should report what they are taking and what affect they may have on their ability to do rail safety work;
- Rail safety workers who use prescription medication should also understand the impacts of self-medicating outside of prescribed dosages.

Who

The Board/ Executive Committee may wish to approve/endorse the DAMP as part of their governance obligations.

Managers and Supervisors must ensure that:

- All rail safety workers understand their obligations under the DAMP;
- The D&A testing regime is appropriate for the operations and is implemented appropriately;
- D&A testing is conducted for all Category A notifiable occurrences which are subject to mandatory post incident testing;
- D&A testing is reported in the monthly return;
- All rail safety workers are required to comply with the details of the DAMP.

When

The requirements for D&A testing should be included in each operators D&A, and in any event, testing is to occur on one of the following basis:

- Random;
- Post incident;
- Targeted.

Requirements for post incident testing are included in Element 23 – Notifiable Occurrences.

List of relevant documents (internal)

Element 14 – Internal Communication

Element 15 – Training and Instruction

Element 23 – Notifiable Occurrences

Element 27 – Health and Fitness

Links (external)

The following webpages and documents are available on ONRSR's website (www.onrsr.com.au):

- ONRSR Webpage – Guideline - Safety Management System
- ONRSR Webpage – Rail Safety National Law
- ONRSR Fact Sheet – Scalability of D&A management programs for T&H Operators
- ONRSR Fact Sheet – ONRSR's Testing Program ONRSR Fact Sheet – D&A Requirements for RTOs
- ONRSR Fact Sheet – D&A Requirements for RTOs (NSW ONLY)

Appendices

A. None

What and Why

Every operator must be able to demonstrate that they are managing the risks associated with fatigue.

Fatigue not only refers to people falling asleep, but as they become fatigued, they become more susceptible to making more errors.

Fatigue arises not just through a lack of sleep, although rest and sleep are the only way in which it can be overcome.

Like all aspects of an SMS, rail operators must assess the risks associated with rail safety worker fatigue and what the potential impacts are on the safety of the operations.

Fatigue management remains difficult for smaller less complex rail operators. This is primarily because a smaller workforce generally means more difficulty filling short notice absences. As well as this, workers may have other full-time jobs, be older in age, travel longer distances, and the strong team-work ethic of small and volunteer-based railways may deter reporting of fatigue for fear of letting people down.

The mix of fatigue risk factors can be unique to the level of task and the individual.

The aim of the fatigue risk management process is to identify and assess these factors and ensure that the organisation can demonstrate that everything that is reasonably practical is being done to effectively manage fatigue related risks. All rail operators are required to have a Fatigue Risk Management Program (FRMP) as part of their SMS. This is a program of risk management activities presented with relevant policies procedures and instructions which describe how the operator s the risks of rail safety worker fatigue.

The FRMP follows a very similar process to the health assessment standards where the tasks that the RSW do and what could go wrong determines the scope of medical assessments.

In the same way the scope and detail of the FRMP will depends on how likely it is that someone will be fatigued and what could go wrong if an error is made because of fatigue.

As a minimum, a FRMP must contain a clearly documented process that describes the following steps, which are effectively a risk assessment, to:

- determine scope and context of the work by group workers according to the tasks they do.
- identify any factors that would contribute to fatigue;
- analyse how likely it is that each group of RSW will be fatigued and what could happen if they are fatigued eg person struck by train, runaway, collision etc;
- evaluate options to improve existing controls to eliminate or reduce the fatigue factors or to better manage fatigue-related errors;
- establish if additional controls are reasonably practical;
- organise for the new or improved controls to be implemented.

The FRMP must be documented and each of these steps should be written down as part of the program. A risk assessment focused on fatigue risks will demonstrate that the operator has identified, analysed and evaluated relevant risk factors that could affect their operations.

How

The SMS contains a procedure /document that describes how the operator plans to identify and manage the risks associated with fatigue. The procedure should include several key areas as described below:

1. Scope and Context of the Program

Operators should group workers by the type of work that they do. This could be by:

- Work type;
- Role and responsibilities – rollingstock maintainers will have some different fatigue risks from train crew;
- Location – Station based, on board, train crew, maintenance sheds, on track;
- When they work – day/night shift, light-up shift, weekends and holidays, full time?
- Safety critical vs non-safety critical tasks

Appendix A has an example Rail Safety Worker Groupings.

A statement describing the scope and context of the program is a useful option to consolidate thought and focus when considering fatigue.

Such a statement could look like:

Operations are focused on Railmotor movements. The operations occur on track managed and maintained by Rail Track Company. There are three groupings of rail safety workers – Train Crew, Maintainers and the Stationmaster. All three groups have the following in common:

Daylight operations except on special events (5 scheduled a year).

Rail safety worker scheduling is carried out by the Maintenance Supervisor.

Some workers travel for 1-2 hours to come to work.

Train crew

Round trip cycle time is normally approximately 3 hours with additional rollingstock preparation and inspection routines.

Railmotors operate twice weekly on Saturday and Sunday.

All train crew are retired or unemployed volunteers.

Two-man crewing is in place at all times.

Maintainers

Maintenance occurs between Monday and Friday during daylight hours.

All maintainers conduct rail safety work in the main shed and the humpy, are supervised on site.

The maintenance supervisor is an employee, while all other maintainers are retired or unemployed volunteers.

2. Identifying Risk factors

The operator must then identify the factors that may contribute to the fatigue of each grouping.

Separate risk assessments may be needed for each grouping depending on how different the tasks are and risks of those tasks.

Factors which all RTOs need to consider in describing how they manage the risk of fatigue include:

- The scheduling of work, including time on task, the opportunity for rest during the shift, shift length, time of day/night;
- The opportunity for rest between shifts;
- Roster patterns including the sequence of shifts and consecutive days off for full recovery;
- Time actually at work taking into account call-ins, overtime and delays if things have gone wrong;
- Amount of notice given of work times that may impact on the ability to plan sleep and family time
- The nature of the rail safety work being – physically demanding, boring, monotonous, does it require intense concentration, is the environment comfortable (wind, heat, cold, humid, noise, vibration)? Is the worker isolated or is relief and assistance close at hand?
- The suitability of rest environments.

Factors outside the work environment which affect the opportunity for rest including:

- Full time work in addition to volunteer work;
- Home environment including (but not limited to):
 - Impacts from other family members;
 - Diet and lifestyle;
 - sleeping arrangements;
 - noise and environmental factors.
- Volunteering for several organisations at once;
- Travel time to and from work location; or even,
- Staying at unsuitable rest locations to reduce costs.

3. Analysis of Fatigue - Related Risk

Risk analysis involves combining the fatigue factors with the risks of the tasks to establish the overall impact fatigue could have on risk.

The task analyses that are done to determine worker category for the health assessment standards are a good starting point. These identify the tasks the performance requirements what could go wrong if people have health problems or become incapacitated. The fatigue risk management approach is almost the same.

The process should look at the fatigue factors identified in the first step, judge how fatigued they could be and whether fatigue could impact on the type of tasks they are likely to do. Things to consider are:

- How may fatigue factors be likely to impact on them - how fatigued are they likely to be?
- Could this level of fatigue impact on their ability to do their tasks?
- Could this level of fatigue impact on their memory or response times?
- Are the tasks susceptible to fatigue effects?
- Are workers are doing high risk tasks at times when they are likely to be fatigued?
- What are the current controls in place to reduce the fatigue factors and reviewing if they are effective?

The evaluation of likelihood and consequence after current controls is the assessment of those controls.

Example controls may include:

- A reference to the operators training commitment to widen the training of rail safety workers across several tasks, to increase the 'pool' when considering who to roster;
- Limits on the lengths of shifts that are to be worked by specific rail safety worker roles;
- In NSW and Queensland, the number of shifts and the length of them are limited by the law (for train drivers only);
- Prescribed limits or principles about how rosters should be developed;
- That rostering procedures must take into account fatigue, and consider:
 - The scheduling of work, including time on task, the opportunity for rest during the shift, shift length, time of day/night;
 - The opportunity for rest between shifts;
 - Roster patterns;
 - Monitoring the time actually at work compared to the planned time;
 - The nature of the rail safety work being carried out – is it physically demanding, boring, monotonous, does it require intense concentration, is the environment comfortable (wind, heat, cold, humid, noise, vibration)?
 - Is the worker isolated or is relief and assistance close at hand?
 - Other factors outside the operations that could impact on fatigue;
 - Accommodation standards for rest environments/ list of recommended accommodation providers.
- How the operator raises awareness of fatigue and its effects amongst its rail safety workers;
- Clearly limits the minimum amount of notice to call someone in for an additional or unexpected shift;
- A notation that rail safety workers are responsible for their own fatigue, and should consider fatigue when accepting additional or unplanned rail safety work;
- A requirement to roster equitably and to limit the number of consecutive shifts that are able to be worked – ie a reduced reliance on a single person;
- The types of risks that must be considered, and that rostering changes are to be made accordingly.
- Mechanisms for self-declaring impairment by fatigue;
- Encouragement for reporting fatigue to Authorised Health Professionals as part of the Health Assessment Process;
- Where members of the workforce are employed elsewhere, the operator may have to consider the effects of that work, when considering the factors that contribute to rail safety worker fatigue;
- Encouragement of a culture where safety is more important than operations.

Other things to consider when managing fatigue include:

- Sign on sheets may include a declaration that the rail safety worker is not suffering from fatigue prior to commencement of rail safety work;
- Self-reporting by rail safety workers is encouraged if they are fatigued or feel the effects of fatigue setting in during their shift;
- Rail safety workers are aware of the operator's requirements and are not affected by fatigue before they carry out rail safety work or have been given lower risk work for that day;
- Fatigue is discussed at volunteer briefings; tool box talks and other meetings;
- Records are kept for planned and actual rosters worked to assess actual hours worked;

- Audits of rosters may be included in audit schedules.

4. Evaluation of options to reduce the factors (risk controls)

As part of the process, the operator should also evaluate those controls that are in place to eliminate or minimise these factors.

The assessment of likelihood and consequence of current controls will indicate whether or not these factors are being managed sufficiently.

Operators should ask:

- Are the current controls enough?
- Is the level of risk after the controls sufficiently low?
- What can be done to further reduce the level of risk?
 - Is it possible reduce exposure to any of the fatigue factors?
 - Can something more be done to pick up and rectify mistakes and errors?
- Have we done everything reasonable so that the risk is SFAIRP?

Who

Managers and Supervisors need to consider fatigue when developing rosters and allocating work tasks. They should also review actual hours worked on rosters compared to planned.

Managers and Supervisors should make sure that all rail safety workers understand and apply the fatigue management components of the SMS.

Rail safety workers are responsible for managing their fatigue outside of performing rail safety work. They are also responsible for informing their Managers/Supervisor if they believe that they are suffering from fatigue.

When

Fatigue should be considered every time that a roster or work rota is developed.

Rail safety workers should understand:

- their obligations to 'self-declare' that they are fatigued every time that they perform rail safety work, and
- behaviours away from work can affect how they perform work tasks.

List of relevant documents (internal)

Element 27 – Health and Fitness

Element 28 - Drug and Alcohol Management

Master and Actual Rosters /Workplans

Links (external)

[ONRSR – Guideline – Small isolated line heritage operations – Safety Management System \(SMS\)](#)

[ONRSR Website – Guideline - Safety Management System](#)

[ONRSR Website – Rail Safety National Law](#)

[ONRSR Safety Bulletin – Fatigue Management and EBAs](#)

[ONRSR Website – Scalability of Fatigue Management Program Requirements](#)

[ONRSR Website – Fatigue risk management requirements for NSW operations](#)

[ONRSR Website – Interpretation of Queensland Specific Fatigue Requirements](#)

Appendices

A. Example Rail Safety Worker Grouping

Appendix A – Fatigue Risk Management (Rail Safety Worker Groupings)

Role	Location	Workforce Description	Work Type	When they work
Railmotor crew	Crew	Majority of volunteers	<ul style="list-style-type: none"> • Preparation and Inspection; • Driving; • Shunting; • Stabling. 	Day shift Weekends & Public Holidays
Steam crew	Crew	All volunteers (mix of retired and employed)	<ul style="list-style-type: none"> • Light Up; • Preparation and Inspection; • Driving; • Shunting; • Turntable operations; • Stabling. 	Light-up prior to daylight Mostly day work, with some evening work for special events.
Maintenance	Main Shed Humpy	Few PT employees Mostly volunteers (retired)	<ul style="list-style-type: none"> • Preparation and Inspection; • Light up (for steam); • Locomotive & Rollingstock Maintenance; • Modifications & Repairs; • Certification of rollingstock; • Movement within the shed; • Section Car operation. 	Light-up prior to daylight Day work – Monday to Friday only. Maximum 7 hours shifts.
Track	Main Shed On Track	Private contractor with local trainees	<ul style="list-style-type: none"> • Track Inspection • Section car operation • Track mediation and repairs. 	Non-operating days; Planned outages; Daylight hours. Maximum 7 hours shifts



Safety Management System Modules

Element 30 – Resource Availability



What and Why

An accredited rail operator needs to have sufficient resources to run the railway safely. When less resources are available that are needed, shortcuts are often taken resulting in incidents or accidents, which were completely avoidable.

Resources includes access to financial resources as well as equipment and people. This can be further broken down to include:

- Appropriate funding and insurance;
- People are competent to operate, inspect and maintain the rollingstock and/or infrastructure;
- Risk management skills are available;
- Engineering support is available;

The law also requires rail operators to have procedures and systems that are used to estimate what resources are required to operate and maintain rail operations, and the Safety Management System.

Any plans that are developed as part of the SMS should ensure that the rail operator has acceptable access to these resources.

How

A written procedure that describes how the rail operator ensures that it has appropriate resources to manage and operate its operations is included in the SMS, that is, the overall normal business planning process/cycle:

This procedure can include references to other documents that sit outside the SMS, such as:

- A business plan;
- Annual budgeting processes or annual budgets;
- Operations plans that include details on minimum numbers of rail safety workers that are required to carry out rail safety tasks;
- Long term maintenance plans that describe how assets are managed and maintained;
- Training plans;
- Procurement processes;
- Volunteer recruitment strategies;
- Succession plans; and /or
- Marketing plans.

The procedure could also include details of any external groups or bodies that it uses to assist with resourcing, such as:

- Safety advisory groups;
- Consultancy firms;
- Auditors;
- Technical experts used to certify assets.

Who

The Board/Executive Committee will normally endorse budgets and associated resourcing plans as part of their governance obligations;

Managers and supervisors who have the responsibility for developing the SMS and/or related plans should ensure that adequate resources are available, and understood, for operations;

All rail safety workers should understand what the minimum operational resources are for their specific rail safety tasks (e.g. 2-man train crew) so that they can ensure they comply with safety requirements before starting work.

When

- Depending on the scale of the rail operator's business, the frequency of this planning process may vary, but given the budgetary component, it is likely to be at least annually.
- Whenever changes in operations occur, operational plans should be developed to ensure that appropriate resources are in place to meet those new needs;
- Volunteer recruitment drives are conducted when additional resources are sought;
- New and/or amended operations do not commence unless appropriate resources are in place.

List of relevant documents (internal)

All plans included in the Safety Management System, such as:

- Fatigue Risk Management Plans;
- Drug and Alcohol Management Plans (DAMP);
- Change Management Plans;
- Asset Management Plans;
- Audit Plans;
- Security Management Plans.

Element 4 – Governance & Internal Controls

Element 12 – Management of Change

Element 16 – Risk Management

Element 18 – Procurement & Contract Management

Element 24 – RSW Competence

Element 25 – Security Management

Element 29 – Fatigue Risk Management

Template / Master Rosters

Links (external)

[ONRSR Website](#)

www.asic.com.au

www.acnc.gov.au

Appendices

None