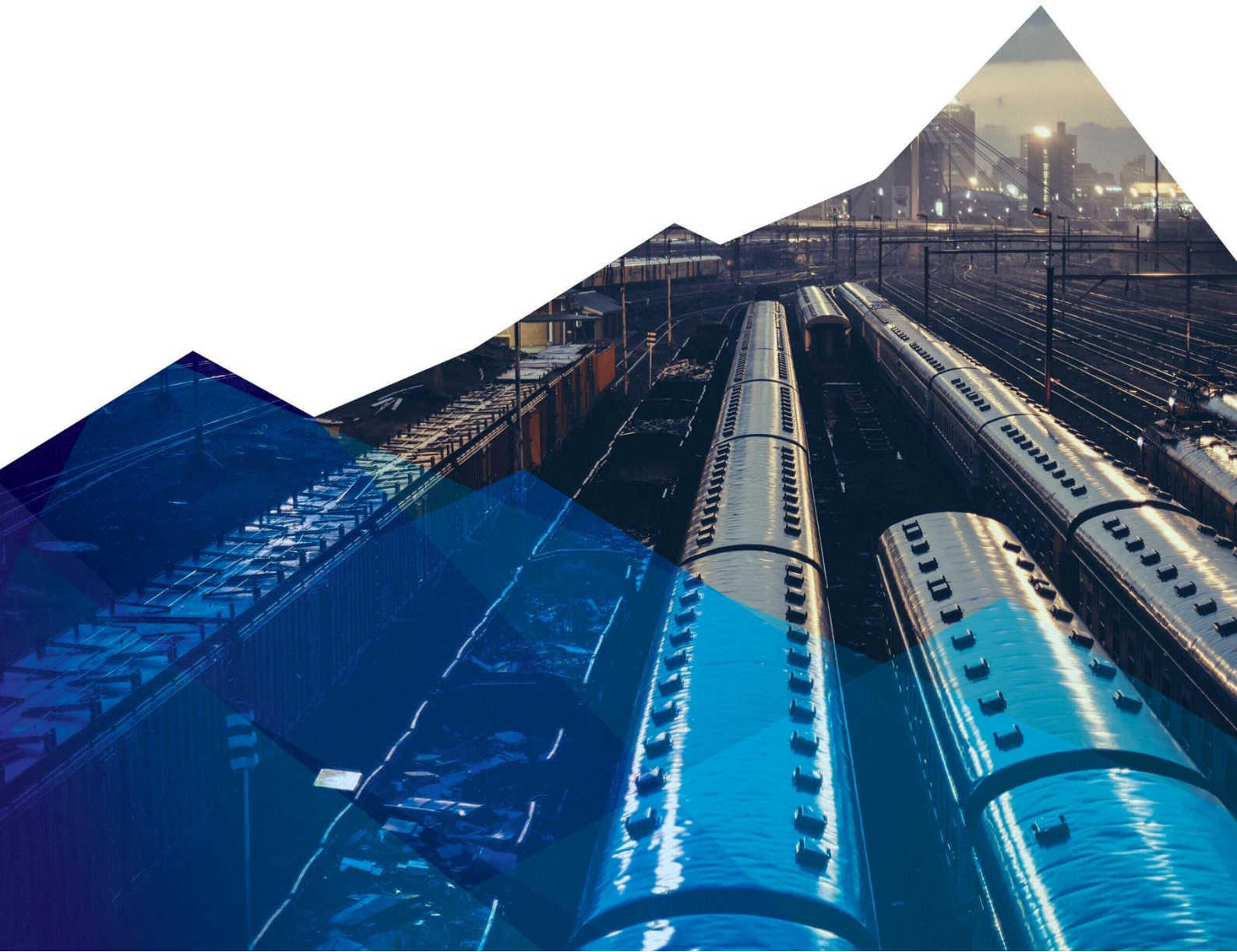
REFERENCE GUIDE

RAIL INDUSTRY SAFETY AND STANDARDS BOARD

Management System Framework

Version 1.0 – 25 June 2025



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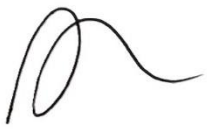

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Distribution and Change

The RISSB maintains the master for this document and publishes the current version on the RISSB website. Any changes to the content of this publication require the version number to be updated. Changes to this publication must be approved according to the procedure for developing RISSB products.

Contents

1 Introduction

1.1 Purpose

This Framework is a resource which provides the Australian rail industry with a roadmap of the significant national standards, codes of practice, rules and guidelines which are available to be utilized in developing the safety management systems of an accredited railway organization.

This Framework's primary purpose is to identify the key RISSB/rail industry documents that a prospective or existing rail organization should refer to when setting up/modifying its safety management systems. This can include:

a) gaining accreditation as an RTO; or

b) varying their existing accreditation.

To achieve their objective, the end-user needs to clearly identify the specific nature of their intended/extended or varied scope of operations in order to be able to identify those products that will assist them in building or modifying their SMS.

This Framework can be used as a starting point for new rail operators or rail personnel entering the Australian rail industry. It can also be used as a ready reference source for existing organizations that may be seeking to expand or diversify their current operations into new areas of railway operations.

This Framework is a resource that provides the Australian rail industry with a roadmap of the significant RISSB or other key national standards, codes of practice, rules and guidelines that can be utilized in railway organizations' safety management systems.

1.2 Scope

This Framework is relevant for all organisations required to maintain a safety management system under Section 99—Safety Management System of the Rail Safety National Law (RSNL).

It classifies all RISSB publications (standards, codes of practice, guidelines, rules) relevant for each of the safety management system elements, as defined in the Rail Safety National Law Regulations (RSNLR) – Schedule 1. Where appropriate, additional regulatory references are cited for consideration in the development of the management system document.

This Framework does not include other pertinent interfacing legislative instruments including, but not limited to:

a) The Work Health and Safety National Law (including any specific state versions);

b) State specific Electrical Legislation;

c) National Heavy Vehicle Legislation.

Nothing in this Framework should be taken as defining mandatory obligations on any organisation. It is only to be used as a reference source that may assist any organization seeking to enter the rail industry with information that is or may be relevant to the proposed activities or for existing RTOs seeking to make changes to existing activities.

1.3 Defined terms and abbreviations

Generic rail industry terms and definitions are provided in the RISSB Glossary https://www.rissb.com.au/glossary/

Defined terms with specific or unique application within this guideline are listed:

a) ***Australian Harmonised National Rule (AHNR)***

set of rules based on the ANRP framework, that the RTOs can adopt verbatim and incorporate it into their network rules and procedures

b) ***Australian National Rules and Procedures (ANRP)***

set of rules that allows for a good practice application and standardisation to assist in the safe and efficient transport of people, goods and materials

c) ***ONRSR***

Office of the National Rail Safety Regulator

d) ***rail transport operator (RTO)***

as defined in Rail Safety National Law

e) ***RCOP***

RISSB Catalogue of Products

f) ***RSNL***

Rail Safety National Law

g) ***RSNLR***

Rail Safety National Law Regulations

h) ***SMS***

safety management system

i) ***WHS***

work health and safety

The Macquarie Dictionary definition applies where terms are not defined within the RISSB Glossary or above.

2 Application and structure

2.1 Accreditation

The RSNL was first enacted in South Australia in 2012. All other states and territories have adopted the RSNL or passed legislation that models it.

A fundamental principle of the RSNL is the management of risks to rail safety that may arise from railway operations. Section 46 of the RSNL requires the elimination or minimization of risks so far as is reasonably practicable.

The purpose of accreditation is to demonstrate that the RTO has the competency and capacity to manage the risks associated with its railway operations.

To be granted accreditation, the RTO must demonstrate that it has a safety management system in place that meets, at minimum, the requirements described under the RSNL Regulations at Schedule 1. The safety management system shall describe the controls for the risks associated with its railway operation and these controls must meet, at minimum, the requirements described under the RSNL Regulations at Schedule 1.

There are provisions for certain exceptions to this requirement which may be granted where that RTO is specifically exempt under the RSNL.

2.2 Structure

2.2.1 RISSB Catalogue of Products

The RISSB Catalogue of Products (RCOP) is aimed at those involved in managing work activities associated with Australian railways. In this context, the intention of the RCOP products is to assist with the provision of a more harmonized, safe and efficient operation.

The RCOP documents set out principles, standards, guidelines and rules, aimed at providing a uniform approach to rail operations and supporting the provision of safe and efficient infrastructure, rolling stock and operating systems while at the same time providing capacity for efficiency and innovation.

RISSB owns and manages the RCOP. The term RCOP is a generic term encompassing all of the RISSB developed and/or owned standards, codes of practice, rules and guidelines. These documents are contained in a suite of six specific categories, which are:

a) rolling stock;

b) infrastructure;

c) operations;

d) train control systems;

e) safety; and

f) light rail.

RISSB also assists the rail industry with harmonizing safety practices across the rail industry, including railway level crossings safety on behalf of the rail industry, and producing other guidance materials such as handbooks and other tools to facilitate product adoption.

The full RCOP suite of products are available at the RISSB website for access by RISSB members. Where any RCOP documents are deemed to be of significant public interest, and with the approval of the RISSB Board, such resources may be made available to all.

The general structure of the RCOP suite of products is described below.

2.2.2 Standards

RISSB standards are written as voluntary/performance-based standards.

Standard is a set of requirements that seek to achieve at least the minimum objectives of safety, quality or performance of a product or service.

Performance-based standards have their requirements expressed in terms of performance, i.e. outcomes to be achieved. This provides freedom for developing innovative technical methods to meet the requirements of the standard.

Performance-based standards consist of:

a) requirements that are expressed as criteria to be fulfilled if compliance with the document is to be claimed and from which no deviation is permitted. Requirements are identified within a standard using the verb form shall or shall not;

b) recommendations are criteria that convey that among several possibilities, one is recommended as particularly suitable, without mentioning or excluding others, or that a certain course of action is preferred (but not necessarily a requirement) are identified within a standard using the verb form should or should not; and

c) options and permissions that might also be contained within the standard. These informative criteria are identified within the standard using the verb form may.

RISSB standards are voluntary for adoption. On their own, RISSB standards have no legal status and no requirement for compliance by RTOs, manufacturers, consumers or the public.

Voluntary standards may, however, be subject to citation in legislation or within the context of a commercial contract, having the effect of making the standard mandatory.

They are, however, enforceable by law when:

d) adopted into an organization's SMS (e.g., AS 7520.1 – Body structural requirements – Locomotive referenced within the rolling stock design documents), or

e) referenced by regulators like the ONRSR (e.g., ONRSR Code of Practice – Train Visibility at Level Crossings, which calls out AS 7531 – Rolling stock lighting and visibility).

RISSB standards are normative in that conformity to the requirements is necessary for a user to claim compliance with the standard.

2.2.3 Codes of practice

A code of practice (CoP) is a set of descriptions that explains how an RTO can meet a higher-level requirement. It is normative, but it can contain several options about how to comply with the higher-level requirement.

The practices detailed in the CoP include information such as:

a) principles – providing guidance and information to railway organizations on issues that should be carefully managed; and

b) mandatory requirements – are necessary to enable the operational objectives of a standard or a piece of legislation.

A CoP can also provide informative guidance if it is more practical than writing a separate Framework.

2.2.4 Guidelines

A guideline is a set of informative guidance. It is not normative but informative. Guidelines provide guidance on means of meeting some of the requirements of a standard, code of practice, legislation, or applicable regulation(s).

2.2.5 National operations publications

The RISSB is responsible for and has actively worked towards the national harmonization of rail operations. Over many years, RISSB has produced several important documents/tools, which are managed on behalf of the railway industry. These are listed below and discussed further on this page:

a) Operational Concept for the Australian Rail Network – containing the seven fundamental operating principles (FOP)

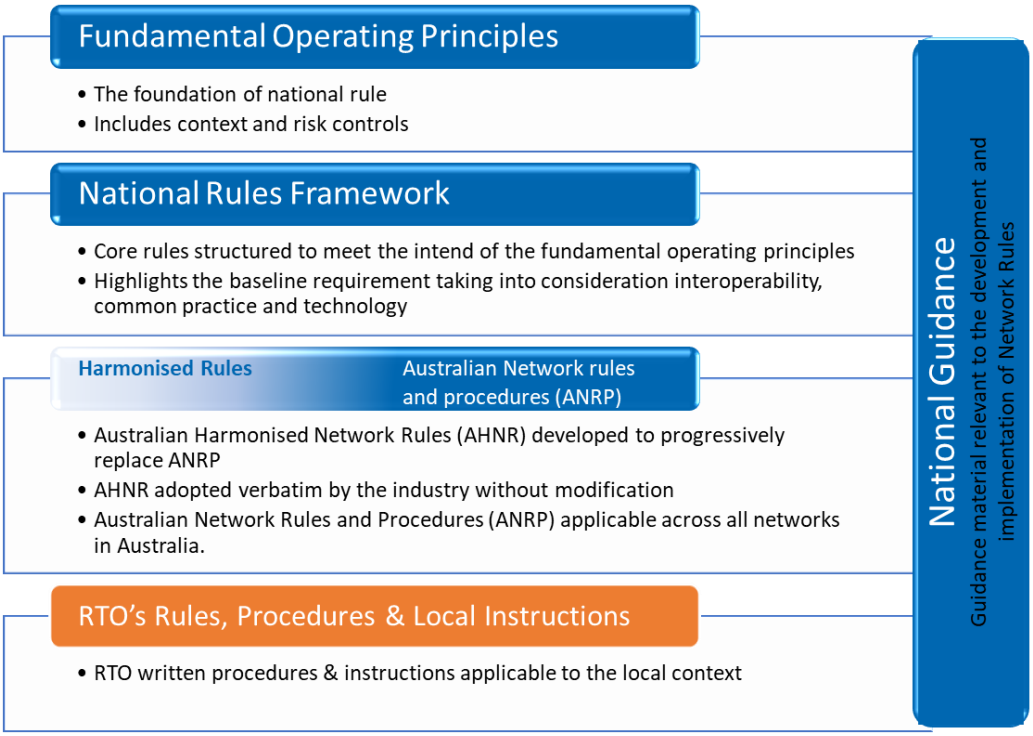
b) Australian National Rules Framework

c) Australian Harmonised National Rule/s (AHNR)

d) The Australian Network Rules and Procedures (ANRP)

e) National Guidance on developing Rules & procedures (e.g., RISSB Code of Practice – Development and maintenance of network rules)

The following diagram illustrates the conceptual relationship between the suite of documents within the national operations publications and those within an RTO's network rules.



2.2.6 Glossary of terms

The RISSB Glossary of Terms is a common resource relevant to all railway disciplines, available for everyone's access.

2.3 Application of RISSB products

Subject to any other related relevant legislation, such as the national WHS Act or other local equivalent, the application of the RCOP provides support to the requirements and obligations as described under the RSNL and the RSNLR Schedule 1.

In the event of any inconsistency between:

a) the application of any part of the RCOP; or

b) the interpretation of a provision of the RSNL or the RSNLR with the RCOP or a provision of any RISSB product,

the RSNL and/or the RSNLR is to prevail.

When considering how any RCOP product is to be incorporated into the SMS of a prospective RTO or an RTO seeking to vary and accreditation, the end user should review and consider all products relevant to their existing or intended operations.

With respect to standards and guidelines, they are all at the discretion of the end user as to how much they incorporate into their SMS. To claim compliance with any standard means that the standard's provisions must be fully met by the end user's own internal SMS procedures. The same principle applies to guidelines, which are informative documents that assist an end user with potential strategies, solutions and/or options to meet an operational and/or legislative requirement.

CoPs are slightly different and, where adopted in full, may be relied upon to demonstrate that the entity has achieved compliance with accepted industry standards and/or processes in meeting a relevant outcome or legislative provision. As with standards and guidelines, to claim compliance, the end users' SMS procedures must reflect the provisions of the CoP.

It should be noted that CoPs are not mandatory. However, where an entity chooses not to rely on a CoP in the event of a challenge, either from an audit or any action following an incident related to the subject matter, it is for the end user to demonstrate that the systems and processes that were utilized instead of the CoP are as effective or better than the provisions of the CoP.

As the term suggests, the rules must be applied to the extent required by the nature of the end users' operations. However, there are two distinctly different approaches based on whether the operations are subject to rules under the ANRP or the AHNR.

The ANRP provides for a framework that is applied nationally and provides for a set of nationally accepted common principles whilst recognizing the unique nature of the disparate rail entities across Australia. This enables the end users to develop rules and/or procedures that meet the principles described by within the ANRP whilst also meeting their own unique requirements.

The AHNR is a set of harmonized rules that are progressively replacing the ANRP. Where these rules are relevant to an end user's operations, they are required to be adopted into their SMS verbatim with no variation. Adoption of the AHNR brings the Australian railway industry closer to a set of nationally harmonized rules.

The requirements prescribed by any RISSB standard or rule, where adopted into the RTO's SMS, do not require application retrospectively and generally only become applicable when a SFAIRP case indicates that it is desirable to do so or when directed to do so by the ONRSR.

In all other cases, the requirements will become applicable where there is a relevant significant change, such as upgrading and/or modification, new construction or the implementation of new systems or as otherwise directed by the ONRSR.

3 The safety management system and associated references

3.1 Introduction

This section of the Framework describes the key SMS elements, as prescribed by the RSNLR at Schedule 1, which must be applied as necessary in the development of the RTO's SMS. In addition, it describes the key reference documents, with a particular focus on the RISSB products that are relevant to those elements. This is to assist RTOs with identifying and selecting suitable and appropriate information for developing their SMS.

NOTE:

The RSNL regulation 16 requires that the SMS provide enough detail appropriate for the nature and known safety risks of the railway operations. In many cases, the RISSB products will provide significant assistance to RTOs in meeting this obligation.

The following section headings in this part are directly aligned with the RSNLR Schedule 1 elements for convenience and referencing purposes. Each section has the relevant title from Schedule 1 with a brief description of the element and/or its intent.

Each heading contains a subheading titled Normative references, which identifies references that are directly relevant to the subject and should be used to assist in the development of that SMS element. This is then followed by a second subheading titled Informative references, which contains other relevant RISSB products or other potentially significant reference material, including ONRSR, ISO, AS, etc., that may provide additional guidance and support information for the development of that SMS element.

Whilst using this reference Framework, there may be areas where there are no specific RISSB references. The RISSB is continually working with the industry to develop products in response to industry needs and requests to close any such gaps.

This work is assessed on a risk-based approach to identify and prioritize those needs that will provide the greatest benefit. As such, some aspects have not yet been fully addressed, and they will be under constant review and assessment, with new additions and revisions as work progresses.

NOTE:

All RISSB developed products are identified in the referencing by having 'RISSB' as a prefix before the AS, CoP or Guideline identifier.

All users should be aware of and refer to ISO 9001—Quality Management Systems and ISO 45001—Occupational Health and Safety Management Systems as necessary. Both contain provisions and requirements that are, or maybe, intrinsically linked with many items contained under these rail safety provisions.

3.2 Interpretation

Clause 1 of the RSNLR states that "…a reference to the chief executive and governing body of the RTO includes a reference to any other person or body that has control of the RTO." This section is often misunderstood as to what it requires.

This clause fundamentally requires that the RTO shall have clearly described the following factors:

a) An organizational structure describing the senior management.

b) Identification of the party(s) that ultimately controls the organization.

This has a strong correlation with the requirements of the RSNL s55 'Duty of officers to exercise due diligence' and the RSNLR clauses 4 and 5, which describe the requirements and obligations relevant to the governance of the entity and the roles and responsibilities of those charged with governance of the entity and its activities.

Normative references

- RSNLR Sch 1 cl 1
- ONRSR Guideline – Safety management system, item 6.1

Informative references

- RISSB Guideline – Safe decisions

3.3 Policy

The RSNL requires that an RTO shall have in place a safety policy. A safety policy is a long-established requirement under the broader H&S laws. A safety policy statement is a written document that expresses an organization's commitment to employee well-being, safe railway operations, outlines specific rail safety goals and establishes a framework for achieving those goals.

Safety policy statements serve many different purposes and each one should be customized to fit the unique needs of the RTO to ensure it's both effective and relevant to the organization and its railway operations.

End users need to be aware that their policy document must clearly reference railway safety to distinguish it from the broader health and safety policy statements required under WHS laws.

Normative references

- RSNLR Sch1 cl 2
- ONRSR Guideline – Safety management system, item 6.2

Informative references

- nil specific

3.4 Safety culture

Safety culture refers to how safety issues are addressed in a workplace. It often reflects the attitudes, beliefs, perceptions and values that employees share in relation to safety. Safety culture is a sub-facet of organizational culture, which affects attitudes and behaviour in relation to an organization's ongoing health and safety performance.

When discussing safety culture, two main factors are common to all definitions:

a) It is about people's values, attitudes, beliefs and behaviours. In an organization with a good safety culture, these are geared towards safety, which is considered a priority.

b) It is about the spread of these values, attitudes, beliefs and behaviours. Organizations with a good safety culture have these spread throughout the entire organization and in everything everyone does within that organization.

A good safety culture helps an organization maintain safe railway operations by having everyone from operators to managers take safety seriously, constantly communicate, remain watchful and avoid compromises. This, in turn, means that operations are conducted in as safe a manner as is reasonably practicable.

Normative references

- RSNLR Sch 1 cl 3
- ONRSR Guideline – Safety management system, item 6.3
- RISSB Guideline – Achieving a positive safety culture in the rail corridor
- RISSB – Culture hub survey tool (website)

Informative references

- ISO 45003 – Occupational health and safety management - Psychological health and safety at work – Guidelines for managing psychosocial
- RISSB Guideline – Good practice in the management of rail driver health and wellbeing
- RISSB Guideline – Safety data
- RISSB Guideline – Security handbook for small to medium rail transport operators

3.5 Governance & internal control arrangements

Corporate governance is the act of directing, controlling and evaluating an organization. It includes a supervisory board setting forth the organization's governance structures and principles to identify the distribution of rights and responsibilities among different stakeholders and cultivate a company culture of integrity.

A key requirement of governance and internal control is having an SMS that has processes and procedures that:

a) defines, describes and establishes the acceptability of the risk profile of the railway operations;

b) defines and describes the needs and expectations of the SMS;

c) determines the interface and interactions of the SMS processes;

d) establishes and applies metrics and methods to ensure effectiveness, operability and integrity of the SMS;

e) identifies and determines the resources required for the operations;

f) requires identification, control and acceptance of risks and opportunities;

g) assigns and allocates responsibilities and authorities; and

h) evaluates and assists with decision-making for changes as necessary to the SMS.

Normative references

- RSNLR Sch 1 cl 4.
- ONRSR Guideline – Safety management system, item 6.4
- RISSB AS 7472:2021 – Railway operations – Management of change
- RISSB AS 7474:2021 – Rail industry – System safety
- RISSB Guideline – System safety
- RISSB Guideline – Safe decisions
- RISSB Guideline – Measuring safety performance
- RISSB Guideline – Network and operational performance reporting

Informative references

- RISSB Code of practice – Rail safety investigation

3.6 Management, responsibilities, accountabilities and authorities

The RTO shall ensure that all persons who have a role to perform with respect to the implementation and management of the SMS in the organization have assigned responsibilities and authorities, which shall be communicated throughout the organization and its operations.

The RTO shall also have defined processes to ensure that persons diligently carry out their responsibilities and are held accountable.

Normative references

- RSNLR Sch 1 cl 5
- ONRSR Guideline – Safety management system, item 6.5

Informative references

- RISSB ANRP 2031 – Responsibilities of track workers
- RISSB ANRP 2027 – Responsibilities of rail traffic crew
- RISSB Guideline – Safe decisions

3.7 Regulatory compliance

A fundamental obligation of all organizations is the requirement to ensure that they meet all applicable regulatory obligations. The RSNLR requires that the RTO shall establish, implement and maintain a process(es) to:

a) determine and have access to up-to-date legal requirements and other requirements that are applicable to its rail operations under the RSNL;

b) determine how these legal requirements and other requirements apply to the rail operations and what needs to be communicated;

c) take these legal requirements and other requirements into account when establishing, implementing, maintaining and continually improving its SMS; and

d) ensuring that processes are in place to maintain, update and distribute all relevant regulatory information and sources as necessary.

The RISBB suite of products relevant to an organization's railway operations may be relevant where they are adopted formally by the RTO and incorporated into their SMS.

Normative references

- RSNLR Sch 1 cl 6
- ONRSR Guideline – Safety management system, item 6.6

Informative references

- RSNLR Sch 1 cl 7
- ONRSR Guideline – Safety management system, item 6.7

3.8 Document control arrangements and information management

Document control and information management is the practice of managing and tracking both digital and physical documents that require a system of procedures and protocols to govern the creation, maintenance, storage, distribution and control of documents within the rail organization.

This also includes digital information such as computer records, data recorders for track conditions, train operating parameters, train-control voice recordings, etc.

Document control and records management is a fundamental requirement of all management systems.

NOTE:

Certain records that relate to individuals working in/for the RTO will be subject to the provisions of the Privacy Act, such as medical records and similar personal information.

There is a requirement under the RSNLR to ensure the retention and management of all engineering and safety critical information generated for or in the course of the organization's rail operations. This includes but is not limited to:

a) controlled documents, including engineering standards, safeworking rules and procedures, etc;

b) performance data e.g. safety/operational etc;

c) rail safety related personnel medical/training records;

d) maintenance records;

e) radio/telephonic safety critical communications;

f) electronic data including train control, signalling and event recorder systems;

g) management of change records;

h) contracting and procurement records.

Normative references

- RSNLR Sch 1 cl 7
- ONRSR Guideline – Safety management system, item 6.7
- ISO 27001 – Information security management

Informative references

- Office of the Australian Information Commissioner – The privacy act
- RISSB AS 7650 – Drawings and operating symbols for OHLE rail systems.
- RISSB AS 7739.1 – Digital engineering for fixed rail infrastructure – Part 1: Concepts and principles
- RISSB AS 7739.2 – Digital engineering for fixed rail infrastructure – Part 2: Technical requirements
- RISSB ANRP – Glossary
- ISO 19650 – Building information modelling

3.9 Review of the safety management system

The RSNLR requires that RTOs conduct a review of their SMS. This process is commonly referred to as a management system review.

The management system review process is carried out to evaluate the performance of the SMS based on the purpose and goals, as well as whether it is producing the desired results aligned with the organization's needs. It is a key process for an organization's top management to continuously improve processes and standards toward proactively addressing railway safety concerns and issues.

Normative references

- RSNLR r 17 – Review of safety management system
- RSNLR Sch 1 cl 8
- ONRSR Guideline – Safety management system, item 6.8

Informative references

- RISSB Guideline – Safe decisions
- RISSB Guideline – Measuring safety performance
- RISSB Guideline – Network and operational performance reporting

3.10 Safety performance measures

The fundamental purpose of safety performance measurement is to enable an organization to establish whether its safety aims and objectives are being realized and to understand how the safety performance is trending over time.

Normative references

- RSNL s 103 – Safety performance reports
- RSNLR Sch 1 cl 9
- ONRSR Guideline – Safety management system, item 6.9
- RISSB Guideline – Measuring safety performance

Informative references

- RISSB Guideline – Safety data
- RISSB Guideline – Network and operational performance reporting

3.11 Safety audit arrangements

The audit is a key tool for establishing and ensuring that an organization's systems and processes meet the legal and other requirements applicable to its operations. It is also an essential tool for establishing the degree of compliance within the organization with its own systems and procedures and as a keystone for senior management to be aware of the organization's performance and areas for improvement.

The RTO must ensure that it has in place procedures to carry out such audits and that the auditing process addresses:

a) planning;

b) prioritization of areas of greatest concern;

c) competence and independence of auditors;

d) documentation of areas of concern; and

e) communication of audit results to key management.

Normative references

- RSNLR Sch 1 cl 10
- ONRSR Guideline – Safety management system, item 6.10

Informative references

- nil specific

3.12 Corrective action

The RTO is required to have processes to ensure that any identified deficiencies arising from audits, inspections, investigations, customer complaints or any other source are managed effectively through to a final resolution.

Such procedures must include the following features as a minimum:

a) A means to record and register the item.

b) A means to review the item.

c) Description of the required actions to correct the item.

d) Identification of the person(s) responsible for the remediation.

e) A means to identify the priority of the item and a timeline for resolution.

Normative references

- RSNLR Sch 1 cl 11
- ONRSR Guideline – Safety management system, item 6.11

Informative references

- nil specific

3.13 Management of change

Change is inevitable in all organizations and it is essential that RTOs have procedures in place to ensure that safety risks associated with any changes to railway operations, assets, or systems are identified and eliminated or reduced so far as is reasonably practicable (SFAIRP).

Normative references

- RSNLR Sch 1 cl 12
- ONRSR Guideline – Safety management system, item 6.12
- RISSB AS 7472 – Railway operations - management of change
- RISSB AS 7704 – Train control systems change management
- RISSB Guideline – Firmware, software and configuration management of operational rail assets
- RISSB Guideline – Configuration management for contractors

Informative references

- RISSB AS 7501 - Rolling stock compliance certification
- RISSB AS 7502 – Road rail vehicles
- RISSB AS 7715 – Train detection
- RISSB AS 7717 – Signal testing and commissioning
- RISSB Guideline – Rolling stock safety assessment
- RISSB Guideline – Safe decisions
- RISSB Guideline – Wheel and rail profile development
- RISSB – Operational concept for the Australian rail network

3.14 Consultation

Consultation is critical to all management functions, particularly for ensuring safety and safe operations. The RSNL similarly embeds the requirement for consultation into the SMS as a keystone, supporting procedures and processes, including the development and any proposed alteration(s).

The RSNL goes further to describe the parties that should consulted as relevant to the RTO's operations and includes some or all of the following:

a) Personnel carrying out work for the RTO, e.g. employees, contractors etc.

b) Safety Representatives.

c) Union representatives.

d) Interfacing agencies e.g., roads, local authorities, other businesses.

e) Emergency services.

f) Members of the public (passengers).

Normative references

- RSNLR Sch 1 cl 13
- ONRSR Guideline – Safety management system, item 6.13
- RISSB Code of practice - Development and maintenance of network rules

Informative references

- RISSB AS 7658 – Level crossings – Rail industry requirements
- RISSB Guideline – Consolidation of public level crossings
- RISSB Guideline – Rail emergency management planning

3.15 Internal communication

RTOs require efficient and accurate internal communications processes. This is critical to ensure that all persons working in the operations know and understand the requirements of the SMS and it's supporting procedures as relevant to their roles and/or functions. In addition, it is essential to ensure:

a) communication of new and changed processes;

b) accurate information exchange e.g., between network control and drivers/safeworking personnel;

c) timely and accurate reporting processes for incident management and response; and

d) communication of safety-critical information, including safety alerts, CANs, etc.

Normative references

- RSNLR Sch 1 cl 14
- ONRSR Guideline – Safety management system, item 6.14
- RISSB AS 7660 – Radio communication in the rail corridor
- RISSB Code of practice – Development and maintenance of network rules
- RISSB Code of practice – Safety critical communications
- RISSB Code of practice – Safety critical operational information
- RISSB AS 7528 – Rolling stock – interior communications
- RISSB AHNR 2007 – Network communications
- RISSB Guideline – Good practice in mitigating safety risks when planning works in the rail corridor

Informative references

- RISSB AS 7632 – Railway infrastructure – signage
- RISSB AS 7658 – Level crossings – rail industry requirements
- RISSB AS 7704 – Train control systems change management
- RISSB Guideline – The safe use of mobile electronic devices on the railway network
- RISSB ANRP 9016 – Identification and verification of location
- RISSB ANRP 4007 – Rail traffic whistles
- RISSB ANRP 2003 – Hand signals and verbal commands
- RISSB ANRP 2009 – Reporting and responding to a condition affecting the network

In addition to the above specific items, all the rail safeworking rules and procedures (ANRP) that are applicable to the RTO's rail operations are a key part of the internal communications system for the RTO's SMS.

3.16 Training and instruction

A fundamental obligation under the RSNLR is for the RTO to have in place, in its SMS, suitable and sufficient procedures to provide necessary training to all personnel, including contractors and others as appropriate, on the SMS and the railway operations as they relate to the person's role and function.

Such training includes vocational, technical, safeworking, basic induction and refresher/upskilling training as required.

There are no RISSB products that specifically address training as a subject. However, many of the RISSB products have inherent obligations to provide training, including aspects like route knowledge.

This guide's users are directed to the Australian Industry Standards (AIS) Transport and Logistics (TLI) training packages for a full list of the available training packages for railway operations.

Normative references

- RSNLR Sch 1 cl 15.

- ONRSR Guideline – Safety management system, item 6.15
- RISSB Code of practice – Recruitment and training of network control officers

Informative references

- RISSB AS 7454 – Management of route network competence
- RISSB AS 7453 Recruitment and selection of rail traffic drivers
- RISSB Guideline – Protection officers
- Transport & Logistics Infrastructure (TLI) training packages for the rail industry

In addition to all the above specific rail-related training, the RTO may develop additional bespoke training unique to its operations. This can include local induction training, vegetation control and so forth.

There are also professional training courses that RTOs may choose to offer for key staff or functional roles such as civil/electrical/mechanical engineering functions.

3.17 Risk management

The RTO must have systems and processes in place to identify and evaluate all risks arising from and related to its railway operations.

These processes must include as a minimum:

a) a systematic process to identify events that could cause harm and the nature of possible outcomes from those events;

b) any of various methods of assessing risk either quantitatively or qualitatively by determining the probability and consequences of occurrences associated with identified failure modes of the safety systems and processes;

c) a process for deciding when risk is acceptable and further treatment of risk is required using appropriate comparisons with good practice, expert judgement and cost-benefit analysis. Risks to safety should be controlled so far as is reasonably practicable (SFAIRP);

d) the analysis and monitoring of occurrences to determine problem areas and adverse trends; and

e) independent validation when appropriate.

The requirement to ensure safety SFAIRP is a well-established legal principle and underpins all safety duties. For assistance in deciding if something is controlled/managed SFAIRP, reference should be made to the ONRSR Guideline – Meaning of duty to ensure safety so far as is reasonably practicable.

All such risks and controls must be subjected to regular review and monitoring to ensure ongoing relevance, effectiveness and capacity.

All aspects of the assessment process must be suitably recorded. The RSNL also requires that it shall include risks and controls which have been considered and rejected and why they have been rejected.

NOTE:

All RISSB standards, CoPs and guidelines are designed to provide practical advice and guidance on potential control methods, processes and strategies to assist RTOs in managing specific rail-related operational risks.

Normative references

- RSNL s 46, 99 & 100 – Management of risks

- RSNLR Sch 1 cl 16
- ONRSR Guideline – Safety management system, item 6.16
- ONRSR Major projects guideline
- ISO 31000 – Risk management – Principles and guidelines
- RISSB AS 7474 – System safety

Informative references

- AS HANDBOOK HB 436 – Risk management guidelines – Companion to ISO 31000
- RISSB AS 7770 – Rail cyber security
- RISSB Code of practice – Derailment containment and protection for rail underbridges
- RISSB Code of practice – Rail cyber security for rolling stock & train control systems
- RISSB Guideline – Safe decisions
- RISSB Guideline – Reliability, availability. maintainability (RAM)
- RISSB Guideline – System safety
- RISSB Guideline – SPAD Risk management
- RISSB Guideline – Firmware, software and configuration management of operational rail assets
- RISSB Guideline – Good practice in mitigating safety risks when planning work in the rail corridor
- RISSB Guideline – Rail cyber security
- RISSB Guideline – Rail emergency management planning
- RISSB – The Australian rail risk model (ARRM)
- RISSB – The hazard register

The RISSB products identified above relate to specific aspects of the risk management process and/or provide detailed guidance on the subject field.

3.18 Human factors

Human factors refer to environmental, organizational and job factors, as well as human and individual characteristics, which influence behaviour at work and can affect health and safety.

Humans are at the core of almost all processes and activities carried out in a rail organization. A keystone requirement of the RTO's SMS is the need to recognize and have processes and procedures in place to identify and manage the human factors relevant to its rail operations.

These processes and procedures must demonstrate that RTO understands that human error is normal and that systems must be designed to complement the human operator in the design and function of all aspects of the organization and its operations that interface with humans. These aspects include the human–machine interface, organizational design, culture, business processes and team processes.

Normative references

- RSNLR Sch 1 cl 17
- ONRSR Guideline – Safety management system, item 6.17
- RISSB AS 7470 – Human factors integration in engineering design – General requirements

- RISSB AS 7631 – Railway infrastructure – Sighting

Informative references

- RISSB AS 7453 – Recruitment and selection of rail traffic drivers
- RISSB AS 7533 – Driving cabs
- RISSB AS 7601.1 – Light rail and road interfaces – Part 1: Management of light rail vehicle movement
- RISSB Guideline – Integration of human factors in engineering design
- RISSB Guideline – Integration of human factors across the project lifecycle
- RISSB Guideline – SPAD Risk management

3.19 Procurement and contract management

The rail industry relies heavily on contractors, suppliers and other entities external to the RTO's operations to supply and provide services and products essential to the support and delivery of the RTO's operations. The RSNL requires that all RTOs have in place processes and procedures to ensure:

a) the RTO's requirements for safety are unambiguously described in all tender documents and contracts;

b) the contracts are not structured in such a way that they encourage or lead to any compromise to the safety of the railway operations;

c) only the contractor/supplier who demonstrates the best capability and capacity are selected;

d) adequate monitoring of contractors and suppliers and providing for remedial action(s) when necessary for safety and/or operational failures or sub-optimal performance; and

e) validation that the required goods and/or services for the rail operations meet the required specification/performance needs.

RISSB Standards provide valuable assistance in supporting the procurement process by providing specifications as prescribed by the standards' mandatory provisions. These may be directly referenced in contractual documents for the purpose of procuring railway-related items and/or materials.

Normative references

- RSNLR Sch 1 cl 18
- ONRSR Guideline – Safety management system, item 6.18
- All RISSB Australian standards

Informative references

- RISSB AS 7739.1 – Digital engineering for fixed rail infrastructure – Part 1: Concepts and principles
- RISSB AS 7739.2 – Digital engineering for fixed rail infrastructure – Part 2: Technical requirements
- RISSB Code of practice – Type approval – Signalling
- RISSB Code of practice – Digital engineering
- RISSB Guideline – Configuration management for railway contractors
- RISSB Guideline – Requirements for the procurement of rolling stock

- RISSB Guideline – Contracting in the rail industry

3.20 General engineering and operation system requirements

3.20.1 Overview

The RSNL uses this section of the RSNLR to focus on ensuring that the RTO has in place the necessary engineering and operating standards and procedures (e.g., specifications, operational instructions, safe systems of work, etc.) relevant to all of the railway operations carried out by the RTO.

These must cover all aspects of railway operations, including rolling stock, infrastructure assets and/or operations and the full lifecycle from design through all operational/functional life until ultimate disposal, as may be appropriate and relevant.

This must be supported by processes and procedures enabling the RTO to validate and verify that railway assets and/or operational processes meet the design criteria, specifications and relevant safety requirements.

These must all be documented and controlled as required by the RTO's document control and management processes (ref s3.7).

For ease of reference and due to the number of RISSB products in the section, they are broken into the following three sub-sections:

a) Rolling Stock

b) Infrastructure

c) Operations & Safeworking

Normative references

- RSNLR Sch 1 cl 19
- ONRSR Guideline – Safety management system, item 6.19
- RISSB Operational concept for the Australian rail network

3.20.2 Rolling stock

The RISSB Rolling Stock Standards Series (AS 75xx) apply to the design, construction, testing, inspection and maintenance of railway rolling stock operating on Australian rail networks.

Compliance with the practices described in the rolling stock standards should satisfy all RIMs and/or the ONRSR, as these standards have been developed with all of industry consultation and participation and are accepted as good practice standards.

Normative references

- RISSB AS 7451 – Train integrity
- RISSB AS 7479 – Track maintenance and road rail vehicles – Collision avoidance and proximity warning
- RISSB AS 7482 – Railway rolling stock – Heating ventilation and air conditioning (HVAC)
- RISSB AS 7486 – Railway energy storage: Rolling stock onboard electrical energy storage
- RISSB AS 7488 – Railway rolling stock – Locomotive and passenger vehicle flooring
- RISSB AS 7501 – Rolling stock compliance certification
- RISSB AS 7502 – Road rail vehicles

- RISSB AS 7503 – Rail vehicle identification and markings
- RISSB AS 7504 Series – Brake components
- RISSB AS 7505 – Signalling detection interface
- RISSB AS 7507 – Rolling stock outlines
- RISSB AS 7508 – Track forces and stresses
- RISSB AS 7509 – Rolling stock – Dynamic behaviour
- RISSB AS 7510 Series – Braking systems
- RISSB AS 7511 – Onboard train protection systems
- RISSB AS 7513 Series – Rolling stock interior environment
- RISSB AS 7514 – Wheels
- RISSB AS 7515 – Axles
- RISSB AS 7516 – Axle bearings
- RISSB AS 7517 – Wheelsets
- RISSB AS 7518 – Rolling stock suspension
- RISSB AS 7519 Series – Bogie structural requirements
- RISSB AS 7520 Series – Australian railway rolling stock – Body structural requirements
- RISSB AS 7521 – Interior crashworthiness
- RISSB AS 7522 – Access and egress
- RISSB AS 7523 Series – Railway rolling stock emergency equipment
- RISSB AS 7524 – Coupler and drawgear
- RISSB AS 7527 – Rolling stock event recorders
- RISSB AS 7528 – Interior communications
- RISSB AS 7529 Series – Rolling stock fire safety
- RISSB AS 7530 – Electrical systems
- RISSB AS 7531 – Lighting and visibility
- RISSB AS 7532 – Railway rolling stock – Audible warning devices
- RISSB AS 7533 Series – Driving cabs

Informative references

- RISSB Code of practice – Wheel defects
- RISSB Code of practice – Management of locomotive exhaust emissions
- RISSB Code of practice – Inspection maintenance and repair of rail locomotive boilers
- RISSB Code of practice – ECP Braking
- RISSB Guideline – Rolling stock safety assessment
- RISSB Guideline – Requirement for the procurement of rolling stock
- RISSB Guideline – Condition monitoring of rolling stock
- RISSB Guideline – Wheel and rail profile development

- RISSB Guideline – Static twist test

3.20.3 Infrastructure

The RISSB infrastructure standards series apply to the design, construction, testing, inspection and maintenance of railway infrastructure for all Australian rail networks.

Compliance with the practices described in the infrastructure standards should satisfy all RIMs and/or the ONRSR, as these standards have been developed with all of industry consultation and participation and are accepted as good practice standards.

Normative references

- AS 1085 Series – Railway track material
- RISSB AS 7473 – Complex system integration in railways
- RISSB AS 7630 – Railway infrastructure – Track classification
- RISSB AS 7631 – Railway infrastructure – Sighting
- RISSB AS 7632 – Railway infrastructure – Signage
- RISSB AS 7633 – Railway infrastructure – Clearances
- RISSB AS 7634 – Railway infrastructure – Survey
- RISSB AS 7635 – Track geometry
- RISSB AS 7636 – Railway structures
- RISSB AS 7637 – Hydrology and hydraulics
- RISSB AS 7638 – Railway earthworks
- RISSB AS 7639 – Track structure and support
- RISSB AS 7640 – Railway infrastructure – Rail management
- RISSB AS 7641 – Rail gauge corner lubrication management – For friction levels and measurement
- RISSB AS 7642 – Turnouts and other special trackwork
- RISSB AS 7643 – Track stability
- RISSB AS 7644 – Rail corridor access
- RISSB AS 7645 – Rail corridor management
- RISSB AS 7650 – Drawings and operating symbols for OHLE rail systems
- RISSB AS 7651 – Axle counters
- RISSB AS 7658 – Level crossings – Rail industry requirements
- RISSB AS 7659 – Point locking, point drives and point detection
- RISSB AS 7663 – Railway signal cables
- RISSB AS 7664 – Railway signalling cable routes, cable pits and foundations
- RISSB AS 7703 – Railway signalling – Power supply systems
- RISSB AS 7705 – Level crossing monitoring systems
- RISSB AS 7706 – Interface with points
- RISSB AS 7708 – Signalling earthing and surge protection

- RISSB AS 7716 – Signalling testing process
- RISSB AS 7717 – Signal testing and commissioning
- RISSB AS 7718 – Signal design process management
- RISSB AS 7720 – Signalling equipment enclosure and wiring
- RISSB AS 7722 – EMC Management
- RISSB AS 7721 – Lineside signal, indicators and signal signage
- RISSB AS 7739.1 – Digital engineering for fixed rail infrastructure – Part 1: Concepts and principles
- RISSB AS 7739.2 – Digital engineering for fixed rail infrastructure – Part 2: Technical requirements

Informative references

- RISSB Code of practice – Track stability
- RISSB Code of practice - Derailment containment and protection for rail underbridges
- RISSB Code of practice – Type approval – Signalling
- RISSB Guideline – Condition monitoring of fixed rail infrastructure
- RISSB Guideline – Continuous welded rail management
- RISSB Guideline – Consolidation of public level crossings
- RISSB Guideline – Wheel and rail profile development
- RISSB Guideline – Refuges – Bridges and tunnels

3.20.4 Operations and safeworking

Normative references

- RISSB AHNR – The Australian harmonised network rules series
- RISSB ANRP – The Australian national rules series
- RISSB AS 7450 – Rail systems interoperability
- RISSB AS 7451 – Train integrity
- RISSB AS 7454 – Management of network route competence
- RISSB AS 7473 – Complex system integration in railways
- RISSB AS 7601.1 – Light rail and road interfaces – Part 1: Management of light rail vehicle movement
- RISSB AS 7640 – Railway networks – Remotely piloted aircraft systems (drones) – operational requirements
- RISSB AS 7659 – Point locking, point drives and point detection
- RISSB AS 7660 – Radio communication in the rail corridor
- RISSB AS 7666 – Train protection and control interoperability
- RISSB AS 7705 – Level crossing monitoring systems
- RISSB AS 7711 – Signalling principles
- RISSB AS 7724 – Unauthorized movement protection – Operational requirements

- RISSB AS 7725 – Application based work on track authority systems

Informative references

- RISSB Code of practice – Light rail network safeworking
- RISSB Code of practice – Development and maintenance of network rules
- RISSB Code of practice – Safety critical information
- RISSB Code of practice – Safety critical communications
- RISSB Code of practice – Rail traffic horn use
- RISSB Code of practice – Shunting operations in terminals, yards and maintenance facilities
- RISSB Code of practice – Distributed power freight trains
- RISSB Code of practice – Loading of rail freight
- RISSB Code of practice – ECP Braking
- RISSB Guideline – Firmware, software and configuration management of operational rail assets
- RISSB Guideline – Management of rail traffic with unreliable track circuits
- RISSB Guideline – Good practice in mitigating safety risks when planning works in the rail corridor
- RISSB Guideline – Security handbook for small to medium transport operators: Volumes 1 & 2
- RISSB Guideline – Protection officers
- RISSB Guideline – In line refuelling
- RISSB Guideline – Operating road rail vehicles
- RISSB Guideline – Rail systems interoperability
- RISSB Guideline – SPAD Risk management
- RISSB Guideline – Safe operation of restricted access vehicles across level crossings

3.20.5 Miscellaneous

Normative references

- RISSB AS 7471 – Australian rail – Personal protective equipment (PPE) – Minimum requirements

Informative references

- RISSB Guideline – Environmental management in rail construction
- RISSB Guideline – Photography and video near the rail corridor

3.21 Process control

Process control is the method of monitoring, managing, adjusting and moderating any process or safety-critical item/equipment to ensure consistent quality, maintain conformity and reduce wastage. Process control helps RTOs ensure that their railway operations are safe and maintained to suitable levels so that their operations perform and continue to perform as required.

The RSNL requires that RTOs have processes in place that, as a minimum, that include the following:

a) Procedures for inspection and testing of safety-related systems, equipment, components and processes.

b) Defined standards for assessment.

c) Calibration and management of testing and inspection equipment.

d) Defined periodicities for inspections and record of results found.

e) Processes to manage and control any deficiencies identified.

Normative references

- RSNLR Sch 1 cl 20
- ONRSR Guideline – Safety management system, item 6.20
- RISSB AS 7634 – Railway infrastructure – Survey
- RISSB AS 7640 – Railway infrastructure - Rail management
- RISSB AS 7716 – Signalling testing process
- RISSB AS 7717 – Signal testing & commissioning
- RISSB AS 7718 – Signal design process management

Informative references

- nil specific

3.22 Asset management

3.22.1 Overview

Asset management is a process by which all aspects of an asset's lifecycle, from concept and design through to ultimate disposal, are managed, planned and managed. This ensures the asset meets its intended role and function for the railway operations safely and efficiently and is fit for purpose.

As a minimum, the RTO's asset management system must include the following areas:

a) Asset standards, engineering standards, technical maintenance plans, procurement and contract management and processes control.

b) Asset register including asset identification, description and location.

c) Asset performance specifications.

d) Ownership and management responsibility.

e) Maintenance history.

f) Service life.

Normative references

- RSNLR Sch 1 cl 21
- ONRSR Guideline – Safety management system, item 6.21
- RISSB AS 7474 – Rail industry – System safety

Informative references:

- AS 55000 SERIES – Asset management

- RISSB AS 7739.1 – Digital engineering for fixed rail infrastructure – Part 1: Concepts and principles
- RISSB Guideline – System safety
- RISSB Guideline – Reliability, availability and maintainability (RAM)

3.22.2 Rolling stock

Normative references

- RISSB AS 7515 - Axles
- RISSB AS 7516 – Axle bearings
- RISSB AS 7517 – Wheelsets

Informative references

- RISSB Guideline – Condition monitoring of rolling stock

3.22.3 Infrastructure

Normative references

- RISSB AS 7635 – Track geometry
- RISSB AS 7636 – Railway structure
- RISSB AS 7640 – Railway infrastructure - rail management
- RISSB AS 7642 – Turnouts and other special trackwork
- RISSB AS 7644 – Rail corridor access
- RISSB AS 7645 – Rail corridor management
- RISSB AS 7658 – Level crossings – rail industry requirements
- RISSB AS 7660 – Radio communication in the rail corridor
- RISSB AS 7702 – Rail equipment type approval
- RISSB AS 7715 – Train detection
- RISSB AS 7717 – Signal testing and commissioning
- RISSB AS 7718 – Signal design process management
- RISSB AS 7720 – Signalling equipment enclosure and wiring
- RISSB AS 7722 – EMC Management
- RISSB AS 7739.1 – Digital engineering for fixed rail infrastructure – Part 1: Concepts and principles

Informative references

- RISSB Code of practice – Digital engineering
- RISSB Guideline – Firmware, software and configuration management of operational rail assets
- RISSB Guideline – Condition monitoring of fixed infrastructure

3.23 Safety interface coordination

All railway operations interface with many other operations and activities, including roads, local authorities, other businesses, private property owners, etc.

The RSNL requires the development and implementation of a safety interface agreement (SIA), which each party involved must implement in accordance with legislation and regulation. The SIA should be agreed upon by those parties involved in safety-related functions associated with the running of the railway and may be between two or more parties.

A critical part of the SIA is the clear identification of the risks manifest at the interface, along with an assessment of those risks, the relevant control measures required and the responsibility for the ongoing management and maintenance of those controls.

Normative references

- RSNL s 105- s 111 – Safety interface requirements
- RSNLR Sch 1 cl 22
- ONRSR Guideline – Safety management system, item 6.22
- RISSB AS 7450 – Rail systems interoperability
- RISSB AS 7601.1 – Light rail and road interfaces – Part 1: Management of light rail vehicle movement

Informative references

- nil specific

3.24 Management of notifiable occurrences

If a specific notifiable occurrence takes place in the RTOs operations, the RSNL requires that the RTO takes action in two stages. The first stage is to notify the ONRSR that the occurrence has taken place, and the second stage is to carry out a suitable and sufficient investigation into the circumstances of the event.

The RSNL requires the RTO to have in place procedures that ensure that notifiable occurrence(s) are:

a) reported in accordance with the RSNL and RSNLR reg 57;

b) investigated in a manner consistent with the respective requirements and guidance produced by the ONRSR;

c) ensures the preservation of evidence so far as is reasonably practicable;

d) the level and detail of any investigation is cognizant and suitably resourced with respect to the severity of the incident; and

e) permits for the participation of regulators and/or any other experts/specialists as may be required.

Normative references

- RSNL s 121 – Notification of certain occurrences
- RSNL s 122 – Investigation of notifiable occurrences
- RSNLR r 57
- RSNLR Sch 1 cl 23
- ONRSR Guideline – Safety management system, item 6.23

- RISSB AS 7457 – Management of SPADs and proceed authority exceeded events

Informative references

- RISSB Code of practice – Rail safety investigation
- ONRSR Guideline – Notifiable occurrence reporting requirements
- ONRSR Guideline – Investigation reports by rail transport operators
- RISSB Guideline – Derailment investigation and analysis
- RISSB Guideline – SPAD Risk management
- ANRP 2011 – Responding to a major incident

3.25 Rail safety worker competence

As defined in Section 8 of the RSNL, anyone who performs rail safety work must be competent to do so.

Procedures shall be established and implemented to develop, maintain and monitor rail safety worker competence and training for all work functions affecting railway safety. The RTO procedures must include at least the following items:

a) Only rail safety workers competent in performing specified safety-related work shall do so. Where necessary, this training should be refreshed at suitable intervals.

b) Provide accredited training for workers involved in the delivery of training and/or assessment of specified safety-related work wherever practicable.

c) Ensure that worker competence, qualification requirements and associated recognized training are determined using nationally endorsed competency standards as relevant.

d) Ensure workers have appropriate verbal and written language skills and the necessary literacy to carry out any safety-related work.

Normative references

- RSNLR Sch 1 cl 24
- ONRSR Guideline – Safety management system, item 6.24
- RISSB AS 7453 – Recruitment and selection of rail traffic drivers
- RISSB AS 7454 – Management of network route competence

Informative references

- RISSB Guideline – Protection officers

3.26 Security management

Railway operations and railway premises are areas which are difficult to control and secure. Security is a requirement of the RSNLR and RTOs must ensure that they have in place processes and procedures to ensure the safety and security of people who work on or with the railway and passengers as well as the security of freight.

This means protecting them from risks associated with:

e) anti-social behaviour;

f) assault;

g) theft;

h) vandalism;

i) sabotage;

j) terrorism; and

k) cyber-attack etc.

Normative references

- RSNLR Sch 1 cl 25
- ONRSR Guideline – Safety management system, item 6.25
- RISSB AS 7770 – Rail cyber security

Informative references

- RISSB AS 7453 – Recruitment and selection of rail traffic drivers
- RISSB Guideline – Rail cyber security
- RISSB Code of practice - Rail cyber security for rolling stock & train control systems
- RISSB Guideline – Security handbook for small to medium transport operators: VOLUMES 1 & 2
- Australian government information security manual

3.27 Emergency management

The purpose of the rail emergency management plan is to provide direction to railway personnel as to the agreed record of roles, responsibilities, arrangements and strategies for managing rail emergencies, including the safety of operations under degraded conditions of the infrastructure or the rolling stock.

Rail emergencies are complex. They often require a multi-agency response, with a designated control agency providing overall coordination at the emergency site. In most jurisdictions, the emergency services perform this role.

The RSNL requires the RTO to develop, implement and regularly test an emergency response plan (EMP). The EMP should be developed in consultation with all agencies that can reasonably expect to have a role and function in responding to an emergency.

Normative references

- RSNLA s113 – Emergency management plan
- RSNLR Sch 1 cl 26
- ONRSR Guideline – Safety management system, item 6.26
- RISSB Guideline – Rail emergency management planning

Informative references

- RISSB ANRP 2011 – Responding to a major incident
- RISSB AS 7523.1 – Railway rolling stock emergency equipment – Part 1: Locomotive rolling stock
- RISSB AS 7523.2 – Railway rolling stock emergency equipment – Part 3: Passenger rolling stock
- RISSB AS 7523.4 – Railway rolling stock emergency equipment – Part 4: Infrastructure rolling stock

- RISSB ANRP 2009 – Reporting and responding to a condition affecting the network

3.28 Health and fitness

Railway operations require a range of levels of health and fitness to ensure that rail safety work can be conducted to ensure the safety of the rail operations as well as the safety of the workers.

The RSNL requires that all RTOs have in place a health and fitness management program which must, as a minimum, meet the requirements described in the National Transport Commission (NTC) – National standard for health assessment of Rail Safety Workers.

Normative references

- RSNL s 114 - Health and fitness management program
- RSNLR Sch 1 cl 27
- ONRSR Guideline – Safety management system, item 6.27
- NTC – National standard for health assessment of Rail Safety Workers

Informative references

- RISSB Guideline – Good practice in the management of rail driver health and fitness

3.29 Drugs and alcohol

The inappropriate use of alcohol and/or other drugs (AOD) is a risk in all workplaces, however in the rail sector it has the potential to cause substantial damage and harm. The RSNL therefore imposes an obligation on RTOs to develop and have in place a suitable and sufficient drugs and alcohol management program (DAMP).

As with other management initiatives there are several discrete components to the effective management and control on the use of AOD. These include:

a) an effective and policy developed in consultation with all affected parties;

b) a program of education and training to all relevant persons;

c) clear definition and communication of every person's role and responsibilities under the DAMP;

d) processes to identify AOD (potentially) affected persons and a process to ensure that any identified persons are managed in a just and confidential manner;

e) processes for the conduct of AOD testing as and when needed; and

f) processes to provide support and advice to those who request it.

Normative references

- RSNL s 115 – Drug and alcohol management program
- RSNLR Sch 1 cl 28
- ONRSR Guideline – Safety management system, item 6.28

Informative references

- NTC – National standard for health assessment of Rail Safety Workers

3.30 Fatigue risk management

The RSNL requires an RTO to have in place a fatigue risk management system (FRMS). This is more than simply having a regime of governance of working hours.

A successful FRMS has several key elements that collectively establish a process by which fatigue is monitored and managed based on data, operational knowledge and evidence. Those factors are:

a) identifying the factors which may cause fatigue in the workplace;

b) assessing the potential likelihood of fatigue occurring and the potential risks arising from fatigue if it occurs;

c) controlling risks by implementing the most effective control measures reasonably practicable in the circumstances;

d) reviewing control measures to ensure they are working as planned. This can be from well-developed KPIs, monitoring working hours, incident events etc.; and

e) consultation and participation of all workers.

Normative references

- RSNL s 116 – Fatigue risk management program
- RSNLR Sch 1 cl 29
- ONRSR Guideline – Safety management system, item 6.29

Informative references

- RISSB Guideline – Good practice in the management of rail driver health and fitness
- NTC – National standard for health assessment of Rail Safety Workers

3.31 Resource availability

Resource availability is critical to establishing and maintaining all railway operations. The RSNL requires an RTO to ensure that it has suitable and sufficient processes and procedures to ensure the ongoing suitability and availability of adequate resources for the operations.

An often-overlooked requirement is that the RTO develop and prepare plans to ensure that resources are available and accessible as and when required.

Normative references

- RSNLR Sch 1 cl 30
- ONRSR Guideline – Safety management system, item 6.30.

Informative references

- RISSB Guideline – Safe decisions
- RISSB Guideline – Measuring safety performance
- AHNR 3000 – Planning works in the rail corridor

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