Guideline

Identifying rail safety work under the RSNL
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1. Overview

The Office of the National Rail Safety Regulator (ONRSR) was established under the Rail Safety National Law (RSNL) to administer a national system of rail safety regulation.

The RSNL provides for the national accreditation of rail transport operators (RTOs) and the effective management of safety risks associated with railway operations.

Under the legislation, the ONRSR develops policy, guidelines, and other information to help operators to:

> enhance safety performance through continuous reviews of, and improvements to, safety management systems (SMS);
> protect workers and the general public from injury; and
> achieve productivity by encouraging a national approach to rail safety policy.

1.1 Rail safety work in context

This document provides guidance on the term rail safety work, and outlines how RTOs can identify rail safety workers as part of their risk management processes.

1.2 Purpose

This guideline should be read in conjunction with the RSNL and National Regulations and is intended to provide guidance only.

It does not replace, limit, or expand the scope of the legislation, and in the event of any inconsistency, the legislation will prevail.

Nor does it cover any specific obligations an operator may have under occupational health and safety legislation.

Where necessary, RTOs should seek their own, independent legal advice about the RSNL, occupational health and safety laws, and the appropriate application of these to their own operations.

This guideline should be read in conjunction with other relevant ONRSR documents, including:

> Preparation of a Rail Safety Management System guideline;
> Effective control and management of railway operations guideline;
> Works near or on railways and interaction with utilities fact sheet; and
> Meaning of duty to ensure safety so far as is reasonably practicable guideline.
2. Defining rail safety in the RSNL

Responsibilities of an accredited RTO

It is the responsibility of an accredited RTO to determine which people are undertaking rail safety work for which that RTO is accredited, and to ensure that the process is appropriately documented. This will assist in ensuring that the duties outlined in section 52 of the RSNL are met.

This guidance has been provided to assist an RTO in making those assessments, but not to supplement the exercise that must be undertaken by each operator in determining who is a rail safety worker in their operating context.

2.1 Rail safety work

The RSNL identifies a rail safety worker (s.4) as any individual who has carried out, is carrying out, or is about to carry out rail safety work (s.8(1)), which includes:

(a) driving or despatching rolling stock or any other activity which is capable of controlling or affecting the movement of rolling stock;
(b) signalling (and signalling operations), receiving or relaying communications or any other activity which is capable of controlling or affecting the movement of rolling stock;
(c) coupling or uncoupling rolling stock;
(d) maintaining, repairing, modifying, monitoring, inspecting or testing -
   (i) rolling stock, including checking that the rolling stock is working properly before being used; or
   (ii) rail infrastructure;
(e) installation of components in relation to rolling stock;
(f) work on or about rail infrastructure relating to the design, construction, repair, modification, maintenance, monitoring, upgrading, inspection or testing of the rail infrastructure or associated works or equipment, including checking that the rail infrastructure is working properly before being used;
(g) installation or maintenance of -
   (i) a telecommunications system relating to rail infrastructure or used in connection with rail infrastructure; or
   (ii) the means of supplying electricity directly to rail infrastructure, any rolling stock using rail infrastructure or a telecommunications system;
(h) work involving certification as to the safety of rail infrastructure or rolling stock or any part or component of rail infrastructure or rolling stock;
(i) work involving the decommissioning of rail infrastructure or rolling stock or any part or component of rail infrastructure or rolling stock;
(j) work involving the development, management or monitoring of safe working systems for railways;
(k) work involving the management or monitoring of passenger safety on, in or at any railway.

An individual is considered to be a rail safety worker if they perform activities that fall into any of the categories listed above, regardless of whether this work constitutes all or just part of their role. A rail transport operator must identify the activities that might be rail safety work, when preparing a safety management system (SMS).
Based on the specific operations of their organisation, this process requires them to:

> assess the level of risk inherent in each activity;
> identify the employees and third parties (e.g. contractors) likely to be responsible for that work; and
> implement strategies to manage those individuals at least to the degree required by the RSNL.

### 2.1.1 Meaning of ‘rail infrastructure’

Under s.4 of the RSNL, *rail infrastructure* means:

- the facilities that are necessary to enable a railway to operate and includes -
  - railway tracks and associated railway track structures; and
  - service roads, signalling systems, communications systems, rolling stock control systems, train control systems and data management systems; and
  - notices and signs; and
  - electrical power supply and electric traction systems; and
  - associated buildings, workshops, depots and yards; and
  - plant, machinery and equipment,

but does not include -

- rolling stock; or
- any facility, or facility of a class, that is prescribed by the national regulations not to be rail infrastructure.

At present there are no prescribed exclusions from this definition in the regulations.

For the purposes of defining rail safety work, ONRSR interprets ‘facilities that are necessary to enable a railway to operate’ as including those facilities that have an impact upon (or are associated with) the safety of the railway operations.

### 2.1.2 Meaning of ‘on or about’ rail infrastructure (s.8(1)(f))

Rail safety workers are required to take reasonable care for their own safety and that of others (s.56).

This means that they must be alert to the risks that are inherent in working on, or in close proximity to, rail infrastructure.

People working ‘on or about’ rail infrastructure are defined as doing rail safety work under s.8(1)(f) and must comply with s.56, but only if they are working on the rail infrastructure or associated buildings themselves. Specifically, this means work relating to the design, construction, repair, modification, maintenance, monitoring, upgrading, inspection or testing of the rail infrastructure or associated works or equipment.

When considering how to apply s8 (1)(f)- ‘on or about rail infrastructure’ this would generally include, but not only be limited to the *danger zone.*

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1 The definition of danger zone may vary, depending on the applicable network rules. Also note that different terminology may be used in reference to light rail.
It is important to note that while work undertaken within the danger zone would typically be rail safety work, this is not always the case; and conversely, rail safety work may be undertaken outside the danger zone. Each scenario needs to be assessed separately and should be considered on a case by case basis, particularly given that the test includes work relating to the ‘associated works or equipment’ which may be outside the ‘danger zone’.

The ‘danger zone’ is defined in the Rail Industry Safety and Standards Board’s (RISSB) Australian Network Rules & Procedures (ANRP) as all space:

   within three metres horizontally from the nearest rail and any distance above or below it, unless a safe place exists or has been created.\(^2\)

A ‘safe place’ might include (but is not limited to) areas protected by features such as signals, protective barriers, standing train protection, and so forth. A station platform is considered to be a safe place behind the yellow line, but people working in such locations might still need additional protection.

Workers carrying out maintenance, repairs, modifications, monitoring, inspections, or testing of rolling stock, rather than rail infrastructure, are not covered under s.8(1)(f), but would still be deemed rail safety workers under s.8(1)(d)(i), whether or not they are operating ‘on or about rail infrastructure’.

2.1.3 Greenfield and brownfield sites

Note: ‘Greenfield’ in this context generally means a site that has not been developed, or does not contain any rail infrastructure. ‘Brownfield’ in this context generally means there is existing rail infrastructure on that site.

Work undertaken at a ‘greenfield’ site is not automatically ‘rail safety work’, particularly when initial earthworks are underway. While this pre-work is not regarded as rail safety work, it must be assessed and signed off by an appropriately qualified rail safety worker and in accordance with the RTO’s SMS. However, once the process of laying slab, sleepers or rail commences, this is identified as rail safety work.

Work undertaken at ‘brownfield’ sites involves existing rail infrastructure and whilst each situation needs to be assessed based on individual circumstances, it is likely to be rail safety work.

2.2 Identifying rail safety workers

To determine whether a person should be classified as a rail safety worker, an RTO needs to undertake a risk assessment of their operations to identify the roles and responsibilities that might be relevant to, or associated with, rail safety in accordance with s.8(1) of the RSNL.

This should be performed as part of the processes used to develop and review the organisation’s SMS.

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2.2.1 Defining ‘rail safety work’

The RTO should identify the scope and limits of rail safety work within their railway operations by:

1. undertaking a task analysis of each role within the organisation and identifying the technical and non-technical knowledge and skills required to perform each successfully (the focus should be on tasks, rather than formal job titles); and

2. ascribing each task as either ‘rail safety work’ or ‘non-rail safety work’ depending on:
   a. the nature of the tasks performed; and
   b. the location where the work is to be performed; and
   c. whether the tasks come within the scope of s.8(1).

Any person who is expected to carry out a task identified as rail safety work (or that could potentially be so deemed), based on the above assessment, should be classified as a ‘rail safety worker’.

Once that determination has been made, operators can implement control measures to manage the risks of the rail safety work. Figure 1 outlines this process.

If an individual is identified as a potential rail safety worker, it is the responsibility of the operator to determine how they should manage the risks and ensure the safety of such a person. This means they need to consider how they will address the health, drug and alcohol, fatigue, competency, and training needs of these workers.

ONRSR expects that the operator will retain evidence to document the decision-making process used to identify the controls applied to various rail safety worker roles. This should include appropriate assessment and management strategies to demonstrate that the risks are being addressed, so far as is reasonably practicable (SFAIRP).
Figure 1: Determining if the role is rail safety work

Is the role rail safety work?
Section 8(1) of the RS NL identifies rail safety work as:
(a) driving or despatching rolling stock or any other activity which is capable of controlling or affecting the movement of rolling stock;
(b) signalling (and signalling operations), receiving or relaying communications or any other activity which is capable of controlling or affecting the movement of rolling stock;
(c) coupling or uncoupling rolling stock;
(d) maintaining, repairing, modifying, monitoring, inspecting or testing—
   (i) rolling stock, including checking that the rolling stock is working properly before being used; or
   (ii) rail infrastructure;
(e) installation of components in relation to rolling stock;
(f) work on or about rail infrastructure relating to the design, construction, repair, modification, maintenance, monitoring, upgrading, inspection or testing of the rail infrastructure or associated works or equipment, including checking that the rail infrastructure is working properly before being used;
(g) installation or maintenance of—
   (i) a telecommunications system relating to rail infrastructure or used in connection with rail infrastructure; or
   (ii) the means of supplying electricity directly to rail infrastructure, any rolling stock using rail infrastructure or a telecommunications system;
(h) work involving certification as to the safety of rail infrastructure or rolling stock or any part or component of rail infrastructure or rolling stock;
(i) work involving the decommissioning of rail infrastructure or rolling stock or any part or component of rail infrastructure or rolling stock;
(j) work involving the development, management or monitoring of safe working systems for railways;
(k) work involving the management or monitoring of passenger safety on, in or at any railway.

Identify nature of tasks and location of work

Consider the guidance in section 2 of the guideline about ‘rail infrastructure’.
- Is the work on or about rail infrastructure (refer to section 2.1.2)
- Is the work relating to rail infrastructure?

If uncertain in relation to s8(1)(f)

If yes, proceed with risk assessment.

Rail Safety Worker

Risk Assessment

Low risk

Control the risk SFAIRP

High risk
### The rail safety worker checklist

Below is a simple checklist to assist in the identification of a rail safety worker, as per the provisions of section 8(1) of the RSNL.

The list is not exhaustive, and it is the responsibility of the RTO to determine the activities likely to be considered to be rail safety work within their own operations.

If the answer to any of these questions is ‘yes’, the person in question is a rail safety worker, whether the activity in question constitutes all of their role or just a part, and they must be covered by the RTO’s SMS.

However, it is the operator’s responsibility to make that determination.

**Notes:**
- References in the table below to ‘person’ should be assumed to include employees, contractors, and other parties carrying out work for the RTO (as per s.119).
- References to ‘testing’ should be assumed to include ‘calibration’.

<table>
<thead>
<tr>
<th>Questions</th>
<th>RSNL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is the person responsible for <strong>driving</strong> or <strong>dispatching</strong> rolling stock?</td>
<td>Yes/No s.8(1)(a)</td>
</tr>
<tr>
<td>2. Does the person carry out any activity which is capable of <strong>controlling</strong> or <strong>affecting the movement of rolling stock</strong>?</td>
<td>Yes/No s.8(1)(a)</td>
</tr>
<tr>
<td>3. Does the person carry out any <strong>signalling</strong> operations?</td>
<td>Yes/No s.8(1)(a)</td>
</tr>
<tr>
<td>4. Is the person responsible for <strong>receiving</strong> or <strong>relaying communications</strong> or any other activity which is capable of controlling or affecting the movement of rolling stock?</td>
<td>Yes/No s.8(1)(b)</td>
</tr>
<tr>
<td>5. Is the person responsible for <strong>coupling</strong> or <strong>uncoupling</strong> rolling stock?</td>
<td>Yes/No s.8(1)(c)</td>
</tr>
<tr>
<td>6. Is the person responsible for <strong>maintaining, repairing, or modifying rolling stock or rail infrastructure</strong> that may have an impact upon (or is associated with) the safety of operations?</td>
<td>Yes/No s.8(1)(d)</td>
</tr>
<tr>
<td>7. Is the person responsible for <strong>monitoring</strong> <strong>rolling stock or rail infrastructure</strong> that may have an impact upon (or is associated with) the safety of operations?</td>
<td>Yes/No s.8(1)(d)</td>
</tr>
<tr>
<td>8. Is the person responsible for <strong>inspecting</strong> or <strong>testing</strong> <strong>rolling stock or rail infrastructure</strong> that may have an impact upon (or is associated with) the safety of operations?</td>
<td>Yes/No s.8(1)(d)</td>
</tr>
<tr>
<td>9. Is the person responsible for <strong>checking that rolling stock is working properly</strong> before being used?</td>
<td>Yes/No s.8(1)(d)</td>
</tr>
<tr>
<td>10. Does the person <strong>install components</strong> of rolling stock?</td>
<td>Yes/No s.8(1)(e)</td>
</tr>
<tr>
<td>11. Does the person <strong>design, construct, repair, modify, maintain, upgrade, inspect, or test rail infrastructure</strong> or associated works or equipment while working within a danger zone?</td>
<td>Yes/No s.8(1)(f)</td>
</tr>
<tr>
<td>12. Does the person <strong>install or maintain a telecommunications system</strong> relating to rail infrastructure or used in connection with rail infrastructure that may have an impact upon (or is associated with) the safety of operations?</td>
<td>Yes/No s.8(1)(g)</td>
</tr>
<tr>
<td>13. Does the person <strong>install or maintain the electricity supply</strong> for rail infrastructure, any rolling stock using rail infrastructure or a telecommunications system that may have an impact upon (or is associated with) the safety of operations?</td>
<td>Yes/No s.8(1)(g)</td>
</tr>
<tr>
<td>14. Does the person carry out any work involving <strong>certification of the safety of rail infrastructure or rolling stock</strong> or any part or component of rail infrastructure or rolling stock?</td>
<td>Yes/No s.8(1)(h)</td>
</tr>
<tr>
<td>15. Does the person carry out any work involving the <strong>decommissioning</strong> of rail infrastructure or rolling stock or any part or component of rail infrastructure or rolling stock?</td>
<td>Yes/No s.8(1)(i)</td>
</tr>
<tr>
<td>16. Does the person carry out any work on the <strong>development, management or monitoring of safe working systems</strong> for railways?</td>
<td>Yes/No s.8(1)(j)</td>
</tr>
<tr>
<td>17. Does the person carry out any work involving the <strong>management or monitoring of passenger safety</strong> on, in or at any railway?</td>
<td>Yes/No s.8(1)(k)</td>
</tr>
</tbody>
</table>
2.2.3 Task analysis: consideration of the ‘grey areas’

Those roles and functions that clearly include one or more of the tasks and activities set out in the rail safety worker checklist will generally provide a simple guide for an RTO to identify those roles as rail safety workers, and undertake the appropriate assessment.

An issue arises however, where roles and functions are undertaken in relation to an RTO's operations that do not clearly fit into any of those identified in the checklist. These ‘grey areas’ can include activities such as a painter on a railway platform; and a contractor performing maintenance in a train control room.

All RTOs must be aware that the circumstances will be different when considering these issues for each operator, and in some cases, the circumstances may mean that the activity is rail safety work, and thus the individual undertaking that work is a rail safety worker. There will not be a ‘one size fits all’ approach.

The following are examples of how a rail transport operator might assess the tasks with respect to these less clear roles in determining whether they are rail safety workers or not, and duties associated with managing those workers. These are only brief high level examples and there will always be other considerations to be taken into account. Irrespective of whether the worker is a rail safety worker or not, RTO general safety duties apply.

Example 1: Contractor undertaking routine facility maintenance at a railway station

<table>
<thead>
<tr>
<th>Task and location:</th>
<th>A contractor is engaged to undertake the replacement of light bulbs in the concourse area of a metropolitan central railway station. No light bulb replacement is required over or near the track.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the role rail safety work?</td>
<td>They are not doing any activities described in section 8(1) – noting that they are undertaking work on 'railway premises' - not on rail infrastructure.</td>
</tr>
<tr>
<td>Are they a rail safety worker?</td>
<td>This contractor would not be a rail safety worker. However, the RTO would still have a duty to ensure this person undertakes the work safely and in a way that does not affect the safety of the railway operations, the safety of themselves or others.</td>
</tr>
</tbody>
</table>

Example 2: Security guards/Transit officers working on railway premises

**Scenario A**

<table>
<thead>
<tr>
<th>Task and location:</th>
<th>A security guard engaged to work at a railway station car park overnight.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the role rail safety work?</td>
<td>They are not doing any activities described in section 8(1) – noting that they are undertaking work on 'railway premises' - not on rail infrastructure.</td>
</tr>
<tr>
<td>Are they a rail safety worker?</td>
<td>This security guard would not be a rail safety worker. However, the RTO would still have a duty to ensure this person undertakes the work safely and in a way that does not affect the safety of the railway operations, the safety of themselves or others.</td>
</tr>
</tbody>
</table>
**Scenario B**

<table>
<thead>
<tr>
<th>Task and location:</th>
<th>A transit officer employed by an RTO to undertake a range of duties including ticket inspection, passenger security, patrolling stations and trains.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the role rail safety work?</td>
<td>They are undertaking work within activities described in section 8(1)(k).</td>
</tr>
<tr>
<td>Are they a rail safety worker?</td>
<td>This person would likely be a rail safety worker, and would need to be managed accordingly.</td>
</tr>
</tbody>
</table>

**Scenario A:**

<table>
<thead>
<tr>
<th>Task and location:</th>
<th>A civil engineer working in a design firm office, drafting a preliminary design for a new turnout as part of a rail track upgrade project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the role rail safety work?</td>
<td>Unlikely- this work would not fit within section 8(1)(f).</td>
</tr>
<tr>
<td>Are they a rail safety worker?</td>
<td>It is unlikely that this person is a rail safety worker - but this person would have clear duties under section 53 of the RSNL. The duty falls to the RTO under section 52(3)(b) to ensure a design is safe.</td>
</tr>
</tbody>
</table>

**Scenario B:**

<table>
<thead>
<tr>
<th>Task and location:</th>
<th>A Project Director working on behalf of an accredited rail transport operator, receiving and approving a final design for a new track turnout as part of a rail track upgrade project.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the role rail safety work?</td>
<td>Yes, this would likely fall within the description of the activities in section 8(1)(f).</td>
</tr>
<tr>
<td>Are they a rail safety worker?</td>
<td>This person would likely be a rail safety worker, and would need to be managed accordingly.</td>
</tr>
</tbody>
</table>

### 2.3 Applying the appropriate level of worksite protection

Whether an employee or contractor is a rail safety worker or not, the RTO must plan to protect all workers operating within the rail corridor.

The level of protection applied is determined by a safety assessment that considers the task being performed, the risks it entails, its proximity to the danger zone, and the potential impact it may have on the system.

The Protection Officer (or equivalent) must determine the appropriate methods of protection for rail safety workers in accordance with the RTO's SMS.
3. Requirements for ‘rail safety workers’

Rail safety workers are subject to specific safety consideration under the RSNL beyond what is prescribed by occupational health and safety legislation.

Rail transport operators have additional obligations to manage the risks associated with railway operations in order to protect, train, and manage rail safety workers.

These obligations are prescribed as safety duties in s.52, and further specified elsewhere in the RSNL and the National Regulations.

This includes a need for the rail safety worker to be covered by:

- a health and fitness management program (see s.114; Regulation 27 and Schedule 1.27);
- a drug and alcohol management program (s.115; Regulation 28 and Schedule 1.28);
- a fatigue risk management program (s.116; Regulation 29 and Schedule 1.29);
- additional provisions for the assessment of the competence of rail safety workers (s.117; Schedule 1.24); and
- requirements for the training and instruction of rail safety workers on the implementation of the SMS (Schedule 1.15 of the National Regulations).

Each of these programs should be included in the RTO’s SMS to the level required for the individual rail safety worker.

Rail safety workers are also required to have a form of identification in accordance with s.118.

Once identified as a rail safety worker, a further assessment of the level of risk inherent in the role should be carried out. If the rail safety worker is in the technical definition of the danger zone a further examination of what protections have been put in place should be undertaken. This examination should include looking at protections such as physical or non-physical barriers, safe work rules, safety induction courses, worker competencies and OHS coverage.

3.1 The importance of scalability

Risk management of rail safety work is scalable to suit the specific nature of the RTO’s operation.

Not all rail safety workers are the same, nor do they require the same level of management and control. Each role that involves rail safety work will require different levels of protection, training, and management that should be determined through appropriate risk assessment practices. In determining how the operator should manage risks, they need to consider how to address the health, drug and alcohol, fatigue, competency, and training needs of rail safety workers.

ONRSR expects that the RTO will retain evidence to document the decision-making process used to identify the controls applied to various rail safety worker roles.
Figure 2: Example of the scalability of RTO duties in relation to rail safety workers

Safety Considerations for Rail Safety Workers

- **Health and fitness**
  - Apply the Health and Fitness Program
  - Review RSW in accordance with the National Standard for the Health Assessment of RSW
  - Risk assessment may determine the category of RSW – which will determine the level of assessment (i.e., Medical with a GP required).

- **Drugs and alcohol**
  - Apply the Drug and Alcohol Management Plan (DAMP)
  - Apply the DAMP to the extent necessary to manage the risks
  - For example, this may inform the level and type of testing applied to that RSW

- **Fatigue risk**
  - Apply the Fatigue Risk Management Plan (FRMP)
  - Apply the FRMP to the extent necessary to manage those risks
  - For example, consider controls such as rostering, rest, role and function

- **Competence**
  - Apply the RTO Competency Management Process
  - RTO to assess RSW competence in accordance with the available AQF qualifications, and refer relevant skills and knowledge
  - If not practicable, must be able to demonstrate RSW otherwise has necessary qualifications and skills and knowledge

- **Training and instruction**
  - Does the RSW need specific rail safety training to perform their role?
    - Yes
      - Inclusion of systems and procedures in SMS for RSW training and instruction
    - No
      - Site induction program includes relevant information about RSW safety and duties