

Reporting Requirements for Notifiable Occurrences



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Table of contents

Οv	ervie	w and	Purpose	1
Sc	ope			1
1	Rep	orting	J Requirements	2
	1.1	Notifi	able Occurrences	2
		1.1.1	Notifiable occurrences	2
	1.2	Repo	rting to ONRSR	
		1.2.1	Reporting Requirements	
		1.2.2	Post-Incident Drug and Alcohol Testing	4
	1.3	Guidi	ng Principles for Reporting Notifiable Occurrences	5
		1.3.1	Top Event Reporting	5
	1.4	Other	^r Railway Casualties	
		1.4.1	Other railway casualties: EXAMPLES	
	1.5	Defin	ition of Data Items for Reporting	
		1.5.1	Mandatory Data Items	
		1.5.2	Data Items for Casualties	
		1.5.3	Data Items for Property Damage	
		1.5.4	Data Items for Drug and Alcohol Testing of Rail Safety Workers	
		1.5.5	Data Items for Specific Occurrences	
2	Glo	ssary.		19
3	Usi	r na the	se reporting requirements	30
Ŭ		-		
	3.1			
		3.1.1	Running Line Derailment	
		3.1.2	Yard Derailment	
	3.2		sion	
		3.2.1	Running Line Collision	
		3.2.2	Yard Collision	
	3.3	Level	Crossing Occurrence	
		3.3.1	Collision with Road Vehicle	
		3.3.2	Collision with Person	
		3.3.3	Level Crossing Equipment Failure/Defect	
		3.3.4	Level Crossing Equipment Damage/Interference	
		3.3.5	Near Miss with Road Vehicle	

	3.3.6	Near Miss with Person	. 58
	3.3.7	Other Level Crossing Occurrence	. 60
3.4	Signa	Passed at Danger / Authority Exceeded	61
	3.4.6	SPAD CLASSIFICATION A1 (Limit of Authority (LOA) Missed by Train Crew)	66
	3.4.7	SPAD CLASSIFICATION A2 (Signal Irregularity for the LOA)	. 67
	3.4.8	SPAD CLASSIFICATION A3 (Proceed Authority Incorrectly Given by Rail Operator)	. 67
	3.4.9	SPAD CLASSIFICATION A4 (Sub-Optimal Train or Track Infrastructure Conditions)	. 68
	3.4.10	SPAD CLASSIFICATION B1 (Signal Restored and Passed at Danger – Infrastructure Failure)	. 68
	3.4.11	SPAD CLASSIFICATION B2 (Signal Restored and Passed at Danger - Network Control / Signal	ller
		Error)	69
	3.4.12	SPAD CLASSIFICATION B3 (Signal Restored and Passed at Danger – Emergency)	69
	3.4.13	SPAD CLASSIFICATION B4 (LOA Exceeded Through Uncontrolled Movement)	70
3.5	Light	Rail or Tram Authority Exceeded	71
	3.5.4	LRTAE CLASSIFICATION A1 (Road Traffic Light Passed Without Authority)	76
	3.5.5	LRTAE CLASSIFICATION A2 (Light rail/tram signal passed without authority)	76
	3.5.6	LRTAE CLASSIFICATION A3 (Traffic light or signal passed without authority due to an	77
	057	infrastructure irregularity)	
	3.5.7	LRTAE CLASSIFICATION A4 (Limit of Authority missed by Light Rail/Tram Crew)	
	3.5.8	LRTAE CLASSIFICATION A5 (Authority to proceed incorrectly given)	
	3.5.9	LRTAE CIASSIFICATION A6 (Sub-optimal light rail/tram or track infrastructure conditions)	
	3.5.10 3.5.11	LRTAE CLASSIFICATION B1 (Failure of light rail/tram signal infrastructure) LRTAE CLASSIFICATION B2 (Signal Restored and Passed at Danger – Network Controller	. 80
	3.3.11	Error)	80
	3.5.12	LRTAE CLASSIFICATION B3 (Authority to proceed rescinded in an emergency)	
		LRTAE CLASSIFICATION B4 (Limit of Authority exceeded through uncontrolled movement)	
3.6	Signal	lling and other Proceed Authority Systems Irregularity	. 83
	3.6.1	Wayside Signalling System Irregularity	84
	3.6.2	In-cab Signalling System Irregularity	86
	3.6.3	Token Based System Irregularity	86
	3.6.4	Communications Based Train Authority System Irregularity	87
3.7	Slip, T	rip or Fall	89
	3.7.1	To/From Rolling Stock	91
	3.7.2	Between Platform and Rolling Stock	92
	3.7.3	On Rolling Stock	92
	3.7.4	On Track	93
	3.7.5	On/From Platform/Concourse	93
	3.7.6	On/From Escalator/Lift	. 94

	3.7.7	On/From Stairs/Ramps	94
	3.7.8	From Structure	95
	3.7.9	Caught in Rolling Stock Doors	95
	3.7.10	Other Slip, Trip or Fall	96
3.8	Load	Irregularity	97
	3.8.1	Door Open	98
	3.8.2	Out of Gauge	98
	3.8.3	Load Shift	99
	3.8.4	Uneven Distribution of Load	99
	3.8.5	Loose Load Fastening	100
	3.8.6	Other Load Irregularity	100
3.9	Dange	erous Goods	. 102
	3.9.1	On Rolling Stock	104
	3.9.2	Off Rolling Stock	104
3.10	Safew	orking - Network Rule or Procedure Breach	. 105
	3.10.1	Wayside Signalling System Procedure/Rule Breach	106
	3.10.2	In-cab Signalling System Procedure/Rule Breach	107
	3.10.3	Token Based System Procedure/Rule Breach	107
	3.10.4	Communications Based System Procedure/Rule Breach	108
	3.10.5	Track Work Procedure/Rule Breach	108
	3.10.6	Work Scheduling Practice/ Procedure Breach	110
	3.10.7	Other Safeworking Rule or Procedure Breach	110
3.11	Track	and Civil Infrastructure Irregularity	. 112
	3.11.1	Broken Rail and rail defects	114
	3.11.2	Misaligned Track	115
	3.11.3	Spread Track	116
	3.11.4	Points Irregularity	116
	3.11.5	Track Obstruction	117
	3.11.6	Civil Infrastructure Irregularity	119
	3.11.7	Bridge Strike	120
	3.11.8	Other Track Infrastructure Irregularity	120
3.12	Rollin	g Stock Irregularity	. 121
	3.12.1	Train Parting	122
	3.12.2	Wheel/Axle Failure	122
	3.12.3	Defective Bearing	123
	3.12.4	Faulty Passenger Train Door	123
	3.12.5	Braking System	124

Noti	fiable	Occurrences under the RSNL	166
Dire	ctory	of Categories with Codes	159
3.21	Runav	vay	
	3.20.6	Other Railway Network Security	
	3.20.5	Theft	155
	3.20.4	Vandalism	
	3.20.3	Terrorism/Sabotage	
	3.20.2	Alleged Assault	
	3.20.1	Railway Trespass	
3.20	Railwa	ay Network Security	
3.19	Comn	nunications System Failure	
	3.18.2	Enforcement Systems Irregularity	
	3.18.1	Warning Systems Irregularity	
3.18	Train	Warning and Enforcement Systems Irregularity	
3.17	Alcoh	ol or Drugs Irregularity	
	3.16.2	Attempted Suicide	
	3.16.1	Suspected Suicide:	
3.16	Suspe	ected Suicide or Attempted Suicide	
3.15	Explo	sion	
	3.14.3	Station/Terminal Fires	
	3.14.2	Lineside Fires	
	3.14.1	On Train	
3.14	Fire		
	3.13.2	Other Electrical Infrastructure Irregularity	
	3.13.1	Overhead Traction Supply	
3.13	Electr	ical Infrastructure Irregularity	
	3.12.6	Other Rolling Stock Irregularity	

4

5

Overview and Purpose

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

The purpose of this document is to provide rail transport operators with the **requirements for reporting notifiable occurrences** to ONRSR in accordance with the RSNL to ensure compliance with reporting requirements, uniform classification and reporting of such occurrences.

This reporting framework enables ONRSR, in its role as a risk-based regulator to:

- > monitor how and where safety risks arise and investigate occurrences where necessary on an ongoing basis; and
- > collect sufficient data to identify safety trends over the medium term to effectively target regulatory and safety activities and facilitate the provision of advice on incidents and irregularities that impact rail safety.

The data collected by ONRSR on notifiable occurrences is also used to provide statistical input into a number of safety reports.

Scope

These reporting requirements are for rail transport operators accredited under the RSNL.

Reporting notifiable occurrences is a legal requirement imposed on rail transport operators under section 121 of the RSNL. In turn a rail transport operator must ensure a notifiable occurrence is reported in the form, contains all the information, and is made in the manner, required by the Regulator (Regulation 57(4) of the RSNL National Regulations).

This document sets out the legal requirements imposed on rail transport operators by the Regulator under Regulations 28 and 57 of the National Regulations.

Rail transport operators

Rail transport operators, as defined under section 4 of the RSNL, include:

- > Rail infrastructure managers;
- > Rolling stock operators; or
- > Persons who are both a rail infrastructure manager and a rolling stock operator.

1 Reporting Requirements

1.1 Notifiable Occurrences

Rail transport operators must report to ONRSR **all notifiable occurrences**, including prescribed incidents that happen **on**, **or in relation to, their railway premises or railway operations** under subsection 121(1) of the RSNL.

Two or more operators may make a joint report with respect to a notifiable occurrence affecting them: subsection 121(2) of the RSNL.

1.1.1 NOTIFIABLE OCCURRENCES

A notifiable occurrence is defined under section 4 of the RSNL as an **incident associated with railway operations**:

- > that has, or could have, caused significant property damage, serious injury or death; or
- > that is, or is of a class that is, prescribed by the national regulations to be a notifiable occurrence or class of notifiable occurrence;

but does not include an incident, or class of incident, that is prescribed by the national regulations not to be a notifiable occurrence.

Application of reporting categories

The reporting categories detailed in this document are based on the notifiable occurrences that must be reported by rail transport operators to ONRSR under regulation 57 of the RSNL (refer to **Section 5 Notifiable Occurrences under the RSNL**).

Incident

A notifiable 'incident' also refers, under regulation 57 of the RSNL to the detection of any irregularities in:

- > any rail infrastructure (including electrical infrastructure) that could affect the safety of railway operations or the safety of people; and
- > any rolling stock that could affect the safety of railway operations.

Prescribed Incident

A notifiable occurrence further defined by regulation 28(7)(a) of the National Regulations as an incident that occurs while rail safety work is being carried out in respect of the operator's railway operations which have additional requirements for drug and alcohol testing of rail safety workers involved (or reasonably suspected to have been involved) in the incident and immediate notification of the incident.

Note: These new prescribed incident requirements do not apply in Western Australia For New South Wales specific prescribed incidents requirements refer to Reg. 28(7)(b) Category A notifiable occurrence reporting requirements are unchanged

Associated with railway operations: exclusions

To constitute a notifiable occurrence, an incident must be associated with railway operations.

Location: this excludes incidents, which take place in:

- > railway offices and station car parks not involving the operation or movement of rolling stock;
- > station bus interchanges and rail replacement bus services; and
- > roads and road overpasses connecting to stations.

Health-related condition: this excludes incidents that are:

> associated with a health-related condition in a person, such as a heart attack, seizure or substance abuse, where it is not associated with or leading to a notifiable occurrence.

1.2 Reporting to ONRSR

The notifiable occurrences (separated into Category A and Category B) which must be reported to ONRSR by rail transport operators under the RSNL, as prescribed under regulations 28 and 57 of the National Regulations, are reproduced at **Section 5** *Notifiable Occurrences under the RSNL*.

1.2.1 REPORTING REQUIREMENTS			
Category A Notifiable Occurrence and Prescribed Incidents		Category B Notifiable Occurrence	
Timeframe for Notification	 Immediately after becoming aware A rail transport operator must give a verbal report to ONRSR Within 72 hours of occurrence A rail transport operator must provide a written report to ONRSR, in compliance with these reporting requirements. The report should reflect the extent of information available to the rail transport operator during this period. 	Within 72 hours of occurrence A rail transport operator must provide a written report to ONRSR, in compliance with these reporting requirements. This report should reflect the extent of information available to the rail transport operator during this period.	
Form and Manner of Notification	reports. The ONRSR Portal can be access Notifiable Occurrence Notification Form Operators can make reports using the Notifi	ONRSR Portal is the preferred method for submitting notifiable occurrence orts. The ONRSR Portal can be accessed at https://portal.onrsr.com.au <i>ifiable Occurrence Notification Form</i> erators can make reports using the Notifiable Occurrences Notification Form allable on the ONRSR website) during the transition phase to the Portal.	

Updates	After written report
	There are circumstances where new and revised information comes to light following a rail transport operator's further examination or investigation of an occurrence. Where this identifies different information from that already reported, rail transport operators are strongly encouraged to provide further updates to ONRSR identifying the updated information.
	Although this is not a regulatory requirement, providing updates will enable ONRSR to enhance the initial report of a notifiable occurrence and improve the accuracy and/or completeness of the information provided. This ensures that data on any occurrence is comprehensive and current, which facilitates accurate analysis of safety trends within the rail industry.

1.2.2 POST-INCIDENT DRUG AND ALCOHOL TESTING

When a prescribed incident occurs, the operator must notify ONRSR immediately and undertake drug and alcohol testing of rail safety workers involved (or reasonably believed to have been involved), unless:

- > testing has already been carried out by police or ONRSR
- > ONRSR advises that they are organising for their contracted testers to attend
- > ONRSR advises that testing is not required/unable to be carried out
- > there is a reasonable excuse for not doing so.

Note: in New South Wales, notification of mandatory drug and alcohol testing must be made to ONRSR within 72 hours of a prescribed incident.

Where drug and/or alcohol testing takes place following an incident that constitutes a notifiable occurrence, operators must report to ONRSR on both:

- > the incident: providing all data items required under the relevant category; and
- > the post-incident drug and/or alcohol testing (including negative results): providing all data items required under **3.17** *Alcohol or Drugs Irregularity.*

1.3 Guiding Principles for Reporting Notifiable Occurrences

These reporting requirements adopt an **outcome-based categorisation** of occurrences using a simple **hierarchical classification structure** with various tiers.

Each notifiable occurrence report submitted to ONRSR must be classified by rail transport operators to the **lowest (most detailed) level of sub categorisation available**.

For example, a collision between rolling stock and a fallen tree on a running line should be reported by a rail transport operator under **3.2.1.7.1**: *Natural Object*, which falls under **3.2** *Collision:* **3.2.1** *Running Line Collision:* **3.2.1.7** *With Obstruction.*

1.3.1 TOP EVENT REPORTING

It is common for incidents or irregularities impacting rail safety to comprise a chain of events which may correspond to more than one category, such as where a broken rail leads to a train derailment.

In such instances, rail transport operators must classify the chain of events according to the top event.

The top event is the **event with the greatest adverse outcome** – expressed in terms of casualties, damage or the seriousness of the event.

To identify the top event within a chain of events, rail transport operators must consider all the events that took place and select the one which:

- > directly led to the greatest casualties and/or damage during the chain of events; or
- > where there were no, or limited, casualties/damage, the event which was most serious considering what could have happened next, had circumstances been slightly different.

Example		Relevant Events and Categories	REPORT TOP EVENT - CATEGORY	
i.	A train derails on a running line due to broken rail.	Broken rail: 3.11 <i>Track and</i> <i>Civil Infrastructure Irregularity:</i> 3.11.1 <i>Broken Rail and Rail</i> <i>Defects</i> Running line derailment: 3.1 <i>Derailment</i> : 3.1.1. <i>Running</i> <i>Line Derailment</i>	3.1 Derailment: 3.1.1. Running Line Derailment The derailment is likely to have led to greater damage than the broken rail.	

1.3.1.1 DETERMINING THE TOP EVENT to report: EXAMPLES

1.3	1.3.1.1 DETERMINING THE TOP EVENT to report: EXAMPLES				
	Example	Relevant Events and Categories	REPORT TOP EVENT - CATEGORY		
ii.	During a yard shunting controlled by radio and hand signals, wagons run through incorrectly set points, derail, strike a yard signal and come to rest fouling the mainline.	Incorrectly set points: 3.10 Safeworking - Network Rule or Procedure Breach: 3.10.4 Communications Based System Procedure/Rule Breach Collision with yard signal: 3.2 Collision: 3.2.2 Yard Collision: 3.2.2.5 With Infrastructure Foul mainline: 3.1 Derailment: 3.1.1. Running Line Derailment	3.1 Derailment: 3.1.1. Running Line Derailment Although the collision with the yard signal resulted in damage to the wagon, the running line derailment represented the most serious event in light of what could have happened next (such as a collision with another train), had circumstances been slightly different.		
111.	A train strikes a road vehicle that is fouling the running line. The train derails and strikes a train on an adjacent running line. Multiple injuries and fatalities are reported.	Running line collision with road vehicle: 3.2 <i>Collision</i> : 3.2.1: <i>Running Line Collision</i> : 3.2.1.6 <i>With Road Vehicle Not on a Level Crossing</i> Running line derailment: 3.1 <i>Derailment</i> : 3.1.1 <i>Running Line Derailment</i> Running line collision between trains: 3.2 <i>Collision</i> : 3.2.1 <i>Running Line Collision</i> : 3.2.1.1 <i>Between Trains</i>	3.2 Collision: 3.2.1 Running Line Collision: 3.2.1.1 Between Trains The collision between the trains is likely to have led to the greatest casualties of the three events i.e. the majority of the fatalities and injuries reported.		
iv.	A signal blacks out and the driver fails to observe the signal, proceeds into a section and collides with another service.	Driver fails to observe signal and proceeds into section: 3.4 <i>Signal Passed at Danger</i> <i>(SPAD)</i> Running line collision between trains: 3.2 <i>Collision</i> : 3.2.1 <i>Running Line Collision</i> : 3.2.1.1 <i>Between Trains</i>	 3.2 Collision: 3.2.1 Running Line Collision: 3.2.1.1 Between Trains The collision between the trains is likely to have led to the greatest casualties and damage of the three events. 		

1.3	1.3.1.1 DETERMINING THE TOP EVENT to report: EXAMPLES			
	Example	Relevant Events and Categories	REPORT TOP EVENT - CATEGORY	
ν.	During a yard shunting, a train derails all wheels and then strikes a stanchion causing loss of OHW power. The lead locomotive sustains coupling damage.	Yard derailment: 3.2 Collision: 3.1.2 Yard Derailment Strikes stanchion in yard: 3.2 Collision: 3.2.2 Yard Collision: 3.2.2.5 With Infrastructure Loss of OHW power: 3.13 Electrical Infrastructure Irregularity: 3.13.1 Overhead Traction Supply Coupling damage to locomotive: 3.12 Rolling Stock Irregularity: 3.12.6 Other Rolling Stock Irregularity	3.2 Collision: 3.2.2 Yard Collision: 3.2.2.5 With Infrastructure The collision of the train with the stanchion is likely to have led to the greatest damage (to both the train and the stanchion) of the four events.	
vi.	A passenger standing on the platform falls to the running line, is struck by a passing train and is subsequently admitted to hospital.	Fall to tracks: 3.7 <i>Slip, Trip or</i> <i>Fall</i> : 3.7.5 <i>On/From</i> <i>Platform/Concourse</i> Struck by train: 3.2 <i>Collision</i> : 3.2.1 <i>Running Line Collision</i> : 3.2.1.3 <i>With Person Not on a</i> <i>Level Crossing</i>	 3.2 Collision: 3.2.1: Running Line Collision: 3.2.1.3 With Person Not on a Level Crossing The passenger is likely to have suffered a graver casualty from being struck by the train, rather than from falling. 	
vii.	A brake fault causes a passenger service to overrun the platform. The train stops suddenly causing injuries to passengers on board.	Brake fault: 3.12 <i>Rolling Stock</i> <i>Irregularity</i> : 3.12.5 <i>Braking</i> <i>System</i> Injury to passengers on board: 3.7 <i>Slip, Trip or Fall</i> : 3.7.3 <i>On</i> <i>Rolling Stock</i>	3.7 Slip, Trip or Fall: 3.7.3 On Rolling Stock The passengers falling on board the train is likely to have led to greater casualties in terms of injuries than the brake fault.	
viii.	A load shift on a freight train forces a wagon door to open and swing out of gauge. The load and door are resecured without further incident.	Load shift: 3.8 <i>Load</i> <i>Irregularity</i> : 3.8.3 <i>Load Shift</i> Wagon door open: 3.8 <i>Load</i> <i>Irregularity</i> : 3.8.1 <i>Door Open</i> Out of gauge: 3.8 <i>Load</i> <i>Irregularity</i> : 3.8.2 <i>Out of Gauge</i>	3.8 Load Irregularity: 3.8.2 Out of Gauge In the absence of any human or property consequences, the door swinging to an out of gauge position represents the most serious event , considering what could have happened next had the circumstances been slightly different.	

1.3	1.3.1.1 DETERMINING THE TOP EVENT to report: EXAMPLES			
	Example	Relevant Events and Categories	REPORT TOP EVENT - CATEGORY	
ix.	A broken rail affects an active level crossing warning installation or similar, where the level crossing is working as it should (i.e. right side failure).	Broken rail: 3.11 <i>Track and</i> <i>Civil Infrastructure Irregularity:</i> 3.11.1 <i>Broken Rail and Rail</i> <i>Defects</i> Incorrect level crossing signal: Not notifiable as it does not endanger the safety of railway operations for the purpose of 3.3 <i>Level Crossing Occurrence</i> : 3.3.4 <i>Level Crossing</i> <i>Equipment</i> <i>Damage/Interference</i>	 3.11 Track and Civil Infrastructure Irregularity: 3.11.1 Broken Rail and Rail Defects The broken rail is the only notifiable occurrence. 	
х.	A train runs through and damages a set of points. The points are booked out of use pending repairs.	Incorrectly set points: 3.10 Safeworking - Network Rule or Procedure Breach: 3.10.7 Other Safeworking Rule or Procedure Breach Damage to points: 3.11 Track and Civil Infrastructure Irregularity: 3.11.4 Points Irregularity	3.11 Track and Civil Infrastructure Irregularity: 3.11.4 Points Irregularity The damage to the points represents the more serious event considering what could have happened next (derailment) had circumstances been slightly different.	
xi.	School children interfere with the operation of automatic doors on a passenger train leading to the doors being unable to close fully.	Interference with doors: 3.20 <i>Railway Network Security</i> : 3.20.4 <i>Vandalism</i> : 3.20.4.3 <i>Other Vandalism</i> Train doors unable to close fully: 3.12 <i>Rolling Stock</i> <i>Irregularity</i> : 3.12.4 <i>Faulty</i> <i>Passenger Train Door</i>	3.12 Rolling Stock Irregularity: 3.12.4 Faulty Passenger Train Door The faulty door represents the more serious event , considering what could have happened next (damage to the train and potential for passengers falling) had circumstances been slightly different.	

1.3.1.1 DETERMINING THE TOP EVENT to report: EXAMPLES				
Example	Relevant Events and Categories	REPORT TOP EVENT - CATEGORY		
 xii. A stone smashes a cab window, injuring the driver The driver is admitted to the hospital for cuts. 		3.20 Railway Network Security: 3.20.4 Vandalism: 3.20.4.1 Object Projected at Rolling Stock: 3.20.4.1.1 Struck Train		
	Train window broken: 3.12 <i>Rolling Stock Irregularity</i> : 3.12.6 <i>Other Rolling Stock</i> <i>Irregularity</i>	The act of stone throwing represents the more serious event , considering what could have happened next (damage leading to a derailment) had circumstances been slightly different.		
xiii. A signal is reported to be incorrectly set at stop. An inspection reveals a piece of ballast has been wedge under the train stop.	-	3.20 Railway NetworkSecurity: 3.20.4 Vandalism:3.20.4.3 Other VandalismThe vandalism is the only event notifiable.		
	Piece of ballast wedged under train stop: 3.20 <i>Railway</i> <i>Network Security</i> : 3.20.4 <i>Vandalism</i> : 3.20.4.3 <i>Other</i> <i>Vandalism</i>			

1.4 Other Railway Casualties

A rail transport operator must notify ONRSR of **any other incident that does** <u>not</u> **correspond to a category**, however, is:

- > associated with railway operations; and
- > has caused **death or serious injury to any person** (including a rail safety worker or a member of the public) or significant property damage.

This notification is to be via the normal processes set out under section 1.2.

For completeness, this does <u>not</u> require rail transport operators to notify ONRSR of incidents leading to death or serious injury to a person that are not associated with railway operations, including those that:

- > take place in railway offices and station car parks not involving the operation or movement of rolling stock; station bus interchanges and rail replacement bus services; and roads and road overpasses connecting to stations; and
- > are associated with a health-related condition, such as a heart attack seizure or substance abuse, and are <u>not</u> associated with the operation or movement of rolling stock.

1.4.1 OTHER RAILWAY CASUALTIES: EXAMPLES

i.	A track and signals team are replacing a blade and stock rail in a yard. The points machine is isolated to prevent any uncontrolled movement. A signal technician attempts to remove two bolts from the back of a blade whilst another member uses the bar to hold the blade away from the stock rail. The bar slips resulting in the blade springing back, catching the technician's hand between the blade and the stock rail. The bar slices the skin off the technician's hand and he is taken to hospital.	 The incident which is not classifiable under these reporting requirements: > is associated with railway operations: the maintenance and repair of rail infrastructure; and caused serious injuries to a person: the separation of his skin from underlying tissue such that tendons, bones or muscles are exposed, requiring medical treatment.
ii.	A terminal operator is checking some wagons in between some roads, and steps out in the path of a reversing terminal vehicle, being driven by another terminal operator. The vehicle strikes the terminal operator, injuring his leg and hip and smashing his face. First aid is administered, an ambulance is called and the operator is hospitalised. The driver is tested for drugs and alcohol, following the incident and returns a negative result.	 The incident which is not classifiable under these reporting requirements: > is associated with railway operations: the maintenance of rolling stock; and caused serious injuries to a person: injuries to the leg, hip and face requiring immediate treatment as an in-patient in a hospital.

iii.	A passenger on board a train, suffers a severed finger from the seat mechanism, whilst reversing a seat.	 The incident which is not classifiable under these reporting requirements: > is associated with railway operations: the operation of rolling stock on a railway; and caused a serious injury to a person: the amputation of the tip of the passenger's finger requiring immediate treatment.
iv.	A rail safety worker crushes a finger when operating a twist lock on a container wagon. Upon hospitalisation, the worker is found to have also fractured his finger.	 The incident which is not classifiable under these reporting requirements: > is associated with railway operations: the operation of rolling stock on a railway; and caused serious injuries to a person: injuries to the finger require immediate treatment as an in-patient in a hospital.
v.	A young boy injures himself when his shoe is caught at the side of the escalator whilst ascending from the concourse to the railway platform. He sustains a deep cut on his large toe on his left foot and is taken to hospital.	 The incident which is not classifiable under these reporting requirements: > is associated with railway operations: the operation of rail infrastructure; and > caused serious injuries to a person: a deep cut to a passenger's toe constitutes a serious laceration requiring immediate treatment.

1.5 Definition of Data Items for Reporting

The following tables set out the definitions for the **data items required to be included in the Notifiable Occurrences** *Notification Form* (available on the ONRSR website):

1.5.1 MANDATORY DATA ITEMS

Identifies the data items that <u>must</u> be provided, where available and applicable, for all notifiable occurrences that are reported.

1. Notifying Organisation	The organisation code for the reporting rail organisation.
2. Rail Infrastructure Manager (RIM)	The infrastructure manager for the railway on which the occurrence took place
3. Rolling Stock Operator (RSO)	The rolling stock operator or operators, if there were more than one that were involved in the occurrence.
4. Train Control Report Number/ Code	The unique code issued by a train control authority to identify the occurrence.
5. Incident Number/Code	The unique code used by the reporting rail organisation to identify the occurrence within their own recording system.
	This may be the same as the Train Control Report Number/Code if the reporting rail organisation is the train control authority.
6. Region	The state or territory in which the occurrence took place.
7. Line Section Identifier	The location code or line section name identifying the section of track where the occurrence took place.
8. Running Kilometerage	The running line kilometerage of the occurrence.
	Where the occurrence takes place in a yard, the adjacent running line kilometerage may be reported.
9. Location of Occurrence	The location where the occurrence took place. Where the occurrence involves a piece of rolling stock or other mobile plant, or is a load shift etc. and is detected only on arrival at a destination, the location is that arrival point.
10. Line Type	Either running line or yard.
11. Date of Occurrence	Expressed in day/month/year format.
12. Time of Occurrence	Expressed in 24 hour clock format e.g. 15:36.
13. Notification Category	Under the National Regulations, occurrences are categorised into either:

	 Category A Occurrences: requiring immediate verbal notification of the occurrence ONRSR followed by a written notification within 72 hours of the occurrence; or Category B Occurrences: requiring written notification to ONRSR within 72 hours of the occurrence.
14. Prescribed Incident	An accident or incident associated with railway operations as prescribed under Regulation 28(7)(a) of the National Regulations that requires immediate notification to ONRSR and mandatory post-incident drug and alcohol testing in accordance with that regulation.
	Note:
	These prescribed incident requirements do not apply in Western Australia
	For New South Wales specific prescribed incidents requirements refer to Reg. 28(7)(b)
15. Occurrence Classification	The classification category for the occurrence, where relevant, based on these reporting requirements.
16. Description of Occurrence	 A clear and complete description of the circumstances and outcomes of the occurrence, based on the information available at the time of the notification, including: > a description of the chain of events that occurred; and > specific information appropriate to each type of occurrence.
47 Decerimtion of Courses!	
17. Description of Causes/ Contributing Factors	A description of any factors that may have contributed to the occurrence or any other qualifying information, if available at the time of notification. A useful reference is the <i>Contributing Factors Framework</i> .
18. D&A testing	Refer to 3.17 Alcohol or Drugs Irregularity for details on mandatory data items.

1.5.2 DATA ITEMS FOR CASUALTIES

Identifies the data items that must be provided in relation to any casualties associated with an occurrence, noting that each person is to be reported separately in relation to a casualty.

Person Type	The type of person in relation to a casualty, being either:
	> a rail safety worker;
	> a railway worker (other than a rail safety worker);
	> a passenger;
	> a member of the public; or

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	> a trespasser.
Type of Casualty	 The type of personal consequence (casualty), being either: a fatality; a serious injury; or a minor injury.

1.5.3 DATA ITEMS FOR PROPERTY DAMAGE

Identifies the data items that must be provided where property damage is associated with an occurrence.

1. Property Damage/ Consequence A description of the rolling stock, railway infrastructure and other property damaged and the type of damage that was sustained.

1.5.4 DATA ITEMS FOR DRUG AND ALCOHOL TESTING OF RAIL SAFETY WORKERS

Identifies the data items that must be provided in relation to drug and alcohol testing on rail safety workers that constitutes a notifiable occurrence.

1. Type of Test Performed	 An indication of what type of tests, if any, were performed, being one of: drug; alcohol; or drug and alcohol.
2. Reason for Test	The reason why the drug and/or alcohol test was performed, being one of: > Pre-sign on; > Post-sign on; — Random; — Following Occurrence; or — Triggered by Suspicion*. * to be included in description of occurrence.
3. Time of Test	For a drug and/or alcohol test undertaken following an occurrence, the time that the test took place.
4. Test Results	For a test undertaken following an occurrence, advice on whether the result was (relative to the legislative requirements for drug and alcohol):

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est),

1.5.5 DATA ITEMS FOR SPECIFIC OCCURRENCES

Identifies the data items that must be provided in relation to specific occurrences.

1. Train or Other Rolling Stock Description	Where a train or other rolling stock is involved in an occurrence, the following information is to be provided, where available or applicable:
a) Train / Rolling Stock Type	 The type of rolling stock, being either a: Urban Passenger Train; Non-urban Passenger Train; Tourist and Heritage Passenger Train; Tram; Freight Train; Track Maintenance Train; Road/Rail Vehicle; or Other (specify e.g. Track Machine).
b) Train / Rolling Stock Identification	The common identification of the rolling stock (the train number).
c) Traction Type	The type of traction for the rolling stock, being either: > Electric (excludes diesel electric);

1.5.5 DATA ITEMS FOR SPECIFIC OCCURRENCES

Identifies the data items that must be provided in relation to specific occurrences.		
	 > Diesel (includes diesel hydraulic and diesel electric); > Steam; or > Other Traction Type – any type of traction that does not fit into one of the above categories. 	
d) Rolling Stock Class	The class code or codes of rolling stock that is primary to the occurrence e.g. <i>RKCX</i> .	
2. Level Crossings	Where a level crossing is involved in an occurrence, it is to be identified as follows:	
a) Level Crossing Identifier	The unique identifier for the level crossing at which the occurrence took place e.g. <i>RLX0012, Smith Street</i> .	
b) Level Crossing Control Type	 The class of road vehicle/pedestrian control used at the level crossing at the time of the occurrence, being either: Active – lights only; Active – lights and boom gates; Passive – Stop Signs; Passive – Give Way Signs; or None. 	
3. Road Vehicle	Where a road vehicle is involved in an occurrence, the class of vehicle should be provided and defined as follows:	
a) Road Vehicle Type	The class of road vehicle involved in the occurrence, being either a: > Light Passenger Vehicle; > Heavy Freight Vehicle; > Dangerous Goods Vehicle; > Bus; > Motorcycle; > Bicycle; or > Other.	
4. Infrastructure Features	Where an item of track or infrastructure, as set out below, is primary to an occurrence, its identification is to be provided as follows:	
a) Signal Number	The number of the trackside signal involved in the occurrence.	

1.5.5 DATA ITEMS FOR SPECIFIC OCCURRENCES

Identifies the data items that must be provided in relation to specific occurrences.

b) Perway Switch/Points/Turnout Number	The point number involved in the occurrence.
5. Signal Passed at Danger (SPAD) / Authority Exceeded	Where a Signal Passed at Danger (under 3.4 Signal Passed at Danger) occurrence takes place, the following must be provided:
a) SPAD Exceedance Over- run	The distance (in metres) which the leading vehicle travels beyond the signal or limit authority.
b) SPAD Vulnerability Data Item	Data item is based on consideration of the severity and probability of their actual and possible consequences
6. Dangerous Goods	Where a dangerous goods occurrence takes place (under 3.9 Dangerous Goods) or a dangerous good is associated with an occurrence, the following must be provided:
a) Dangerous Goods Type	 The ADG class and/or description of the type of dangerous goods involved: Class 1. Explosives. Class 2. Gases. Class 3. Flammable liquids. Class 4. Flammable solids. Class 5.1 Oxidising substances. Class 5.2 Organic peroxides. Class 6.1 Toxic substances. Class 7. Radioactive material. Class 8. Corrosive substances. Class 9. Miscellaneous goods.
7. Worksite Protection Incident	Where a worksite protection incident takes place (under 3.10.5 Track Work Procedure/Rule Breach or otherwise) the following must be provided:
a) Employer	The organisation responsible for worksite protection at the time of the incident (may be an accredited rail transport operator or a third party organisation such as a protection supplier).
b) Qualification	 Qualification of the person with the primary responsibility for worksite protection at the time of the incident, such as > certification as a Protection Officer or Safeworking Officer;

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1.5.5 DATA ITEMS FOR SPECIFIC OCCURRENCES		
Identifies the data items that must be provided in relation to specific occurrences.		
	 > certification as a Hand Signaller; or > another Rail Safety Worker qualification. 	
c) Contractor Working on Site	The organisation with primary responsibility for managing the worksite at the time of the incident being either an accredited rail infrastructure manager or rolling stock operator or a non-accredited contractor.	
8. Breach of Work Scheduling/ Alcohol or Drugs Irregularity	Where a breach of work scheduling (under 3.10 Safeworking – Network Rule or Procedure Breach) or an alcohol or drugs irregularity (under 3.17 Alcohol or Drugs Irregularity) occurrence takes place, the following must be provided:	
a) Class of Rail Safety Worker	 The class of rail safety worker affected by the occurrence, Shunter; Driver; Guard; Controller/Signaller; Station Staff; Rolling Stock Maintainer; Rail Infrastructure Maintainer; or Other. 	

2 Glossary

Ballast: is a stone or aggregate material spread on the ground for the purpose of holding the track in line laterally and longitudinally and also to provide drainage.

Balloon loop: is a circular portion of running line that allows trains to reverse their direction of travel without stopping or shunting and are widely used in the loading of bulk commodities such as coal, grain and minerals.

Block (section): is a portion of line with defined limits between which only one rail traffic movement is permitted at any time.

Buffer stop: is a structure erected across and the end of a track at main line terminals or dead end sidings which is intended to stop rolling stock.

Casualty

A casualty is a death or injury (requiring medical attention) of an employee, passenger, trespasser or member of public <u>as a result of railway operations</u> including:

- > A level crossing occurrence;
- > A slip, trip or fall or an assault on railway premises;
- > A suspected suicide on railway premises; or
- > A defined notifiable occurrence that is triggered by a health-related condition (e.g. a person has a seizure, collapses and falls from the platform and is struck and injured by rolling stock).

It does <u>not</u> include deaths or injuries on railway premises and property and rolling stock that does not occur as a result of railway operations, such as those arising from:

- > A health-related condition such as a heart attack, or seizure where it is not associated with or leads to a defined notifiable occurrence;
- > Substance abuse (e.g. drug or alcohol overdose) where it is not associated with a defined notifiable occurrence; or

See also Fatality, Serious injury and Minor injury below.

Catch points: set of points designed to prevent unauthorised access to a section of track by prior intentional derailment of a vehicle.

Catenary wire: in overhead electrification, is the uppermost of the two overhead wires mounted above the track and supporting the contact wire.

Civil infrastructure: railway structures and track base/drainage works that are not considered to be a part of the track and are not related to signalling or electrical systems. These include bridges, overpasses, platforms, trackside structures and culverts.

Contact wire: is a bare solid conductor being the lower of the two overhead wires mounted directly above the track centreline. The pantographs of electric trains press against the underside of this wire and collect the current required by the train.

Dangerous goods: are listed in the *Australian Dangerous Goods Code* and include substances (liquid, solid, gaseous or vapour) that are:

- > hazardous to health;
- > corrosive or potentially hazardous by virtue of their temperature or pressure;

- > biological agents; and
- > substances which may, if they escape, present a fire or explosion hazard.

See also Security sensitive dangerous goods.

Derailer: is a specially shaped block placed over one rail of a siding to protect main line traffic from any runaway vehicles or unauthorised moves. This protection is achieved by derailing any locomotive or wagon that comes in contact with the derailer. In some terminals, derailers are also used to prevent unauthorised entry into sidings.

Electrical infrastructure: electric traction infrastructure, which is equipment and systems associated with the supply and reticulation of electricity for traction purposes (but excluding elements of civil infrastructure supporting or otherwise associated with the equipment or systems).

Fail-safe: the capability of an item or system to ensure that any failure in a predictable or specified mode will result only in that item or system reaching and remaining in a safe condition.

Fatality: a person who dies, within 30 days of a notifiable occurrence, from injuries sustained as a result of that occurrence (refer to *Casualty* above).

Fishplate: is a steel component normally used in pairs for the purpose of joining rail ends together.

Foul: in a position to obstruct rail traffic on an adjacent line or track.

Freight train: a train that is designed and used for carrying freight, such as coal and minerals, grain, fuel, livestock and containers, whether or not it is carrying freight at the time. It also refers to a train operated in conjunction with maintenance activities, such as a ballast train.

Gantry: a signal structure spanning one or more tracks and having two or more points of support.

Injury: refer to *Minor injury* and *Serious injury* below.

Kilometerage: the distance in kilometres from a set point, used to identify a specific place in a section.

Level crossing: as defined in section 4 of the RSNL, a level crossing includes each of the following areas:

- (a) an area where a road and a railway (other than a tramway) meet at substantially the same level, whether or not there is a level crossing sign on the road at all or any of the entrances to the area;
- (b) an area where a road and tramway meet at substantially the same level and that has a level crossing sign on the road at each entrance to the area;
- (c) a pedestrian crossing-
 - being an area where a footpath or shared path crosses a railway (other than a tramway) at substantially the same level, whether or not there is a level crossing sign on the path at all or any of the entrances to the area; or
 - (ii) being an area where a footpath or shared path crosses a tramway at substantially the same level and that has a level crossing sign on the path at each entrance to the area.

A level crossing may either be a pedestrian crossing or a road crossing. See also **pedestrian crossing** or **road crossing**.

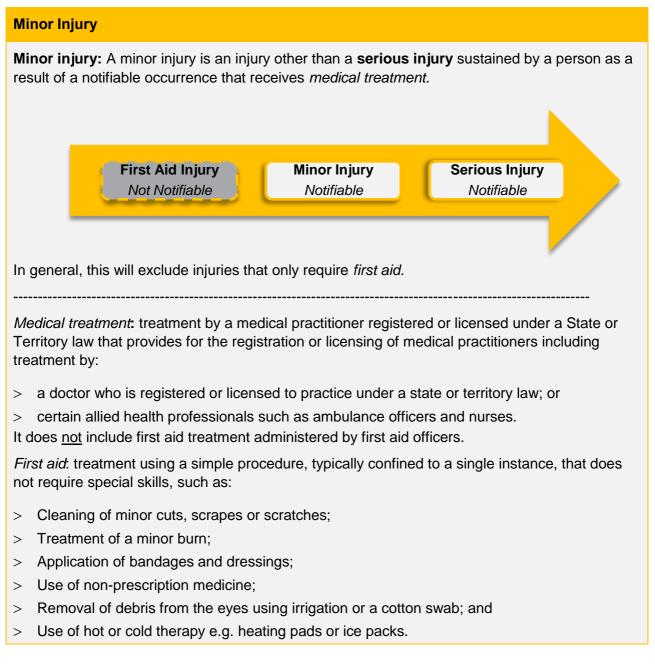
Level crossings are provided with various levels of traffic control, namely:

> **active traffic control equipment:** control of the movement of vehicular or pedestrian traffic across a level crossing by devices such as flashing signals, gates or barriers, or a combination

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of these, where the device is activated prior to and during the passage of rolling stock through the crossing.

- > passive traffic control equipment: control of the movement of vehicular or pedestrian traffic across a level crossing by signs and devices, none of which are activated during the approach or passage of rolling stock, and which rely on the road user including pedestrians detecting the approach or presence of rolling stock by direct observation.
- > **no active or passive traffic control equipment:** level crossings where no active or passive traffic controls of any kind are provided.



Near miss: is an occurrence where the driver of a moving train takes emergency action, or would have if there was sufficient time, to avoid impact with a person, vehicle or other obstruction and no collision occurred. Emergency action includes continuous audible warning and/or brake application.

Network control centre: is a centre responsible for managing rail movements safely across the national rail network. Also known as a **train control centre**.

Network rules: are mandatory requirements (including rules, systems and procedures) aimed at providing a uniform approach to the provision of safe railway operations and rail-related work activities across the rail network.

Non-urban passenger train: is a passenger train that travels outside designated metropolitan areas (other than a Tourist and Heritage Passenger Train). This includes long distance passenger trains and inter-city or regional passenger trains.

Notifiable occurrence: as defined in section 4 of the RSNL, is as an incident associated with railway operations:

- > that has, or could have, caused significant property damage; serious injury; or death; or
- > that is, or is of the class that is, prescribed by the national regulations to be a notifiable occurrence or class of notifiable occurrence;

but does not include an incident, or class of incident, that is prescribed by the national regulations not to be a notifiable occurrence.

See also expanded discussion at Section 1.3 above.

On-track trailer: small non-powered vehicle for operation on rail only that can be hauled by a road/rail vehicle (RRV) or other infrastructure maintenance vehicle.

Overhead line equipment: structures and overhead equipment necessary for the traction power supply for electric rolling stock.

Passenger: a person travelling or intending to travel on a train. Such a person may be a member of the public or an off-duty railway employee that is (regardless of whether they hold a valid ticket or authority to travel):

- > travelling, boarding or alighting from a train; or
- > on railway premises (other than a railway station car park) before and after travel.

It does not refer to:

- > a trespasser, a stowaway or a person travelling on the outside of a train or in a location on a train not authorised for passenger travel; or
- > a railway driver or on-duty railway employee travelling to a place of work at the time of an occurrence.

Pedestrian crossing: level crossing provided for the exclusive use of pedestrians, who may be people travelling on foot, by bicycle (dismounted, where required) or by mobility aid (e.g. wheelchair, scooters).

Points: a set of points permit rail traffic to change from one track to another. Points are normally referred to as left or right hand denoting the turnout direction as viewed from the toe end.

Possession: in reference to a yard, is the closure of one or more running lines to enable work, such as major track repair or reconstruction, to be carried out.

Potential conflict point: includes:

- > a point beyond the signal at danger on which a head-on, crossing, converging or rear-end collision with another legitimately positioned train could occur in the event of a SPAD;
- > where the signal provides protection to people, obstructions or equipment, the point at which a train could collide with them; and

> a point at which the signal overlap section ends.

Prescribed incident: an accident or incident associated with railway operations as prescribed under Regulation 28(7)(a) of the National Regulations that requires immediate notification to ONRSR and mandatory post-incident drug and alcohol testing in accordance with that regulation.

Note: Prescribed incident requirements do not apply in Western Australia. For New South Wales, specific prescribed incidents refer to Reg. 28(7)(b)

Proceed authority: formal authority issued to a train, or any party, allocating occupancy of one or more block sections or segments of track.

Public: persons who are authorised to be in a designated area of the railway premise, but are not there for travel by train. This may include:

persons passing through a concourse or station or bystanders;

- > persons on a level crossing, bridge or adjacent to railway premises affected by a notifiable occurrence; and
- > emergency services personnel.

Rail corridor¹: the area of land reserved for railway operations, typically:

Everywhere within 15 metres of the outermost rails or

- > the boundary fence where boundary fences are provided and are closer than 15 metres, or
- > if the property boundary is less than 15 metres, the property boundary, or
- > a permanent structure such as a fence, wall or level.

Rail infrastructure manager: defined in section 4 of the RSNL, is the person who has effective control and management of the rail infrastructure of a railway, whether or not the person:

- > owns the rail infrastructure; or
- > has a statutory or contractual right to use the rail infrastructure or to control, or provide, access to it.

Rail safety worker: an individual who has carried out, is carrying out, or is about to carry out, rail safety work, as defined in section 8 of the RSNL.

Rail transport operator: infrastructure manager, rolling stock manager or both. Refer to section 4 of the RSNL (also defined at *Section* 1.1, above).

Railway: guided system designed for the movement of rolling stock which has the capability to transport passengers, freight, or both on a railway track with a gauge of 600 millimetres or more. It also comprises of all associated infrastructure, sidings and rolling stock.

Common types of railways include heavy and light railways, monorails and tramways – refer to section 4 of the RSNL for further examples. The RSNL does not apply to certain railways listed under section 7, including slipways, aerial cable operated systems and railways used only by a horse-drawn tram.

Railway infrastructure: facilities other than rolling stock necessary for a railway to operate safely including:

> railway track, associated track structures and over-or-under track structures;

¹ Some Operators may define the 'rail corridor' differently. For example, in WA the 'rail corridor' can be defined as 50 meters from the centre of the track.

- supports (including supports for railway equipment or items associated with the use of a railway);
- > tunnels, bridges, stations and platforms;
- > train control systems, signalling systems and communications;
- > electric traction infrastructure; and
- > buildings, workshops and associated equipment.

Railway operations

Railway operations includes all activities related to the performance of a rail transport operator, as defined in section 4 of the RSNL, namely:

- > the construction of a railway, railway tracks and associated railway track structures;
- > the construction of rolling stock;
- > the management, commissioning, maintenance, repair, modification, installation, operation or decommissioning of rail infrastructure;
- > the commissioning, use, modification, maintenance, repair or decommissioning of rolling stock;
- > the operation or movement, or causing the operation or movement by any means of rolling stock on a railway (including for the purposes of construction or restoration of rail infrastructure);
- > the movement, or causing the movement, of rolling stock for the purposes of operating a railway service; or
- > the scheduling, control and monitoring of rolling stock being operated or moved on rail infrastructure.

Railway premises: includes any land and premises such as offices, workshops, maintenance depots or housing used for railway operations, including zones adjacent to the track, and any rolling stock or vehicles associated with railway operations, refer to section 4 of the RSNL.

Railway worker: a person (whether full or part time) who works for or at the direction of a railway organisation and is not off duty.

This includes a person who is:

- > a permanent or temporary employee (including a trainee or apprentice);
- > a contractor, (sub) contract worker or a person supplied by an employment agency; or
- > a volunteer.

Work that may be undertaken by such a person includes:

- > rail safety work (including as a shunter, a driver, a guard, a controller or signaller, station staff and the maintainer of rolling stock or rail infrastructure);
- > work on the office and technical staff; and
- > work on the infrastructure staff and freight centre staff.

Road crossing: level crossing, where a railway line and road intersect permitting road users to travel through the area in/on a motor vehicle.

Road/rail trailer: small non-powered vehicle which can operate both on road and rail. It is fitted with rail wheels such that it can be hauled on rail by a road/rail vehicle (RRV) or other infrastructure maintenance vehicles.

Road/rail vehicle (RRV): vehicle which can operate under its own power, both on rail and road, and which can transition from one mode of operation to the other. Such a vehicle may or may not have the ability to travel on a public highway and may or may not be road registered.

Road vehicle

A road vehicle is a vehicle or any device, in, on, or by which a person or property is permitted to be transported on a public or private roadway. It includes:

- > light passenger vehicles: cars (sedans/utilities/station wagons/4WDs), light commercials (<4.5t), delivery vans and mini buses (maximum capacity of 12 passengers);
- > heavy freight vehicles: medium rigid trucks, semi-trailers, B doubles and road trains;
- > dangerous goods vehicles: fuel tankers and tankers containing other dangerous goods (such as acid);
- > buses: with a capacity greater than 12 passengers;
- > special purpose machine: tractors, forklifts, general farm machinery and specially constructed machinery;
- > motorcycles (including motorised scooters);
- > bicycles; and
- > animal-drawn vehicles and animals that are being ridden or drawing a vehicle (as defined in the Australian Road Rules).

It does not include:

- > trams;
- > motorised wheelchairs; and
- > pedestrian conveyances human powered devices by which a pedestrian may move other than by walking or by which a walking person may move another pedestrian e.g. baby carriages, roller skates, skateboards and non-motorised scooters and wheelchairs.

Rolling stock: vehicle, whether or not self-propelled, that operates on or uses a railway including a locomotive, carriage or monorail vehicle. Refer to section 4 of the RSNL for more examples. It does not include a vehicle that is designed to operate on the track and road when it is on the road.

Rolling stock operator: a person who has effective control and management of the operation or movement of rolling stock on rail infrastructure for a railway, but does not include a person by reason only that the person drives the rolling stock or controls the network or network signals, as defined in section 4 of the RSNL.

Running line: is a railway track used primarily for the through movement of trains, as defined in section 4 of the RSNL. Turnbacks or reversing tracks are considered to be part of the running line by ONRSR, unless specified as a siding by the railway infrastructure manager since their primary use is for terminating passenger trains and not usually for the long term stabling of trains.

Safeworking: prescribe the network requirements for the different systems of safeworking utilised across the rail network. Different rules, procedures and systems of safeworking are utilised across the rail network.

Security: protection of persons, property and railway operation by means of arrangements to reduce the risk of harm from criminal acts, such as theft, assault, terrorism and sabotage.

Security sensitive dangerous goods: any substances or items prescribed by relevant Australian or state legislation as security sensitive or of security concern. In general, these are items or

materials carried as cargo, which if not controlled may be used to perform an act of terrorism or sabotage etc.

Serious injury

Serious injury is an injury requiring the person to have:

- > immediate treatment as an in-patient in a hospital; or
- > immediate treatment for:
 - amputation of any part of his or her body; or
 - serious head injury; or
 - serious eye injury; or
 - serious burn;
 - separation of his or her skin from an underlying tissue such that tendons, bones or muscles are exposed (such as degloving or scalping); or
 - spinal injury;
 - loss of a bodily function;
 - serious lacerations;
- > medical treatment within 48 hours of exposure to a substance, such as chemicals, animal or human blood and airborne contaminates.

Note this definition incorporates elements of section 36 of the Work Health and Safety Act 2011 (Cth).



Medical treatment: treatment by a medical practitioner registered or licensed under a State or Territory law that provides for the registration or licensing of medical practitioners including treatment by:

- > a doctor who is registered or licensed to practice under a state or territory law; or
- > certain allied health professionals such as ambulance officers and nurses.

It does not include first aid treatment administered by first aid officers.

Amputation: includes amputation of a limb or other body part, including the tip of a finger or toe, a nose and, or ear.

Serious head injury: includes:

- > a fractured skull or damage to the skull to the extent that is likely to affect organ/face function;
- > loss of consciousness or an injury resulting in temporary or permanent amnesia; or
- > blood clot or bleeding in the brain.

It does not relate to bruise or minor abrasion or laceration to the skin.

Serious eye injury: is an injury that:

- > results in, or is likely to result in, the loss of the eye or total or partial loss of vision;
- > involves an object penetrating the eye such as a metal fragment or wood chip; or
- > exposure of the eye to a substance which poses a risk of serious eye damage (not mere irritation to the eye).

Spinal injury: is an injury to the cervical, thoracic, lumbar or sacral vertebrae, including the associated soft tissues, such as muscles, ligaments, discs and nerves (including the spinal cord).

Loss of a bodily function: includes:

- > loss of consciousness or loss of the sense of smell, taste, sight or hearing; or
- > loss of movement of a limb or loss of function of an internal organ.
- It does not include a sprain, strain, fracture or fainting.

Serious lacerations: are those that cause:

- > muscle, tendon, nerve or blood vessel damage or permanent impairment;
- > deep and/or extensive cuts; or
- > tears of wounds to the flesh or tissues (including stitching to prevent loss of blood and/or other treatment to prevent loss of bodily function and/or infection).

Shunting: movement of trains or rail vehicles for the purposes of marshalling or altering their consist.

Siding: portion of track where vehicles can be placed clear of the running lines.

Signal: a visual display device which conveys instructions or provides prior warning of instructions regarding the driver's authority to proceed.

Significant property damage: is damage that:

- > requires major repairs or replacement of the property; and/or
- > affects the structural integrity, performance or operational characteristics of the train, rolling stock, and/or rail and civil infrastructure.

Staff: token used in a train staff system, the possession of which gives the train permission to enter a block section.

Staff ticket: written authority issued after a driver has seen the staff for a section.

Terrorist act: action or threat intended to advance a political, ideological or religious cause by coercing or intimidating an Australian or foreign government or the public, by:

- > causing serious harm to people or property;
- > endangering life;
- > creating a serious risk to the health and safety of the public; or

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> seriously disrupting trade, critical infrastructure or electronic information.

It does <u>not</u> include a non-violent protest or industrial action. For further information, refer to Part 5.3 of the *Criminal Code Act 1995* (Cth).

Suspected suicide: is defined as death within 30 days of being struck.

Token: metal staff or a staff ticket used as the authority for rail traffic to occupy a section.

Tourist and heritage passenger train: passenger train, including a tram, which is in service primarily for nostalgia, leisure and tourism purposes such as a heritage steam train.

Track: combination of rails, rail connectors, sleepers, ballast, points and crossings, or substitute devices, if used.

Track machine: flange wheeled vehicle for infrastructure maintenance, construction and inspections.

Track maintenance train: special type of train that is designed and used for track inspection and maintenance work.

Traction: type of power unit providing motive power to a train. Common types of traction include electric traction, diesel traction (including diesel hydraulic traction and diesel electric traction) and steam traction.

Traffic control device: any sign, signal, pavement marking or other installation placed or erected by a public authority or official body having the necessary jurisdiction, for the purpose of regulating, warning or guiding road users.

Train: one or more units of rolling stock coupled together, at least one of which is a locomotive or other self-propelled unit that is designed to run on a railway, as defined in section 4 of the RSNL. Common types of trains are: passenger trains (urban, non-urban and tourist and heritage), trams, freight trains, track maintenance trains, light locomotive(s), monorails and inclined railways.

Tram: type of passenger train that runs on light rail and is typically designed to travel short distances in an urban setting.

Trespasser: a person who is in a railway premise (including land and rolling stock) without the necessary permission or authority, whether intentionally or negligently.

Trespassers on a railway premise include:

- > persons who commit suspected suicides;
- > stowaways and persons travelling on places not authorised for their use e.g. outside trains;
- > persons who disobey warning signs or signals or stray away from the normal route of the level crossing;
- > persons who cross the track anywhere other than at an authorised crossing point (such as passengers or members of the public that use a recognised 'staff only' crossing at a station without authority);
- > persons electrocuted while dangling or throwing objects from a position that is not on railway premises, onto overhead line equipment/conductor rails at bridges etc.;
- > persons deliberately falling or jumping from a platform i.e. where not caused by illness, platform congestion or other incident; and
- > persons carrying out illegal activities.

However, the following persons will not be considered trespassers on a railway premise:

- > pedestrians crossing the road where tram tracks run within the road; and
- > persons with the requisite authority to be on a railway premise.

Trolley: small non-powered vehicle that can be moved on rail by hand.

Turnout: a combination of sets of points, V crossing and guard rails which permits traffic to turnout from one track to another.

Urban passenger train: passenger train that primarily travels within designated metropolitan areas, such as a commuter train or tram. Accordingly, it does not include inter-city, regional or long-distance services.

Wrong-side failure: where safeworking equipment fails to other than a safe state, for example signal fails to a less restrictive aspect than required.

3 Using these reporting requirements

The occurrence classification scheme detailed in this document is **outcome-based** and **hierarchical**, with a structure consisting of:

- > **Categories**: first and broadest level of classification consisting of the principal occurrence categories; and
- > **Subcategories:** relate to each principal occurrence type at either a second or third level tier.

Each and every occurrence report is to be classified by a rail transport operator to the **lowest (and most detailed) level of subcategorisation** available for that particular principal occurrence type.

CATEGORY STRUCTURE

The following information is provided for each Category under the classification scheme:

- > **Broad description** of the Category;
- > Examples of occurrences that are **notifiable under the Category**, **not notifiable at all or notifiable under another Category**;
- > Mandatory reporting requirements for occurrences reported under the Category.

In addition, the following information is provided for each Category with subcategories:

- > List of the **subcategories to the lowest level** under the Category with a **broad description** of each subcategory;
- > Examples of occurrences that are **notifiable under each subcategory**, **not notifiable at all or notifiable under another (sub)category**; and
- > Any additional mandatory reporting requirements for each subcategory under the Category.

3.1 Derailment

Derailment is an incident where **one or more rolling stock wheels leave the rail or track during railway operations**.

Derailment may result from one or more of a number of distinct causes; namely:

- > mechanical failure of track infrastructure (broken rails, gauge spread);
- > mechanical failure of a component of rolling stock (bearing failure, wheel breakage);
- > fault in the geometry of the track infrastructure or defective rolling stock component that results in a derailment (rail climbing due to excessive wear of wheels or rails, earthworks slip);
- > dynamic effect of the track-rolling stock interaction (hunting, vertical bounce, track shift under rolling stock, excessive speed);
- > improper operation of points, or improper observance of signals protecting them;
- > as a secondary event following collision with other rolling stock, road vehicles, or other obstructions (level crossing collisions, obstructions on the line); and
- > rolling stock handling (sudden traction or braking forces).

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of a Derailment <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.1.1 Running Line Derailment
- 3.1.2 Yard Derailment

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Derailment <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rail Infrastructure Manager (RIM);
- > Rolling Stock Operator (RSO);
- > Line type;
- > Train type, traction type, and rolling stock class; and
- > A general description of the derailment including:
 - The direction of travel;
 - The number of derailed wagons and where they were situated in the consist;
 - The operational status (running line or yard) of the line on which the derailment occurred and of any other lines which the derailment obstructs; and
 - The best available detail of the chain of events leading to and resulting from the derailment, including any related precursor events already identified (e.g. natural events that have occurred in the area).

3.1.1 has the following additional mandatory reporting requirements:

- > Line section; and
- > Kilometerage.

OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLE		
Notifiable:	> Any derailment of rolling stock (including a train) on an open or closed running line or in a yard or siding.	
	> Where, following investigation, a wheel is found to have left the head of the rail on a running line and subsequently re-railed.	
Not notifiable:	> Wheel sets not attached to rolling stock in repair shops.	

3.1.1 RUNNING LINE DERAILMENT

Derailment of rolling stock :

- > which occurs on a running line that is open to traffic, including crossings, refuge and balloon loops and turnbacks (unless these are specified as a siding by the rail infrastructure manager); or
- > that results in an **obstruction of a running line**.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Derailment of rolling stock that has blocked a running line open to traffic such as:
 - Derailment of a rolling stock that is travelling on a running line.
 - Derailment of a Road Rail Vehicle travelling under a Road/rail vehicle (RRV) Authority or Train Order.
- > Derailment of a train which has been authorised to depart a yard or siding and has commenced its journey on a running line.
- > Derailment of a train in passenger service on a dock siding road that has been authorised to depart.
- > A derailment of rolling stock during shunting movements on a running line within yard limits.
- > Derailment of rolling stock in a yard or siding that results in the running line being obstructed such as:
 - A Road Rail Vehicle is derailed in a possession and comes to rest foul of an adjacent running line that is open to traffic.
- > Derailment of rolling stock (including a train) on a portion of running line closed for maintenance or other purposes that result in a non-closed running line being obstructed.
- > Derailment of rolling stock at catch points or derailer that results in the running line being obstructed.
- > Where, following investigation, a wheel is found to have left the head of the rail on a running line and subsequently re-railed.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Derailment of rolling stock where there is no possibility that any running line is obstructed:
 - in a yard or siding; or
 - on a portion of running line closed for maintenance or other purposes, including a running line under occupation.

This includes cases, where such derailments lead to rolling stock on a running line running at reduced speed, which can arise due to:

- the presence of investigating, re-railing or emergency services close to the running line; or
- pending confirmation that the derailment is not obstructing the running line. *Refer to* 3.1.2 *Yard Derailment.*
- > Where a wheelset is suspended above the rail following a collision with infrastructure on a running line. *Refer to* **3.2.1.5** *With Infrastructure*.
- Where parts of the rolling stock diverge at a set of points on a running line for example, the leading and trailing bogie paths take different paths and the wheels have not left the tracks. *Refer to* **3.11.4** *Points Irregularity.*

3.1.2 YARD DERAILMENT

Derailment of rolling stock that **does not obstruct a running line**, including a derailment:

- > in a yard or siding; or
- > on a portion of running line closed for maintenance or other purposes including a running line under occupation or within a possession.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Derailment of rolling stock that occurs in a yard or siding or on a portion of track closed for maintenance, including a running line under occupation that does not obstruct a running line.
- > Derailment of a train which has been authorised to depart a yard or siding, but at the time of derailment has not commenced its journey on a running line.
- > Derailment of a track machine that occurs within a yard or siding that does not result in obstruction of a running line.
- > Derailment in a yard or siding closed for maintenance or other purposes or on a portion of track closed for maintenance, including a running line under occupation for another purpose, that does not result in obstruction of running line such as:
 - Derailment of a ballast hopper wagon during the discharge of ballast within a possession.
 - Derailment of a Road Rail Vehicle not permitted to operate outside the limits of a possession.
 - Derailment of a track maintenance machine operating within a possession or on a portion of running line closed for engineering works.
- > Where, following investigation, a wheel is found to have left the head of the rail in a yard or siding and subsequently re-railed.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Derailment of rolling stock that obstructs any running line:
 - in a yard or siding; or
 - on a portion of track closed for maintenance or other purposes, including a running line under occupation. *Refer to* 3.1.1 *Running Line Derailment.*
- > Where a wheelset is suspended above the rail following a collision with infrastructure in a yard. *Refer to* **3.2.2.5** *With Infrastructure*.
- > Where parts of the rolling stock diverge at a set of points on a yard or siding for example, the leading and trailing bogie paths take different paths and the wheels have not left the tracks. *Refer to* **3.11.4** *Points Irregularity.*

3.2 Collision

Rolling stock strikes or is struck by another rolling stock, road vehicle, obstruction, person or fixed railway infrastructure.

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of a Collision <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.2.1 Running Line Collision
 - 3.2.1.1 Between Trains
 - 3.2.1.2 With Rolling Stock
 - 3.2.1.3 With Person Not on a Level Crossing
 - 3.2.1.4 With Animal
 - 3.2.1.5 With Infrastructure
 - 3.2.1.6 With Road Vehicle Not on a Level Crossing
 - 3.2.1.7 With Obstruction
 - 3.2.1.7.1 Natural Object
 - 3.2.1.7.2 Railway-Related Object
 - 3.2.1.7.3 Other Object
 - 3.2.1.8 Other Running Line Collision

3.2.2 Yard Collision

- 3.2.2.1 Between Trains
- 3.2.2.2 With Rolling Stock
- 3.2.2.3 With Person Not on a Level Crossing
- 3.2.2.4 With Animal
- 3.2.2.5 With Infrastructure
- 3.2.2.6 With Road Vehicle Not on a Level Crossing
- 3.2.2.7 With Obstruction
 - 3.2.2.7.1 Natural Object
 - 3.2.2.7.2 Railway-Related Object
 - 3.2.2.7.3 Other Object
- 3.2.2.8 Other Yard Collision

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Collision <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rail Infrastructure Manager (RIM);
- > Rolling Stock Operator (RSO);
- > Line type;
- > Train type, traction type, and rolling stock class; and
- > A general description of the collision including:
 - The nature of the collision, involving the trains, rolling stock, vehicles, persons, objects or obstructions etc. involved in the collision;
 - The direction of travel of the train, rolling stock, vehicles, persons etc. involved in the collision;
 - The operational status (running line or yard) of the line on which the collision occurred and any other lines which the collision obstructs; and

The best available detail of the chain of events leading to and resulting from the collision, including relevant signal indications or settings, train orders in force, points settings, train control instructions or line side hand signals or other communications.

3.2.1 *Running Line Collision* has the following additional mandatory reporting requirements:

- > Line section;
- > Kilometerage; and
- > Train identifier.

3.2.1.3 *With Person <u>Not</u> on a Level Crossing* has the following mandatory reporting requirements in addition to **3.2.1** above:

- > Person type; and
- > Type of casualty, where applicable.

3.2.1.6 With Road Vehicle <u>Not</u> on a Level Crossing and 3.2.2.6 With Road Vehicle <u>Not</u> on a Level Crossing have the following mandatory requirements:

- > Road vehicle;
- > Person type, where applicable; and
- > Type of casualty, where applicable.

OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLE				
Notifiable:	 Collision of rolling stock on a running line or in a yard, siding, or a portion of track closed for maintenance, including: 			
	 between rolling stock (including runaways, RRVs and track machines); between rolling stock and a road vehicle (including between a tram and a road vehicle at a road junction that is not signed as a level crossing); 			
	 between a train and other rolling stock; or 			
	 a load protruding from a wagon and striking a passing train. 			
	Collision of rolling stock with a person on a running line or in a yard, siding, or a portion of running line closed for maintenance (other than at a level crossing), including:			
	 by a train, tram or other rolling stock with a person such as track worker, trespasser or an impaired person placing themselves in danger; or 			
	 a load shift on a wagon, a train mirror or an open train door striking a person. 			
	Collision of rolling stock with an animal or object on a running line or in a yard, siding, or a portion of running line closed for maintenance that requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction being imposed. These objects include:			
	 fixed railway infrastructure, such as a bridge, platform, tunnel, gantry or signalling equipment. 			
	 temporary structure such as, scaffolding at a station or around a bridge. 			
	 terminal infrastructure such as buffer stops or baulks. 			
	 closing doors of a train stabling shed in a yard. 			
	 objects that are on or about the track, such as: 			
	 natural objects such as fallen trees or land slips; 			
	 railway-related objects such as misplaced sleepers, fallen freight or ballast that has been placed foul of the gauge of the rolling stock; or 			
	 other objects such as tools left on the track. 			
Not notifiable:	> Collision of rolling stock where there is no damage, or, damage incurred is minimal or rectified immediately.			
	> Collision between road vehicles on a tramway.			

3.2.1 RUNNING LINE COLLISION

Collisions on a running line

3.2.1.1 Between Trains

Collision between any type of trains, road rail vehicles, on a running line and track machines on a running line.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Collision of trains on a running line or that obstructs a running line.
- > Load protruding from a wagon, or an open rolling stock door, that strikes a passing train.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Collision between trains in a siding or portion of running line that is closed for maintenance that do not interfere with or affect the running line. *Refer to* **3.2.2.1** *Between Trains.*

3.2.1.2 With Rolling Stock

Running line collision with non-powered rolling stock, including rolling stock not part of a train at the time of collision, irrespective of whether it results in damage.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Collision between a train and rolling-stock on a running line or that obstructs a running line.
- > Wagon or trolley that collides with another wagon or trolley and obstructs a running line.

NOT NOTIFIABLE:

> Heavy coupling that does not result in injury or damage.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Wagon or trolley that collides with another wagon in a yard, not obstructing a running line. *Refer to* **3.2.2.2** *With Rolling Stock.*
- > Heavy coupling that results in injury or damage. *Refer to* **3.10.7** *Other Safeworking Rule or Procedure Breach.*

3.2.1.3 With Person Not on a Level Crossing

Collision with a person on a running line not on a level crossing. This includes collisions on a tramway (including at intersections where pedestrians can cross the tramway at an intersection controlled by road traffic signals that is not signed as a level crossing).

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Collision with a trespasser or a person where there is no indication that the person attempted suicide.
- > A train mirror, shifted load, open train door, or other fixed part of rolling stock that strikes a person that would normally be standing clear of a running line.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Near miss with a rail worker walking or working on a running line. *Refer to* **3.10.5** *Track Work Procedure/Rule Breach.*
- > Near miss with a trespasser on a running line. *Refer to* **3.20.1.1** *Near Miss with Trespasser.*
- > Collision with a person or track worker within a siding or portion of running line closed for maintenance. *Refer to* 3.2.2.3 *With Person <u>Not</u> on a Level Crossing.*
- > Collision with a person at a level crossing. *Refer to* **3.3.2** *Collision with Person.*
- > Suspected or attempted suicide. Refer to 3.16 Suspected Suicide or Attempted Suicide.

3.2.1.4 With Animal

Running line collision of rolling stock with any animal, including at a level crossing that requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Collision with animal(s) on a running line that causes damage to windscreen or fixtures on the rolling stock that requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction imposed.
- > Collision with animal(s) on a running line that causes damage to track and signal infrastructure that requires a speed restriction imposed.

NOT NOTIFIABLE:

> Collision with animal that does not result in damage to the rolling stock or any speed restriction imposed.

NOTIFIABLE UNDER ANOTHER CATEGORY:

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> Collision with animal not on a running line that requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction imposed. *Refer to* 3.2.2.4 *With Animal.*

3.2.1.5 With Infrastructure

Collision of rolling stock with fixed railway infrastructure.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Collision with a bridge, platform, tunnel, gantry or signalling equipment.
- > Collision with a temporary structure such as scaffolding at a station or around a bridge.
- > Collision with terminal infrastructure such as buffer stops, baulks, or other items intended to mark the end of a line or restrict rolling stock movement.
- > Collision with moveable infrastructure (gates etc.) that have the potential to obstruct the line.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Collision with infrastructure within a yard, siding or a portion of running line closed for maintenance. *Refer to* **3.2.2.5** *With Infrastructure.*
- > Collision with railway infrastructure maintenance equipment or with items that have become detached from railway structure. *Refer to* **3.2.1.7.2** *Railway-Related Object.*

3.2.1.6 With Road Vehicle Not on a Level Crossing

Collision of rolling stock with a road vehicle fouling the running line or driving into a train and not on a level crossing. This includes collisions at intersections that are controlled by traffic lights where there are not level crossing signs at each entrance to the area.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Collision with a road vehicle fouling a running line and not on a level crossing.
- > Collision between a tram and a road vehicle at the road and rail interface and not at a level crossing.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

Collision with a road vehicle not on a level crossing within a siding or a portion of running line closed for maintenance. *Refer to* 3.2.2.6 *With Road Vehicle <u>Not</u> on a Level Crossing.*

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3.2.1.7 With Obstruction

Collision of rolling stock with an object on or about the running line that requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction being imposed.

3.2.1.7.1 Natural Object

Collision of rolling stock with an object part of the natural environment that is on, or foul of a running line that requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Collision with a land slip, branches, flood water or mud slide.

NOT NOTIFIABLE:

> Collision with natural object that does not result in any damage to rolling stock.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Collision with natural objects within a yard, siding or portion of a running line closed for maintenance. *Refer to* 3.2.2.7.1 *Natural Object.*

3.2.1.7.2 Railway-Related Object

Collision of rolling stock with an object part of railway operations that is on or foul of the running line that requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Collision with used/unused sleepers placed foul of line.
- > Collision with fish plates, rail and rail cut-offs placed foul of line.
- > Collision with portable track maintenance equipment placed foul of line.
- > Collision with stockpiled ballast placed foul of line or excess ballast placed on line.
- > Collision with freight fallen from a train and foul of line.
- > Collision with a stop or warning board, foul of line.
- > Collision with signal or electrical infrastructure installed within structure gauge or becoming foul of line.
- > Collision with items of temporary infrastructure (scaffolding etc.) constructed foul of line or has collapsed or parts dislodged from structure and falls on the line.
- > Collision with the boom of mechanical plant that is insufficiently clear of a running line allowing the boom to swing foul and be struck by rolling stock.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Collision between rolling stock and railway-related objects within a siding or portion of running line closed for maintenance. *Refer to* **3.2.2.7.2** *Railway-Related Object.*

3.2.1.7.3 Other Object

Collision with other objects on or foul of the running line that is not classifiable under 3.2.1.7.1 or 3.2.1.7.2, that requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Collision with items of building material (metal sheeting etc.), tyres, shopping trolleys and other discarded objects foul of line.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Collision with other objects within a yard, siding or portion of running line closed for maintenance. Refer to 3.2.2.7.3 Other Object.
- > Collision with a non-railway related object placed on the line with the intention of causing damage to, or derailment of, rolling stock. *Refer to* **3.20.4.3** *Other Vandalism*.
- > Object projected and strikes the rolling stock. Refer to 3.20.4.1 Object Projected at Rolling Stock.

3.2.1.8 Other Running Line Collision

Running line collision of rolling stock that is not classifiable under one of the above subcategories that requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Collisions not classifiable under any of the above categories and occurs on a running line.

NOT NOTIFIABLE:

> Collision between road vehicles on a tramway.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Other rolling stock collisions within a yard, siding or portion of running line closed for maintenance. *Refer to* **3.2.2.8** *Other Yard Collision.*

3.2.2 YARD COLLISION

Collision within a yard/siding or a portion of running line closed for maintenance where it does not obstruct or interfere with the safe operation of a running line.

3.2.2.1 Between Trains

Collision between trains within a yard/siding or a portion of running line closed for maintenance that does not obstruct or interfere with the safe operation of a running line.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Collision between a train or a runaway train and another train in a yard or siding that does not obstruct the running line.
- > Collision of two road/ work trains or rail vehicles (RRVs) within a possession.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Collisions between trains in a siding, or portion of running line closed for maintenance, which interferes with or affects a running line. *Refer to* **3.2.1.1** *Between Trains.*

3.2.2.2 With Rolling Stock

Collision with rolling stock within a yard/siding or a portion of running line closed for maintenance which at the time was not part of a train (i.e. not attached to a locomotive), that does not obstruct or interfere with the safe operation of a running line.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Runaway of a wagon or trolley that collides with another wagon in a yard, siding, or possession, not obstructing a running line.

NOT NOTIFIABLE:

> Heavy coupling that does not result in injury or damage.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Runaway of a wagon or trolley that collides with another wagon or trolley and obstructs a running line. *Refer to* 3.2.1.1 *With Rolling Stock.*

3.2.2.3 With Person Not on a Level Crossing

Collision with a person in a yard/siding or a portion of running line closed for maintenance excluding a level crossing occurrence.

NOTIFIABLE:

- > Collision with a person in a yard or siding or a portion of running line closed for maintenance (other than at a level crossing), not obstructing a running line, including:
 - A collision with a rail safety worker performing shunting activities in a yard.
 - Collision between a train load and a railway worker in a yard while the train is in motion.
 - Collision between a moving track machine and a track worker within a possession.
 - A collision with an unauthorised person in a yard or siding where there is no indication that the person attempted suicide.
 - Collision with a railway worker walking or working within a yard or siding.
- > Collision between a tram and tram worker in a stabling or maintenance facility.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- Collision with a person (other than at a level crossing) in a yard, siding or portion of running line closed for maintenance or other purposes, which interferes with or affects a running line. *Refer to* 3.2.1.3 *With Person <u>Not</u> on a Level Crossing.*
- > Collision with an unauthorised person attempting suicide in a yard or siding. Refer to 3.16 Suspected Suicide or Attempted Suicide.

3.2.2.4 With Animal

Collision with animal(s) within a yard/siding or a portion of running line closed for maintenance that requires the rolling stock to be taken out of service, either immediately or at the end of its run, or a speed restriction being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Collision with animal in a yard, siding or a portion of running line closed for maintenance, not obstructing a running line that causes damage to the driver's windscreen and requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction imposed.
- > Collision with animal that causes damage to track or signal infrastructure in a yard, siding or a portion of track closed for maintenance, not obstructing a running line that requires a speed restriction imposed.

NOT NOTIFIABLE:

> Collision of rolling stock with an animal where there is no damage to the impacted rolling stock.

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NOTIFIABLE UNDER ANOTHER CATEGORY:

> Collision with animal that interferes with or affects a running line. *Refer to* **3.2.1.4** *With Animal.*

3.2.2.5 With Infrastructure

Collision with fixed railway infrastructure within a yard/siding or a portion of running line closed for maintenance.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Collision with a bridge, platform, tunnel, gantry signalling equipment or temporary structure, not obstructing a running line.
- > Collision with terminal infrastructure such as buffer stops, baulks, or other items intended to mark the end of a line or restrict rolling stock movement, not obstructing a running line.
- > Collision with moveable fixed infrastructure (gates etc.) that does, not obstruct a running line.

NOT NOTIFIABLE:

> Collision with infrastructure within a possession, where any damage to both the rolling stock and infrastructure is minimal or rectified immediately, such as a tamper ripping up axle counter cabling.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Collision with any fixed railway infrastructure which obstructs a running line. Refer to 3.2.1.5 With Infrastructure.
- > Collision with rail infrastructure maintenance equipment or items that have become detached from a structure in a yard, not obstructing a running line. *Refer to* 3.2.2.7.2 *Railway-Related Object.*

3.2.2.6 With Road Vehicle Not on a Level Crossing

Collision with a road vehicle within a yard/siding or a portion of running line closed for maintenance not on a level crossing.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Collision with a road vehicle on, or fouling a yard/siding or a portion of running line closed for maintenance (other than at a level crossing), and not affecting a running line.
- > Collision between a non-rail mounted vehicle and a rail mounted road/rail vehicle (RRV) in a possession, not affecting a running line.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

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> Collision of rolling stock with a road vehicle (other than at a level crossing), which obstructs a running line. *Refer to* **3.2.1.6** *With Road Vehicle* <u>*Not*</u> *on a Level Crossing.*

3.2.2.7 With Obstruction

Collision with an object on or about the track within a yard/siding or a portion of running line closed for maintenance that requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction being imposed.

3.2.2.7.1 Natural Object

Collision with an object on, or foul of a line within a yard/siding or a portion of track closed for maintenance which is part of the natural environment that requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Collision with a land slip, fallen tree/branches, flood waters or mud slide.

NOT NOTIFIABLE:

Collision with branches that does not result in any damage to rolling stock.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Collision with natural object in yard/siding, or a portion of running line closed for maintenance that interferes with or affect a running line. *Refer to* **3.2.1.7.1** *Natural Object.*

3.2.2.7.2 Railway-Related Object

Collision with an object on or foul of a line within a yard/siding or a portion of running line closed for maintenance that requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Collision with sleepers, fish plates, rail and rail cut-offs in a yard or within a possession.
- > Collision with portable track maintenance equipment or stockpiled ballast in a yard or within a possession.
- > Collision with freight fallen from a train in a yard or within a possession.
- > Collision with a stop or warning board, signal or electrical infrastructure installed within structure gauge in a yard or within a possession.
- > Collision with items of temporary infrastructure (scaffolding etc.) foul of line in a yard or within a possession.
- > Collision with the boom of mechanical plant that is foul of line in a yard or within a possession.

NOT NOTIFIABLE:

Collision between rolling stock and a detached item of infrastructure within a possession, where any damage to both the rolling stock and infrastructure is minimal or rectified immediately, such as a tamper ripping up axle counter cabling.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Collision of rolling stock with a permanent rail structure, with no possibility of obstructing a running line. *Refer to* **3.2.2.5** *With Infrastructure.*
- > Collision of rolling stock with a railway-related object that interferes with or affects a running line. *Refer to* **3.2.1.7.2** *Railway-Related Object.*

3.2.2.7.3 Other Object

Collision with other objects on or foul of a line within a yard/siding or a portion of running line closed for maintenance that is not classifiable under **3.2.2.7.1** or **3.2.2.7.2**, that requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Collision with items of building material (metal sheeting etc.), tyres, shopping trolleys and other discarded objects foul of a yard/siding or a portion of running line closed for maintenance.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Collisions with other object that interferes with or affects a running line. *Refer to* **3.2.1.7.3** *Other Object.*
- > Object projected and strikes the rolling stock. *Refer to* **3.20.4.1.1** *Struck Train.*

3.2.2.8 Other Yard Collision

Collision within a yard/siding or a portion of running line closed for maintenance that is not classifiable under one of the above subcategories that requires the rolling stock being taken out of service, either immediately or at the end of its run, or a speed restriction being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Collisions not classifiable under any of the above categories, and occurs in a yard or possession.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Other rolling stock collisions on a running line. *Refer to* **3.2.1.8** *Other Running Line Collision.*

3.3 Level Crossing Occurrence

Occurrence at a level crossing that either:

- > results in a collision between rolling stock and a road vehicle or a person; or
- > endangers or has the potential to endanger the safety of motorists, pedestrians and railway operations.

This includes incidents which occur during **periods of unusual operation** e.g. when an automatic crossing is operated manually.

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of a Level Crossing Occurrence <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.3.1 Collision with Road Vehicle
 - 3.3.1.1 At Crossings with Active Traffic Control Equipment
 - 3.3.1.2 At Crossings with Passive Traffic Control Equipment
 - 3.3.1.3 At Unprotected Level Crossings
- 3.3.2 Collision with Person
 - 3.3.2.1 At Crossings with Active Traffic Control Equipment
 - 3.3.2.2 At Crossings with Passive Traffic Control Equipment
 - 3.3.2.3 At Unprotected Level Crossings
- 3.3.3 Level Crossing Equipment Failure/Defect
- 3.3.4 Level Crossing Equipment Damage/Interference
- 3.3.5 Near Miss with Road Vehicle
 - 3.3.5.1 At Crossings with Active Traffic Control Equipment
 - 3.3.5.2 At Crossings with Passive Traffic Control Equipment
 - 3.3.5.3 At Unprotected Level Crossings
- 3.3.6 Near Miss with Person
 - 3.3.6.1 At Crossings with Active Traffic Control Equipment
 - 3.3.6.2 At Crossings with Passive Traffic Control Equipment
 - 3.3.6.3 At Unprotected Level Crossings
- 3.3.7 Other Level Crossing Occurrence

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Level Crossing Occurrence must provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rail Infrastructure Manager (RIM);
- > Line section;
- > Line type;
- > Kilometerage;
- > Level crossing identifier and level crossing control type;
- > Status of level crossing as either a pedestrian crossing or a road crossing; and
- > A general description of the level crossing occurrence including, where applicable:
 - Detail of the level crossing occurrence (e.g. collision with vehicle or person, near miss with vehicle or person, equipment failure, equipment damage or interference);
 - Detail of the actions taken by the drivers of the train and actions taken, or observed to have been taken, by the road vehicle or pedestrian, including directions of travel;
 - The nature of the damage or malfunction in the equipment;
 - An indication as to whether a pedestrian conveyance (e.g. pusher, wheelchair etc.) was involved; and
 - In the case of a near miss, a clear indication of whether the train driver applied the emergency brake, would have applied the emergency brake if there was time, or did not consider it necessary to apply the emergency brake.

3.3.1 Collision with Road Vehicle, 3.3.2 Collision with Person, 3.3.5 Near Miss with Road Vehicle and 3.3.6 Near Miss with Person have the following additional mandatory requirement:

- > Rolling Stock Operator (RSO);
- > Train identifier, train type, traction type and rolling stock class;
- > Road vehicle type, where applicable;
- > Person type, where applicable; and
- > Type of casualty, where applicable.

3.3.7 *Other Level Crossing Occurrence* has the following additional mandatory requirement, where applicable:

- > Rolling Stock Operator (RSO);
- > Train identifier, train type, traction type and rolling stock class; and
- > Road vehicle type

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OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLE				
Notifiable:	Any collision of rolling stock with a road vehicle or a person at a level crossing.			
	> Any failure of level crossing equipment that does not provide the intended level of protection due to all or part of the equipment not operating, prior to, or during the passage of rolling stock (including failures detected during routine maintenance or programmed testing where no rolling stock is present), such as:			
	 active warning devices not operating (due to a loss of power supply or failure of a track circuit or axle counter not detecting the presence of rolling stock) 			
	 boom barrier(s) not lowering for the passage of rolling stock; 			
	 defective locking on emergency escape gates, allowing access to the crossing when the gates are activated. 			
	 Missing or damaged signs and devices at a passive crossing that are not detected and rectified during routine inspection and maintenance. 			
	> Any third party damage to, or interference with level crossing equipment including:			
	 a road vehicle colliding with and damaging signs and devices at an active or passive crossing or damaging boom(s) at an active crossing; 			
	 a road vehicle hitting and damaging rail or track infrastructure at a crossing; 			
	 the road or path surface being deteriorated or damaged and not providing safe passage for pedestrians or road vehicles. 			
	> Any occurrence where a rolling stock driver takes emergency action or has insufficient time to take emergency action to avoid impact with a road vehicle or a person at a level crossing and no collision occurs.			
	> Any other occurrence at a level crossing that (potentially) endangers the safety of motorists, pedestrians and railway operations, including:			
	 operational practices that cause a continuous operation of a level crossing; and 			
	 an incorrect level of road and rail protection being provided at a level crossing during degraded working. 			
Not notifiable:	> Continuous operation of a level crossing due to:			
	 a failure in a track circuit or axle counter; 			
	 electrical or mechanical failure preventing a boom rising after the passage of rolling stock; or 			
	 known electrical or mechanical defects when no rolling stock is present. 			

 Loss of primary power supply detected and rectified prior to the secondary (battery) supply becoming exhausted.
 Audible warning devices not operating when switched out during prescribed hours in accordance with design.
 An individual warning light not being displayed prior to and during the passage of rolling stock.
 Pedestrian boom(s) not raising or swing gate(s) not opening after the passage of rolling stock due to electrical or mechanical failure.
 Level crossing alarms being responded to in accordance with Rail Infrastructure Manager (RIM) requirements and a higher level of failure does not occur

3.3.1 COLLISION WITH ROAD VEHICLE

3.3.1.1 Collision between rolling stock and road vehicle at a level crossing. At Crossings with Active Traffic Control Equipment

Collision with road vehicle at a level crossing where the movement of road vehicles is controlled by flashing signals, gates or barriers or a combination of these, which are activated prior to and during the passage of the rolling stock.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Collision of rolling stock with a road vehicle.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- Collision of rolling stock with a road vehicle not on a level crossing (including between a tram and a road vehicle, where the tramways track and road meet and it is not signed as a level crossing). *Refer to* 3.2.1.6 *With Road Vehicle Not on a Level Crossing* or 3.2.2.6 *With Road Vehicle Not on a Level Crossing.*
- Suspected or attempted suicide at a level crossing. Refer to 3.16 Suspected Suicide or Attempted Suicide.

3.3.1.2 At Crossings with Passive Traffic Control Equipment

Collision with a road vehicle that takes place at a level crossing that is controlled by signs such as stop or give way signs, and relies on the road user detecting the approach or presence of rolling stock by direct observation.

NOTIFIABLE:

> Collision of rolling stock with a road vehicle.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- Collision of rolling stock with a road vehicle not on a level crossing (including between a tram and a road vehicle, where the tramways track and road meet and it is not signed as a level crossing). *Refer to* 3.2.1.6 *With Road Vehicle Not on a Level Crossing* or 3.2.2.6 *With Road Vehicle Not on a Level Crossing.*
- > Suspected or attempted suicide at a level crossing. *Refer to* **3.16** *Suspected Suicide or Attempted Suicide*.

3.3.1.3 At Unprotected Level Crossings

Collision with road vehicle that takes place at a level crossing which is not controlled by active or passive traffic control equipment.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Collision of rolling stock with a road vehicle.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- Collision of rolling stock with a road vehicle not on a level crossing (including between a tram and a road vehicle, where the tramways track and road meet and it is not signed as a level crossing). *Refer to* 3.2.1.6 *With Road Vehicle <u>Not</u> on a Level Crossing* or 3.2.2.6 *With Road Vehicle <u>Not</u> on a Level Crossing.*
- > Suspected or attempted suicide at a level crossing. *Refer to* **3.16** *Suspected Suicide or Attempted Suicide*.

3.3.2 COLLISION WITH PERSON

Occurrence at a level crossing involving a collision between rolling stock and a person.

3.3.2.1 At Crossings with Active Traffic Control Equipment

Collision with a person (including railway worker) that takes place at a level crossing where the movement of pedestrians is controlled by flashing signals, gates or barriers or a combination of these which are activated prior to and during the passage of the rolling stock.

NOTIFIABLE:

> Collision of rolling stock with a person.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- Collision of rolling stock with a person not on a level crossing. *Refer to* 3.2.1.3 *Running Line Collision: With Person Not on a Level Crossing* or 3.2.2.3 *Yard Collision: With Person Not on a Level Crossing.*
- Suspected or attempted suicide at a level crossing. *Refer to* 3.16 Suspected Suicide or Attempted Suicide.
- > Collision of a tram with a person where the tramway track and road or footpath meet and it is not signed as a level crossing. *Refer to* 3.2.1.3 *Running Line Collision: With Person Not* on a Level Crossing or 3.2.2.3 Yard Collision: With Person Not on a Level Crossing.

3.3.2.2 At Crossings with Passive Traffic Control Equipment

Collision with person that takes place at a level crossing where the movement of pedestrians is controlled by signs and mazes, and relies on the pedestrian detecting the approach or presence of rolling stock by direct observation.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Collision of rolling stock with a person.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Collision of rolling stock with a person not on a level crossing. Refer to 3.2.1.3 Running Line Collision: With Person Not on a Level Crossing or 3.2.2.3 Yard Collision: With Person Not on a Level Crossing.
- > Suspected or attempted suicide at a level crossing. *Refer to* **3.16** *Suspected Suicide or Attempted Suicide.*
- Collision of a tram with a person where the tramway track and road or footpath meet and it is not signed as a level crossing. *Refer to* 3.2.1.3 *Running Line Collision: With Person Not on a Level Crossing* or 3.2.2.3 *Yard Collision: With Person Not on a Level Crossing.*

3.3.2.3 At Unprotected Level Crossings

Collision between rolling stock and a person that takes place at a level crossing where the movement of pedestrians is not controlled by active or passive traffic control equipment.

NOTIFIABLE:

> Collision of rolling stock with a person.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- Collision of rolling stock with a person not on a level crossing. *Refer to* 3.2.1.3 *Running Line Collision: With Person Not on a Level Crossing* or 3.2.2.3 *Yard Collision: With Person Not on a Level Crossing.*
- > Suspected or attempted suicide at a level crossing by driver of the road motor vehicle. *Refer* to **3.16** *Suspected Suicide or Attempted Suicide.*
- Collision of a tram with a person where the tramway track and road or footpath meet and it is not signed as a level crossing. *Refer to* 3.2.1.3 *Running Line Collision: With Person Not* on a Level Crossing or 3.2.2.3 Yard Collision: With Person Not on a Level Crossing.

3.3.3 LEVEL CROSSING EQUIPMENT FAILURE/DEFECT

Failure of level crossing equipment that does not provide the intended level of protection due to all or part of the level crossing equipment not operating, prior to, or during the passage of rolling stock.

This includes any failure of equipment detected during routine maintenance.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Active warning devices that do not operate due to:
- > a loss of power supply; or
- > a track circuit or axle counter circuit not detecting the presence of the rolling stock.
- > Boom barrier(s) that do not lower for the passage of rolling stock.
- > Warning lights not being displayed for the passage of rolling stock.
- > Audible warnings (bell sirens) not being activated, where designed to do so.
- > Pedestrian crossing boom barrier(s) that do not lower or swing gate(s) that do not close correctly.
- > Faults that would likely render active traffic control equipment to be non-operational that are found during inspection or maintenance, detected without rolling stock involved.
- > Pedestrian indicator or warning light(s), that, where fitted, are not displayed.
- > Defective locking on any emergency escape gates, allowing access to the level crossing when the gates are activated.
- > Missing or damaged signs and devices at a passive crossing that are not detected and rectified during routine inspection and maintenance.

NOT NOTIFIABLE:

- > Continuous operation of a level crossing due to:
 - a track circuit or axle counter failure;
 - an electrical or mechanical failure preventing a boom(s) rising after the passage of a train;
 - known electrical/ mechanical defects when no rolling stock is present.
- > Loss of primary power supply detected and rectified prior to the secondary (battery) supply becoming exhausted.
- > Audible warning device that is not operating when switched out during prescribed hours in accordance with the design.
- > Individual warning light not being displayed prior to and during the passage of rolling stock.
- > Pedestrian boom(s) that does not rise or any swing gates that do not open after the passage of a train.
- > Level crossing alarms that are responded to in accordance with the requirements of the Rail Infrastructure Manager (RIM), where the level of protection that is intended to be provided by the level crossing equipment is achieved.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Failure or defect of level crossing equipment caused by third party damage to or interference with the equipment. *Refer to* **3.3.4** *Level Crossing Equipment Damage/ Interference.*
- > Occurrence which is caused by infrastructure irregularities, such as broken rail, welds, bonds and defective insulated joints, that result in the unnecessary operation of level crossing equipment. *Refer to* **3.11** *Track and Civil Infrastructure Irregularity.*

3.3.4 LEVEL CROSSING EQUIPMENT DAMAGE/INTERFERENCE

Third party damage to or interference with level crossing equipment other than suspected or known cases of vandalism.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Road vehicle that collides with or hits and damages:
 - signs and devices at an active or passive level crossing;
 - boom(s) at an active level crossing; or
 - level crossing infrastructure.
- > Where the road or path surface is damaged at a level crossing to the extent that it no longer provides for safety passage for pedestrians or road vehicles.
- > Where the boom rests on top of a road vehicle that queues across or is stuck on a level crossing.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Any person that places objects across the rails causing continuous activation of the level crossing equipment. *Refer to* **3.20.4.3** *Other Vandalism.*
- > Road and pedestrian lights or boom barriers and gates interfered with or broken by persons. *Refer to* 3.20.4.3 *Other Vandalism.*
- > Graffiti defacing level crossing signage. Refer to 3.20.4.2 Graffiti.

3.3.5 NEAR MISS WITH ROAD VEHICLE

Occurrence where the driver of a rolling stock takes emergency action or has insufficient time to take emergency action to avoid impact with a road vehicle at a level crossing and no collision occurs.

Note: Emergency action includes continuous audible warning and/or brake application.

3.3.5.1 At Crossings with Active Traffic Control Equipment

Near miss with a road vehicle at a level crossing where the movement of road vehicles is controlled by flashing signals, gates or barriers or a combination of these which are activated prior to and during the passage of the rolling stock.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Near miss with a road vehicle driver at an active level crossing that proceeds:
 - across the crossing, ignoring lights and audible warnings; or
 - around a lowered boom, where fitted.
- > Near miss with a road vehicle that queues across or is stuck on a level crossing when control devices are activated.

NOT NOTIFIABLE:

> Near miss between a tram and road vehicle where the tramways track and road meet and it is not signed as a level crossing.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.3.5.2 At Crossings with Passive Traffic Control Equipment

Near miss with a road vehicle at a level crossing that is controlled by signs such as stop or give way signs, and relies on the road user detecting the approach or presence of rolling stock by direct observation.

NOTIFIABLE:

> Near miss with a road vehicle that queues across or is stuck on a crossing, ignoring passive control devices.

NOT NOTIFIABLE:

> Near miss between a tram and road vehicle where the tramways track and road meet and it is not signed as a level crossing.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.3.5.3 At Unprotected Level Crossings

Near miss with a road vehicle that takes place at a level crossing which is not controlled by active or passive traffic control equipment.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Near miss with a road vehicle that proceeds in the path of approaching rolling stock at an unprotected level crossing.

NOT NOTIFIABLE:

> Near miss between a tram and road vehicle where the tramways track and road meet and it is not signed as a level crossing.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.3.6 NEAR MISS WITH PERSON

Any occurrence where a rolling stock driver takes emergency action or has insufficient time to take emergency action to avoid impact with a person at a level crossing and no collision occurs.

3.3.6.1 At Crossings with Active Traffic Control Equipment

Near miss with person that takes place at a level crossing where the movement of pedestrians is controlled by flashing signals, gates or barriers or a combination of these which are activated prior to and during the passage of the rolling stock.

NOTIFIABLE:

- > Near miss with a person at an active level crossing that proceeds:
 - across the crossing, ignoring lights and audible warnings; or
 - around a lowered boom, where fitted.
- > Near miss with a person on a mobility aid that is stuck on the crossing however rolling stock is able to be stopped by normal or emergency brake application.

NOT NOTIFIABLE:

> Near miss between a tram and a person where the tramways track and road or footpath meet and it is not signed as a level crossing.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Near miss with a trespasser on a running line. *Refer to* **3.20.1.1** *Near Miss with Trespasser.*
- > Near miss with a railway worker walking or working on a running line. *Refer to* **3.10.5** *Track Work Procedure/Rule Breach.*

3.3.6.2 At Crossings with Passive Traffic Control Equipment

Near miss with a person that takes place at a level crossing where the movement of pedestrians is controlled by signs and mazes, and relies on the pedestrian detecting the approach or presence of rolling stock by direct observation.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Near miss with person that crosses a passive level crossing in the path of approaching rolling stock.
- > Near miss with person on a mobility aid that is stuck on a passive level crossing.

NOT NOTIFIABLE:

> Near miss between a tram and a person where the tramways track and road or footpath meet and it is not signed as a level crossing.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Near miss with a trespasser on a running line. *Refer to* **3.20.1.1** *Near Miss with Trespasser.*
- Near miss with a railway worker walking or working on a running line. Refer to 3.10 Safeworking (Network) Rule or Procedure Breach or 3.10.5 Track Work Procedure/Rule Breach.

3.3.6.3 At Unprotected Level Crossings

Near miss with person that takes place at a level crossing where the movement of pedestrians is not controlled by active or passive traffic control equipment.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Near miss with a person that crosses an unprotected level crossing in the path of approaching rolling stock.
- > Near miss with a person on a mobility aid that is stuck on the level crossing.

NOT NOTIFIABLE:

> Near miss between a tram and a person where the tramways track and road or footpath meet and it is not signed as a level crossing.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Near miss with a trespasser on a running line. *Refer to* **3.20.1.1** *Near Miss with Trespasser.*
- Near miss with a railway worker walking or working on a running line. Refer to 3.10 Safeworking (Network) Rule or Procedure Breach or 3.10.5 Track Work Procedure/Rule Breach.

3.3.7 OTHER LEVEL CROSSING OCCURRENCE

Level crossing occurrence that is not classifiable under one of the above subcategories.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Shunting practices that cause continuous operation of a level crossing.
- > Road vehicle driving around boom gates not involved in a near miss.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Rolling stock running onto a level crossing when not authorised to do so. Refer to 3.10 Safeworking (Network) Rule or Procedure Breach.
- > Unauthorised persons at a level crossing not involved in a near miss. *Refer to* 3.20.1.2 *Other Railway Trespass.*

3.4 Signal Passed at Danger / Authority Exceeded

Any incident where rolling stock passes a stop indication is referred to as a SPAD (Signal Passed at Danger).

Includes any occurrence where rolling stock:

> passes without authority a signal displaying a stop indication or a stop aspect including but not limited to fixed signals, stop boards, hand signals, or black or improperly displayed signals; or

exceeds the limits of authorised movements including in-cab indicators, paper-based and electronic "occupancy authorities" and encroachment on a protected worksite.

CODING UNDER SUB-CLASSIFICATIONS

All notifiable occurrence reports to ONRSR of a SPAD or authority exceeded <u>must</u> be coded under a sub-classification.

SUBCATEGORIES

3.4.6	SPAD Classification A1	Limit of Authority (LOA) Missed by Train Crew
3.4.7	SPAD Classification A2	Signal Irregularity for the LOA
3.4.8	SPAD Classification A3	Proceed Authority Incorrectly Given by Rail Operator
3.4.9	SPAD Classification A4	Sub-Optimal Train or Track Infrastructure Conditions
3.4.10	SPAD Classification B1	Signal Restored and Passed at Danger – Infrastructure Failure
3.4.11	SPAD Classification B2	Signal Restored and Passed at Danger – Network Control / Signaller Error
3.4.12	SPAD Classification B3	Signal Restored and Passed at Danger - Emergency
3.4.13	SPAD Classification B4	LOA Exceeded Through Uncontrolled Movement

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Signal Passed at Danger (SPAD) <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rail Infrastructure Manager (RIM);
- > Rolling Stock Operator (RSO);
- > Line section;
- > Line type;
- > Kilometerage;
- > Train type, traction type and rolling stock class;
- > Signal identifier;
- > SPAD Exceedance Over-run data (the distance in metres which the front of train travels beyond the signal);
- > SPAD Vulnerability Data Item (select below); and
- > A general description of the occurrence including, where applicable:
 - The nature of the SPAD;
 - An explanation of why you have selected a particular category;
 - A start against signal, where it occurs;
 - The type of action, or absence of action, taken by the driver; and
 - The direction of travel and the chain of events leading to the SPAD.

As noted above, a SPAD Vulnerability Data Item must be provided for each SPAD, based on consideration of the severity and probability of their actual and possible consequences, selecting from one of the following:

Α.	Incident occurred	Severe: such an incident would typically be reported as a collision or derailment under top event reporting.
В.	SPAD rolling stock stopped on the first potential conflict point, with potential conflicting rolling stock stopped by actions of the Driver and/or Network Control Officer (NCO).	Severe: collision only prevented by recovery action.
C.	SPAD rolling stock stopped on the first potential conflict point, with potentially conflicting rolling stock stopped by automatic action of safe	Significant

working system (i.e. signal flank protection) prior to collision.

- **D.** SPAD or potential conflicting rolling stock crossed the conflict zone without incident.
- E. SPAD rolling stock stopped less than or equal to 50 metres in rear (before) of the first potential conflict point by actions of Network Control Officer (NCO) prior to incident.
- **F.** SPAD rolling stock stopped less than or equal to 50 metres in rear of first potential conflict point by actions of the driver alone. No Train Protection System Fitted.
- **G.** SPAD rolling stock stopped less than or equal to 50 metres in rear of the first potential conflict point by the activation or intervention of the Train Protection System.
- H. SPAD rolling stock stopped more than 50 metres in rear of the first potential conflict point by the actions of the Network Control Officer (NCO) prior to incident.
- I. SPAD rolling stock stopped more than 50 metres in rear of the first potential conflict point by actions of the driver alone without the activation or intervention of the Train Protection System.
- J. SPAD rolling stock stopped more than 50 metres in rear of the first potential conflict point with activation or intervention of the Train Protection System.
- K. SPAD where the design of the running line layout and/or safeworking system prevents the possibility of a conflict in advance of the signal or in degraded working where all arrangements were in place for the safe passage of the rolling stock.

Significant: Restricted time window for accident.

Significant: potential incident prevented by recovery action.

Significant: escalation of SPAD required before incident could occur.

Significant: Escalation of SPAD required before incident could occur.

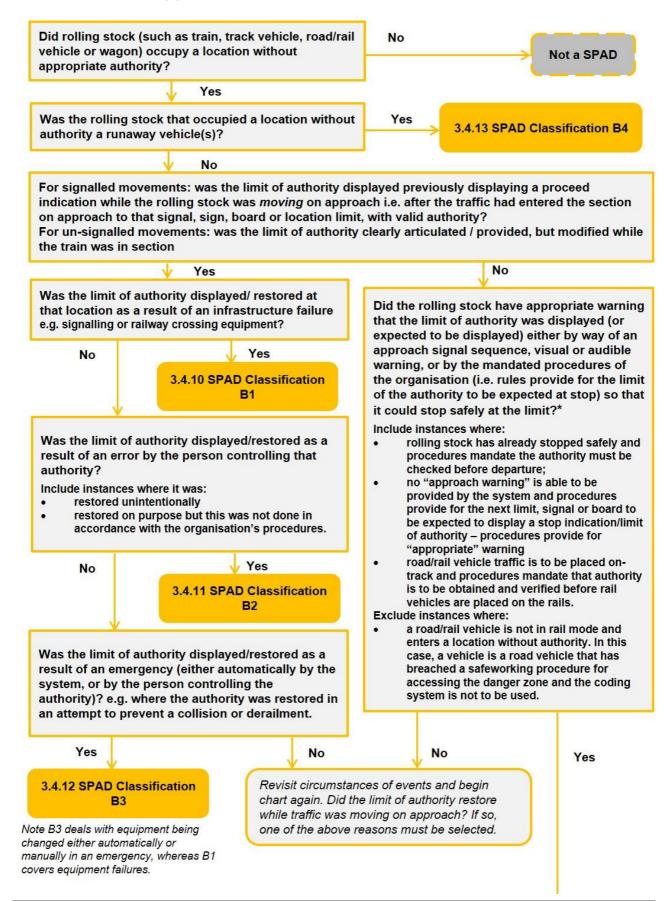
Minor: significant escalation of SPAD required before incident could occur.

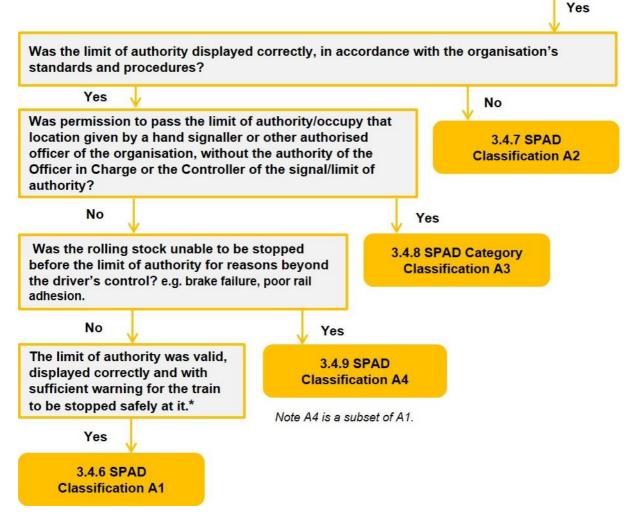
Minor: significant escalation of SPAD required before incident could occur.

Minor: significant escalation of SPAD required before incident could occur.

Minor: incident highly unlikely.

SPAD Decision Support Tool





***Sufficient time to be stopped safely:** In some cases, this will be a subjective determination (particularly when the 'sufficient time' is borderline), there also objective considerations, namely:

- > Signal sighting distance;
- > Braking curve of rolling stock; and
- > Expected human reaction time in this scenario.

3.4.6 SPAD CLASSIFICATION A1 (LIMIT OF AUTHORITY (LOA) MISSED BY TRAIN CREW)

When a SPAD has occurred and, according to available evidence, a stop aspect, indication or end of movement authority² was displayed or given correctly and in sufficient time for the train to be stopped safely at it. This occurrence is a prescribed incident under Regulation 28.

This includes:

- > when a signal displaying a stop indication is passed at danger when the driver of the rolling stock does not realise that the signal has been passed at stop and has made no attempt to bring the rolling stock to a stand before the signal and proceeds into the next section or block.
- > When a signal displaying a stop indication is passed at danger when the signal was displayed correctly and in sufficient time for the train to be stopped safely at it, but on available evidence, there were <u>no</u> external factors beyond the driver's control to prevent the train from bringing the rolling stock to a stand before the signal.

Note: Includes where further movement of the train is prevented by train control devices (trainstops, AWS etc.) or a verbal instruction to stop given by the Signaller/Network Controller.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Signal completely missed and passed at danger due to driver error or violation.
- > End of movement authority (including in-cab, signalled, paper and/or computer-based occupancy authority) exceeded due to a driver error or violation.
- > Signal completely missed and passed at danger when stationary rolling stock starts and proceeds beyond the signal.
- > The scenario where the driver a driver is distracted and on sighting the next signal at stop, applies full service brakes but passes the signal.
- > Following crew changeover, the train exceeded authority by passing a stop board which defined the limit of authority. The incoming crew believed they had authority to go past, even though the authority clearly articulated the boundary.
- > The rear portion of an otherwise stationary train rolls back due to coupling slack stabilisation resulting in part of the rear vehicle passing a signal or block limit board and/or re-occupies a track circuit.

NOT NOTIFIABLE:

This section is intentionally left blank.

² End of movement authority includes in-cab, signalled, paper and/or computer-based occupancy authority.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > A staff or ticket is surrendered with no protection or authority is in place before a train completely clears the block or section intact. *Refer to* 3.10.3 *Token Based System Procedure/Rule Breach.*
- > A written or electronic proceed authority for a block is released with no protection or authority is in place before a train completely clears the block or section intact. *Refer to* 3.10.4 *Communications Based System Procedure/Rule Breach.*

3.4.7 SPAD CLASSIFICATION A2 (SIGNAL IRREGULARITY FOR THE LOA)

A signal is passed at danger due to the stop indication not correctly displayed however was preceded by a correct indication on the preceding signal that would have informed the driver the signal passed was at stop.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Signal passed at danger due to signal blacked out, damaged, or missing, and aspect not visible to train crew. Signal passed at danger due to signal indication obscured by vegetation or other object.
- > Signal passed at danger due to glare for example sun shining on signal lenses makes the aspect appear lit.
- > Signal passed at danger due to irregular signal indication.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Signal passed due to it displaying a less restrictive aspect than the stop indication that should have been shown (Wrong-side failure). *Refer to* **3.6.1** *Wayside Signalling System Irregularity.*

3.4.8 SPAD CLASSIFICATION A3 (PROCEED AUTHORITY INCORRECTLY GIVEN BY RAIL OPERATOR)

When a signal is passed at danger due to a hand-signaller or other authorised person giving permission to the driver to pass the signal at stop without the authority of the signaller/train controller. This occurrence is a prescribed incident under Regulation 28.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> The scenario of when, during a yard movement, a shunter indicates to a driver to proceed past a signal at stop without the appropriate authority of the signaller.

NOT NOTIFIABLE:

> A shunter gives permission for a signal to be passed at danger during a shunting movement in a yard, with the appropriate authority of the signaller.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.4.9 SPAD CLASSIFICATION A4 (SUB-OPTIMAL TRAIN OR TRACK INFRASTRUCTURE CONDITIONS)

The stop indication was displayed correctly and in sufficient time for the rolling stock to be stopped safely however the train crew were unable to stop prior to passing signal owing to circumstances beyond his/her control (e.g., poor rail head adhesion, train braking equipment failure or malfunction etc.).

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Signal passed at danger, or end of movement authority exceeded, due to poor rolling stock braking performance.
- > Signal passed at danger, or end of movement authority exceeded, due to driver incorrect braking techniques.
- > Signal passed at danger, or end of movement authority exceeded, due to poor rail/wheel adhesion (wet rails etc.), where no warning had been received by the driver.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Signal passed at danger due to driver misjudging braking distance, without there being circumstances beyond his/her control. Refer to 3.4.6 Signal Passed at Danger A1.
- > Signal passed at danger due to poor rail/wheel adhesion (wet rails etc.), where a warning had previously been received by the driver. Refer to **3.4.6** *Signal Passed at Danger* A1.

3.4.10 SPAD CLASSIFICATION B1 (SIGNAL RESTORED AND PASSED AT DANGER – INFRASTRUCTURE FAILURE)

Signal restored to danger in front of approaching rolling stock due to a signalling infrastructure failure and the driver is unable to stop prior to passing the signal.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Signal restored to danger due to signal equipment/circuit failure.
- > Signal restored to danger due to track circuit failure.
- > Signal restored to danger due to point detection fault.
- > Signal restored to danger due to loss of signalling power supply.
- > Signal restored to danger due to a fault associated with level crossing equipment.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.4.11 SPAD CLASSIFICATION B2 (SIGNAL RESTORED AND PASSED AT DANGER – NETWORK CONTROL / SIGNALLER ERROR)

A limit of authority or signal restored to danger in front of approaching rolling stock because it was returned to danger by the person controlling that authority as a result of an error.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Signaller/Network Controller inadvertently placing signal to stop.
- > Signaller/Network Controller attempting to set conflicting route.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- Signal returned to danger by signaller/network controller to protect obstruction. *Refer to* 3.4.12 *Signal Passed at Danger* B3.
- > Signal returned to danger in an emergency to protect fire/law enforcement agencies on running line. *Refer to* **3.4.12** *Signal Passed at Danger* **B3**.

3.4.12 SPAD CLASSIFICATION B3 (SIGNAL RESTORED AND PASSED AT DANGER – EMERGENCY)

A limit of authority or signal restored to danger in front of approaching rolling stock by the person controlling the authority due to an emergency and driver is unable to stop prior to passing the signal.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Signal returned to danger by signaller/network controller to protect obstruction.
- > Signal returned to danger in an emergency to protect fire/law enforcement agencies on the running line.
- > Signal returned to danger due to activation of land slip or flood detectors.
- > While travelling between station A and C, the signaller directed the train to stop at station B (mid-section) as police advised that a trespasser was on the running line near station C. The train was already approaching station B, and stopped approximately 250 m past the station.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.4.13 SPAD CLASSIFICATION B4 (LOA EXCEEDED THROUGH UNCONTROLLED MOVEMENT)

Rolling stock without any traction unit attached or is unattended, runs away past a signal(s) at danger, or without an in-cab movement authority. This occurrence is a prescribed incident under Regulation 28.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Wagon stabled in a siding runs away and passes signal(s) at stop.
- > Unattended rolling stock marshalled as a train runs away and passes signal(s) at stop.
- > Portion of train breakaway runs away and passes signal(s) at stop.

NOT NOTIFIABLE:

This section is intentionally left blank.

- > The uncontrolled movement of rolling stock that endangers the safety of railway operations, but does not pass a signal at stop. *Refer to* **3.21** *Runaway.*
- > The uncontrolled movement of rolling stock that result in a collision. *Refer to* **3.2** *Collision*.
- > The uncontrolled movement of rolling stock that results in a derailment. *Refer to* **3.1** *Derailment.*

3.5 Light Rail or Tram Authority Exceeded

Any incident where rolling stock operating on a light rail or tram network passes a stop indication is referred to as a LRTAE (Light Rail or Tram Authority Exceeded).

Includes any occurrence where rolling stock:

- > passes without authority a signal displaying a stop indication or a stop aspect including but not limited to a light rail/tram signal, point indicator, road traffic light at STOP, hand signals, stop boards, platform stop or black or improperly displayed signals; or
- exceeds an authority, a signal displaying a stop indication or stop aspect due to a failure including but not limited to a light rail/tram signal failure, incorrect operation of signal or point equipment, Network Controller error, passing of emergency light rail/tram signals, uncontrolled movement exceeds an authority or light rail/tram signal.

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Light Rail or Tram Authority Exceeded (LRTAE) <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rail Infrastructure Manager (RIM);
- > Rolling Stock Operator (RSO);
- > Line section;
- > Line type;
- > Kilometerage;
- > Train type, traction type and rolling stock class;
- > Signal identifier;
- > LRTAE Over-run data (the distance in metres which the front of train travels beyond the signal);
- > LRTAE Vulnerability Data Item (select below); and
- > A general description of the occurrence including, where applicable:
 - The nature of the LRTAE;
 - An explanation of why you have selected a particular category;
 - A start against signal, where it occurs;
 - The type of action, or absence of action, taken by the driver; and
 - The direction of travel and the chain of events leading to the LRTAE.

As noted above, a LRTAE Vulnerability Data Item must be provided for each LRTAE, based on consideration of the severity and probability of their actual and possible consequences, selecting from one of the following:

A. Incident occurred Severe: such an incident would typically be reported as a collision or derailment under top event reporting. Severe: collision only **B.** LRTAE rolling stock stopped on the first potential conflict point, with potential conflicting prevented by recovery rolling stock stopped by actions of the Driver action. and/or Network Control Officer (NCO). **C.** LRTAE rolling stock stopped on the first Significant potential conflict point, with potentially conflicting rolling stock stopped by automatic action of safe working system (i.e. signal flank protection) prior to collision. **D.** LRTAE or potential conflicting rolling stock Significant: Restricted crossed the conflict zone without incident. time window for accident. **E.** LRTAE rolling stock stopped less than or equal Significant: potential to 50 metres in rear (before) of the first potential incident prevented by conflict point by actions of Network Control recovery action. Officer (NCO) prior to incident. **F.** LRTAE rolling stock stopped less than or equal Significant: escalation of to 50 metres in rear of first potential conflict LRTAE required before incident could occur. point by actions of the driver alone. No Train Protection System Fitted. **G.** LRTAE rolling stock stopped less than or equal Significant: Escalation of to 50 metres in rear of the first potential conflict LRTAE required before point by the activation or intervention of the incident could occur. Train Protection System. H. LRTAE rolling stock stopped more than 50 Minor: significant metres in rear of the first potential conflict point escalation of LRTAE by the actions of the Network Control Officer required before incident (NCO) prior to incident. could occur. I. LRTAE rolling stock stopped more than 50 Minor: significant metres in rear of the first potential conflict point escalation of LRTAE by actions of the driver alone without the required before incident

System.

activation or intervention of the Train Protection

could occur.

- J. LRTAE rolling stock stopped more than 50 metres in rear of the first potential conflict point with activation or intervention of the Train Protection System.
- K. LRTAE where the design of the running line layout and/or safeworking system prevents the possibility of a conflict in advance of the signal or in degraded working where all arrangements were in place for the safe passage of the rolling stock.

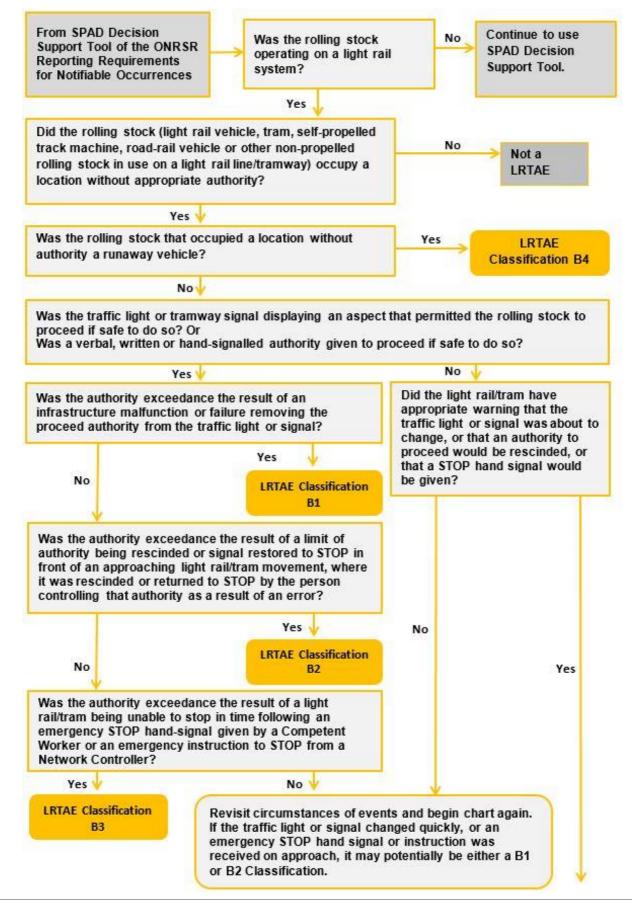
Minor: significant escalation of LRTAE required before incident could occur.

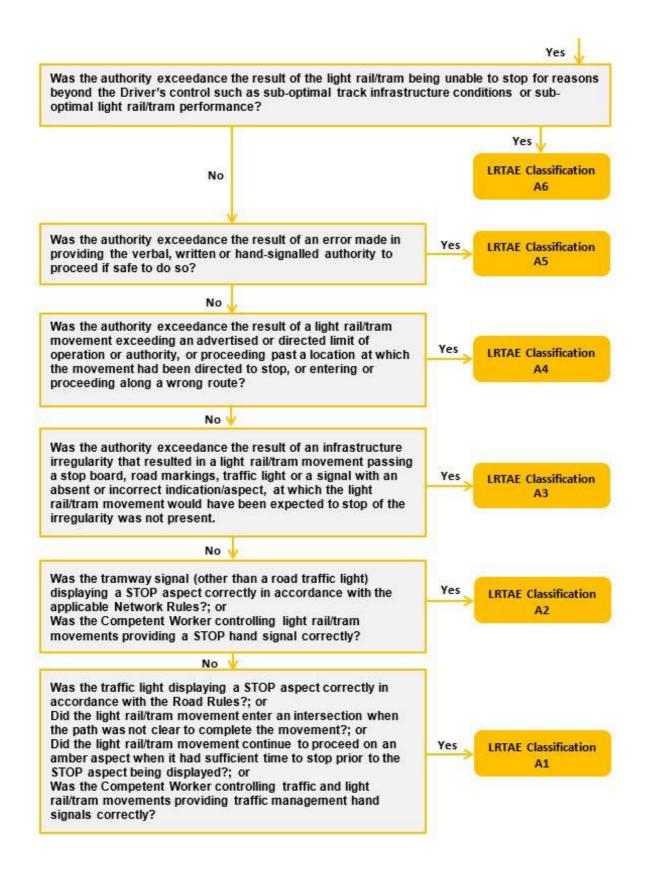
Minor: incident highly unlikely.

SUBCATEGORIES

3.5.4	LRTAE Classification A1	Road Traffic Light Passed Without Authority
3.5.5	LRTAE Classification A2	Light rail/tram signal passed without authority
3.5.6	LRTAE Classification A3	Traffic light or signal passed without authority due to an infrastructure irregularity
3.5.7	LRTAE Classification A4	Limit of Authority missed by Light Rail/Tram Crew
3.5.8	LRTAE Classification A5	Authority to proceed incorrectly given
3.5.9	LRTAE Classification A6	Sub-optimal light rail/tram or track infrastructure conditions
3.5.10	LRTAE Classification B1	Failure of light rail/tram signal infrastructure
3.5.11	LRTAE Classification B2	Signal Restored and Passed at Danger – Network Controller Error
3.5.12	LRTAE Classification B3	Authority to proceed rescinded in an emergency
3.5.13	LRTAE Classification B4	Limit of Authority exceeded through uncontrolled movement

LRTAE Decision Support Tool





3.5.4 LRTAE CLASSIFICATION A1 (ROAD TRAFFIC LIGHT PASSED WITHOUT AUTHORITY)

When, according to available evidence or self-reporting:

> Stopping line has been passed while a road traffic light has been at STOP.

A road traffic light may display solid round aspects or T aspects as detailed in the Australian Road Rules, depending on road location requirements. This occurrence is a prescribed incident under Regulation 28.

Note: unlike railway signalling, the road traffic light may be positioned at a location other than immediately adjacent to the stopping line painted on the roadway or track. The light rail/tram movement must observe the stopping line position rather than the road traffic light, so potentially may be in breach by being past the stopping line but not past the road traffic light.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Light Rail/Tram Crew self-reports passing the stopping line while the road traffic light is at STOP.
- > Traffic light camera records a light rail/tram passing the stopping line while the road traffic light is at STOP.
- > Police Officer reports a Light Rail/Tram Crew for passing the stopping line while the road traffic light at STOP.
- > Another person reports that a Light Rail/Tram Crew passed the stopping line while the road traffic light was at STOP and the review of other evidence such as, on-board recorded footage on the light rail/tram confirms the report.

NOT NOTIFIABLE:

> Light Rail/Tram Crew is directed to proceed across the stopping line by Police or other person with authority to provide the direction.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Where the passing of the stopping line and road traffic light results in another incident such as collision. *Refer to* **3.2** *Collision*.

3.5.5 LRTAE CLASSIFICATION A2 (LIGHT RAIL/TRAM SIGNAL PASSED WITHOUT AUTHORITY)

When, according to available evidence or self-reporting:

- > Light rail/tram signal or point indicator has been passed without authority; or
- > Competent Worker controlling light rail/movements with hand signals is passed without authority.

A light rail/tram signal may display solid round aspects, T aspects, or other aspects as detailed in the light rail/tram operator's Network Rules. This occurrence is a prescribed incident under Regulation 28.

A Competent Worker is a rail safety worker deemed competent to control light rail/tram movements as detailed in the light rail/tram operator's Network Rules.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Light rail/tram signal or point indicator displaying a STOP aspect has been passed without authority.
- > Light rail/tram movement proceeds without authority past a Competent Worker giving hand signals to control light rail/tram movements.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Passing of a light rail/tram signal that results in another incident such as collision or derailment. *Refer to* **3.1** *Derailment* or **3.2** *Collision*.
- > Light rail/tram movement passes a signal without authority and enters along a wrong route due to an infrastructure irregularity. *Refer to* 3.5.6 *Light Rail or Tram Authority Exceeded* A3.

3.5.6 LRTAE CLASSIFICATION A3 (TRAFFIC LIGHT OR SIGNAL PASSED WITHOUT AUTHORITY DUE TO AN INFRASTRUCTURE IRREGULARITY)

When, according to available evidence or self-reporting:

- > Road traffic light or a light rail/tram signal has been passed with an absent or incorrect indication/aspect, at which the light rail/tram movement should have stopped; or
- > Road traffic light or a light rail/tram signal has been passed at STOP due to sun glare; or
- > Road traffic light or a light rail/tram signal has been passed at STOP due to being obscured by vegetation or other obstruction.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Set of road traffic lights displaying no indication or showing incorrect indications/aspects that is passed without authority to proceed being received.
- > Light rail/tram signal passed at danger due to a signal blacked out, damaged or missing.
- > Point indicator displaying an incorrect indication/aspect, or an indication/aspect for another route, or not displaying an aspect at all, that is passed without authority.
- > Road traffic light or a light rail/tram signal that is passed at STOP due to sun glare.
- > Road traffic light or a light rail/tram signal that is passed at STOP due to being obscured by vegetation or other obstruction.

NOT NOTIFIABLE:

- > Direction given by Police or a Competent Worker to proceed across an intersection at which the road traffic lights are not functioning or not functioning correctly.
- > Direction given by a Network Controller to a Light Rail/Tram Crew to pass a light rail/tram signal that has failed or has activated a safe mode.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Light rail / tram signal passed due to it displaying a less restrictive aspect than the stop indication that should have been shown (Wrong-side failure). *Refer to* 3.6.1 *Wayside Signalling System Irregularity.*
- > Passing of a light rail/tram signal that results in another incident such as collision or derailment. *Refer to* **3.1** *Derailment* or **3.2** *Collision*.
- > Light rail/tram movement entering or proceeding along a wrong route. *Refer to* **3.5.7** *Light Rail or Tram Authority Exceeded A4.*
- Failure of the road traffic light or light rail/tram signal that results in the signal restoring to STOP in front of an approaching light rail/tram movement. *Refer to* 3.5.10 *Light Rail or Tram Authority Exceeded B1.*

3.5.7 LRTAE CLASSIFICATION A4 (LIMIT OF AUTHORITY MISSED BY LIGHT RAIL/TRAM CREW)

When, according to available evidence or self-reporting, as a result of a missed observance by a Light Rail/Tram Crew:

- > Light rail/tram movement exceeds an advertised or directed limit of operation or authority such as, a stop board or platform stop; or
- > Light rail/tram movement proceeds past a location at which the Network Controller has directed them to stop or hold; or
- > Light rail/tram movement enters or proceeds along a wrong route.

This occurrence is a prescribed incident under Regulation 28.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Light rail/tram movement exceeding an advertised or directed limit of operation.
- > Light rail/tram movement proceeding past a location where they have been directed to stop or hold by a Network Controller.
- > Light rail/tram movement proceeds past a location without the permission of the Network Controller where permission should have been sought.
- > Light rail/tram movement entering or proceeding along a wrong route.

NOT NOTIFIABLE:

This section is intentionally left blank.

- > Light rail/tram movement exceeding an advertised or directed limit of operation, or proceeding past a location where they have been directed to stop or hold by a Network Controller, that results in another incident such as collision or derailment. *Refer to* 3.1 *Derailment* or 3.2 *Collision*.
- > Light rail/tram movement entering or proceeding along its correct route after observing and taking an incorrect signal indication. *Refer to* 3.5.5 *Light Rail or Tram Authority Exceeded* A2.

3.5.8 LRTAE CLASSIFICATION A5 (AUTHORITY TO PROCEED INCORRECTLY GIVEN)

When, according to available evidence or self-reporting:

- > Network Controller incorrectly gives an authority for a light rail/tram to proceed past a road traffic light, light tram signal, or limit of authority; or
- > Competent Worker gives an incorrect signal for a light rail/tram to proceed past a road traffic light, light tram signal, or limit of authority.

This occurrence is a prescribed incident under Regulation 28.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Network Controller incorrectly gives an authority to proceed past a road traffic light, light tram signal, or limit of authority.
- > Competent Worker gives an incorrect signal for a light rail/tram to proceed past a road traffic light, light rail/tram signal, or limit of authority.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Incorrectly given authority to proceed that results in another incident such as collision or derailment. *Refer to* **3.1** *Derailment* or **3.2** *Collision*.
- 3.5.9 LRTAE CLASSIFICATION A6 (SUB-OPTIMAL LIGHT RAIL/TRAM OR TRACK INFRASTRUCTURE CONDITIONS)

When, according to available evidence or self-reporting:

- > Light rail/tram suffers a braking equipment failure or malfunction that results in the movement exceeding the limit of authority or passing a road traffic light or light rail/tram signal without authority; or
- > Poor rail head adhesion results the light rail/tram movement exceeding the limit of authority or passing a road traffic light or light rail/tram signal without authority.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Light rail/tram movement suffers a braking equipment failure or malfunction that there had been no previous indication of.
- > Light rail/tram movement suffers from poor rail head adhesion that there had been no previous indication of.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > An exceeded limit of authority that results in another incident such as collision or derailment. *Refer to* **3.1** *Derailment* or **3.2** *Collision*.
- > Light rail/tram movement exceeding the limit of authority or passing a road traffic light or light rail/tram signal without authority due to poor rail/wheel adhesion (wet rails etc.), where a warning had previously been received by the driver. *Refer to* 3.5.4 – 3.5.7 *Light Rail or Tram Authority Exceeded.*

3.5.10 LRTAE CLASSIFICATION B1 (FAILURE OF LIGHT RAIL/TRAM SIGNAL INFRASTRUCTURE)

When a light rail/tram movement has exceeded an authority due to:

> Failure of the light rail/tram signal results in the signal restoring to STOP in front of an approaching light rail/tram movement, with the light rail/tram movement not being able to stop before proceeding past the light rail/tram signal.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Failures that allow incorrect operation of signal or point equipment.
- > Failures that return the signal to STOP in front of approaching light rail/tram traffic.

NOT NOTIFIABLE:

- > Failures that have been identified and are known and advertised with altered arrangements for safeworking; or
- > Road traffic lights that have a failure of an aspect.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- Failure that results in another incident such as collision or derailment. *Refer to* 3.1 *Derailment* or 3.2 *Collision*.
- Failure that is otherwise reportable as an infrastructure irregularity, wrong side signalling failure. *Refer to* 3.6.1 *Wayside Signalling System Irregularity* or 3.11 *Track and Civil Infrastructure Irregularity* or 3.13 *Electrical Infrastructure Irregularity.*

3.5.11 LRTAE CLASSIFICATION B2 (SIGNAL RESTORED AND PASSED AT DANGER – NETWORK CONTROLLER ERROR)

A limit of authority or signal restored to STOP in front of an approaching light rail/tram movement because it was returned to STOP by the person controlling that authority as a result of an error.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Network Controller inadvertently placing signal to STOP.
- > Network Controller attempting to set conflicting route.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Signal returned to STOP by Network Controller to protect an obstruction. *Refer to* 3.5.12 Light Rail or Tram Authority Exceeded B3.
- > Signal returned to STOP by a Network Controller in an emergency to protect fire/law enforcement agencies on running line. *Refer to* 3.5.12 *Light Rail or Tram Authority Exceeded* B3.

3.5.12 LRTAE CLASSIFICATION B3 (AUTHORITY TO PROCEED RESCINDED IN AN EMERGENCY)

When, according to available evidence or self-reporting:

- STOP hand signal is given by a Competent Worker in an emergency to an approaching light rail/tram movement, and the light rail/tram movement is unable to stop prior to passing the Competent Worker giving the hand signal; or
- STOP verbal instruction is given by a Network Controller to a light rail/tram movement, and the light rail/tram movement is unable to stop prior to passing the location at which it has been directed to stop; or
- > Signal is returned to STOP by a Network Controller to protect obstruction and an approaching light rail/tram is unable to stop prior to passing the location at which it has been directed to stop; or
- > Signal is returned to STOP by a Network Controller in an emergency to protect fire/law enforcement agencies on running line and an approaching light rail/tram is unable to stop prior to passing the location at which it has been directed to stop.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Light rail/tram movement attempts to stop but is unable to stop before passing a Competent Worker giving a STOP hand signal in an emergency.
- > Light rail/tram movement attempts to stop but is unable to stop prior to passing a location at which a Network Controller has directed by giving an emergency verbal instruction that the light rail/tram movement must STOP at.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

Passing of a hand signal at STOP, or the passing of a location where a direction to STOP has been given, that results in another incident such as collision or derailment. *Refer* to 3.1 *Derailment* or 3.2 *Collision*.

3.5.13 LRTAE CLASSIFICATION B4 (LIMIT OF AUTHORITY EXCEEDED THROUGH UNCONTROLLED MOVEMENT)

When, according to available evidence or self-reporting:

> Light rail/tram movement or self-propelled rolling stock passes a road traffic light at STOP, a light rail/tram signal at STOP or other limit of authority while unattended; or

- > Other rolling stock in use on a light rail/tramway runs away and passes a road traffic light at STOP, a light rail/tram signal at STOP or other limit of authority; or
- > Portion of a light rail/tram movement or self-propelled rolling stock or rolling stock in use on a light rail/tramway breaks away from another portion and runs away and passes a road traffic light at STOP, a light rail/tram signal at STOP or other limit of authority.

This occurrence is a prescribed incident under Regulation 28.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Unattended light rail/tram movement or self-propelled rolling stock runs away and passes a road traffic light at STOP, a light rail/tram signal at STOP or other limit of authority.
- > Other rolling stock in use on a light rail/tramway such as un-propelled maintenance equipment runs away and passes a road traffic light at STOP, a light rail/tram signal at STOP or other limit of authority.
- > Portion of a light rail/tram movement or self-propelled rolling stock or rolling stock in use on a light rail/tramway breaks away from another portion and runs away and passes a road traffic light at STOP, a light rail/tram signal at STOP or other limit of authority.

NOT NOTIFIABLE:

> The runaway of a road-rail vehicle when operating in road configuration.

- > Runaway that results in another incident such as collision or derailment. *Refer to* 3.1 *Derailment* or 3.2 *Collision*.
- > Uncontrolled movement that does not pass a road traffic light at STOP, a light rail/tram signal at STOP or other limit of authority. *Refer to* **3.21** *Runaway*.

3.6 Signalling and other Proceed Authority Systems Irregularity

Signalling failure where vital signalling equipment or circuits do not fail-safe in accordance with the design specifications to provide the intended protection, endangering or having the potential to endanger the safety of railway operations.

Such an irregularity is potentially dangerous and thus, notifiable, if it is not detected by the signalling system and results in a wrong side failure, as follows:

- > a signal shows a less restrictive indication for a train than conditions allow;
- > a set of points are released under traffic conditions when they should be locked;
- > ground frames are released under traffic conditions when it is unsafe to do so;
- > points are incorrectly positioned and/or locked and incorrectly detected;
- > it results in incorrect operation of the interlocking;
- > the presence of a train is not detected;
- > the train crew obtains an erroneous authority due to malfunctioning of the applicable control system; or
- > the train crew obtains a token or staff that should have been withheld by the control system.

Additionally, *equipment* refers to both hardware and software.

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of a Signalling and other Proceed Authority Systems Irregularity <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.6.1 Wayside Signalling System Irregularity
- 3.6.2 In-cab Signalling System Irregularity
- 3.6.3 Token Based System Irregularity
- 3.6.4 Communications Based Train Authority System Irregularity

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Signalling and other Proceed Authority Systems Irregularity <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rail Infrastructure Manager (RIM);
- > Rolling Stock Operator (RSO);
- > Line section;
- > Line type;
- > Kilometerage

- > Train identifier, train type and traction type; and
- > A general description of the occurrence that:
 - Identifies the equipment or system that failed and provides details of the circumstances of the failure; and
 - Identifies the type of Signalling or other Proceed Authority System involved.

3.6.1 *Wayside Signalling System Irregularity* has the following additional mandatory requirements:

- > Signal identifier, where applicable; and
- > Points identifier, where applicable.

OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLE		
Notifiable:	 > Wrong Side Failure of Rail Vehicle Detection Systems. > Wrong Side Failure of In-cab Signalling Systems or Communications Based Train Authority Systems. > Wrong Side Failure of Token Based Systems. 	
Not notifiable:	 Common, predictable failures of points, rail vehicle detection and electrical/electronic interlocking equipment and electrical train staff instruments (i.e. not Wrong Side Failures) including: Signal control circuits, point detection circuits, route setting circuits and non-vital signal indication circuits. Track sequencing alarms, facing points locks, ground fame electric/mechanical release mechanisms and electrical, mechanical or pneumatic control systems. Keys being unable to be withdrawn from lever locks or keys not operating lock. Tokens being unable to be withdrawn or placed back into the instrument. Failure of GPS or other on track electronic rail vehicle detection equipment that prevents a movement authority being issued. Irregularity with the platform guard blue light indicator (a signalling indicator for the guard to proceed). 	

3.6.1 WAYSIDE SIGNALLING SYSTEM IRREGULARITY

Wrong Side Failure of control systems or equipment, fixed structures and components associated with mechanical and semaphore signals, points operating and locking equipment in areas where track circuits or axle counters detect the position of trains.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Failure of control circuits that allow a signal to display a less restrictive indication than track, rolling stock or train traffic conditions allow.
- > Failure of mechanical/ interlocking equipment that allows a route to be set when conditions do not allow for the proposed movement.
- > Train stop or trip arm not correctly detected by the signalling system.
- > Failure of rail vehicle detection circuits to detect the presence of a train when the section of track is occupied.
- > Failure of point detection circuits that allows a signal to be cleared over a set of points which are not correctly set and/or locked for the proposed movement.
- > Release of ground frames when conditions do not allow for the release to be provided.

NOT NOTIFIABLE:

- > Failure of control circuits resulting in a signal displaying a more restrictive aspect than conditions allow.
- > Failure of control circuits which results in irregular aspect displayed in a signal provided the signal in the rear displayed a correct indication.
- > Failure of mechanical interlocking equipment that prevents levers being used to operate signals or points or, allow levers to be restored to normal position.
- > Failure of circuits which prevents a route being set.
- > Failure of non-vital signal indication circuits which results in incorrect or no indication back to the control panel, provided field equipment is responding correctly to vital interlocking.
- > Damaged or broken trip arm which is correctly detected by the signalling system.
- > Failure of rail vehicle detection equipment which causes an unoccupied section of track to show as occupied.
- > Track sequencing alarms, triggered by track circuit showing occupied when there is no train present.
- > Failure of point detection equipment which prevents a signal from being cleared or return to stop, or points to display an in transit indication.
- > Failure of electrical, mechanical or pneumatic control systems that prevent the movement of points to correct position.
- > Failure of facing point locks due to incorrect mechanical adjustment, adjustment of electrical contacts, or damage to lock rod or lock rod clips.
- > Failure of ground frame electric/mechanical release mechanisms.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Train stop or trip arm struck and damaged by rolling stock. *Refer to* **3.2.1.5** *Running Line Collision: With Infrastructure* or **3.2.2.5** *Yard Collision: With Infrastructure.*
- Failure of train crew to respond correctly to an illegal or irregular signal indication. *Refer to* 3.10.1 *Wayside Signalling System Procedure/Rule Breach.*
- > Failure of track detection circuits due to broken rail. *Refer to* **3.11.1** *Broken Rail and Rail Defects.*
- > Failure of detection equipment due to defective track infrastructure. *Refer to* **3.11.4** *Points Irregularity.*
- > Failure of track detection equipment due to foreign objects being placed across rails. *Refer* to **3.20.4.3** *Other Vandalism*.
- > Issues with non-electrical signalling equipment, such as speed boards. *Refer to* **3.11.6** *Civil Infrastructure Irregularity.*

3.6.2 IN-CAB SIGNALLING SYSTEM IRREGULARITY

Wrong Side Failure of In-cab Signalling Systems that permits a movement authority to be given when the status/condition of the infrastructure and the movement of other trains are such that the intended train movement cannot be made safely.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Failure that allows train movement when points and other moveable infrastructure are not in the correct position for the proposed movement.
- > Failure that allows a train to occupy the track over which another train is to pass.
- > Failure that prevents speed restrictions when conditions are no longer safe for the train to operate.

NOT NOTIFIABLE:

> Failure of point, rail vehicle detection and electrical/electronic interlocking equipment that does not lead to an incorrect train movement indication.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Wrong side failure of point, rail vehicle detection or electrical/electronic interlocking equipment. *Refer to* **3.6.1** *Wayside Signalling System Irregularity*.
- > Breach of a Network Rule or Procedure relating to In-cab Based Systems. *Refer to* **3.10.2** *In-cab Signalling System Procedure/Rule Breach.*

3.6.3 TOKEN BASED SYSTEM IRREGULARITY

Wrong Side Failure of Token Based Systems that permits a token to be issued when the condition of the infrastructure and the movement of other trains are such that the intended train movement cannot be made safely.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Failure that allows train crew to obtain a token that should have been withheld by the control system.
- > Failure that allows a ticket to be issued without the token being present.

NOT NOTIFIABLE:

- > Failure of electric train staff instruments that prevent a token from being withdrawn or placed back into the instrument.
- > Failure of point, rail vehicle detection and electrical/electronic interlocking equipment that does not lead to a token or ticket being inappropriately obtained.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Breach of a Network Rule or Procedure relating to Token Based Systems. *Refer to* 3.10.3 *Token Based System Procedure/Rule Breach.*
- > Train crew proceeds into a section without a token for the section. *Refer to* **3.10.3** *Token Based System Procedure/Rule Breach.*
- > Train crew over carries token and proceeds into a section without the correct token for the section. *Refer to* **3.10.3** *Token Based System Procedure/Rule Breach.*
- > Wrong side failure of point, rail vehicle detection or electrical/electronic interlocking equipment. *Refer to* **3.6.1** *Wayside Signalling System Irregularity.*
- > Failure due to token or system line wires being stolen, preventing a token from being withdrawn from the control system. *Refer to* **3.20.5** *Theft.*

3.6.4 COMMUNICATIONS BASED TRAIN AUTHORITY SYSTEM IRREGULARITY

Wrong Side Failure of Communications Based Train Authority Systems that permits a movement authority to be given when the movement of other trains are such that the intended train movement cannot be made safely.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Failure that allows a second authority to be issued when an authority exists for the proposed section.
- > Failure of the system to ensure authority release checks have been followed and allows an authority to be fulfilled when it is not safe to do so.

NOT NOTIFIABLE:

> Failure of point, rail vehicle detection and electrical/electronic interlocking equipment that does not lead to an incorrect train movement authority.

- > Breach of a Network Rule or Procedure relating to Communications Based Systems. *Refer* to **3.10.4** *Communications Based System Procedure/Rule Breach.*
- > Failure of on-board or land based communications systems. *Refer to* 3.19 Communications System Failure.

3.7 Slip, Trip or Fall

Person slips, trips or falls, other than as a result of a health-related condition, on railway premises.

In addition, this category includes similar incidents such as:

- > person or item being worn or carried by a person, that is caught in external rolling stock doors; or
- > person being struck by ticket barriers and suffering an injury (as defined in Section 2.) or fatality as a result.

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of a Slip, Trip or Fall <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.7.1 To/From Rolling Stock
- 3.7.2 Between Platform and Rolling Stock
- 3.7.3 On Rolling Stock
- 3.7.4 On Track
- 3.7.5 On/From Platform/Concourse
- 3.7.6 On/From Escalator/Lift
- 3.7.7 On/From Stairs/Ramps
- 3.7.8 From Structure
- 3.7.9 Caught in Rolling Stock Doors
- 3.7.10 Other Slip, Trip or Fall

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Slip, Trip or Fall <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rail Infrastructure Manager (RIM);
- > Line section;
- > Line type, where applicable; and
- > A general description of the occurrence including, where applicable:

- Details of the circumstances of the fall, including any other parties involved and any related train movements / equipment / platform number.
- > Person type; and
- > Type of casualty, where applicable.

3.7.1 *To/From Rolling Stock*, 3.7.2 *Between Platform and Rolling Stock*, 3.7.3 *On Rolling Stock* and 3.7.9 Caught in Rolling Stock Doors have the following additional mandatory requirements:

- > Rolling Stock Operator (RSO); and
- > Train type, traction type and rolling stock class.

OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLE

Notifiable:	Person, including a railway worker, who slips, trips or falls:	
	 onto, from or inside rolling stock; 	
	 between rolling stock and a platform, loading dock or safety zone; 	
	 on the track, platform, concourse, at the ticket barriers, gates or in other areas of the station; 	
	 on stairs, ramp, escalator, in a lift, or from any structure onto the railway; and 	
	 on or from a non-rail mounted road/rail vehicle (RRV) 	
	 Person or item worn or carried that is caught in external rolling stock doors. 	
	 Person injured as a result of an incident, other than assault, on board a train. 	
	> Person struck by ticket barriers resulting in injury.	
	> Trespasser who slips, trips or falls from riding the rolling stock where they have no authority to be.	
	> Rail safety worker who slips, trips or falls on or from a rolling stock, or on a walkway or shunting path.	
Not notifiable:	Person who slips, trips or falls as a result of a health related condition such as fainting or a seizure (rather than the operation of the rolling stock).	
	 Slip, trip or fall that is not directly associated with railway operations, including: 	
	 in railway offices and station car parks not involved in the operation or movement of rolling stock; in station bus interchanges and on rail replacement bus services; and roads and road overpasses connecting to stations. 	
	> Pedestrian who falls on tram tracks in a shared pedestrian and tram area.	

- > Person who is struck by ticket barriers and does not suffer an injury or fatality as a result.
- Person who slips, trips or falls from a non-rail mounted road/rail vehicle (RRV) and does not suffer an injury or fatality as a result.

3.7.1 TO/FROM ROLLING STOCK

Where a person slips, trips or falls while boarding or alighting a rolling stock.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Person, including a railway worker, who slips, trips or falls:
 - while boarding or alighting a rolling stock;
 - out of a wheelchair or pram while boarding or alighting;
 - on a ramp between the rolling stock and platform while boarding or alighting a the rolling stock;
 - from rolling stock due to
 - the opening of wrong side doors;
 - the rolling stock being off the platform when doors are opened; or
 - any failure of the door locking mechanism; and
 - from a train when passing between cars
 - when jumping from moving rolling stock;
- > Trespasser who slips, trips or falls from riding the rolling stock where they have no authority to be.
- > Rail safety worker who slips, trips or falls from a rolling stock, during the loading, unloading or refuelling process.

NOT NOTIFIABLE:

- > Person who slips, trips or falls as a result of a health condition (such as fainting, heart attack or a seizure) while boarding or alighting rolling stock.
- > Person falls from rolling stock as a result of a health condition (such as fainting, heart attack or a seizure).

- > Rail safety worker who slips, trips or falls while riding a wagon where it is prohibited by the network rules. *Refer to* **3.10.7** *Other Safeworking Rule or Procedure Breach.*
- > Person who is pushed from a train. Refer to 3.20.2.1 Alleged Assault: On Train.

3.7.2 BETWEEN PLATFORM AND ROLLING STOCK

Person falls, or is caught, between a platform, loading dock, or safety zone and rolling stock.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Passenger's leg is trapped between train and platform whilst alighting from train.
- > Rail safety worker falls down between rolling stock and loading dock and is trapped.

NOT NOTIFIABLE:

> Person who slips, trips or falls as a result of a health condition (such as fainting, heart attack or a seizure) and is caught between rolling stock and a platform, loading dock or safety zone.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.7.3 ON ROLLING STOCK

Person slips, trips or falls while travelling on rolling stock.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Passenger trips over luggage on train.
- > Train crew slipping over in locomotive.

NOT NOTIFIABLE:

> Person who slips, trips or falls as a result of a health condition (such as fainting, heart attack or a seizure) while travelling on rolling stock.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Person who slips, trips or falls as a result of being assaulted while travelling on rolling stock. *Refer to* **3.20.2.1** *On Train.*

3.7.4 ON TRACK

Person slips, trips or falls while moving on or about the track.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Person falls on track at level crossing.
- > Passenger slips on track after detraining.

NOT NOTIFIABLE:

- > Pedestrian who falls on tram tracks in a shared pedestrian and tram area.
- > Person who slips, trips or falls as a result of a health condition (such as fainting, heart attack or a seizure) while moving on or about the track.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Person who slips, trips or falls from a platform onto a track. *Refer to* **3.7.5** *On/From Platform/ Concourse.*

3.7.5 ON/FROM PLATFORM/CONCOURSE

Person slips, trips or falls on or from a platform, concourse, at the ticket barriers, gates or in other areas of the station.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Person falls while running along platform to catch train.

NOT NOTIFIABLE:

- > Person who is struck by ticket barriers and does not suffer an injury or fatality as a result.
- > Person who slips, trips or falls as a result of a health condition (such as fainting, heart attack or a seizure) while on a platform, concourse or its surrounds.

- > Person who slips, trips or falls on a platform as a result of being struck by a train mirror, or rolling stock that is out of gauge. *Refer to* **3.2.1.3** *With Person Not on a Level Crossing.*
- > Person who slips, trips or falls as a result of being assaulted while on a platform or in a station. *Refer to* **3.20.2.2** *On Platform.*

3.7.6 ON/FROM ESCALATOR/LIFT

Person slips, trips or falls on or from an escalator or in a lift.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Person slips whilst alighting from escalator.

NOT NOTIFIABLE:

> Person who slips, trips or falls while on an escalator or in a lift, as a result of a health condition such as fainting, heart attack or a seizure (rather than the operation of the rolling stock).

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Person who slips, trips or falls as a result of being assaulted while on an escalator or in a lift. *Refer to* **3.20.2.3** *Other Alleged Assault.*

3.7.7 ON/FROM STAIRS/RAMPS

Person slips, trips or falls on or from the stairs, or ramps.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Person falls whilst running up stairs.

NOT NOTIFIABLE:

> Person who slips, trips or falls while on stairs or ramps, as a result of a health condition such as fainting, heart attack or a seizure (rather than the operation of the rolling stock).

- Person who slips, trips or falls on a ramp between a platform and rolling stock. *Refer to* 3.7.1 *To/From Rolling Stock.*
- > Person who slips, trips or falls on the stairs of rolling stock. *Refer to* **3.7.3** *On Rolling Stock.*
- Person who slips, trips or falls as a result of being assaulted while on stairs/ramps. *Refer to* 3.20.2.3 *Other Alleged Assault.*

3.7.8 FROM STRUCTURE

Person falls from any structure onto railway premises that is associated with railway operations.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Person falls from scaffolding whilst painting in railway station.

NOT NOTIFIABLE:

> Person who falls from any structure onto railway premises as a result of a health condition (such as fainting, heart attack or a seizure).

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Person who slips, trips or falls from a platform onto a track. *Refer to* **3.7.5** *On/From Platform/ Concourse.*
- > Person who is pushed from any structure. Refer to 3.20.2.3 Other Alleged Assault.

3.7.9 CAUGHT IN ROLLING STOCK DOORS

Person or item worn or carried that is caught in external rolling stock doors or where a person is trapped between rolling stock doors and dragged by the rolling stock.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Person who is caught in external rolling stock doors when boarding or alighting from rolling stock at a station.
- > Passenger is trapped between the external rolling stock doors and dragged by the rolling stock.
- > Trolley, mobility aid, wheelchair, pram or item being worn or carried by a person that is caught in external rolling stock doors.

NOT NOTIFIABLE:

This section is intentionally left blank.

- Person who slips, trips and falls while boarding or alighting. *Refer to* 3.7.1 *To/From Rolling Stock.*
- > Person who is caught in rolling stock internal doors such as doors between carriages. *Refer* to **3.7.10** *Other Slip, Trip or Fall.*
- > Passenger that holds train doors open. *Refer to* **3.20.4.3** *Other Vandalism.*

3.7.10 OTHER SLIP, TRIP OR FALL

Slip, trip or fall that does not fall into one of the above subcategories or person who is injured as a result of an on-train incident, which is not a slip, trip or fall.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Person is injured as a result of trapping fingers in parts of the train other than external rolling stock doors.
- > Person who slips, trips or falls in a waiting room, toilet or a part of the station other than the platform, concourse or its surrounds.
- > Person who is struck by ticket barriers and suffers an injury or fatality as a result.
- > Person who slips, trips or falls from a non-rail mounted road/rail vehicle (RRV) and suffers a serious injury or fatality as a result.
- > Rail safety worker who slips, trips or falls on a walkway or shunting path, such as around yards and refuelling.

NOT NOTIFIABLE:

- > Person who is struck by ticket barriers and does not suffer an injury or fatality as a result.
- > Person who slips, trips or falls from a non-rail mounted road/rail vehicle (RRV) and does not suffer a serious injury or fatality as a result.
- > Person who slips, trips or falls as a result of a health condition (such as fainting or a seizure).

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.8 Load Irregularity

Situation, where the load causes damage; or endangers or has the potential to endanger the safety of railway operations, persons and/or premises.

This category is not applicable to passenger trains.

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of a Load Irregularity <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.8.1 Door Open
- 3.8.2 Out of Gauge
- 3.8.3 Load Shift
- 3.8.4 Uneven Distribution of Load
- 3.8.5 Loose Load Fastening
- 3.8.6 Other Load Irregularity

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Load Irregularity <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rolling Stock Operator (RSO);
- > Line section;
- > Line type;
- > Kilometerage;
- > Train type, traction type and rolling stock class; and
- > A general description of the occurrence including:
 - Details of the circumstances of the irregularity, describing the chain of events from loading to discovery.
 - The type of load and container or rolling stock involved.

OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLE		
Notifiable:	Open or incorrectly secured doors, hatches, gates or fastenings that could result in the loss of load or a collision.	
	Load that is placed or shifted to become wider, higher or longer than the approved dimensions for the line over which it operates.	
	> Load that moves, spills or falls from or on rolling stock.	
	> Uneven distribution of a load on rolling stock.	
	> Load fastening irregularity of a train.	
Not notifiable:	> Unsecured seals on a container not carrying dangerous goods.	
	> Passenger overloading.	
	> Trains with less wagons than specified on the consist.	
	> Trains with more wagons than on the consist, where the extra wagons are not carrying dangerous goods.	
	> Tautliner or curtainsider with a side curtain open (and no other loading irregularity identified).	

3.8.1 DOOR OPEN

Door, hatch or gate that is incorrectly secured and could result in the loss of load or a collision.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Open container doors.
- > Open bottom discharge door on a hopper wagon.
- > Unsecured gate on a flat rack container.

NOT NOTIFIABLE:

> Unsecured seals on a container not carrying dangerous goods.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Where a loss of load has occurred. Refer to 3.8.3 Load Shift.
- > Unsecured seals on a container carrying dangerous goods. *Refer to* **3.8.6** *Other Load Irregularity.*

3.8.2 OUT OF GAUGE

Load that is placed, or any load that shifts, to become wider, higher or longer than the approved dimensions for the lines over which it operates.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Piece of timber protruding from wagon on freight train resulting in load being outside of approved dimensions.

NOT NOTIFIABLE:

> Out of gauge load that has formal approval and special conditions for the transport of that load provided it remains compliant with those conditions.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.8.3 LOAD SHIFT

Load that moves, spills or falls on or from rolling stock.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Grain spills from container onto track during journey.
- > Discovery upon arrival that load has moved to an extent that is potentially dangerous.
- > Fall of container from the train consist.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Where a shifted load has become out of gauge. Refer to 3.8.2 Out of Gauge.

3.8.4 UNEVEN DISTRIBUTION OF LOAD

Uneven distribution of load on rolling stock that results in a restriction being placed on their operation, or the non-compliance with loading procedures.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Loading of containers, such that the maximum centre of gravity (height) limit is exceeded.
- > Uneven loading of a coal, wheat or ballast wagon that has the ability to affect the vehicle handling dynamics.
- > Liquids being carried without baffling where movement of the load has the potential to result in instability.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Container not sitting flat owing to twist locks being disengaged. *Refer to* **3.8.6** *Other Load Irregularity.*
- > Dangerous good which is not loaded in compliance with legislation or the Australian Dangerous Goods Code. Refer to **3.9.1** On Rolling Stock.

3.8.5 LOOSE LOAD FASTENING

Load fastening irregularity on rolling stock.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Chains, ropes or tarpaulins dragging or hanging dangerously.
- > Loss of dunnage (packing material) that results in retaining devices loosening.
- > Loads not being restrained in accordance with the Rail Infrastructure Manager's procedures.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Unlocked twist locks. Refer to 3.8.6 Other Load Irregularity.

3.8.6 OTHER LOAD IRREGULARITY

Loading irregularity that is not classifiable under any of the above subcategories.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Overloaded freight vehicle on rolling stock.
- > Loading that causes a coupling misalignment.
- > Incident where twist locks are found to be unlocked or disengaged.

NOT NOTIFIABLE:

This section is intentionally left blank.

- > Trains with more wagons than on the consist, where the additional wagons are carrying dangerous goods. *Refer to* **3.9.1** *On Rolling Stock*.
- > Incorrect marshalling of wagons, such as train consist in the incorrect order. *Refer to* **3.10.7** *Other Safeworking Rule or Procedure Breach.*

3.9 Dangerous Goods

Occurrence involving dangerous goods that endangers or has the potential to endanger the safety of railway operations, people and/or premises.

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of Dangerous Goods <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.9.1 On Rolling Stock
- 3.9.2 Off Rolling Stock

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of Dangerous Goods <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Line section;
- > Line type, where applicable;
- > Kilometerage;
- > Class of Dangerous Goods; and
- > A general description of the occurrence including, where applicable:
 - Details of the circumstances of the incident, including the chain of events from the loading of the dangerous goods (if on train) to the discovery of their spill/release.
 - Details of any container or other vessels involved in the occurrence.
 - Whether the incident occurred on a train or not on a train.
 - Whether the Dangerous Good is associated with an Occurrence, the ADG class and/or description of the type of dangerous goods involved.

3.9.1 On Rolling Stock has the following additional mandatory requirements:

- > Rolling Stock Operator (RSO); and
- > Train type, traction type and rolling stock class.

3.9.2 Off Rolling Stock has the following additional mandatory requirement:

> Rail Infrastructure Manager (RIM).

OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLE		
Notifiable:	Incident in which the Australian Dangerous Goods Code is not adhered to.	
	 Incident that results in the loss of containment of a dangerous good either on or off rolling stock. 	
Not notifiable:	> A fuel spill during refuelling or from the refrigeration unit of a container.	

3.9.1 ON ROLLING STOCK

Any dangerous goods occurrence on moving or stationary rolling stock.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > A loss of containment of a dangerous good.
- > Incorrect placarding, consignment, loading, documentation or segregation of a dangerous good, i.e. not in accordance with the Australian Dangerous Goods Code.

NOT NOTIFIABLE:

> A fuel spill during refuelling or from the refrigeration unit of a container.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Derailment involving rolling stock carrying dangerous goods where there is no loss of containment. *Refer to* **3.1** *Derailment*.
- > Unsecured seal on a container with dangerous goods. *Refer to* **3.8.6** *Other Load Irregularity.*
- > Leak of fuel, oil or hydraulic fluid from rolling stock. *Refer to* **3.12.6** *Other Rolling Stock Irregularity.*
- > Escape of a dangerous good resulting in a fire or explosion. Refer to 3.14 Fire or 3.15 Explosion.
- > Theft of a dangerous good. Refer to 3.20.5 Theft.
- > Release or explosion of dangerous goods due to an act of terrorism. *Refer to* 3.20.3 *Terrorism/Sabotage.*

3.9.2 OFF ROLLING STOCK

Any dangerous goods occurrence not on rolling stock.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Loss of container in a yard or siding.
- > Dangerous goods spill in a railway station that necessitates evacuation.
- > Leak from a gas cylinder on a worksite.
 - Dangerous goods incident on neighbouring land that results in the cessation of railway operations.

NOT NOTIFIABLE:

> Fuel spill during refuelling or from the refrigeration unit of a container.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Escape of dangerous goods resulting in a fire or explosion. *Refer to* 3.14 *Fire or* 3.15 *Explosion*.

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3.10 Safeworking - Network Rule or Procedure Breach

Any breach of a Network Rule, System or Procedure that sets out the requirements to the provision of safe rail operations.

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of a Safeworking (Network) Rule or Procedure Breach <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.10.1 Wayside Signalling System Procedure/Rule Breach
- 3.10.2 In-cab Signalling System Procedure/Rule Breach
- 3.10.3 Token Based System Procedure/Rule Breach
- 3.10.4 Communications Based System Procedure/Rule Breach
- 3.10.5 Track Work Procedure/Rule Breach
- 3.10.6 Work Scheduling Practice/Procedure Breach
- 3.10.7 Other Safeworking Rule or Procedure Breach

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Safeworking (Network) Rule or Procedure Breach <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rolling Stock Operator (RSO);
- > Rail Infrastructure Manager (RIM);
- > Line section;
- > Line type; and
- > A general description of the occurrence including, where applicable:
 - Details of the circumstances of the rule breach or deficiency, including a description of the chain of events leading to and following the breach;
 - Where associated with the train control system, a description of the type of train control system in force; and
 - Identification of applicable safeworking procedure or rule breached.

3.10.1 Wayside Signalling System Procedure/Rule Breach, 3.10.3 Token Based System Procedure/Rule Breach and 3.10.5 Track Work Procedure/Rule Breach

have the following additional mandatory requirement:

> Kilometerage.

3.10.1 Wayside Signalling System Procedure/Rule Breach and 3.10.7 Other Safeworking Rule or Procedure Breach have the following additional mandatory requirements:

- > Signal identifier, where applicable; and
- > Points identifier, where applicable.

3.10.2 In-cab Signalling System Procedure/Rule Breach, 3.10.3 Token Based System Procedure/Rule Breach, 3.10.4 Communications Based System Procedure/Rule Breach and 3.10.7 Other Safeworking Rule or Procedure Breach have the following additional mandatory requirements:

> Train type, traction type and rolling stock class, where applicable.

3.10.5 *Track Work Procedure/Rule Breach* has the following additional mandatory requirements:

> Train/network control centre governing worksite protection.

3.10.6 *Work Scheduling Practice/Procedure Breach* has the following additional mandatory requirements:

> The details of any action taken regarding the affected person.

OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLE

Notifiable:	>	Breach of a safeworking rule or procedure whether intentional or unintentional.
Not notifiable:	>	Operational errors that result in trains being delayed.

3.10.1 WAYSIDE SIGNALLING SYSTEM PROCEDURE/RULE BREACH

Breach of a safeworking rule or procedure that is associated with wayside signalling systems.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Signal incorrectly set by Rail Safety Worker.
- > Points incorrectly set by Rail Safety Worker.
- > An interlocking incorrectly set by Rail Safety Worker.
- > Rail Safety Worker has not adhered to signs/signals prescribing the movement of rolling stock.

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Signal Passed At Danger. *Refer to* **3.4.6 3.4.13** *Signal Passed At Danger.*
- > A wrong side failure of a wayside signalling system. *Refer to* **3.6.1** *Wayside Signalling System Irregularity.*

3.10.2 IN-CAB SIGNALLING SYSTEM PROCEDURE/RULE BREACH

Breach of a safeworking rule, or procedure where in-cab signalling safeworking systems are used.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

Breach of a rule associated with:

- > Positive Train Control Systems (PTC, ATP);
- > Advanced Train Management Systems (ATMS);
- > In-cab tram control and warning systems; or
- > Automatic Warning and Control Systems (AWS).

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Any irregularity in the in-cab signalling system. *Refer to* **3.6.2** *In-cab Signalling System Irregularity.*

3.10.3 TOKEN BASED SYSTEM PROCEDURE/RULE BREACH

Breach of a safeworking rule or procedure where token based safeworking systems are used.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

Breach of:

- > Electric Staff system;
- > Staff and Ticket system;
- > Pilot Staff Working; or
- > Block Telegraph Working.
- > Half Pilot Key and Pilot Key Working.

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Rail Safety Worker exceeding authority by entering a section without a token *Refer to* 3.4.6 Signal Passed at Danger A1 or 3.4.9 Signal Passed at Danger A4.

3.10.4 COMMUNICATIONS BASED SYSTEM PROCEDURE/RULE BREACH

Breach of a Safeworking Rule or Procedure where communications based safeworking systems are used.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

Breach of:

- > Paper-based or electronic safeworking forms for the purpose of authorisation of trackwork and rolling stock
- > Manual Authority system (TOW);
- > Electronic Authority system (EAS);
- > Special Proceed Authority (SPA); or
- > Manual Block Working.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Rolling stock that exceeds the limits of authority. *Refer to* **3.4** *Signal Passed at Danger.*
- > Irregularity within communications based system. Refer to 3.6.4 Communications Based System Irregularity.

3.10.5 TRACK WORK PROCEDURE/RULE BREACH

Breach of a Safeworking Rule or Procedure used for worksite protection.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > A breach of a safeworking rule or procedure used for worksite protection by staff undertaking track work, including:
 - Workers failing to clear the track in accordance with procedures or instructions
 - A breach associated with walking in the danger zone
 - Workers accessing the track prior to being instructed to do so

- Work being conducted after the authority to work has ceased.
- > A breach of a safeworking rule or procedure used for worksite protection associated with lookouts or hand signallers, including:
 - Performing other duties, not remaining at post, or placed in the wrong location
 - Providing an incorrect warning or signal
 - Authorising a train to proceed when unsafe to do so
 - Failing to comply with minimum warning times.
- > A breach of a safeworking rule or procedure used for worksite protection associated with the function responsible for safety and protection of personnel at a track worksite and ensuring that the site is safe for the operation of trains (e.g. protection officers, worksite supervisors), including:
 - Being absent from duty
 - Not ensuring a safe place for track workers
 - Setting up at the wrong location
 - Handing back track whilst track still obstructed, while work continues, or otherwise unsafe.
- > A breach of a safeworking rule or procedure used for worksite protection associated with the function responsible for managing train paths and issuing occupancy authorities (e.g. Network Control Officer), including:
 - Wrong signal set to stop or selected signal does not protect the work area
 - Applying protection at the wrong location, in a segment free from other authorities, or issuing a conflicting authority
 - Terminating an occupancy prematurely
 - Not identifying a train between a blocking signal and worksite, or an error in confirming a train has passed a worksite.
- > A breach of a safeworking rule or procedure used for worksite protection associated with train movements, including:
 - A train travelling too fast through designated work area
- > A breach of a safeworking rule or procedure used for planning worksite protection, Including:
 - A failure of physical protection for a worksite, including:
 - Failure of Audible Warning Devices
 - Failure of lighting or signage providing demarcation for a work area
 - Failure of equipment in a network control centre to maintain a block for a worksite.

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

A track vehicle working within a worksite exceeds its limits of authority. *Refer to* 3.4.6 – 3.4.13 *Signal Passed at Danger*.

> A train enters designated work area without authority. *Refer to* **3.4.6 – 3.4.13** *Signal Passed at Danger.*

Note:

Serious breaches of track work procedure or rule are prescribed incidents and are immediately notifiable under Reg. 28(7)(a). A breach is a prescribed incident when it results in, or has a reasonable possibility of an impact between:

- > rolling stock and persons conducting track work
- > rolling stock and equipment associated with, or being used for track work or
- > moveable plant, machinery or equipment and persons within an area in which track work is being conducted.

These prescribed incident requirements do not apply in Western Australia.

For New South Wales specific prescribed incidents refer to Reg. 28(7)(b).

3.10.6 WORK SCHEDULING PRACTICE/ PROCEDURE BREACH

Breach of the work scheduling practices and procedures within the rail transport operator's fatigue risk management program.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Breaches of the documented scheduling practices or procedures.
- > Rail Safety Work has worked over the maximum hours as defined within the rail transport operator's fatigue risk management program.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.10.7 OTHER SAFEWORKING RULE OR PROCEDURE BREACH

Breach of a network rule, system or procedure that does not fit into one of the above subcategories.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Breach of the network rule, system or procedure that does not fit into one of the above subcategories.

NOT NOTIFIABLE:

This section is intentionally left blank.

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NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.11 Track and Civil Infrastructure Irregularity

Irregularity in the track or civil infrastructure that endangers or has the potential to endanger the safety of railway operations, persons and/or premises.

This includes both defects detected as part of maintenance inspections and outside of maintenance inspections.

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of a Track and Civil Infrastructure Irregularity <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.11.1 Broken Rail and Rail Defects
 - 3.11.1.1 Detected Outside of Maintenance Inspections
 - 3.11.1.2 Maintenance Inspection Detected
- 3.11.2 Misaligned Track
- 3.11.3 Spread Track
- 3.11.4 Points Irregularity
- 3.11.5 Track Obstruction
 - 3.11.5.1 Natural Object
 - 3.11.5.2 Railway-Related Object
 - 3.11.5.3 Other Object
- 3.11.6 Civil Infrastructure Irregularity
- 3.11.7 Bridge Strike
- 3.11.8 Other Track Infrastructure Irregularity

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Track or Civil Infrastructure Irregularity <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rail Infrastructure Manager (RIM);
- > Line section;
- > Line type, where applicable;

- > Kilometerage; and
- > A general description of the occurrence including, where applicable:
 - Details of the nature of the irregularity, the component which has failed or is damaged and the circumstances of its discovery;
 - Details of any remedial actions taken to manage the irregularity;
 - The method or manner in which the irregularity was detected; and
 - In the case of an obstruction, the type of obstruction.

3.11.4 *Points Irregularity* has the following additional mandatory requirement:

> Points identifier.

3.11.7 *Bridge Strike* has the following additional mandatory requirement:

> Road vehicle type, where applicable.

OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLE		
Notifiable:	Rail irregularity or failure of a civil component that causes a stoppage of rolling stock or a speed restriction being imposed that is lower than currently in force including breaks, cracks and corrosions in the rail.	
	 Obstruction of the running line by an object causing a stoppage of rolling stock. 	
	Structural defect in a bridge, viaduct, culvert or tunnel, station infrastructure, or infrastructure used for the movement of persons that endangers the safety of railway operations, persons and/or premises.	
	Occurrence of a road vehicle or vessel striking a rail bridge (including the load carried by the road vehicle or vessel striking the bridge).	
Not notifiable:	> Damage to non-railway infrastructure that does not impact the safety of railway operations, such as the breakage of a stormwater pipe.	
	> Failed insulation material on a mechanical or glued insulated joint.	
	> Rail defects caused as a result of a derailment.	
	> Rough riding due to vertical and horizontal misalignments of track that do not result in a rolling stock stoppage or speed restriction.	
	 Malfunction of point motors, electrical point detection circuits, control systems and equipment and point signalling operating and locking equipment. 	
	 Obstruction of switch movement caused by lack of lubrication or ice on chair, other mechanical failure or obstruction in points. 	
	Services temporarily suspended due to flooding but resumed when it is determined flooding will not endanger railway operations.	
	> Flooding of a line that is temporarily or permanently closed.	
	 Station lift or escalator that is broken and does not result in a person slipping, tripping or falling or becoming trapped. 	

3.11.1 BROKEN RAIL AND RAIL DEFECTS

Rail irregularity that causes a stoppage of rolling stock, or a speed restriction being imposed that is lower than that currently in force.

This irregularity may be detected:

- during maintenance inspections (including Speno testing, Kraut Kramer testing, track patrols and programmed maintenance inspections); or
- > outside of maintenance inspections, such as by a rail safety worker or other external parties.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > A break through the rail (including the rail welds).
- > A break that causes a piece of rail to become detached.
- > A break or crack in the wing rail or the nose of a rail crossing.
- > Internal vertical or horizontal cracks found during ultrasonic testing.
- > Broken or cracked fishplates on a mechanical or insulated rail joint.
- > Broken or missing bolts in a mechanical or insulated rail joint caused by the joint pulling apart.
- > Loss of wheel adhesion that damages the surface of the rail.
- > Rolling contact fatigue causing surface or gauge corner cracking.
- > Rail surface contamination that affects wheel or rail adhesion when braking.
- > Corrosion on the foot of a rail.

NOT NOTIFIABLE:

- > Failed insulation material on a mechanical or glued insulated joint.
- > Rail defects caused as a result of a derailment.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Rail head contamination that causes a track circuit not to detect the presence of a train. *Refer to* **3.6.1** *Wayside Signalling System Irregularity.*

3.11.1.1 Detected Outside of Maintenance Inspections

Broken rails detected outside of normal maintenance inspections.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Broken rails detected by train crews.
- > Broken rails detected by signalling system fault.
- > Broken rails reported by members of public.

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.11.1.2 Maintenance Inspection Detected

Broken rails detected as part of normal maintenance inspections.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Broken rails detected by track inspector.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.11.2 MISALIGNED TRACK

Vertical or horizontal misalignment of track, which results in a stoppage of rolling stock, or a speed restriction being imposed lower than that already in force.

This misalignment may be detected:

- > by normal maintenance procedures (including AK Car testing, track patrols and programmed maintenance inspections); or
- > outside of maintenance inspections such as the rail safety worker or other external parties.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Rough riding due to heat buckles or track pull in during cold weather or other defects that cause horizontal track movement.
- > Rough riding due to mud/bog holes, incorrect super elevation, long and short twists or other defects that cause vertical track movement.

NOT NOTIFIABLE:

> Rough riding due to vertical and horizontal misalignments of track that do not result in a rolling stock stoppage or speed restriction.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.11.3 SPREAD TRACK

Where the gauge between the rails is sufficiently wide to cause a stoppage of rolling stock or the imposition of other restrictions.

This may be detected by:

- > normal maintenance procedures (including AK Car testing, track patrols and programmed maintenance inspections); or
- > outside of maintenance inspections such as the rail safety worker or other external parties.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Where rails are wide to gauge due to incorrect installation, defective or worn rail fastenings or sleepers.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.11.4 POINTS IRREGULARITY

Refers to where:

- > a failure of a civil component of points causes a stoppage of rolling stock or a speed restriction being imposed that is lower than that already in force; or
- > points are trailed through by rolling stock where points are not correctly set for the movement.

This may be detected:

- > by normal maintenance procedures (including track patrols and programmed maintenance inspections); or
- > outside of maintenance inspections, such as by the rail safety worker or other external parties

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Horizontal or vertical movement of the switch.
- > Damaged, crippled or worn switch blade(s).
- > Damaged or worn stock rail.
- > Damaged, worn or incorrectly adjusted heel block.
- > Loose or broken rail brace chair bolts or broken rail brace chairs.

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- > Broken, damaged or disconnected stretcher bars.
- > Damage caused when points are trailed through by rolling stock due to points incorrectly set for movement.

- Malfunction of point motors, electrical point detection circuits, control systems and equipment and point signalling operating and locking equipment where correct signal indication for the condition is maintained.
- > Obstruction of switch movement caused by lack of lubrication or ice on chair, other mechanical failure or obstruction in points.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Points incorrectly set where this constitutes a wrong side failure. *Refer to* **3.6.1** *Wayside Signalling System Irregularity.*

3.11.5 TRACK OBSTRUCTION

Any object or damage that blocks or interferes with track and civil infrastructure.

3.11.5.1 Natural Object

Where an object that is part of the natural environment obstructs the running line causing a stoppage of rolling stock or a speed restriction being imposed lower than that already in force.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Any track obstruction due to:
 - embankment or land slips;
 - rock falls;
 - flooding or flood alerts; and
 - fallen trees or overgrown vegetation.

NOT NOTIFIABLE:

- > Services that are temporarily suspended due to flooding but resumed when it is determined the flooding will not endanger railway operations.
- > Flooding of a line that is temporarily or permanently closed.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Collision of rolling stock with natural objects. Refer to 3.2.1.7.1 Running Line Collision: Natural Object or 3.2.2.7.1 Yard Collision: Natural Object.
- > Track obstruction due to a railway-related object. *Refer to* 3.11.5.2 *Railway-Related Object*.
- > Track obstruction due to an object that is not part of the natural environment or normal railway operations. *Refer to* **3.11.5.3** *Other Object*.

3.11.5.2 Railway-Related Object

Where an object that is a component of rail infrastructure or rolling stock obstructs the track causing a stoppage of rolling stock or a speed restriction being imposed lower than that already in force.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Sleepers, rails or rail fastenings foul of the line.
- > Building or bridge infrastructure that is detached and fouling the line.
- > Equipment detached from rolling stock (such as seats, brake rigging and brake blocks).

NOT NOTIFIABLE:

> Ballast on or beside the track.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- Collision of rolling stock with railway-related objects. *Refer to* 3.2.1.7.2 *Railway-Related Object* or 3.2.2.7.2 *Railway-Related Object.*
- Collision of rolling stock with maintenance equipment left foul of the line. Refer to 3.2.1.7.3 Other Object or 3.2.2.7.3 Other Object.
- > Track obstruction due to a natural object. Refer to 3.11.5.1 Natural Object.
- > Track obstruction due to an object that is not part of the natural environment or normal railway operations. *Refer to* **3.11.5.3** *Other Object*.
- > Pieces of ballast being placed across a rail. *Refer to* **3.20.4** *Vandalism*

3.11.5.3 Other Object

Where an object that originates externally to the rail network obstructs the track causing a stoppage of rolling stock or a speed restriction being imposed lower than that already inforce.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Non-railway-related objects foul of the line.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- Collision of rolling stock with a road vehicle (other than at a level crossing). Refer to 3.2.1.6 With Road Vehicle Not on a Level Crossing or 3.2.2.6 With Road Vehicle Not on a Level Crossing.
- Collision of rolling stock with a natural object left foul of the track. *Refer to* 3.2.1.7.1 *Natural Object* or 3.2.2.7.1 *Natural Object.*
- > Collision of rolling stock with railway-related objects. *Refer to* 3.2.1.7.2 *Railway-Related Object* or 3.2.2.7.2 *Railway-Related Object*.
- Collision of rolling stock with a non-railway related object left foul of the track. *Refer to* 3.2.1.7.3 Other Object or 3.2.2.7.3 Other Object.
- > Collision of rolling stock with a road vehicle at a level crossing. *Refer to* **3.3.1** *Collision with Road Vehicle.*

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3.11.6 CIVIL INFRASTRUCTURE IRREGULARITY

Refers to:

- Structural defect in station infrastructure or infrastructure used for the movement of persons that endangers, or has the potential to endanger, the safety of railway operations, people and/or premises; or
- > Structural defect in a bridge, viaduct, culvert or tunnel that causes a stoppage of rolling stock or a speed restriction being imposed lower than that already in force.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Defects in platforms and overhead pedestrian bridges at a station.
- > Structural or mechanical defects in a lift, escalator or stairs that causes a person to fall or become trapped.
- > Failure of electrical or mechanical lift control and brake mechanisms that cause an uncontrolled descent of the lift.
- > Failure of any structural component(s) of a railway bridge over a road or waterway, including ballast falling from the bridge.
- > Failure of structural component(s) of a road bridge over a railway, including objects falling off the bridge.
- > Failure of structural component(s) of viaducts or culverts.
- > Failure of structural component(s) of a tunnel.
- > Failure of an embankment that affects the track formation.
- > Complete or partial collapse of any scaffold, including any slung or suspended scaffold.

NOT NOTIFIABLE:

> Station lift or escalator that is broken and does not result in a person slipping, tripping or falling or becoming trapped.

- > Damage to level crossing infrastructure. *Refer to* **3.3.4** *Level Crossing Equipment Damage* /*Interference.*
- > Damage to signalling infrastructure. *Refer to* **3.6** *Signalling and Other Proceed Authority Systems Irregularity.*
- > Slip, trip or fall of a person while on an escalator or accessing or egressing a lift during normal operations (with no associated failure). *Refer to* **3.7.6** *On/From Escalator/Lift.*
- > Damage to electrical infrastructure. *Refer to* **3.13** *Electrical Infrastructure Irregularity.*
- > Wilful and unlawful damage or defacement of railway infrastructure. *Refer to* **3.20.4** *Vandalism.*
- > Warning boards and lights not correctly installed. *Refer to* **3.11.8** *Other Track Infrastructure Irregularity.*

3.11.7 BRIDGE STRIKE

Incident where a road vehicle or vessel strikes a rail bridge.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Rail bridge being struck by a road vehicle or its load.
- > Rail bridge over a waterway being struck by a vessel or its load.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

Bridge strike by a train or rolling stock. Refer to 3.2.2.5 With Infrastructure.

3.11.8 OTHER TRACK INFRASTRUCTURE IRREGULARITY

Track infrastructure irregularity that is not classifiable under one of the above subcategories.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Warning signs not being installed or incorrectly installed during hot weather.
- > TSR warning boards and lights not being installed or incorrectly installed where required.
- > Defects in level crossing surfaces that affect the safe passage of road vehicles and pedestrians.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.12 Rolling Stock Irregularity

Rolling Stock Irregularity that endangers or has the potential to endanger the safety of railway operations and/or people.

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of a Rolling Stock Irregularity <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.12.1 Train Parting
- 3.12.2 Wheel/Axle Failure
- 3.12.3 Defective Bearing
- 3.12.4 Faulty Passenger Train Door
- 3.12.5 Braking System
- 3.12.6 Other Rolling Stock Irregularity

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Rolling Stock Irregularity <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rolling Stock Operator (RSO);
- > Line section;
- > Line type;
- > Train type, traction type and rolling stock class; and
- > A general description of the occurrence including, where applicable:
 - Details of the nature of the irregularity, the rolling stock component which has failed or is damaged and the circumstances of its discovery; and
 - Remedial actions to manage the irregularity.

3.12.1 *Train Parting* has the following additional mandatory requirement:

> Kilometerage.

OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLE		
Notifiable:	 Defects or failures which result in rolling stock being taken out of service, including during roll-by, train preparation and pre-trip inspections. Unintentional mechanical separation (uncoupling) of rolling stock. 	
Not notifiable:	> Any defect or failure detected and corrected during a normal maintenance program (with the exception of those items identified in section 3.12.6).	

3.12.1 TRAIN PARTING

Unintentional mechanical separation (uncoupling) of rolling stock.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Failure of draw gear assembly components.
- > Coupler not engaged correctly and released while train is in transit.
- > Release linkage struck by a foreign object.

NOT NOTIFIABLE:

- > Uncoupling of rolling stock during a pull away test.
- > Uncoupling of pneumatic or electrical connectors with no mechanical separation of the rolling stock.
- > Separation of rolling stock in the dumping process in a rotary dumper.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Uncoupling of rolling stock due to a person interfering with and releasing the coupling. *Refer* to **3.20.4.3** *Other Vandalism*.

3.12.2 WHEEL/AXLE FAILURE

Failures of a wheel or axle which occurs while the vehicle is in service that results in the vehicle being taken out of service, either immediately or at the end of its run, or a speed restriction being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Breaks or cracks within any part of a wheel.
- > A tyre is loose and/or has moved on the wheel.
- > A wheel that has moved on its axle.
- > Flat spots, scale or wheel flange on the surface of the tread or tyre.
- > Axle that is unable to rotate due to a failure of the driver mechanism (a motor or gearbox).

- > Axle breaks or shears due to flaws or cracks within the axle.
- > Screwed journals
- > Axle that is bent or out of alignment within its housing.
- > Scouring of the axle due to brake rigging falling onto the axle.

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.12.3 DEFECTIVE BEARING

Defects or failures of an axle bearing which can lead to a catastrophic failure, which occurs while the vehicle is in service and results in the vehicle being taken out of the service immediately, or at the end of its run, or a speed restriction being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Bearing defect detected by trackside monitoring equipment.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Axle that is unable to rotate due to the failure of the driver mechanism (motor or gearbox). *Refer to* **3.12.2** *Wheel/Axle Failure.*
- > Seized bearings causing the journal to screw from the axle. *Refer to* **3.12.2** *Wheel/Axle Failure.*

3.12.4 FAULTY PASSENGER TRAIN DOOR

Failures of passenger train doors occurs while the vehicle is in service and results in the vehicle being taken out of service, either immediately or at the end of its run, or a speed restriction being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Defective doors between coaches, gangways or diaphragm plates.
- > Central locking system that does not lock all doors when activated.
- > Traction interlocking that does not prevent train movement with door(s) open.
- > Traction interlocking indication that is not correctly displayed, with the driver or guard unaware that the interlocking is defective.

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> Where central interlocking is not installed, doors that do not close correctly or are not secured when the train is in motion.

NOT NOTIFIABLE:

> Door(s) that do not open or close when commanded but the train does not proceed.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Passenger slipping or falling as a result of doors incorrectly opening on the wrong side of the train, or when the train is not on the platform. *Refer to* **3.7.1** *To/From Rolling Stock.*
- > Doors incorrectly opening on the wrong side of the platform, or when the train is not completely in the platform. *Refer to* **3.10.7** *Other Safeworking Rule or Procedure Breach.*
- > Digitised voice announcements (DVA) systems that fail to operate causing passengers to be caught in doors. *Refer to* **3.19** *Communications System Failure.*

3.12.5 BRAKING SYSTEM

Failures in a rolling stock or train braking system, which occurs while the vehicle is in service and results in the vehicle being taken out of service immediately or at the end of its run, or a speed restriction being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Failures or defects that prevent the application or release of train brakes, including handbrake.
- > Any defect that causes activation of brake and bearing temperature (BBT) alarms.
- > Brake slide control unit failure that causes a fitted train to overshoot a platform.
- > ECP loss of air where it drops and a penalty application is made.

NOT NOTIFIABLE:

- > Air leaks that do not affect the operation of the train.
- > Brakes on wagon(s) cut out in accordance with the operator's procedures.
- > Emergency brake application due to cross-talk between trains fitted with ECP.
- > Percentage indications that do not result in a penalty application.
- > Brakes applied due to a loss of air caused by broken or defective brake/vacuum hoses.

- > Train handbrake that is not correctly applied. *Refer to* **3.10.7** *Other Safeworking Rule or Procedure Breach.*
- > Handbrake that is released by unauthorised persons. *Refer to* **3.20.4.3** *Other Vandalism.*

3.12.6 OTHER ROLLING STOCK IRREGULARITY

Other rolling stock irregularities, failures and defects that occur while the vehicle is in service or that is detected during maintenance, that result in the vehicle being taken out of service immediately or at the end of its run, or operating restrictions being imposed.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Rolling stock found with a twisted, broken, cracked or corroded body or sub-frame.
- > Failure of a rolling stock pantograph mechanism that caused it to become entangled in the overhead wiring.
- > Any component (trip gear, couplers, brake gear etc.) that detaches and falls from rolling stock or strikes the track or overhead wiring infrastructure.
- > King pin on a bogie that is not correctly engaged or not centred on a bogie.
- > Breaks or fracture within a bogie frame.
- > Any defective vigilance control or other driver safety system.
- > Electrical arcing or fusing in or any part of a train.
- > Defect that causes an electric shock to a passenger or member of the train crew.

NOT NOTIFIABLE:

This section is intentionally left blank.

- > Brake gear that detaches and falls onto an axle. *Refer to* **3.12.2** *Wheel/Axle Failure.*
- > Rolling stock windscreen that is struck by thrown objects. *Refer to* **3.20.4.1.1** *Struck Train.*
- > Graffiti on a driver's cab window where it occurs in a stabling yard or whilst a train is in transit. *Refer to* **3.20.4.2** *Graffiti.*
- Rolling stock car or door window broken or removed by a person on the train. *Refer to* 3.20.4.3 *Other Vandalism*.
- Irregularity with on track equipment for automatic train protection or warning system equipment. *Refer to* 3.18.1 *Warning Systems Irregularity* or 3.18.2 *Enforcement Systems Irregularity.*

3.13 Electrical Infrastructure Irregularity

Electrical failure where the electrical system or components within the system fail in a manner that endangers or has the potential to endanger the safety of railway operations, people and/or premises.

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of an Electrical Infrastructure Irregularity <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.13.1 Overhead Traction Supply
- 3.13.2 Other Electrical Infrastructure Irregularity

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of an Electrical Infrastructure Irregularity <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rail Infrastructure Manager (RIM);
- > Line section;
- > Line type, where applicable;
- > Kilometerage; and
- > A general description of the occurrence including, where applicable:
 - Details of the nature of the irregularity, the equipment which has failed or is damaged and the circumstances of its discovery; and
 - Remedial actions to manage the irregularity.

OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLE

Notifiable:	 Failure in the electrical supply that prevents or restricts the safe movement of trains. Damage to or failure of overhead power.
Not notifiable:	> Electrical infrastructure irregularities, failures or defects that are detected and corrected under normal maintenance.

3.13.1 OVERHEAD TRACTION SUPPLY

Defects in electrical supply or overhead wiring sufficient to cause an electrical fault or dewirement.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Dewirements or entanglements of overhead wiring, including objects fouling the overhead wiring that require services to be stopped.
- > Failure of contact wire geometry that results in the wire not being aligned correctly with the track and a train pantograph becomes entangled in the contact wire.
- > Insulator failures that require power to be removed and services stopped.
- > Loss of overhead power that results in passenger detrainment or self-evacuation, including, feeder line irregularities.
- > Contact wire that sags and necessitates a speed restriction or cessation of operations.
- > Failure that results in overhead wiring stanchions and related infrastructure becoming energised.
- > Incidents where protection equipment does not isolate the overhead supply when it is designed to do so.
- > Unintended contact with overhead (whether there is damage or not and whether the overhead is live or not), for example, contact between a mobile crane or excavator and the overhead.

NOT NOTIFIABLE:

- > Temporary loss of overhead traction supply owing to loss of supply to the overhead power that does not result in passenger detrainment or self-evacuation.
- > Broken insulators or defective spark gaps that do not result in short circuits or the unintended energising of rail infrastructure.
- > Failure of Supervisory Control and Data Acquisition (SCADA) or traction supply equipment that does not have the potential to affect the safety of the electrical network.

- > Loss of an electrical barrier at a bridge. *Refer to* **3.11.6** *Civil Infrastructure Irregularity.*
- > Failure of a rolling stock pantograph mechanism that caused it to become entangled in the contact wire. *Refer to* **3.12.6** *Other Rolling Stock Irregularity.*
- > Fire as a result of arcing of the overhead supply, where the fire results in more significant consequences than the electrical arcing. *Refer to* **3.14.2.1** *Safety Related Infrastructure.*
- > Circuit breaker fires that result in a fire. Refer to 3.14.2.2 Other Lineside Fires.

3.13.2 OTHER ELECTRICAL INFRASTRUCTURE IRREGULARITY

Irregularity that is not classifiable under the above subcategory.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Loss of the power supply to signalling infrastructure.
- > Arcing between items of railway infrastructure (other than rolling stock), such as boundary gates, fencing or station furniture.
- > Electrical shock injury from line side or station equipment.
- > Loss of both the main and back-up electrical supplies for an underground railway station or network control centre.
- > Electric traction rail vehicle identified as being insulated from the rails.
- > Accidental or otherwise unintentional damage to any cables in the ground (and is not reportable under any other occurrence category).

NOT NOTIFIABLE:

- > Common, predictable failures of electrical infrastructure equipment that do not affect the running of rolling stock, such as short circuits or tripping of circuit breakers.
- > Supervisory Control and Data Acquisition (SCADA) alarm faults.

- > Loss of the signalling power supply resulting in continuous activation of a level crossing. *Refer to* **3.3.3** *Level Crossing Equipment Failure/Defect.*
- > Loss of the signalling power supply resulting in a train passing a signal restored to danger. *Refer to* **3.4.10** *Signal Passed at Danger.*
- > Electric shock of passengers or staff from rolling stock. *Refer to* **3.12.6** *Other Rolling Stock Irregularity.*
- > Any severe electrical arcing or fusing in or on any part of a train. *Refer to* **3.12.6** *Other Rolling Stock Irregularity.*
- > Electrical failures that result in a fire, and where the fire results in more significant consequences than the electrical failure. *Refer to* **3.14.2.2** *Other Lineside Fires.*

3.14 Fire

Fire affecting rail infrastructure or rolling stock which endangers or has the potential to endanger the safety of railway operations, people and/or premises.

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of a Fire <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.14.1 On Train
 - 3.14.1.1 Rolling Stock
 - 3.14.1.2 Passenger or Load Related
- 3.14.2 Lineside Fires
 - 3.14.2.1 Safety Related Infrastructure
 - 3.14.2.2 Other Lineside Fires
- 3.14.3 Station/Terminal Fires

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Fire <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Line section;
- > Line type, where applicable; and
- > A general description of the occurrence including, where applicable:
 - Details of the specific area of the train, railway premises, railway infrastructure or other area where the fire occurred (e.g. signal box, station or passenger coach);
 - An indication as to whether the fire was associated with the operation or movement of rolling stock (i.e. bearing friction fires) or other action (i.e. rubbish fires in passenger carriages);
 - A description of any equipment or facility involved; and
 - A description of any person who may have been involved.

3.14.1 *On Train* has the following additional mandatory requirements:

- > Rolling Stock Operator (RSO).
- > Train type, traction type and rolling stock class.

3.14.2 *Lineside Fires* and 3.14.3 *Station/Terminal Fires* have the following additional mandatory requirement:

> Rail Infrastructure Manager (RIM).

3.14.2 *Lineside Fires* has the following additional mandatory requirement:

> Kilometerage.

OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLE		
Notifiable:	> Fire on rolling stock, whether in motion or not including smouldering and the production of smoke, with or without flames.	
	 Fire in or adjacent to the railway corridor leads to railway operations being disrupted or closed as a precautionary measure. 	
	> Fire in or adjacent to railway premises that affects station and terminal operations, irrespective of whether there is any damage.	
	> Dangerous goods fire.	
	 Fire that leads to railway operations being disrupted or closed as a precautionary measure. 	
Not notifiable:	This section is intentionally left blank.	

3.14.1 ON TRAIN

Fire on rolling stock (whether in motion or not).

3.14.1.1 Rolling Stock

Fires associated with rolling stock failure or defect.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Fire on a traction unit.
- > Fire, smoke or fumes in a driver's cab.
- > Bearing friction fire on rolling stock.

NOT NOTIFIABLE:

- > Release of steam from a normal vent or relief valve.
- > Combustion products from engines.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Arcing, shorted electrical equipment. *Refer to* 3.12 *Rolling Stock Irregularity* or 3.13 *Electrical Infrastructure Irregularity.* > Rolling stock fire results in a lineside or station fire. *Refer to* 3.14.2 *Lineside Fires* or 3.14.3 *Station/Terminal Fires.*

3.14.1.2 Passenger or Load Related

Fires associated with any other activity not associated with rolling stock operation or movement.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- Smoke or fumes penetrating passenger accommodation, which necessitates evacuation of the passengers from the vehicle(s) concerned, even where there is no evidence of actual fire.
- > Fire due to vandalism.
- > Fire, including smouldering, of a train load.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.14.2 LINESIDE FIRES

Fire on or adjacent to the railway corridor.

3.14.2.1 Safety Related Infrastructure

Fires associated with safety critical rail infrastructure.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Fire in a signalling or communication cabinet.
- > Fire in lineside cabling.
- > Fire involving lineside traction supply.
- > Sleeper fire.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.14.2.2 Other Lineside Fires

Fires associated with non-safety critical infrastructure.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Fire affecting yard storage or material stockpiles.
- > Fire affecting crops or trackside vegetation outside of a rail corridor that affects railway operations.

NOT NOTIFIABLE:

> Fire where burning is known to be authorised and under control.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.14.3 STATION/TERMINAL FIRES

Fire in or adjacent to railway premises that affects station and terminal operations.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Fire inside a building, structure or terminal, whether or not there was damage.
- > Incident where smoke odour is present which results in partial or full evacuation, even if there is no evidence of an actual fire.
- > Fire in a train control centre that necessitates evacuation.

NOT NOTIFIABLE:

> Accidental operation of a fire alarm.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Terrorism events. *Refer to* **3.20.3.1** *Terrorist Act.*

3.15 Explosion

Explosion affecting rail infrastructure or rolling stock, or that has the potential to affect the safety of railway operations, people and/or premises.

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of an Explosion <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rail Infrastructure Manager (RIM);
- > Rolling Stock Operator (RSO);
- > Line section;
- > Line type, where applicable;
- > Kilometerage;
- > Train type traction type and rolling stock class, where applicable; and
- > A general description of the occurrence including, where applicable:
 - Details of the nature of the incident, including where the explosion occurred and any subsequent actions taken to make the scene safe;
 - Description of any equipment or facility involved; and
 - A description of any person who may have been involved.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Explosion in neighbouring premises which affects railway operations.
- > Explosion in or on rolling stock, whether in motion or not.
- > Explosion of dangerous goods.
- > Explosion of boilers, crank cases, air reservoirs, transformers or capacitors.
- > Explosive charge used for construction or demolition that inadvertently damages railway infrastructure.
- > Audible Warning Device (detonator) that explodes other than as a warning signal.

NOT NOTIFIABLE:

> Pressure release valve operating as intended.

- > Explosion with a resulting fire. *Refer to* **3.14** *Fire.*
- > Explosion associated with terrorism or sabotage. *Refer to* **3.20.3.1** *Terrorist Act.*
- > Bomb threats. *Refer to* **3.20.3.2** *Threat of Terrorist Act.*
- > Detonating an Audible Warning Device (detonator) placed on track through wilful and unlawful interference. *Refer to* **3.20.4.3** *Other Vandalism*.
- > Passenger setting off fireworks on rail infrastructure. *Refer to* **3.20.6** *Other Railway Network Security.*

3.16 Suspected Suicide or Attempted Suicide

Suspected Suicide or Attempted Suicide refers to any suspected or attempted suicide that takes place on or from railway premises and is associated with railway operations.

Where later findings differ from an initial report of an incident under this category, rail transport operators must inform the ONRSR as soon as practicable to ensure the details of the occurrence can be updated.

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of a Suspected Suicide or Attempted Suicide <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.16.1 Suspected Suicide
 - 3.16.1.1 Struck by Train
 - 3.16.1.2 Other Suspected Suicide
- 3.16.2 Attempted Suicide
 - 3.16.2.1 Struck by Train
 - 3.16.2.2 Other Attempted Suicide

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Suspected Suicide or Attempted Suicide <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rail Infrastructure Manager (RIM);
- > Line section;
- > Line type;
- > Kilometerage; and
- > A general description of the occurrence including, where applicable:

Details of the nature of the incident, including the behaviour of the person supporting the determination of attempted suicide; and details of any railway operations involved.

3.16.1.1 Suspected Suicide: Struck by Train and 3.16.2.1 Attempted Suicide: Struck by Train have the following additional mandatory requirements:

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- > Rolling Stock Operator (RSO); and
- > Train type, traction type and rolling stock class.

OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLENotifiable:> Person who appears to have deliberately placed themselves in a
situation to be struck by rolling stock with the intention of taking their life,
regardless of the outcome.
> Person jumping or hanging from a railway structure.
> Person jumping from a structure onto railway premises.Not notifiable:> Drug or alcohol abuse with the intent to cause death,
> Death through self-inflicted injury that does not affect railway operations.
> Any person that verbally threatens to take their life or inflict injury or self-
harm but has not attempted the act.

3.16.1 SUSPECTED SUICIDE:

Suspected suicide (defined as death within 30 days of being struck) that takes place on or from railway premises and is associated with railway operations.

Any incident reported under this subcategory should be based on reasonable judgment from the information available that a suspected suicide was involved. However, reporting of an incident does not pre-empt or rely on coronial decisions.

3.16.1.1 Struck by Train

Suspected suicide involving a person who is struck by train and appears to have deliberately placed themselves in that situation.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Person places themselves on track in front of moving train and is struck.

NOT NOTIFIABLE:

This section is intentionally left blank.

- > Person who places themselves in front of rolling stock as a result of a drug, alcohol or mental impairment, or a lack of understanding of the danger (such as an event involving a young child), where it cannot be determined that they intended to take their own life. *Refer to* 3.2.1.3 *Running Line Collision: With Person Not on a Level Crossing* or 3.2.2.3 *Yard Collision: With Person Not on a Level Crossing*.
- > Person places themselves on track in front of moving train and is struck and dies after 30 days of incident. *Refer to* 3.16.2.1 *Struck by Train.*

3.16.1.2 Other Suspected Suicide

Suspected suicide involving a person who is not struck by rolling stock.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > A person jumping or hanging from a railway structure and dies within 30 days.
- > A person jumping from a structure onto railway premises and dies within 30 days.

NOT NOTIFIABLE:

- > Drug or alcohol abuse with the intent to cause death.
- > Death through self-inflicted injury that does not affect railway operations.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.16.2 ATTEMPTED SUICIDE

Any person who attempts to take their own life on or from railway premises, that is associated with railway operations, who does not die within 30 days.

3.16.2.1 Struck by train

Attempted suicide involving a person who is struck by train and appears to have deliberately placed themselves in that situation.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Person places themselves on track in front of moving train and is struck, but does not die within 30 days.

NOT NOTIFIABLE:

> Any person that verbally threatens to take their life or inflict injury or self-harm but has not attempted the act.

- > Any person who places themselves in front of rolling stock as a result of a drug, alcohol or mental impairment, or a lack of understanding of the danger (such as an event involving a young child), where it cannot be determined that they intended to take their own life. *Refer to* 3.2.1.3 *Running Line Collision: With Person Not on a Level Crossing* or 3.2.2.3 *Yard Collision: With Person Not on a Level Crossing*.
- > Person places themselves on track in front of moving train and is struck but does not die initially, although dies within 30 days of the incident. *Refer to* **3.16.1.1** *Struck by Train.*

3.16.2.2 Other Attempted Suicide

Attempted suicide involving a person who is not struck by rolling stock.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > A person lying on a track in an attempt to commit suicide but who is not struck by rolling stock.
- > A person jumping or hanging from a railway structure that does not die within 30 days.
- > A person jumping from a structure onto railway premises that does not die within 30 days.

NOT NOTIFIABLE:

- > Drug or alcohol abuse with the intent to cause death.
- > Any person that verbally threatens to take their life or inflict injury or self-harm but has not attempted the act.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.17 Alcohol or Drugs Irregularity

Alcohol or Drugs Irregularity refers to any case involving the testing of rail safety workers where:

- a worker returns a test result suggesting a breach of an operator's drug and alcohol management program (DAMP) (initial and/or confirmatory test results for alcohol; confirmed positive test results only for drugs);
- > a worker fails to submit to a test or leaves the location of testing prior to testing commencing.

In reporting drug and alcohol test results under this category, operators may need to provide updated information to ONRSR where formal results are not available within the 72 hour reporting period following an occurrence.

A report of the occurrence need only be provided by a RIM or RSO where it is the party undertaking the drug and/or alcohol testing of the rail safety worker concerned.

Post-incident drug and alcohol testing

Where drug and/or alcohol testing takes place following an incident that constitutes a notifiable occurrence, operators must report to ONRSR on both:

- > the incident: providing all data items required under the relevant category; and
- > the post-incident drug and/or alcohol testing: providing all data items required under 3.17 Alcohol or Drugs Irregularity.

Note: specific requirements apply for immediate notification and drug and alcohol testing following prescribed incidents. *Refer to* **Table 5.3**

For testing undertaken in NSW only

ONRSR must be notified of any case where post-incident drug or alcohol testing of a rail safety worker is undertaken and where an operator is unable to perform a drug or alcohol test within the evidentiary timeframe of 3 hours following a prescribed incident.

ONRSR must also be notified if it is evident or suspected that a worker has done something in contravention of an operator's DAMP to introduce or alter the concentration of alcohol or any other drug in their breath, blood, urine or oral fluid sample or there has been interference or tampering with or destruction of a sample.

Refer to Table 5.4, which sets out additional information regarding testing in NSW.

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of an Alcohol or Drugs Irregularity <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rail Infrastructure Manager (RIM), where applicable;
- > Rolling Stock Operator (RSO), where applicable;
- > Line type, where applicable; and
- > Where an operator is the party undertaking the drug and/or alcohol testing of the rail safety worker concerned, a general description of the occurrence providing details of the circumstances of the test including:
 - An indication of what type of tests, if any, were performed: either Drug, Alcohol, or Drug and Alcohol);
 - The reason why the test was performed: either Random, Following Occurrence or Triggered by Suspicion;
 - The time that the test took place;
 - Role of the rail safety worker being tested: Shunter, Driver, Guard, Controller/Signaller, Station Staff, Rolling Stock Maintainer, Rail Infrastructure Maintainer or Other (specify) (note: those operating an RRV or Track Maintenance vehicle are to be reported as Rail Infrastructure Maintainer); and
 - Failure to submit test, where applicable.

For testing undertaken in NSW only

> Type of irregularity for test, where applicable: interference, tampering or destruction.

Post-incident drug and alcohol testing

> Any initial and confirmatory test results, whether positive or negative.

Drug testing that is random or triggered by suspicion

- > Details as to why drug testing was conducted;
- > Results for confirmed positive testing only.

Alcohol testing that is random or triggered by suspicion

- > Details as to why alcohol testing was conducted;
- > Results for positive testing (initial and/or confirmatory).

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Rail safety worker tests positive for alcohol.
- > Where confirmed positive test results identify the presence of a drug which is a breach of the operator's DAMP.
- > Rail safety worker fails to submit to a test, including testing by the police and/or any person engaged by the operator for that purpose.
- > Rail safety worker leaves the location of testing prior to testing commencing.
- > Post-incident drug or alcohol testing of a rail safety worker is undertaken (following a notifiable occurrence) including, notification of whether the results were positive or negative.
- > Where an operator is unable to perform a drug or alcohol test on a rail safety worker as required following a prescribed incident.

For testing undertaken in NSW only

- > Incident or suspected incident involving:
 - rail safety worker is found to or suspected of interfering, tampering with, or destruction of, a sample of a blood, urine or oral fluid sample provided or taken under an operator's DAMP; or
 - something being done in contravention of an operator's DAMP to introduce, or alter the concentration of, alcohol or any other drug in a rail safety worker's breath, blood, urine or oral fluid before the worker submitted to a breath test or provided a sample of blood, urine or oral fluid under the program.
- > Where an operator is unable to perform a drug or alcohol test on a rail safety worker within 3 hours of a prescribed incident in NSW

NOT NOTIFIABLE:

- > Member of the public failing an alcohol test following a level crossing collision with a motor vehicle.
- > Self-reporting of a voluntary drug and alcohol test by a rail safety worker in accordance with the organisation's drug and alcohol management program (DAMP).
- > Incident relating to the drug or alcohol testing of a person, including a worker, who is not a rail safety worker.
- > Initial drug testing of rail safety worker where laboratory analysis confirms there was no breach of the operator's DAMP.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.18 Train Warning and Enforcement Systems Irregularity

Train Warning and Enforcement Systems Irregularity refers to any failure of installed train monitoring, warning and enforcement systems to detect and act on alarm situations.

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of a Train Warning and Enforcement Systems Irregularity <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.18.1 Warning Systems Irregularity
- 3.18.2 Enforcement Systems Irregularity

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Train Warning and Enforcement Systems Irregularity <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rolling Stock Operator (RSO), where applicable;
- > Line section;
- > Line type;
- > Kilometerage, where applicable;
- > Train type, traction type and rolling stock class where applicable; and
- > A general description of the occurrence including, where applicable:
 - Details of the nature of the irregularity, including the train operations being carried out and the resulting consequences (if any); and
 - A description of the type of warning or enforcement system in place at the time of the incident.

3.18.2 *Enforcement Systems Irregularity* has the following additional mandatory requirements:

> Rail Infrastructure Manager (RIM).

OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLE		
Notifiable:	 Any failure of a train monitoring system to detect or act on a defective system, including: 	
	 A failure of equipment such as Hot Axle Box Detectors (HABL). 	
	 A failure of track flood warning, rock slide detection and other installed infrastructure monitoring systems to detect unsafe conditions. 	
	 Signal Passed at Danger (SPAD) alarm not activating. 	
	> An enforcement system that does not operate when it is expected to do so, including:	
	 Not operating when a train passes a signal at a stop. 	
	 Activating too late, such as 100 metres past the signal. 	
	 A vigilance system or Deadman's Handle failing to detect and act as designed. 	
Not notifiable:	> Activation of alarms owing to a detected defect.	
	> Indicator lights not working.	
	> A vigilance control arm continuously activating.	
	> Enforcement or warning system that activates when it should not such as an unidentified TPWS intervention on account of a defect.	

3.18.1 WARNING SYSTEMS IRREGULARITY

Failure of installed train monitoring or warning systems to detect and act on alarm situations.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Failure of equipment such as:
 - Hot Axle Box Detectors (HABD);
 - Hot Wheel Detectors;
 - Wheel Dimension Fault Detectors;
 - Acoustic Detectors;
 - Out of Gauge Detectors;
 - Weighbridges; and
 - Wheel Impact Load Detectors (WILD).
- > Failure of track flood warning, rock slide detection and other installed infrastructure monitoring systems to detect unsafe conditions.
- > Signal Passed at Danger (SPAD) alarm not activating.

> A Train Control Centre 'Watchdog' system failure that uses GPS data to ensure that train position is accurately recorded.

NOT NOTIFIABLE:

> Indicator lights not working.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Activation of a hot axle alarm owing to hand brakes being on. Refer to 3.10.7 Other Safeworking Rule or Procedure Breach or 3.12.5 Braking System.
- > Irregularities in trackside warning boards. *Refer to* **3.11** *Track and Civil Infrastructure Irregularity.*
- > Wheel Impact Load Detector detecting a fault on a train wheel that necessitates a reduction in speed. *Refer to* **3.12.6** *Other Rolling Stock Irregularity.*

3.18.2 ENFORCEMENT SYSTEMS IRREGULARITY

Failure of installed enforcement systems to detect and act on an alarm or unsafe situations for the operating train.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Enforcement system not operating when a train passes a signal at a stop.
- > Enforcement system activating too late, such as 100 metres past the signal.
- > Vigilance system or Deadman's Handle fails to detect and act when designed to do so.

NOT NOTIFIABLE:

- > Vigilance control device continuously activating.
- > Enforcement or warning system that activates when it should not, for example:
 - Unidentified TPWS intervention(s) on account of a defect.
 - AWS showing an alert or activating on a clear signal.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Trainstop trip arm being struck and damaged by rolling stock and being detected by the signalling system. *Refer to* **3.2.1.5** *With Infrastructure*.
- Failure of a trainstop trip arm to return to the normal position and the position of the arm is not detected by the signalling system. *Refer to* 3.6.1 *Wayside Signalling System Irregularity.*
- > Damaged train stop head not being detected by the signalling system. Refer to 3.6.1 Wayside Signalling System Irregularity.
- > A Train Control Centre 'Watchdog' system failure that uses GPS data to ensure that train position is accurately recorded. *Refer to* **3.18.1** *Warning system Irregularity.*
- > Isolation of an enforcement system that is not in accordance with the operator's procedures. *Refer to* **3.10.7** *Other Safeworking Rule or Procedure Breach.*

3.19 Communications System Failure

Deficiency or failure of a communications system (voice or data) that prevents the timely transmission of safety critical information and includes:

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Communications System Failure <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rail Infrastructure Manager (RIM), where applicable;
- > Rolling Stock Operator (RSO), where applicable;
- > Line section;
- > Line type, where applicable;
- > Train type, traction type and rolling stock class, where applicable; and
- > A general description of the occurrence including, where applicable:
 - Details of the nature of the failure, including the train operations being carried out and any actions taken by crew or train control to deal with the failure.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Failure of the train radio fitted to the leading motive power unit that prevents establishment of an emergency call.
- > Failure of a primary radio system or train control telephone system, which is used for the transmission of safety critical information.
- > Failure of an emergency call facility, emergency communication channel or emergency telephone number at a network control centre.
- > Failure of a communications system used for fire and life safety such as:
 - tunnel emergency telephone;
 - fire telephone;
 - station help point; or
 - station PA system.

NOT NOTIFIABLE:

> Failure of a communications system detected during maintenance work.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Failure of communications between a shunter or a second person and a train driver that results in a train collision with terminal infrastructure in a yard. *Refer to* 3.2.2.5 *With Infrastructure.*
- > Block instrument system (with wayside signals) wrong-side failure, that did not result from theft of cabling. *Refer to* **3.6.1** *Wayside Signalling System Irregularity.*
- > Failure of a communications system that supports in-cab signalling systems. *Refer to* **3.6.2** *In-cab Signalling System Irregularity.*
- > Failure of a communications system that supports a communication based train authority system. *Refer to* **3.6.4** *Communications Based Train Authority System Irregularity.*
- > Loss of availability of a communications system on board a train for the communication between a driver and a guard, or loss of an on-board CCTV camera. *Refer to* 3.12.6 *Other Rolling Stock Irregularity.*
- > Failure of a system that prevents the transmission of alarms from train monitoring and wayside detectors. *Refer to* **3.18.1** *Warning Systems Irregularity.*
- > Theft of cabling that results in a loss of a communications system, where an alternative system is available for safety critical communications. *Refer to* **3.20.5** *Theft.*

3.20 Railway Network Security

Unlawful or improper activity on railway premises that is associated with railway operations and endangers or has the potential to endanger the safety of railway operations, people and/or premises.

CODING UNDER SUBCATEGORIES

All notifiable occurrence reports to ONRSR of a Railway Network Security <u>must</u> be coded under a subcategory.

SUBCATEGORIES

- 3.20.1 Railway Trespass
 - 3.20.1.1 Near Miss With Trespasser
 - 3.20.1.2 Other Railway Trespass
- 3.20.2 Alleged Assault
 - 3.20.2.1 On Train
 - 3.20.2.2 On Platform
 - 3.20.2.3 Other Alleged Assault
- 3.20.3 Terrorism/Sabotage
 - 3.20.3.1 Terrorist Act
 - 3.20.3.2 Threat of Terrorist Act
- 3.20.4 Vandalism
 - 3.20.4.1 Object Projected at Rolling Stock
 - 3.20.4.1.1 Struck Train
 - 3.20.4.1.2 Other
 - 3.20.4.2 Graffiti
 - 3.20.4.3 Other Vandalism
- 3.20.5 Theft
- 3.20.6 Other Railway Network Security

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of Railway Network Security <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;

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- > Rail Infrastructure Manager (RIM), where applicable;
- > Rolling Stock Operator (RSO), where applicable;
- > Line section;
- > Line type, where applicable;
- > Train type, traction type and rolling stock class, where applicable;
- > A general description of the occurrence including, where applicable:
 - Details of the circumstances of the breach, the behaviour of the perpetrators and any actions taken by staff;
 - A description of the perpetrators;
 - A description of where the activity occurred, being broadly one of:
 - On a train
 - On a platform
 - Other location, with a description
 - An indication as the breach was associated with or caused a near miss;
 - In the case of a projectile, a description of the object thrown or otherwise cast (e.g. slingshot, firearm etc.) at trains and advice on whether the train was struck.
 - In the case of a theft, a description of the safety-related (or other) materials or equipment stolen and the implications of this theft.
- > Level crossing identifier, where applicable;
- > Level crossing control type, where applicable;
- > Signal identifier, where applicable; and
- > Points identifier, where applicable.

3.20.1.1 Near Miss With Trespasser, 3.20.2.1 On Train, 3.20.4.1 Object Projected at Rolling Stock and 3.20.4.2 Graffiti

have the following mandatory requirement:

> Rolling Stock Operator (RSO).

3.20.2.2 On Platform and 3.20.2.3 Other Alleged Assault

have the following mandatory requirement:

> Rail Infrastructure Manager (RIM).

3.20.1.1 *Near Miss With Trespasser*, 3.20.3 *Terrorism/Sabotage*, 3.20.4.1 *Object Projected at Rolling Stock* and 3.20.5 *Theft* have the following additional mandatory requirement:

> Kilometerage.

OCCURRENCES THAT ARE NOTIFIABLE AND NOT NOTIFIABLE		
Notifiable:	 Trespass on railway premises. Any physical assault on railway premises that is associated with railway 	
	operations.	
	An act or suspected act of terrorism or sabotage.	
	 Objects thrown, graffiti or other vandalism associated with railway operations. 	
	 Unlawful taking or obtaining of rail safety-related equipment or security- sensitive materials. 	
Not notifiable:	 Occurrence that is not directly associated with railway operations, including: 	
	 in railway offices and station car parks not involving the operation or movement of rolling stock; 	
	 in station bus interchanges and on rail replacement bus services; and 	
	 roads and road overpasses connecting to stations. 	
	 Passenger who causes a disturbance (an unruly passenger) but who does not commit assault, vandalism or trespass. 	
	> Sexual assault or verbal assault on railway premises.	
	 Intoxicated passenger, who does not commit assault, vandalism or trespass. 	
	> Theft of personal belongings, or any lost luggage that necessitates evacuation.	
	 Graffiti not impacting the safety of railway operations such as in passenger cars, station waiting rooms and vending machines. 	
	 Broken windows discovered in a depot before rolling stock enters service. 	
	 Activation of emergency help points or of fire extinguishers without a valid reason. 	
	 Vandalism to platform indicator displays or any damaged seating on rolling stock. 	
	Holes cut in lineside fences, or any ballast placed on the rail head.	

3.20.1 RAILWAY TRESPASS

Unlawful and unwarranted intrusion upon railway premises, without evidence of any further criminal intent.

3.20.1.1 Near Miss with Trespasser

Near miss with a trespasser that does not result in a trip or fall, including where the driver had insufficient time to take emergency action.

Note: Emergency action includes continuous audible warning and/or brake application.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Near miss with a member of the public crossing the track except at a designated level crossing point.

NOT NOTIFIABLE:

- > Near miss with animals that are not being herded.
- > Near miss involving a non-rail mounted road/rail vehicle (RRV).

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Near miss with person crossing illegally at a level crossing. *Refer to* **3.3.5** *Near Miss with Road Vehicle* or **3.3.6** *Near Miss with Person.*
- > Trespasser that slips, trips or falls to or from a train, such as a train-surfer. *Refer to* **3.7.3** *On Rolling Stock.*

3.20.1.2 Other Railway Trespass

Trespass other than a near miss; that is not classifiable above.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Illegal entry of a person into a secured area, including:
 - Trespasser gaining access to a driver's or guard's cab.
 - Stowaway on a freight train.
- > Person trespassing in the rail corridor, where there is no near miss.
- > Person train surfing or out riding, with no associated fall.

NOT NOTIFIABLE:

- > Passenger that is over-carried into sidings and escorted from railway premises.
- > Passenger that fare evades.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Trespass that is associated with further malicious activity, such as vandalism. *Refer to* **3.20.4** *Vandalism*.
- > Theft of security-sensitive goods. *Refer to* **3.20.5** *Theft.*

3.20.2 ALLEGED ASSAULT

Occurrence where it is alleged that a person deliberately inflicts a physical injury on any other person on railway premises. This includes assaults using dangerous items and assaults on members of the public, passengers and employees.

3.20.2.1 On Train

Assault on board rolling stock (including a train).

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Person who slips, trips or falls as a result of being assaulted on rolling stock.
- > Person who is pushed from a train.

NOT NOTIFIABLE:

> Threat to self-harm with no attempt to commit suicide.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Self-harm, related to attempted or suspected suicide. *Refer to* 3.16.1 *Suspected Suicide* or 3.16.2 *Attempted Suicide*.

3.20.2.2 On Platform

Assault on a platform or a station.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Person who slips, trips or falls as a result of being assaulted on a platform or station.

NOT NOTIFIABLE:

> Threat to self-harm with no attempt to commit suicide.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Self-harm, related to attempted or suspected suicide. *Refer to* 3.16.1 *Suspected Suicide* or 3.16.2 *Attempted Suicide.*

3.20.2.3 Other Alleged Assault

Assault that is not classifiable under one of the above subcategories.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Assault in the rail corridor.
- > Person who slips, trips or falls as a result of being assaulted in the rail corridor.

NOT NOTIFIABLE:

> Self-harm, with no attempted suicide.

NOTIFIABLE UNDER ANOTHER CATEGORY:

Self-harm, related to attempted or suspected suicide. *Refer to* 3.16.1 *Suspected Suicide or* 3.16.2 *Attempted Suicide.*

3.20.3 TERRORISM/SABOTAGE

Action or threat (other than a non-violent protest or industrial action) intended to advance a political, ideological or religious cause by coercing or intimidating an Australian or foreign government or the public by:

- > causing serious harm to people or property;
- > endangering life;
- > creating a serious risk to the health and safety of the public; or
- > seriously disrupting trade, critical infrastructure or electronic systems

3.20.3.1 Terrorist Act

Act or suspected act of terrorism or sabotage that endangers or has the potential to endanger the safety of railway operations, people and/or premises.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Intentional fire or explosion set off to cause personal injury or fear, damage to rolling stock or infrastructure, or disruption to railway operations.
- > Deliberate release of toxic gas.
- > Unauthorised persons with firearms on railway premises with intention to cause personal injury or fear, damage to rolling stock or infrastructure, or disruption to railway operations.
- > Suspicious package or substance that is believed to have been left with the intention to cause disruption.

NOT NOTIFIABLE:

> Lost luggage that necessitates evacuation.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Explosion not associated with terrorism. Refer to 3.15 Explosion.

3.20.3.2 Threat of Terrorist Act

Threat or suspected threat of terrorism or sabotage that endangers or has the potential to endanger the safety of railway operations, people and/or premises.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

> Threat to sabotage or take violent action.

> Bomb threat.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.20.4 VANDALISM

Wilful and unlawful interference with, damage of or defacement to railway infrastructure or rolling stock that endangers or has the potential to endanger the safety of railway operations.

It does not include acts of vandalism that result in a greater adverse safety outcome where notifiable in another category.

3.20.4.1 Object Projected at Rolling Stock

Objects being thrown or otherwise cast at rolling stock.

3.20.4.1.1 Struck Train

Objects being thrown or otherwise cast at rolling stock, where the rolling stock is struck by the object.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Rock or other projectile thrown at and strikes rolling stock.
- > Object projected by any other means, such as a slingshot that strikes rolling stock.
- > Item dropped or suspended from an overhead bridge that strikes rolling stock.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.20.4.1.2 Other

Where the projected object does not strike the rolling stock or it is not known whether the object struck the rolling stock.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Rocks or other projectile thrown at rolling stock that does not strike it.
- > Object projected by any other means, such as a slingshot thrown at rolling stock that does not strike it.

NOT NOTIFIABLE:

This section is intentionally left blank.

NOTIFIABLE UNDER ANOTHER CATEGORY:

This section is intentionally left blank.

3.20.4.2 Graffiti

Graffiti that interferes with (or has the potential to interfere with) the safety of railway operations.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Graffiti to external train lights, equipment identification plates or rolling stock windscreens.
- > Graffiti to lineside signals, speed boards or level crossing signage.

NOT NOTIFIABLE:

> Graffiti in or on passenger cars, station waiting rooms or vending machines.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Graffiti obstructing level crossing signage. Refer to 3.3.4 Level Crossing Equipment Damage/Interference.
- > Graffiti obstructing signals resulting in a signal passed at danger. *Refer to* **3.4.7** *Signal Passed at Danger.*
- > Person undertaking graffiti on structures in the rail corridor. *Refer to* **3.20.1** *Railway Trespass.*

3.20.4.3 Other Vandalism

Acts of vandalism that are not classifiable under the above subcategories.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Passenger that holds train doors open.
- > Debris placed under trainstop arms.
- > Activation of emergency door release buttons.

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- > Person placing foreign objects across insulated rail joints causing continuous activation of level crossing equipment.
- > Person interfering with infrastructure, which results in loss of point detection.
- > Collision with an Audible Warning Device (detonator) placed on track through wilful and unlawful interference.

NOT NOTIFIABLE:

- > Damaged seating.
- > Broken windows discovered in a depot before rolling stock enters service.
- > Activation of emergency help points or fire extinguishers without a valid reason.
- > Ballast that is placed on the rail head.
- > Vandalism to platform indicator displays.
- > Holes cut in lineside fences.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Large object that is placed on the track. *Refer to* **3.11.5.3** *Other Object.*

3.20.5 THEFT

Unlawful taking or obtaining of rail safety-related equipment or security-sensitive materials.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Theft of safeworking equipment such as staffs, tokens or audible warning devices (detonators), speed boards, end-of-train markers, uniforms, keys to rolling stock or signalling equipment rooms;
- > Taking security-sensitive substances defined by legislation; and
- > dangerous goods, as defined in the Australian Dangerous Goods Code.

NOT NOTIFIABLE:

> Theft of personal belongings i.e. passenger phone, bag etc.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Theft of sleepers or non-safety-related wiring from the rail corridor that involves trespass. *Refer to* **3.20.1.2** *Other Railway Trespass.*
- > Theft that results in open container doors. *Refer to* **3.8.1** *Door Open.*

3.20.6 OTHER RAILWAY NETWORK SECURITY

Railway network security occurrence that is not classifiable under one of the above subcategories.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Unlawful use of railway equipment, such as trains or trams being driven without authorisation, by members of the public.
- > Laser pointers aimed at rail staff.
- > Unattended open boundary gates.

NOT NOTIFIABLE:

- > Unruly passenger who does not commit assault, vandalism or trespass and refuses to detrain.
- > Threat of suicide or self-harm.
- > Intoxicated passenger, who does not commit assault, vandalism or trespass.
- > Person drinking alcohol or smoking on railway premises.

NOTIFIABLE UNDER ANOTHER CATEGORY:

> Release of handbrakes by a member of the public resulting in a runaway. *Refer to* 3.21 *Runaway.*

3.21 Runaway

Uncontrolled movement of an unattended train or item of rolling stock that endangers or has the potential to endanger the safety of railway operations.

MANDATORY REPORTING REQUIREMENTS

All notifiable occurrence reports to ONRSR of a Runaway <u>must</u> provide the following information:

- > Occurrence identification number;
- > Code identifier and category;
- > Date and time of occurrence;
- > Location of occurrence including State/Territory;
- > Rail Infrastructure Manager (RIM);
- > Rolling Stock Operator (RSO);
- > Line section;
- > Line type;
- > Kilometerage;
- > Train type traction type and rolling stock class; and
- > A general description of the occurrence including, where applicable:
 - Details of the circumstances of the runaway, the extent of the runaway and the actions taken to manage the incident.

EXAMPLES INCLUDE BUT ARE NOT LIMITED TO:

NOTIFIABLE:

- > Uncontrolled movement of rolling stock (not being driven).
- > Runaway of rolling stock without a driver but with a guard on the train.
- > Runaway of a trolley or on-track machinery in a possession.
- > Road/rail vehicles (RRVs) that runaway whilst on-tracking or off-tracking.
- Wagons or rail mounted trailers that separate from the rest of the train or a road/rail vehicle (RRV) and runaway.
- > Occurrences where it is believed trespassers may have removed chocks or released handbrakes.

NOT NOTIFIABLE:

> Road/rail vehicles (RRVs) operating off-track as a road vehicle.

NOTIFIABLE UNDER ANOTHER CATEGORY:

- > Where the runaway results in the derailment of rolling stock (running line or yard). Refer to 3.1.1 Running Line Derailment or 3.1.2 Yard Derailment.
- > Where the runaway collides with, and damages a train (running line or yard). *Refer to* **3.2.1.1** *Between Trains* or **3.2.2.1** *Between Trains*.

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- Where the runaway collides with, and damages rolling stock (running line or yard). Refer to 3.2.1.2 With Rolling Stock or 3.2.2.2 With Rolling Stock.
- > Where the runaway collides with a person (running line or yard). *Refer to* **3.2.1.3** *With Person Not on a Level Crossing* or **3.2.2.3** *With Person Not on a Level Crossing*.
- > Where the runaway collides with, and damages terminal infrastructure (running line or yard). *Refer to* **3.2.1.5** *With Infrastructure or* **3.2.2.5** *With Infrastructure*.
- Where a rolling stock run-away exceeds the limits of an authorised movement. *Refer to* 3.4.13 Signal Passed at Danger or 3.5.13 Light Rail or Tram Authority Exceeded.
- > Where wagons are gravity shunted in breach of procedures. *Refer to* **3.10.7** *Other Safeworking Rule or Procedure Breach.*
- > Uncontrolled movement of an unattended passenger train on a platform. *Refer to* **33.10.7** *Other Safeworking Rule or Procedure Breach.*

4 Directory of Categories with Codes

Category and subcategory	Codes		
3.1 DERAILMENT			
3.1.1 Running Line Derailment 301010000			
3.1.2 Yard Derailment	301020000		
3.2 COLLISION			
3.2.1 Running Line Collision			
3.2.1.1 Between Trains	302010100		
3.2.1.2 With Rolling Stock	302010200		
3.2.1.3 With Person <u>Not</u> on a Level Crossing	302010300		
3.2.1.4 With Animal	302010400		
3.2.1.5 With Infrastructure	302010500		
3.2.1.6 With Road Vehicle <u>Not</u> on a Level Crossing	302010600		
3.2.1.7 With Obstruction			
3.2.1.7.1 Natural Object	302010701		
3.2.1.7.2 Railway-Related Object	302010702		
3.2.1.7.3 Other Object	302010703		
3.2.1.8 Other Running Line Collision	302010800		
3.2.2 Yard Collision			
3.2.2.1 Between Trains	302020100		
3.2.2.2 With Rolling Stock	302020200		
3.2.2.3 With Person <u>Not</u> on a Level Crossing	302020300		
3.2.2.4 With Animal	302020400		
3.2.2.5 With Infrastructure	302020500		
3.2.2.6 With Road Vehicle <u>Not</u> on a Level Crossing	302020600		
3.2.2.7 With Obstruction			
3.2.2.7.1 Natural Object	302020701		
3.2.2.7.2 Railway-Related Object	302020702		
3.2.2.7.3 Other Object	302020703		
3.2.2.8 Other Yard Collision	302020800		
3.3 LEVEL CROSSING OCCURRENCE			
3.3.1 Collision with Road Vehicle			

3.3.1.1 At Crossings with Active Traffic Control Equipment	303010100
3.3.1.2 At Crossings with Passive Traffic Control Equipment	303010200
3.3.1.3 At Unprotected Level Crossings	303010300
3.3.2 Collision with Person	
3.3.2.1 At Crossings with Active Traffic Control Equipment	303020100
3.3.2.2 At Crossings with Passive Traffic Control Equipment	303020200
3.3.2.3 At Unprotected Level Crossings	303020300
3.3.3 Level Crossing Equipment Failure/Defect	303030000
3.3.4 Level Crossing Equipment Damage/Interference	303040000
3.3.5 Near Miss with Road Vehicle	
3.3.5.1 At Crossings with Active Traffic Control Equipment	303050100
3.3.5.2 At Crossings with Passive Traffic Control Equipment	303050200
3.3.5.3 At Unprotected Level Crossings	303050300
3.3.6 Near Miss with Person	
3.3.6.1 At Crossings with Active Traffic Control Equipment	303060100
3.3.6.2 At Crossings with Passive Traffic Control Equipment	303060200
3.3.6.3 At Unprotected Level Crossings	303060300
3.3.7 Other Level Crossing Occurrence	303070000
3.4 SIGNAL PASSED AT DANGER / AUTHORITY EXCEEDED	
3.4.6 SPAD Classification A1 Limit of Authority (LOA) Missed by Train Crew	304060000
3.4.7 SPAD Classification A2 Signal Irregularity for the LOA	304070000
3.4.8 SPAD Classification A3 Proceed Authority Incorrectly Given by Rail Operator	304080000
3.4.9 SPAD Classification A4 Sub-Optimal Train or Track Infrastructure Conditions	304090000

3.4.10	SPAD Classification B1 Signal Restored and Passed at Danger – Infrastructure Failure	304100000
3.4.11	SPAD Classification B2 Signal Restored and Passed at Danger – Network Control / Signaller Error	304110000
3.4.12	SPAD Classification B3 Signal Restored and Passed at Danger - Emergency	304120000
3.4.13	SPAD Classification B4 LOA Exceeded Through Uncontrolled Movement	304130000
3.5 L	IGHT RAIL OR TRAM AUTHORITY EXCEEDED	
3.5.4	LRTAE Classification A1 Road Traffic Light Passed Without Authority	305040000
3.5.5	LRTAE Classification A2 Light rail/tram signal passed without authority	305050000
3.5.6	LRTAE Classification A3 Traffic light or signal passed without authority due to an infrastructure irregularity	305060000
3.5.7	LRTAE Classification A4 Limit of Authority missed by Light Rail/Tram Crew	305070000
3.5.8	LRTAE Classification A5 Authority to proceed incorrectly given	305080000
3.5.9	LRTAE Classification A6 Sub-optimal light rail/tram or track infrastructure conditions	305090000
3.5.10	LRTAE Classification B1 Failure of light rail/tram signal infrastructure	305100000
3.5.11	LRTAE Classification B2 Signal Restored and Passed at Danger – Network Controller Error	305110000
3.5.12	LRTAE Classification B3 Authority to proceed rescinded in an emergency	305120000
3.5.13	LRTAE Classification B4 Limit of Authority exceeded through uncontrolled movement	305130000

3.6 SIGNALLING AND OTHER PROCEED AUTHORITY SYSTEMS IRREGULARITY		
3.6.1 Wayside Sig	gnalling System Irregularity	306010000
3.6.2 In-cab Signa	alling System Irregularity	306020000
3.6.3 Token Base	ed System Irregularity	306030000
3.6.4 Communica Irregularity	ations Based Train Authority System	306040000
3.7 SLIP, TRIP C	OR FALL	
3.7.1 To/From Ro	olling Stock	307010000
3.7.2 Between Pla	atform and Rolling Stock	307020000
3.7.3 On Rolling	Stock	307030000
3.7.4 On Track		307040000
3.7.5 On/From Pla	atform/Concourse	307050000
3.7.6 On/From Es	scalator/Lift	307060000
3.7.7 On/From St	airs/Ramps	307070000
3.7.8 From Struct	ture	307080000
3.7.9 Caught in R	olling Stock Doors	307090000
3.7.10 Other Slip,	Trip or Fall	307100000
3.8 LOAD IRREG	GULARITY	
3.8.1 Door Open		308010000
3.8.2 Out of Gaug	ge	308020000
3.8.3 Load Shift		308030000
3.8.4 Uneven Dis	tribution of Load	308040000
3.8.5 Loose Load	l Fastening	308050000
3.8.6 Other Load	Irregularity	308060000
3.9 DANGEROUS GOODS		
3.9.1 On Rolling	Stock	309010000
3.9.2 Off Rolling	Stock	309020000
3.10 SAFEWORKING - NETWORK RULE OR PROCEDURE BREACH		
3.10.1 Wayside Sig	gnalling System Procedure/Rule Breach	n 310010000

3.10.2 In-cab Signalling System Procedure/Rule Breach 310020000			
3.10.3 Token Based System Procedure/Rule Breach 310030000			
3.10.4 Communications Based System Procedure/Rule 310040000 Breach			
3.10.5 Track Work Procedure/Rule Breach	310050000		
3.10.6 Work Scheduling Practice/Procedure Breach	310060000		
3.10.7 Other Safeworking Rule or Procedure Breach	310070000		
3.11 TRACK AND CIVIL INFRASTRUCTURE IRREGULARITY			
3.11.1 Broken Rail and Rail Defects			
3.11.1.1 Detected Outside of Maintenance Inspections	311010100		
3.11.1.2 Maintenance Inspection Detected	311313200		
3.11.2 Misaligned Track	311020000		
3.11.3 Spread Track	311030000		
3.11.4 Points Irregularity	311040000		
3.11.5 Track Obstruction			
3.11.5.1 Natural Object	311050100		
3.11.5.2 Railway-Related Object	311050200		
3.11.5.3 Other Object	311050300		
3.11.6 Civil Infrastructure Irregularity	311060000		
3.11.7 Bridge Strike	311070000		
3.11.8 Other Track Infrastructure Irregularity	311080000		
3.12 ROLLING STOCK IRREGULARITY			
3.12.1 Train Parting	312010000		
3.12.2 Wheel/Axle Failure	312020000		
3.12.3 Defective Bearing	312030000		
3.12.4 Faulty Passenger Train Door	312040000		
3.12.5 Braking System	312050000		
3.12.6 Other Rolling Stock Irregularity	312060000		
3.13 ELECTRICAL INFRASTRUCTURE IRREGULARITY			
3.13.1 Overhead Traction Supply	313010000		

3.14 FIRE	
3.14.1 On Train	
3.14.2.1 Rolling Stock	314020100
3.14.2.2 Passenger or Load Related	314020200
3.14.2 Lineside Fires	
3.14.2.1 Safety Related Infrastructure	314020100
3.14.2.2 Other Lineside Fires	314020200
3.14.3 Station/Terminal Fires	314030000
3.15 EXPLOSION	315000000
3.16 SUSPECTED SUICIDE OR ATTEMPTED SUICIDE	
3.16.1 Suspected Suicide	
3.16.1.1 Struck by Train	316010100
3.16.1.2 Other Suspected Suicide	316010200
3.16.2 Attempted Suicide	
3.16.2.1 Struck by Train	316020100
3.16.2.2 Other Attempted Suicide	316020200
3.17 ALCOHOL OR DRUGS IRREGULARITY	317000000

3.18 TRAIN WARNING AND ENFORCEMENT SYSTEMS IRREGULARITY

3.18.1 Warning Systems Irregularity	318010000
3.18.2 Enforcement Systems Irregularity	318020000
3.19 COMMUNICATIONS SYSTEM FAILURE	31900000

3.20 RAILWAY NETWORK SECURITY

3.20.1 Railway Trespass		
3.20.1.1 Near Miss With Trespasser	320010100	
3.20.1.2 Other Railway Trespass	320010200	
3.20.2 Alleged Assault		
3.20.2.1 On Train	320020100	

3.20.2.2 On Platform	320020200
3.20.2.3 Other Alleged Assault	320020300
3.20.3 Terrorism/Sabotage	
3.20.3.1 Terrorist Act	320030100
3.20.3.2 Threat of Terrorist Act	320030200
3.20.4 Vandalism	
3.20.4.1 Object Projected at Rolling Stock	
3.20.4.1.1 Struck Train	320040101
3.20.4.1.2 Other	320040102
3.20.4.2 Graffiti	320040200
3.20.4.3 Other Vandalism	320040300
3.20.5 Theft	320050000
3.20.6 Other Railway Network Security 320060000	
3.21 RUNAWAY	32000000

5 Notifiable Occurrences under the RSNL

The following tables reproduce:

- the Category A notifiable occurrences and Category B notifiable occurrences listed in Regulation 57 of the National Regulations;
- > the Prescribed Incidents listed in Regulation 28(7)(a) requiring immediate notification, with the relevant Reporting Requirements for Notifiable Occurrences categories and subcategories where applicable; and
- > the Drug and alcohol irregularities required to be reported under Regulation 28(2)(b).

TABLE 5.1 CATEGORY A NOTIFIABLE OCCURRENCES : Reg. 57(1)(a)

i.	an accident or incident that has caused death, serious injury or significant property damage	Dependent on specific accident or incident
ii.	a running line derailment	3.1. Derailment: 3.1.1 Running Line Derailment
iii.	a running line collision between rolling stock	3.2 Collision: 3.2.1: Running Line Collision: 3.2.1.1 Between Trains or 3.2.1.2 With Rolling Stock
iv.	a collision at a level crossing between rolling stock and either a road vehicle or a person	3.3 Level Crossing Occurrence: 3.3.1 Collision with Road Vehicle or 3.3.2 Collision with Person
v.	a suspected terrorist attack	3.20 Railway Network Security: 3.20.3 Terrorism/Sabotage: 3.20.3.1 Terrorist Act
vi.	an accident or incident involving a significant failure of a safety management system that could have caused death, serious injury or significant property damage	Dependent on specific accident or incident
vii.	any other accident or incident likely to generate immediate or intense public interest or concern	Dependent on specific accident or incident

Note - for prescribed incidents refer to Table 5.3

TABLE 5.2 CATEGORY B NOTIFIABLE OCCURRENCES : Reg. 57(1)(b)		
i.	a derailment, other than a running line derailment	3.1. Derailment: 3.1.2 Yard Derailment
ii.	a collision involving rolling stock, other than a collision described in paragraph (a)(iii) or (iv)	 3.2 Collision: 3.2.1 Running Line Collision: 3.2.1.3 With Person <u>Not</u> on a Level Crossing 3.2.1.4 With Animal 3.2.1.5 With Infrastructure 3.2.1.7 With Obstruction (any subcategory) 3.2.1.8 Other Running Line Collision
iii.	an incident at a level crossing, other than a collision described in paragraph (a) (iv)	 3.3 Level Crossing Occurrence: 3.3.3 Level Crossing Equipment Failure/Defect; 3.3.4 Level Crossing Equipment Damage/Interference; 3.3.5 Near Miss with Road Vehicle; 3.3.6 Near Miss with Person; or 3.3.7 Other Level Crossing Occurrence.
iv.	an incident in which a vehicle or vessel strikes an associated railway track structure	3.11 Track and Civil Infrastructure Irregularity: 3.11.7 Bridge Strike
V.	the passing of a stop signal, or a signal with no indication, by rolling stock without authority	3.4 Signal Passed at Danger/Authority Exceeded (any subcategory)
vi.	an accident or incident where the rolling stock exceeds the limits of authorised movement given in a proceed authority	3.4 Signal Passed at Danger/Authority Exceeded (any subcategory)
vii.	a rolling stock run-away	3.21 Runaway
viii.	a failure of a signalling or communications system that endangers, or has the potential to endanger, the safe operation of trains or the safety of people, or to cause damage to adjoining property	3.6 Signalling and Other Proceed Authority Systems <i>Irregularity</i> (any subcategory) 3.19 Communications System Failure
ix.	any slip, trip or fall by a person on railway premises	3.7 Slip, Trip or Fall (any subcategory other than 3.7.9 Caught in Rolling Stock Doors)
х.	a person being caught in the door of any rolling stock	3.7.9 Slip Trip or Fall: 3.7.9 Caught in Rolling Stock Doors

xi.	a person suffering from electric shock directly associated with railway operations	3.12 Rolling Stock Irregularity: 3.12.6 Other Rolling Stock Irregularity 3.20 Railway Network Security: 3.20.1: Railway Trespass (any subcategory)
xii.	any situation where a load affects, or could affect, the safe passage of trains or the safety of people, or cause damage to adjoining property	3.8 Load Irregularity (any subcategory)
xiii.	an accident or incident involving dangerous goods that affects, or could affect, the safety of railway operations or the safety of people, or cause damage to property	3.9 Dangerous Goods (any subcategory)
xiv.	any breach of a network rule	3.10 Safeworking (Network) Rule or Procedure Breach (any subcategory)
xv.	any breach of the work scheduling practices and procedures set out in the rail transport operator's fatigue risk management program	3.10 Safeworking (Network) Rule or Procedure Breach: 3.10.6 Work Scheduling Practice/ Procedure Breach
xvi.	the detection of an irregularity in any rail infrastructure (including electrical infrastructure) that could affect the safety of railway operations or the safety of people	 3.11 Track and Civil Infrastructure Irregularity (any subcategory) 3.13 Electrical Infrastructure Irregularity (any subcategory)
xvii.	the detection of an irregularity in any rolling stock that could affect the safety of railway operations	3.12 Rolling Stock Irregularity (any subcategory)
xviii.	a fire or explosion on, in, or near, rail infrastructure or rolling stock that endangers the safety of railway operations or the safety of 1 or more people, or causes service terminations or track or station closures	3.14 Fire (any subcategory) 3.15 Explosion
xix.	any incident on railway property where a person inflicts, or is alleged to have inflicted, an injury on another person	3.20 Railway Network Security: 3.20.2 Alleged Assault (any subcategory)
xx.	a suspected attempt to suicide	3.16 Suspected Suicide or Attempted Suicide: 3.16.2 Attempted Suicide (any subcategory)
xxi.	the notification that a rail safety worker, when required to do so under the drug	3.17 Alcohol or Drugs Irregularity

	and alcohol management program of a rail transport operator, has failed to submit to a test in accordance with the testing regime set out in the operator's drug and alcohol management program	
xxia.	the notification that a rail safety worker has returned a result to a test undergone by the worker in accordance with the testing regime set out in the drug and alcohol management program of a rail transport operator that suggests that the worker was in breach of the operator's drug and alcohol management program at a relevant time	3.17 Alcohol or Drugs Irregularity
xxii.	the infliction of wilful or unlawful damage to, or the defacement of, any rail infrastructure or rolling stock that could affect the safety of railway operations or the safety of people	3.20 Railway Network Security: 3.20.4 Vandalism (any subcategory)
xxiii.	a security incident associated with railway premises that affects the safety of railway operations, including an act of trespass, vandalism, sabotage or theft that could affect the safety of railway operations	3.20 Railway Network Security (any subcategory other than 3.20.3.1 Terrorist Act)

TABLE 5.3 PRESCRIBED INCIDENTS: Reg. 28(7)(a)

i.	a running line collision between rolling stock	3.3.2 Collision: 3.2.1: Running Line Collision: 3.2.1.1 Between Trains or 3.2.1.2 With Rolling Stock
ii.	a collision at a road or pedestrian level crossing between rolling stock and either a road vehicle or a pedestrian	3.3.3 Level Crossing Occurrence: 3.3.1 Collision with Road Vehicle or 3.3.2 Collision with Person
iii	the derailment of rolling stock (other than a road-rail vehicle) on a running line	3.1. Derailment: 3.1.1 Running Line Derailment

iv	a fatality other than a fatality as a result, or reasonably suspected of being as a result, of suicide	Dependent on specific accident or incident
V	a serious injury to a person other than as a result of a slip, trip or fall	Dependent on specific accident or incident
Vİ	 an incident resulting in, or in relation to which there was a reasonable possibility of, an impact between – a) rolling stock and persons conducting track work, or b) rolling stock and equipment associated with, or being used for, track work, or c) moveable plant, machinery or equipment and persons within an area in which track work is being conducted 	Dependent on specific accident or incident: serious breaches are prescribed incidents when there is potential for death, serious injury or significant property damage.
vii	an incident where a train or part of a train exceeds the limits of an authorised movement and there was sufficient time for a rail safety worker driving the train to comply with the authorisation	3.4 – Signal Passed at Danger / Authority Exceeded 3.4.6 – SPAD A1 3.5 – Light Rail or Tram Authority Exceeded 3.5.4 – LRTAE A1 3.5.5 – LRTAE A2 3.5.7 – LRTAE A4
viii	an incident where the train exceeds the limits of an authorised movement due to a proceed authority being incorrectly given to the rail safety worker driving the train	3.4 – Signal Passed at Danger / Authority Exceeded 3.4.8 – SPAD A3 3.5 – Light Rail or Tram Authority Exceeded 3.5.8 – LRTAE A5
ix	a rolling stock run-away that exceeds the limits of an authorised movement for the rolling stock	3.4 – Signal Passed at Danger / Authority Exceeded 3.4.13 – SPAD B4 3.5 – Light Rail or Tram Authority Exceeded 3.5.13 – LRTAE B4

Note – These prescribed incident requirements do not apply in Western Australia. For New South Wales specific prescribed incidents refer to Reg. 28(7)(b) TABLE 5.4 ADDITIONAL NSW DRUG AND ALCOHOL REPORTINGREQUIREMENTS: Reg. 28(2)(b)Note: (vi) not included as replicates Reg. 57(1)(b)(xxi))

3.17 Alcohol or Drugs Irregularity

i.	an analysis of blood confirming the presence of a drug in the blood of a rail safety worker
ii.	an analysis of blood confirming that the prescribed concentration of alcohol is present in the rail safety worker's blood
iii.	an analysis of urine confirming the presence of a drug in the urine of a rail safety worker
iv.	a breath test indicating that the prescribed concentration of alcohol is present in a rail safety worker's breath or blood
V.	a breath analysis confirming that the prescribed concentration of alcohol is present in a rail safety worker's breath or blood
vii.	any incident or suspected incident involving the interference or tampering with, or the destruction of, a sample of a person's blood or urine provided or taken under the drug and alcohol management program of the operator in contravention of the program
viii.	any incident or suspected incident involving something being done in contravention of the drug and alcohol management program of the operator to introduce, or alter the concentration of, alcohol or any other drug in a rail safety worker's breath, blood or urine before the worker submitted to a breath analysis or provided a sample of blood or urine under that program.