

ONRSR Consultation Paper

# Drug and Alcohol Management Review

July 2017



## Table of contents

<b>1</b>	<b>Introduction .....</b>	<b>3</b>
<b>2</b>	<b>Background .....</b>	<b>3</b>
<b>3</b>	<b>Scope.....</b>	<b>3</b>
<b>4</b>	<b>The review method.....</b>	<b>4</b>
<b>5</b>	<b>Existing requirements under the RSNL .....</b>	<b>5</b>
<b>6</b>	<b>Drug and alcohol management in context.....</b>	<b>6</b>
<b>7</b>	<b>Analysis.....</b>	<b>10</b>
<b>8</b>	<b>Summary of proposed recommendations .....</b>	<b>26</b>

## 1 Introduction

ONRSR is in the final stages of concluding its review of the legislative framework for drug and alcohol management and this paper provides the proposed recommendations for consultation. Following consultation, final recommendations from the review will be put before the Transport and Infrastructure Council (Ministerial Council) for its consideration in November 2017.

## 2 Background

During the introduction of the *Rail Safety National Law* (RSNL) and National Regulations, Ministerial Council agreed that NSW could continue with its existing requirements for rail operator drug and alcohol testing, subject to a review within three years from the commencement of ONRSR, as per the following minute:

- > NOTED that the national regulations will allow NSW to continue to require rail operators in NSW to undertake random or targeted urine testing for drugs consistent with existing arrangements, and AGREED to a further review by the Regulator within three years from commencement date of the National Regulator.

Ministers also agreed to ONRSR undertaking a drug and alcohol testing program and its associated funding arrangements.

In May 2014, Ministers agreed to consider the review recommendations in 2017 (instead of 2016 as previously agreed) given the ongoing progressive transition of jurisdictions to ONRSR. In November 2016, Ministerial Council also agreed that opportunities for greater national consistency in ONRSR's drug and alcohol testing program be considered as part of the review.

## 3 Scope

### 3.1 Objectives

The objectives of the review are to assess and compare the effectiveness, in terms of safety and rail transport operators' productivity, of the differing drug and alcohol management legislative arrangements in the RSNL; and to compare the effectiveness against other industries in Australia and the rail industry internationally in terms of both detecting drugs and alcohol, and providing a deterrent for rail safety workers in this regard.

This encompasses assessing the value and purpose of the ONRSR's drug and alcohol testing program and operators' testing regimes under the RSNL; the NSW-specific provisions for operators in NSW; and the level of regulatory burden placed on operators.

### 3.2 Scope

The scope of the review includes:

- > Analysis of the effectiveness of current testing regimes (undertaken by ONRSR; operators nationally; and operators in NSW) to manage risks associated with drug and alcohol use, and analysis of available data, including:
  - Drug and alcohol tests (undertaken by industry, police and the ONRSR)
  - Drug and alcohol positives and non-negatives (where 'positives' are confirmed test results and 'non-negatives' are screening test results)
  - Numbers of rail safety workers and percentages tested
  - Incidents involving drugs and alcohol
- > Consideration of appropriate respective roles of the regulator and operators in a drug and alcohol risk management framework

- > Assessment of the effectiveness, including sanctions currently applied, of rail transport operators in managing the risk of rail safety workers undertaking rail safety work whilst under the influence of drugs or alcohol, operating under both the RSNL and NSW's specific provisions
- > Analysis of ONRSR's ability to take prosecution action when a positive drug and/or alcohol test result is returned and the results of such prosecution action
- > Review of current and innovative drug and alcohol management frameworks and research from other industries in Australia and the rail industry internationally (including testing methods and reliability)
- > Consideration of the value of testing for presence and/or impairment of a drug in the rail safety context and methods for such testing
- > Consideration as to the requirement of a Regulatory Impact Statement.

In undertaking the review, consideration has been given to relevant COAG principles established to guide the development of ONRSR, and the research and recommendations of the Independent Expert Panel on Rail Safety in 2011 (the Expert Panel). The review also recognises ONRSR's Regulatory Approach, Compliance and Enforcement policy and Safety Improvement policy.

## 4 The review method

ONRSR has undertaken a process that has involved data analysis, research into other industries in Australia and other regulatory regimes overseas to assess and compare the effectiveness of the different drug and alcohol management legislative arrangements under the RSNL, looking strategically at areas where a reduction in drug and alcohol-related risk, greater national consistency and reduced regulatory burden can be achieved.

In progressing analysis with stakeholders, the focus of the review has been on achieving a nationally consistent legislative framework, with supporting documentation, that supports the reduction of drug and alcohol related risk in the rail industry. There are currently different requirements under the RSNL for rail transport operators undertaking railway operations in NSW and the merits of each of these areas have been analysed along with learnings from other industries within Australia and other regulatory approaches overseas. The main identified areas of difference between the RSNL and NSW specific requirements are:

- > Methods of drug testing
- > Minimum levels of random drug and alcohol testing
- > Evidentiary drug and alcohol testing
- > Post-incident drug and alcohol testing.

The review has been informed by engagement with key stakeholders including industry, unions, government and academic experts.

The Drug and Alcohol Review Reference Group was formed in 2015 to support the development of the review. The Reference Group includes representation from industry (including the Australasian Railway Association and individual operators), government representatives and the Rail, Tram and Bus Union (RTBU).

In addition to Reference Group meetings, specific meetings have been held with RTBU senior executive, senior government officials and a leading international academic expert in the field of drug and alcohol management.

In 2017, ONRSR also commissioned focus group research to provide insight into the effectiveness of drug and alcohol deterrence in the rail industry across Australia. Rail safety workers from a range of different types of operations provided their input and perceptions as part of these focus groups.

## 5 Existing requirements under the RSNL

### 5.1 Requirements for all rail transport operators

A rail transport operator's obligations regarding drug and alcohol management are to ensure, so far as is reasonably practicable, that rail safety workers do not carry out rail safety work in relation to the operator's railway operations, and are not on duty, while impaired by alcohol or a drug. This is a requirement under section 52 (2) (c) of the RSNL.

Under section 99 (2) (e) of the RSNL, the safety management system for a rail transport operator must include a drug and alcohol management program, and section 115 of the RSNL requires operators to prepare and implement such a program that complies with the prescribed requirements under regulation 28 of the National Regulations.

Under regulation 28 of the National Regulations, a drug and alcohol management program of a rail transport operator must include a range of policies and procedures, including the provision of information and education to rail safety workers and the details of the operator's drug and alcohol testing regime.

### 5.2 Additional requirements for rail transport operators in NSW

The drug and alcohol testing regime of a rail transport operator required to be accredited in respect of railway operations carried out within New South Wales must include additional requirements set out in subregulation 28 (2) of the National Regulations.

These additional requirements include:

- > in each year on a random basis using risk management principles to select rail safety workers (being not less than 25% of all rail safety workers carrying out rail safety work within New South Wales in relation to the operator's railway operations), the operator must require the workers to submit to a preliminary breath test or breath analysis, or to provide a urine sample
- > if a rail safety worker is involved, or is reasonably suspected of having been involved, in a prescribed incident while carrying out rail safety work within New South Wales in respect of the operator's railway operations, the operator must, unless there is a reasonable excuse for not doing so, require the worker to undergo, within 3 hours immediately after the incident, drug and alcohol testing
- > that testing referred to in either of the preceding subparagraphs must be carried out by an authorised person engaged by the operator for that purpose.

Rail transport operators who operate a heritage railway are exempt from the requirement to test a minimum level of rail safety workers.

### 5.3 ONRSR drug and alcohol testing program

The RSNL also provides for testing of rail safety workers for the presence of a drug or alcohol by the Regulator. The RSNL has provisions to allow the Regulator to appoint authorised persons to conduct drug and alcohol testing, and this testing is conducted to an evidentiary standard, which allows positive test results to be used as evidence in a prosecution by the Regulator.

An authorised person may require a rail safety worker to submit to testing for the presence of alcohol by means of breath analysis or blood testing.

An authorised person may also require a rail safety worker to submit to testing for the presence of a prescribed drug by means of oral fluid analysis or blood test (or urine test in New South Wales).

It is an offence for a rail safety worker to refuse to immediately comply with a direction given by an authorised person for the purpose of requiring the worker to submit to the tests for alcohol or a drug described above.

## 5.4 Regulatory Burden

In 2016, ONRSR undertook a review of jurisdictional laws applying the RSNL, which was noted by Ministerial Council in November 2016. As part of this process, ONRSR consulted with industry representatives in relation to those derogations that impacted industry the most significantly. Industry identified drug and alcohol as one of the top four derogations with the greatest impact on industry. National operators have to work across two different sets of requirements if they operate both within and outside of NSW. As of July 2017, 53 national operators were in this situation. These inconsistencies increase cost and reduce flexibility for operators to best manage the risks of drug and alcohol use.

## 6 Drug and alcohol management in context

### 6.1 'Deterrence' in the rail industry

The main purpose of drug and alcohol management is to manage drug and alcohol related risks to safety by preventing rail safety workers from working while impaired or likely to be impaired by drugs or alcohol.

Effective deterrence aims to prevent rail safety workers from attending work with a specified drug and/or alcohol in their system or being impaired by drugs and/or alcohol when undertaking rail safety work. Deterrence is based on perceived swiftness, severity and certainty of the punishment. In [Attachment A](#), Professor Jeremy Davey explains deterrence theory in the rail context. In the excerpt below, Professor Davey summarised deterrence theory:

*Within the classical deterrence model the theory argues that individuals would be afraid of the perceived legal punishment or consequences of their illegal act and this result in behaviour compliance. Additionally the effectiveness of the legal punishments are dependent on the perceived swiftness, severity and certainty of the punishment.*

One of the essential elements of a testing program is the notion of certainty of detection if a worker attends work with alcohol or a specific drug in their system. A random drug and alcohol testing regime, that can test rail safety workers anywhere and at any time, is the foundation of effective deterrence. Random testing is undertaken by both operators and ONRSR. Targeted testing can also increase the deterrence effect by focussing testing on certain variables such as specific types of rail safety workers, locations and times.

Sanctions also influence the effect that deterrence has on rail safety workers. Operators can enforce disciplinary actions and other penalties, including dismissal. The Regulator can also prosecute rail safety workers for breaching the requirements of the RSNL. These sanctions create strong financial and social disincentives for rail safety workers.

Over the past years, there has been significant ongoing investment by rail transport operators in drug and alcohol management. Operators nationally have developed robust drug and alcohol testing regimes, supported by education and health programs, in order to manage the risks associated with drug and alcohol use. Operators have worked to build a fair and just safety culture, and drug and alcohol management has become a shared responsibility between operators and rail safety workers.

Overall, the size of the drug and alcohol problem in the Australian rail industry, as identified by the positive rate of test results, is low. Both alcohol and drug positive test rates are well under one percent, with the drug positive test rate consistently higher than the alcohol positive test rate. **Tables 1 and 2** provide a snapshot of the total drug and alcohol tests undertaken under the RSNL, over the last three financial years and the associated rate of positive results.

**Table 1: Drug testing by rail transport operators under the RSNL**

	2013-14	2014-15	2015-16
<b>No of tests</b>	23,777	21,691	24,891
<b>% positives</b>	0.42%	0.55%	0.35%

**Table 2: Alcohol testing by rail transport operators under the RSNL**

	2013-14	2014-15	2015-16
<b>No of tests</b>	227,380	169,848	152,991
<b>% positives</b>	0.029%	0.047%	0.042%

**Table 3** compares positive results for ONRSR branches for 2015-16. The table indicates that results are reasonably consistent between jurisdictions.

**Table 3: Drug and alcohol positive rates by rail transport operators by ONRSR branch**

2015-16	NSW branch	Vic branch	WA branch	Central branch	Total national
<b>% drug positives</b>	0.41%	0.27%	0.25%	0.44%	0.35%
<b>% alcohol positives</b>	0.049%	0.082%	0.020%	0.091%	0.042%

*Central branch includes South Australia, Northern Territory, Tasmania and ACT*

For the above tables, data is inclusive of jurisdictions as they have transitioned to ONRSR, as follows:

- > 2013-14 inclusive of NSW, NT, SA and TAS
- > 2014-15 inclusive of VIC (full year) and ACT (from 20 November 2014)
- > 2015-16 inclusive of WA (from 2 November 2015)

A comparison with road side testing by police demonstrates that drug and alcohol testing in the rail industry has a much lower positive test rate. Roadside testing with drug positive results can range from approximately 8% to over 20% in different jurisdictions. However it must be noted that testing by police is often intelligence based and in most instances significantly targeted.

It should be noted that safety critical workers are also subject to drug and alcohol screening in accordance with the National Standard for Health Assessment of Rail Safety Workers. While periodic health assessments do not routinely include a drug or alcohol screen, pre-placement and/or change of risk category health assessments may include screening.

## 6.2 'Deterrence': the rail safety worker's perspective

ONRSR undertook a series of focus groups with rail safety workers in June and July 2017 to obtain their views on the effectiveness of drug and alcohol management in the rail industry and in particular in relation to their perceptions of deterrence.

Eight focus groups were conducted, with two focus groups each held in Perth, Adelaide, Melbourne and Sydney. These focus groups were facilitated by an independent moderator, Professor Jeremy

Davey, and involved rail safety workers from above rail (urban and regional passenger, freight), below rail, mining and construction operations.

Below is a summary of the findings from this research:

- > **Perceived deterrence:** The overall impact of testing as a deterrent was similar across almost all jurisdictions and organisations. The perceived deterrent impact of testing was more prevalent and stronger for alcohol compared with drugs.
- > **Method of testing:** Urine was identified by participants as an invasive testing method and not appropriate if testing for impairment.
- > **Likelihood of testing:** The level of breath testing undertaken varied across operations from those where testing was a condition of entry to a site (regarded as a strong deterrent) to those where testing is undertaken by an external testing contractor less frequently. Participants also identified that 'random testing' was often more focused in groups that were easy to access, for example at major depots or central stations, than further out on the network.
- > **Awareness of ONRSR's testing program:** With the noted exception of South Australia (which is the jurisdiction in which ONRSR first commenced its testing program almost four years ago), there was little knowledge of ONRSR testing program.
- > **Evidentiary testing:** Participants felt it was unfair and inappropriate for their organisation to test on behalf of ONRSR.
- > **Education:** All groups expressed a need for further education in relation to drug and alcohol testing and DAMPs more broadly.

### 6.3 Emerging challenges

Operators face a range of emerging and ongoing challenges and opportunities as methods of testing improve, new research is released to inform best practice in the management of drugs and alcohol and new drugs enter the market, such as synthetic drugs.

Testing methods have continued to progressively improve over time. The level of inferior results, such as false negatives and false positives has decreased substantially with the introduction of new testing equipment however they are occasionally still experienced which is often due to inferior technology and devices. Therefore using up to date technology is important in making sure the process of drug and alcohol testing is as efficient as possible.

The only totally reliable confirmatory drug analysis is by a laboratory and in some states, Police are moving away from roadside drug analysis, focussing their process on a roadside screening test supported by confirmatory laboratory analysis.

New methods that are developed, such as testing of hair samples, can also influence the development and implementation of a drug and alcohol testing regime. Consideration needs to be given in the development of any testing regime as to which testing method is the most appropriate for the circumstances, for example hair sample testing shows longer term historical patterns of substance use, whereby oral testing shows recent use only.

In relation to the emergence of synthetic drugs, these are generally not covered by legislation in other industries and it is difficult to prescribe specific substances as they are constantly changing. However, synthetic cannabinoids are currently included in the Poisons Standard and some operators are already testing for synthetic drugs. The Commonwealth Poisons Standard is also regularly updated to reflect amendments to existing drugs and the introduction of new drugs. There have been mixed results in drug screening tests for synthetic drugs although laboratory analysis is significantly more conclusive and the technology is continuously improving. Advice from an independent expert in drug and alcohol research is that the use of synthetic drugs may be perceived as a bigger problem than it really is in practice.

A recent study of Coroner data (road fatalities 2011-2015) in Queensland identified that in those road fatalities where illicit drugs were present, drivers tested positive to either cannabis or methamphetamine in more than 99 percent of cases.

Under the risk-based approach in the RSNL, rail transport operators are responsible for managing their risks, and this would include ensuring that their risk management processes stay up to date to incorporate the types of ongoing developments described above. Rail transport operators are also required to document their position on prohibition and restriction on the use of drugs and alcohol (which includes prescription and synthetic drugs).

## **6.4 ONRSR compliance monitoring and deterrence**

ONRSR is a risk based regulator and has a risk based audit and compliance program in place, whereby the greatest regulatory effort is exerted on the operators with the greatest risk.

In addition, ONRSR continuously monitors various data sources and other intelligence and conducts reactive regulatory activities where anomalies or trends are detected. In terms of drug and alcohol testing, this monitoring includes the number of tests conducted, the results from these tests, intelligence from audits and inspections and confidential reporting as well as the type of rail safety worker tested. It is ONRSR's expectation that operators use a risk based approach in selecting which rail safety worker type to test (e.g to test track workers, train drivers, train controllers over office based rail safety workers).

When auditing the DAMP of an operator, ONRSR tests the effectiveness of the DAMP. Of particular interest is whether or not the operator has a holistic approach to drug and alcohol management. This should include processes for the provision of information and education, a risk based drug and alcohol testing regime (including post incident testing), a notification process to self-report or report others, means of identification of workers who have an alcohol or other drug problem.

The audit and compliance program is not only focussing on the DAMP, but also on contractor management and compliance with the operator's SMS. This is an important aspect to ensure contractors are fully aware of the risks within the rail environment and therefore the strict requirements for rail safety workers. This is particularly critical, since contractors often engage workers who are not used to the rail environment and often unaware of the drug and alcohol provisions.

Every month an ONRSR internal committee, chaired by the Chief Executive, reviews in detail all reports of drug and alcohol testing from operators and ONRSR's program during the previous month and if any concerns are raised additional regulatory activities are undertaken to address these.

To support rail transport operators to manage their risk relating to drug and alcohol, ONRSR has also produced guidance material which is available on ONRSR's website: [http://www.onrsr.com.au/data/assets/pdf\\_file/0014/1913/Scalability\\_of\\_DAMP\\_requirements.PDF](http://www.onrsr.com.au/data/assets/pdf_file/0014/1913/Scalability_of_DAMP_requirements.PDF).

In addition to the compliance activities above, ONRSR's drug and alcohol testing program has also been established since the commencement of ONRSR. The introduction of the ONRSR testing program across Australia has been a lot slower than anticipated due to legislative changes being required in almost all application laws, and negotiation with police in each jurisdiction to enable confirmatory breath analysis to be undertaken by police at police stations. As a result, only a relatively small number of tests have been undertaken to date. Full drug and alcohol testing is still unable to be undertaken in Western Australia, Victoria, ACT and Queensland, however ONRSR is working closely with governments and police to fully implement in these jurisdictions as soon as possible.

When Ministerial Council agreed to ONRSR undertaking a drug and alcohol testing program and the funding for this it was based on approximately 2500 tests being undertaken annually with an estimated 60% being post incident and 40% being random. It is anticipated that once testing of both drugs and alcohol are introduced nationally these figure will be achieved.

**Tables 4 and 5** below provide summary statistics on the outputs of the program. There have been no positive results to date as a result of ONRSR testing. The ONRSR program provides an additional level of deterrence as, when fully implemented, it can be undertaken anywhere in Australia, at any time and with any operator. ONRSR tests to an evidentiary standard and the results can be used to prosecute rail safety workers for offences under the RSNL.

**Table 4: Drug testing by ONRSR**

	2013-14	2014-15	2015-16	2016-17
<b>No of tests</b>	206	216	109	371
<b>% positives</b>	0	0	0	0

**Table 5: Alcohol testing by ONRSR**

	2013-14	2014-15	2015-16	2016-17
<b>No of tests</b>	203	220	191	646
<b>% positives</b>	0	0	0	0

## 7 Analysis

### 7.1 Methods of drug testing

#### 7.1.1 Current Arrangements

Organisation	Method of drug testing required under the RSNL
ONRSR	Oral fluid or blood; or urine in NSW
Rail Transport Operators in NSW	Urine for 25% requirement and post incident but can use other methods outside of that requirement
Rail Transport Operators in all jurisdictions except NSW	Choose method of testing most appropriate to their circumstances

#### 7.1.2 Effectiveness of the current arrangements

Drug testing can be conducted via a range of methods, for example, analysis of a sample of urine, oral fluid, blood or hair. Oral fluid and urine testing are the main methods most commonly used in the rail industry in Australia.

The RSNL requires all operators to develop and implement a drug and alcohol management program to manage the risk of drug and alcohol use by rail safety workers in the workplace. The RSNL national requirements do not prescribe the methods operators are to use to test for drugs as part of their drug and alcohol management program, enabling operators to choose the method of drug testing which is most appropriate for the risk they are managing.

Additional requirements under the National Regulations require operators in NSW to test for drugs via urine for random and post-incident testing. Testing is required to be conducted to an evidentiary standard, and positive test results can only be used as evidence for the offence of under the influence for the purpose of a prosecution and cannot be used as evidence for the offence of presence of the three drugs prescribed in the RSNL:

- > Delta-9-tetrahydrocannabinol (Cannabis)
- > Methylamphetamine (Methamphetamine)
- > 3,4-Methylenedioxymethylamphetamine (MDMA/ecstasy).

No evidence provision has been included in the RSNL for positive urine test results for the offence of presence as this is not a sufficient indication an individual may be under the influence of a drug solely due to its presence in their urine. While these and other drugs identified via urine testing are reportable to ONRSR as a positive result, they are not in breach in relation to the offence of presence of a prescribed drug.

The RSNL also includes provisions for an ONRSR drug and alcohol program, with drug testing to be conducted via oral fluid analysis or blood testing (note the RSNL (NSW) also includes provision for urine testing). ONRSR primarily undertakes oral fluid testing. Positive test results can be used as evidence for the offences of presence of a prescribed drug and under the influence. This testing process aligns with police provisions for roadside testing for vehicle drivers.

The key differences between urine and oral fluid testing are summarised in **Table 6**. The table highlights that there are advantages and disadvantages in using either method of drug testing. No method is clearly superior in all aspects.

**Table 6 - Differences between urine and oral fluid testing for drugs**

Urine testing	Oral fluid testing
Indicates the presence of a drug for a significantly longer period of time	Indicates more recent use only
Presence of a drug also required further indicia to prove impairment – for this reason there is no offence of presence for urine	The presence of a drug indicates recent use and for those drugs prescribed under the RSNL. There is an offence of presence for oral fluid
May not detect very recent use of some drugs (4-8 hours prior)	Can detect recent use
More invasive of a rail safety worker's privacy	Less invasive of a rail safety worker's privacy
Needs appropriate collection facilities	Less need for appropriate collection facilities
Indicates more types of drugs. Indicates the three prescribed drugs under RSNL	Indicates less types of drugs than shown in urine. Indicates the three prescribed drugs under the RSNL
Less expensive	More expensive
Can be accredited under the Australian Standard for on-site screening and laboratory analysis	Cannot be accredited under the Australian Standard for on-site screening (can be accredited for laboratory analysis)

The most significant differences between the two methods is that urine detects a wider range of drugs and indicates use for a longer period of time, whereas oral fluid screening typically detects six types drugs, and indicates more recent use. Both testing methods will identify if a drug is present in the sample being tested. Under the RSNL, it is an offence for a rail safety worker to carry out, or attempt to carry out, rail safety work while a prescribed drug is present in his or her oral fluid or blood.

Police have advised that the same three drugs contained in the RSNL are also prescribed for offences under roadside driver testing provisions as they are those that have the greatest impact on road safety and are widely used within the community.

While police typically use oral testing for roadside testing of the general public, it is noted testing undertaken by operators has slightly different focus in terms of workplace safety and assessment, treatment, counselling or rehabilitation and public safety. Hence, it is considered by the Regulator that other testing methods are also beneficial.

A urine test result that indicates the presence of those three drugs by itself is not sufficient to indicate impairment, and further indicia (such as observations of the rail safety worker's behaviour) are required to prove impairment. Urine is not typically used to test for an offence of presence of a drug because urine indicates past use (via metabolites) and the presence of a drug in urine may be completely independent of impairment due to the length of time since the drugs were consumed.

Urine testing indicates to rail transport operators who are managing their risk in this area that the rail safety worker has taken drugs at some time and can also indicate longer term use of a drug. This provides the opportunity for the management of this under their drug and alcohol management program, which includes providing education and support programs.

While blood testing is also available, it is typically not the first choice of testing method used by operators or ONRSR, due to the complexities, availability of qualified persons to take the sample and its invasive nature. Blood testing identifies a range of drugs and can be used as evidence for the offence of presence of a prescribed drug.

### **7.1.3 Research from other industries in Australia and rail internationally**

A study of other industry sectors in Australia and of the rail industry internationally identified that a range of methods are being used. For example, aviation safety legislation prescribes the methods for drug testing that may be used by either operators (oral fluid or urine) or the regulator (oral fluid only). On the other hand, legislation in the mining sector does not prescribe any specific method for drug testing.

A number of cases in the mining sector have been brought to the Fair Work Commission in relation to the issue of the use of urine versus oral fluid testing for drugs in the workplace. In a 2015 ruling, the Fair Work Commission noted that while there are limitations to both methods, a mixed testing regime that includes both urine and oral fluid analysis is not unreasonable.

Typically, Police roadside drug testing around Australia is undertaken via oral fluid testing (or blood testing following serious incidents). However, there are some scenarios, for example in WA, where Police undertake urine testing following a road incident.

### **7.1.4 Proposed approach**

Given the advantages and disadvantages of each method of drug testing, there may be circumstances where it would be beneficial for an operator to use one or another of the methods available.

Placing a restriction on the method of testing that can be used by operators may prevent operators from best managing their drug and alcohol-related risks using all possible options at their disposal.

It is proposed that the RSNL does not prescribe one particular type of drug testing method but instead allows all rail transport operators to have access to all methods of testing and the flexibility to apply the most appropriate method to manage their risks.

Similarly, it is proposed that ONRSR have the option to use whichever method of drug testing that is most appropriate for the circumstances. ONRSR would continue to use oral fluid testing in most circumstances, however enabling ONRSR to undertake urine testing in specific circumstances, as are the current arrangements for blood testing, would increase the Regulator's flexibility to apply the most appropriate method of testing for the circumstances. Circumstances under which ONRSR may choose to undertake urine testing include:

- > If greater flexibility in the timeframe is needed for post-incident testing
- > If there are visible signs indicating impairment
- > If a complaint is received about a workgroup or work location (for example through REPCON)
- > If intelligence is extracted from data that indicates a concern (i.e. an operator with testing program that only uses one method of testing and is reporting irregular test results).

### 7.1.5 Impact of proposed approach

Giving rail transport operators across Australia the flexibility to apply the most appropriate testing methods provides greater opportunity for operators to tailor their testing regime to reflect any insights through a risk-based approach to drug and alcohol management. This may also improve deterrence. This approach would see a change for operators in NSW who currently have to undertake drug testing using urine.

As there are benefits for industry in using both oral fluid and urine drug testing and a number of large operators currently use a mix of both testing methods to manage their risk SFAIRP, ONRSR would expect all operators to include the use of both oral (detecting recent use) and either urine, blood or hair (detecting wider range of drugs and longer use) as part of their testing regime included in their DAMP unless an operator could demonstrate they are mitigating this risk SFAIRP in other ways. ONRSR would develop guidance to further assist industry in choosing which may be the most appropriate method and under what circumstances each is recommended for use.

The choice of methods will allow ONRSR to implement a more robust drug and alcohol testing program that improves deterrence.

There are no identified material cost or regulatory burden impacts with this approach.

#### **Recommendation:**

- 1 ONRSR and operators should have access to all testing methods in the law and the flexibility to apply the most appropriate method of drug testing based on the organisation's identified risk.

## 7.2 Minimum level of random drug and alcohol testing

### 7.2.1 Effectiveness of the current arrangements

Random drug and alcohol testing is an integral component of rail transport operator drug and alcohol management, as it plays a significant role in establishing a deterrent effect to discourage rail safety workers from being impaired by drugs or alcohol. The National Regulations require all operators to develop and implement a drug and alcohol testing regime. Random drug and alcohol testing is typically included in operator drug and alcohol testing regimes across Australia.

Additional arrangements under the National Regulations prescribe that a minimum of 25% of all rail safety workers carrying out rail safety work within NSW in respect of an operator's railway operations must submit to a preliminary breath test or breath analysis, or provide a urine sample, on an annual basis. This testing is required to be conducted to an evidentiary standard (i.e. evidence provisions enable the results to be used in a prosecution by the Regulator).

The minimum requirement in NSW was introduced in 2008, in part as a result of the recommendations of the inquiries into the Glenbrook and Waterfall accidents, to encourage greater coverage of random drug and alcohol testing among operators in NSW. This is seen to have had a major impact on the management of drug and alcohol nationally and the commencement of a change in culture in relation to operators testing rail safety workers as a control for managing their risk.

Since that time, drug and alcohol testing has become much more prevalent as safety culture has developed nationally and internationally, in all jurisdictions and across many different industries. The

RSNL requires all transport operators to develop and implement a drug and alcohol management program, and this requirement is audited by ONRSR as part of ongoing compliance activities.

It is clear that random testing is a significant part of the deterrent effect. But there are mixed views on whether a prescribed minimum level is a stronger deterrent than a risk-based approach for setting the level of drug and alcohol testing.

Industry representatives have expressed views on how their drug and alcohol management programs are driven by their need to manage risk, not by the need to manage compliance with a specific target. Prescribing a minimum requirement for random testing does not take into account the outcomes or insight provided by an operator's risk assessment in ensuring that controls are tailored to meet the risk mitigation needs of the specific context of the operator. Setting a prescribed minimum level can lead to operators focussing on managing the target rather than managing the risk.

There are no precedents set in other industries and the Expert Panel reported that they could not substantiate that higher levels of testing were associated with increased deterrence. As identified earlier, expert advice identifies that deterrence can also be improved by targeting certain cohorts such as specific types of rail safety workers, locations and times of the day or year.

ONRSR currently receives the following data in relation to drug and alcohol testing of rail safety workers:

- > Monthly periodic data, which includes data on all drug and alcohol tests conducted on rail safety workers (both employees and contractors)
- > Notifiable occurrence data, which includes rail safety worker positive drug and alcohol test results (both employees and contractors)
- > An annual return, which includes an estimate of the number of employees who will be engaged in rail safety work (i.e. not including contractors).

Due to different specifications for including and excluding contractors in rail safety worker counts, it is not possible to determine the proportion of rail safety workers tested nationally, or on a state by state basis, using data reported in accordance with National Regulations 56 and 57. However, at the individual operator level, operators in NSW need to be able to demonstrate they have met the 25% minimum requirement prescribed in the National Regulations. The majority of rail transport operators (excluding tourist and heritage operators) are testing in excess of 25% of rail safety workers for drugs and/or alcohol, with some operators testing as high as 100% of rail safety workers.

### **7.2.2 Research from other industries in Australia and rail internationally**

Random drug and alcohol testing regimes are present and widespread in all sectors from both a regulator and operator perspective. Police testing of drivers at the roadside is common throughout Australia. It is considered an effective deterrent to driving under the influence due to its high visibility. Although there is no legislative requirement for it, some heavy vehicle operators complement Police testing with their own drug and alcohol testing regimes in order to better manage drug and alcohol related risks.

In aviation, the deterrent effect is provided through a mix of operator and regulator testing. Aviation safety legislation provides for random drug and alcohol testing by the regulator, and for targeted and post-incident testing by operators. The legislation is silent on random testing by operators, hence no minimum requirement for random testing is prescribed in aviation.

Internationally, Canada and New Zealand do not include specific requirements for minimum levels of random testing in their rail legislation. There is also no minimum requirement in the UK, however there is guidance that states that a minimum of 5% of staff carrying out safety critical tasks each calendar year should be tested.

In 1994, the United States' Federal Railroad Administration (FRA) set its initial minimum random drug testing rate at 50% for covered employees because of the lack of data to gauge the extent of the drug abuse problem at that time. FRA also set its minimum random alcohol testing rate for

covered employees at 25% for the same reason. As its data continued to show consistently low industry-wide drug and alcohol positive rates among covered employees, FRA lowered its minimum annual random drug and alcohol testing rates to their current rates of 25% and 10% respectively. The legislation also provides the flexibility for the FRA to flex up or down the minimum required rate based on the data for the number of positives for the previous two years.

In addition to the international experience, the Expert Panel found no academic or research evidence that the success of drug testing programs necessarily depends on the number of tests conducted. The Expert Panel identified that research into roadside alcohol and drug testing and its effect has shown that high visibility operations have good deterrence value, and that programs that target specific high risk groups, locations, time of year or time of day can also have high deterrence effects. Professor Davey identifies that both general and specific deterrence are key in an effective testing regime.

### **7.2.3 Proposed approach**

Given industry's continued focus on and investment in drug and alcohol management systems over the past years, it is proposed that all rail transport operators be required to set the level of random drug and alcohol testing using a risk-based approach in their DAMP and no minimum levels of testing are prescribed in the National Regulations.

Operators must have a drug and alcohol management program, which must include details of its testing regime, in order to manage the risk of rail safety workers undertaking work while under the influence of alcohol or drugs. The level of detail and nature of risk controls in a drug and alcohol management program may vary for different workforce groups within an organisation, and among different organisations. Therefore, random testing arrangements may also vary within an organisation and between different organisations in order to mitigate the identified risks.

Enabling operators to set an appropriate level of random testing, by demonstrating that they have assessed the risks and considered the level of random testing necessary to manage those risks, would align with the risk-based and co-regulatory nature of the RSNL. This approach has the potential to provide a stronger deterrent effect than prescribing a minimum level of random testing.

ONRSR would provide further clarification in the form of national guidance in relation to setting the appropriate level of testing and continue undertaking regulatory monitoring of rail transport operators' DAMPs.

### **7.2.4 Impact of proposed approach**

There is minimal impact of the proposed approach on operators that operate solely outside of NSW as this is generally how they are currently determining their testing regime.

As stated previously, available data indicates that the majority of rail transport operators are testing significantly higher than 25% therefore any movement (up or down) of testing numbers in NSW as a result of this change would better reflect the testing required to manage their risk rather than a percentage.

The proposed approach would strengthen the management of this risk, be nationally consistent and align with the co-regulatory nature of the RSNL. It is not expected there would be any significant impact on cost or regulatory burden on operators. Developing ONRSR guidance to support operators to undertake random drug and alcohol testing on a risk basis could provide further direction to operators and improve the deterrence effect of random drug and alcohol testing.

ONRSR will continue reviewing operator testing through its established committee and audit and inspection regime, as outlined in 6.4 and any significant change would both be identified with the rail transport operator being required to prove they are managing this risk SFAIRP.

#### **Recommendation:**

- 2 The level of random testing conducted by rail transport operators should be determined using a risk based approach. ONRSR will issue guidance material outlining their expectations in relation to managing the risk of drug and alcohol use SFAIRP.

## **7.3 Evidentiary drug and alcohol testing**

### **7.3.1 Effectiveness of current arrangements**

The RSNL requires operators to have a drug and alcohol management program, which must include details of its testing regime, in order to manage the risk of rail safety workers undertaking work while under the influence of alcohol or drugs. The RSNL also provides the Regulator with the means to monitor compliance in this regard and prosecute breaches of the RSNL.

To that end, the RSNL does not require operators to conduct drug and alcohol testing to an evidentiary standard, except in NSW, where evidentiary testing is prescribed; that is, evidence provisions have been legislated to enable results of testing to be used in a prosecution by the Regulator. The Regulator is able to prosecute a rail safety worker for offences under the RSNL where ONRSR, Police or an operator in NSW made the requirement for testing as an authorised person.

In order to enable rail transport operators to undertake testing on behalf of ONRSR they are required to have authorised persons appointed under the RSNL to undertake the testing. These persons are appointed through a process of sub-delegation from the Regulator and have specific requirements in terms of procedures, devices and verbal directions they must use. As identified earlier, compliance in this area is extremely challenging. The Regulator has been unable to progress a number of prosecutions arising from evidentiary testing undertaken by operators in NSW as authorised persons do not always strictly follow procedures or provide the necessary clear direction to rail safety workers when undertaking testing.

The offences relating to a prescribed concentration of alcohol or prescribed drug is included under section 128 of the RSNL. The RSNL states that a rail safety worker must not carry out, or attempt to carry out, rail safety work:

- > while there is present in his or her blood the prescribed concentration of alcohol; or
- > while a prescribed drug is present in his or her oral fluid or blood; or
- > while so much under the influence of alcohol or a drug as to be incapable of effectively discharging a function or duty of a rail safety worker.

ONRSR, Police and rail transport operators in NSW test to an evidentiary standard. There are no requirements under the RSNL for operators to conduct evidentiary testing in other jurisdictions.

All positive tests resulting from tests conducted in NSW to an evidentiary standard are investigated by ONRSR for potential to support a prosecution. Even though 190 cases have been investigated in 2014-15 and 2015-16 there has only been one prosecution by the Regulator, and a further six are currently being considered. The one finalised prosecution was for the offence of presence of alcohol of a rail safety worker in NSW in 2015. There are a number of reasons why prosecutions are not taken forward and these are explained below.

- > **Inadequate process/direction** – If authorised persons do not provide suitably clear direction to rail safety workers when undertaking testing then the use of positive results from those tests to support prosecution can be jeopardised.
- > **No impairment or unable to prove impairment** – Positive urine test results cannot proceed to prosecution unless it can be proven that the rail safety worker is under the influence of a drug (including prescription drugs) as there is no offence of presence of drugs in urine and therefore additional evidence is needed to prove impairment. There are often difficulties associated with

collecting the additional evidence/indicia required to prove impairment for positive drug tests obtained by urine.

- > **Not rail safety work** – Prosecution cannot be brought when workers test positive for the presence of drugs or alcohol but they either have not yet commenced rail safety work, or further enquiries do not provide sufficient evidence to demonstrate that the worker was in fact undertaking rail safety work at the relevant time.
- > **Not confirmed by breath analysis** – Prosecution cannot be brought if confirmatory testing is not undertaken. In a number of cases, non-negative breath tests for alcohol have not been confirmed by breath analysis (either because breath analysis was not undertaken, or because breath analysis returned a zero result).

The current requirement for evidentiary testing by rail operators in NSW was put in place prior to the establishment of the National Rail Safety Regulator and continued with the introduction of the RSNL. Its original intention was to alleviate pressure on resources of the NSW's Rail Safety Regulator.

### 7.3.2 Research from other industries in Australia and rail internationally

No examples were found in other industries within Australia (including aviation, mining, marine and heavy vehicles) of operators being required to conduct testing to an evidentiary standard to enable prosecution by the relevant regulatory body or Police. No evidence was found of evidentiary testing being required by rail operators overseas (including the UK, USA, Canada and NZ).

### 7.3.3 Discussion

Two areas to be considered in relation to requiring rail transport operators to undertake testing to an evidentiary standard and provide these results to the Regulator for potential prosecution, is it good policy to apply this in the rail context and also is it practicable and achievable?

Having all tests undertaken by rail transport operators to evidentiary standard and made available to the Regulator for prosecution purposes would in theory allow for any positive test to be potentially progressed for prosecution, thereby potentially strengthening the deterrent factor, however as has been demonstrated since 2013 this, for the reasons outlined above, is not the case (as prosecutions have been unable to be progressed) and could therefore have a detrimental impact on deterrence.

When the Expert Panel considered the respective roles of the operator and the Regulator in 2011, they did not support a requirement for the RSNL to require operators to provide to ONRSR evidentiary test results to enable ONRSR to prosecute offences under the RSNL. The Expert Panel identified that:

- > Only the Regulator can launch a prosecution for a breach of the RSNL in its role in ensuring compliance with the law. Therefore it was argued it should be the responsibility of ONRSR to gather the evidence it needs for its own prosecution purposes.
- > The main objective of a DAMP is to develop a work environment that encourages RSW to make responsible decisions in regards to drug and alcohol use, supported by education and health programs. The requirement to provide evidentiary tests would undermine the benefits of deterrence and threaten the health outcomes from management of alcohol and drug use.

This clearly delineated the differing roles of operators and the Regulator: for industry, it is one of risk management and rail safety worker oversight; for the Regulator, it is a compliance measure, with both parties providing testing regimes that act as a deterrent.

There is also no precedent for operator testing to evidentiary standards in other industries. Marine, heavy vehicle and aviation operators in Australia are not required to collect evidence on behalf of the regulator under their relevant legislation.

Notwithstanding this, any decision to broaden the requirement for evidentiary testing would bring with it significant administrative challenges and costs. If the requirement to undertake testing to an evidentiary standard was extended to all operators in Australia, this would require a significant ongoing investment in training, systems and processes to ensure that authorised persons are trained

and appointed and the appropriate standards being followed correctly. As shown in NSW even with this training, due to the infrequent requirement to use this training and turnover of staff within organisations, actually administering the process to the required standard by rail transport operator's employees is frequently not achieved. To require rail transport operators nationally to undertake this role would result in a significant cost to both industry and ONRSR and from the experience in NSW with questionable benefit.

In addition to this, ONRSR has experienced challenges with setting up complex arrangements with Police in various jurisdictions for an anticipated very small number of evidentiary breath analysis tests. It is extremely unlikely Police would be willing to take on a broader function across Australia to undertake breath analysis for all rail transport operators. Also as seen in NSW in excess of 50% of rail safety workers returning a non-negative breath screening test did not undergo confirmatory testing at a police station for a number of reasons.

Currently rail transport operators have their own "sanctions" they apply to rail safety workers who return a positive drug or alcohol test which are documented in their DAMP and HR policies. These often include termination of employment, so they are already acting as a deterrent as the sanctions are certain, swift and severe for the rail safety worker.

#### **7.3.4 Proposed approach**

It is proposed that ONRSR is solely responsible for testing to an evidentiary standard. The power to do this is already enabled under the RSNL and it is the Regulator who has the sole responsibility for bringing prosecution. As legislative changes in application laws and negotiations with police are finalised, ONRSR continues to increase the number of random drug and alcohol tests it undertakes. Funding is already available for this and it is anticipated that additional funding will not be required.

The current requirement for evidentiary testing by rail operators in NSW was put in place with the intention to alleviate pressure on resources of the then NSW rail safety regulator. Now that there is a national testing program managed by ONRSR, the pressure on resources specific to NSW is no longer an issue and the outsourcing of the testing program to Medvet already includes testing in NSW. With the issues identified above in relation to operators undertaking evidentiary testing that is able to be progressed to prosecution, this has not really proven to be an effective mechanism for the Regulator to gather evidence for prosecution purposes. There is also the possibility that continuing to conduct evidentiary testing, if positive results do not lead to prosecutions, may lead to a weakening of the deterrent effect as rail safety workers begin to perceive the threat of prosecution as minimal.

#### **7.3.5 Impact of proposed approach**

To have ONRSR undertake all testing to an evidentiary standard for potential evidence in a prosecution for a breach against the RSNL and rail transport operators nationally undertake their testing programs in line with their DAMP is seen as the most effective and efficient method of providing a deterrent for rail safety workers. This approach would provide national consistency and more strongly aligns with the co-regulatory nature of the RSNL as it delineates clearer roles for the rail transport operator and regulator. For the Regulator this is monitoring compliance with the RSNL and prosecuting breaches; for operators, this is managing risk through their drug and alcohol management programs.

There would be some savings in terms of cost and regulatory burden for rail transport operators in NSW and for ONRSR due to removing the need for operators to have authorised persons approved by ONRSR.

Removing the requirement for evidentiary testing in NSW will have no impact on operators in other jurisdictions.

**Recommendation:**

- 3 Rail transport operators should not be required under the RSNL to conduct drug and alcohol testing to evidentiary standards for use by the Regulator for prosecution purposes. Note the Regulator will increase their testing program.

## 7.4 Post-incident drug and alcohol testing

### 7.4.1 Effectiveness of current arrangements

With the exception of NSW, the RSNL does not specifically require rail transport operators to undertake post-incident testing. However, post-incident testing following Category A incidents is typically included in operator drug and alcohol testing regimes across Australia. Operators will conduct post-incident testing to identify if impairment from drug or alcohol use was a cause or contributing factor to the incident.

Additional arrangements under the National Regulations prescribe that an operator in NSW must require a rail safety worker who has been involved in a prescribed incident while carrying out rail safety work within NSW to undergo drug and alcohol testing within three hours after the incident, unless there is reasonable excuse for not doing so. The prescribed incidents for the purpose of the NSW specific arrangements are slightly different to Category A notifiable occurrences, as outlined in **Table 7**.

**Table 7: Differences between Category A notifiable occurrences and prescribed incidents**

Category A notifiable occurrence	Prescribed incident
Collisions: <ul style="list-style-type: none"> <li>&gt; a running line collision between rolling stock</li> <li>&gt; a collision at a road or pedestrian level crossing between rolling stock and either a road vehicle or a person</li> </ul>	Collisions: <ul style="list-style-type: none"> <li>&gt; a collision between rolling stock</li> <li>&gt; a collision between rolling stock and a person</li> <li>&gt; a collision between rolling stock and a road vehicle or plant equipment</li> </ul>
Derailments: <ul style="list-style-type: none"> <li>&gt; a running line derailment</li> </ul>	Derailments: <ul style="list-style-type: none"> <li>&gt; the derailment of rolling stock</li> </ul>
Death, serious injury or property damage: <ul style="list-style-type: none"> <li>&gt; an accident or incident that has caused death, serious injury or significant property damage</li> <li>&gt; an accident or incident involving a significant failure of a safety management system that could have caused death, serious injury or significant property damage</li> </ul>	Death and serious injury: <ul style="list-style-type: none"> <li>&gt; No equivalent prescribed incident (may be captured to some extent in prescribed incidents for collisions and derailments)</li> </ul>
Network rules: <ul style="list-style-type: none"> <li>&gt; No equivalent Category A (this is a Category B occurrence)</li> </ul>	Network rules: <ul style="list-style-type: none"> <li>&gt; a breach of the rail infrastructure manager's network rules</li> </ul>
Other: <ul style="list-style-type: none"> <li>&gt; a suspected terrorist attack</li> </ul>	Other: <ul style="list-style-type: none"> <li>&gt; No equivalent prescribed incident</li> </ul>
<ul style="list-style-type: none"> <li>&gt; any other accident or incident likely to generate immediate or intense public interest or concern</li> </ul>	<ul style="list-style-type: none"> <li>&gt; any other incident that the Regulator may, by notice in writing to a rail transport operator, declare to be a type of prescribed incident in respect of the operator's railway operations</li> </ul>

Post-incident testing can currently be conducted to an evidentiary standard by Police, ONRSR and operators in NSW. While limited Police testing data is available as negative test results are not reported to ONRSR, Police typically attend a number of Category A occurrences, such as fatalities (including suicides), level crossing incidents, and some running line collisions.

In NSW, some operators have indicated that it is not always feasible to undertake testing within the three hour evidentiary timeframe. In 2015-16 of the 1132 prescribed incidents 204 were in relation to collisions and derailments and operators have advised that testing was only undertaken following 54% of the 204 incidents.

As shown in **Table 8** below, in 2015/16, out of the 663 Category A incidents and 39,681 Category B incidents reported to ONRSR (including NSW), there were 11 positive drug and alcohol test results reported to ONRSR that were as a result of post-incident testing. None of these positive results were for a Category A incident.

**Table 8: Post-incident drug and alcohol testing**

	2013-14	2014-15	2015-16
<b>Category A incidents</b>	596	741	663
<b>Category B incidents</b>	31,952	44,284	39,681
<b>No of post-incident drug positives</b>	N/A	10	9
<b>No of post-incident alcohol positives</b>	N/A	1	2

Nine of these positive results in 2015-16 were in NSW with eight following prescribed incidents. These eight incidences would have been subject to the requirement for operators to conduct the testing to an evidentiary standard. There were no prosecutions for offences under the RSNL following post-incident testing during this time. An analysis of the nine positive results identified the following reasons for not progressing to prosecution:

- > Seven positive drug (urine) test results where there was no indication of the rail safety worker being under the influence of a drug
- > One positive breath test for alcohol that was not confirmed by breath analysis
- > One positive drug test result that was consistent with a declared medication and there were no signs of being under the influence.

In setting up the ONRSR drug and alcohol testing program, there was an expectation that ONRSR would conduct post-incident testing after all Category A incidents that Police did not attend. Police may attend an incident site as part of incident response activities and undertake testing, examples where Police generally attend include level crossing incidents and incidents involving fatalities. Police may choose to only conduct alcohol testing in some circumstances. Both Police and ONRSR undertake testing to an evidentiary standard which allows the Regulator to use test results as evidence to support prosecution, however if both attend testing is generally only undertaken by one party.

Since implementation of the program, there has been a less than anticipated post-incident testing conducted by ONRSR. For some incidents it has been deemed unnecessary for ONRSR to undertake post-incident testing. The main reason for this is:

- > Police are in attendance and will undertake the testing
- > the application law has not been amended to enable testing to be undertaken

- > negotiations with Police have not been finalised
- > the actions of rail safety workers involved were not considered to potentially be contributory to the incident
- > the incident recovery was quick, resulting in the worker continuing duties away from the site (for example a road-rail vehicle derailment resulting in the vehicle being returned to road mode and driven on road for the rest of its journey)
- > slips, trips and falls by members of the public that resulted in serious injury or death not involving a rail safety worker
- > incident sites were in remote locations and evidentiary timeframes could not be met
- > hazardous environment, such as weather conditions at the time presented unsafe conditions in which to send authorised persons.

There is a public expectation that rail safety workers involved in a significant incident of public interest will be tested for drug and alcohol use, and that if drug and alcohol use is identified, the rail safety workers involved will be prosecuted. ONRSR have a significant role to play, as the national safety regulatory body, to meet these expectations.

#### 7.4.2 Research from other industries in Australia and rail internationally

Post-incident testing is typically included in drug and alcohol testing regimes in other industries and internationally. While post-incident testing is not mandated in heavy vehicle or marine legislation in Australia, Police will generally be the ones to respond to incidents on the road or in domestic waters.

However, it is mandatory for operators in the aviation sector in Australia to conduct post-incident testing after an accident or serious incident if suitable test conditions exist. Suitable test conditions mean that testing can be conducted within 32 hours since the incident occurred for drug testing and within 8 hours for alcohol testing, and that it is practicable to conduct a test. This testing is not evidentiary (i.e. positive results cannot be used as evidence in a prosecution by the Regulator).

#### 7.4.3 Proposed approach

The Drug and Alcohol Review Reference Group strongly supported mandatory post-incident testing to an evidentiary standard for incidents where the actions of rail safety workers were potentially considered to have contributed to the incident and there is a level of public interest in the incident. They also supported that this testing should be undertaken by the Regulator or Police to ensure any further actions could be taken for noncompliance with the RSNL if warranted. The results of these tests are shared with the rail transport operator and therefore they would have the required information to support their investigation and action any positive results according to their internal policies.

If the Regulator was unable to or chose not to test then the rail transport operator would be required to undertake testing, unless circumstances prevented the testing to be undertaken. The testing undertaken by the operator would not be required to an evidentiary standard however would form part of the operator's investigation into the incident and any positive results would be dealt with in accordance with the operator's procedures.

As stated above the current classification of Category A occurrences includes a number of occurrences whereby testing is not considered warranted. ONRSR has undertaken a review of Category A incidents and other incidents and identified, those incidents when post incident testing would be appropriate. Included in this analysis are incidents involving a breach of network rules and signals passed at danger (SPADs). Although these are not Category A incidents, a breach of network rules is a prescribed incident in NSW.

**Table 9** provides an assessment of the different types of incidents considered against a series of questions to determine whether evidentiary post-incident testing should be required.

**Table 9: Analysis of the types of incidents that require post-incident testing**

	Approx. % of Cat A's in 2015-16	Could the rail safety worker have contributed to the occurrence?	Is the incident of public interest?	Should testing be evidentiary?
<b>Running Line Collisions between rolling stock</b>	1%	Possible	Yes	Yes
<b>Level crossing collisions</b>	4%	Unlikely	Yes	Yes
<b>Running Line Derailments</b>	8%	Possible	Yes	Yes
<b>Suspected suicides</b>	11%	Unlikely	No	No
<b>Fatalities (other than suspected self-harm)</b>	2%	Possible	Yes	Yes
<b>Serious injury ( as a result of slips, trips and falls)</b>	55%	Unlikely	No	No
<b>Serious injury (other than slips, trips and falls)</b>	14%	Possible	No	Yes
<b>Breach of network rules<sup>1</sup></b>	N/A	Possible	No	Yes
<b>SPADs (A1, A3, B4)<sup>2</sup></b>	N/A	Possible	No	Yes

*Note: if Police test, ONRSR will not test.*

<sup>1</sup> Post incident testing is currently required following a breach of network rules which is a prescribed incident in NSW.

<sup>2</sup> New classifications for SPADs come into effect from 1 July 2018 and those considered most appropriate for drug and alcohol testing have been included. Further information on the definition of the SPAD sub-categories is provided at Attachment B.

As previously noted, there is a public expectation that rail safety workers, involved in a significant incident of public interest will be tested for drug and alcohol use, and that if drug and alcohol use is identified, the rail safety workers involved may be prosecuted.

If the range of categories for which ONRSR undertakes post incident testing is expanded to include major SPADs and breaches of network rules, this will then allow evidentiary testing and potential subsequent prosecutions for major occurrences. It is acknowledged, even though ONRSR will endeavour to undertake testing wherever possible following a prescribed incident testing may not be able to be undertaken by ONRSR or police. When this occurs rail transport operators will be required to undertake testing of rail safety workers that could have potentially contributed to the incident. Even though this testing will not be required to be to an evidentiary standard it is essential input into the investigation and any positive results can be dealt with in accordance with the operators procedures.

It is recommended that the following incidents in **Table 10** be “prescribed incidents” whereby it is mandated that testing be undertaken. ONRSR will endeavour to undertake this testing wherever possible if police do not undertake the testing, however if this cannot take place then the rail transport operator will be required to undertake this testing.

**Table 10: Prescribed incidents for Regulator (or Police) to undertake post incident testing**

Running Line Collisions between rolling stock
Level crossing collisions
Running Line Derailments
Fatalities (other than suspected self-harm)
Serious injury (other than slips, trips and falls)
Serious Breach of network rules
SPADs (A1, A3, B4)

#### 7.4.4 Impact of proposed approach

The proposed approach may potentially increase coverage of evidentiary post-incident testing across Australia and ensure that this testing is targeted to the most appropriate incidents. It may potentially see a slight increase in post incident testing across Australia however even though it is not currently a legislative requirement outside of NSW it is general practice for operators to undertake testing in these situations.

Rail transport operators will be required to review their DAMP and update if required, to ensure they have post incident testing for the defined incidents included.

ONRSR will be required to increase the number of post incident tests undertaken, however the budget for this is already available. To enable this to be implemented nationally support from those jurisdictions where a full testing program by ONRSR is still unable to be implemented will be required.

#### **Recommendation:**

- 4 (a) Drug and alcohol testing following a prescribed incident to be mandatory in legislation.
- 4 (b) Post incident drug and alcohol testing to be undertaken following those prescribed incidents listed in **Table 10**.
- 4 (c) Rail transport operators to undertake drug and alcohol testing following a prescribed incident if this testing is not undertaken by police or ONRSR.
- 4 (d) ONRSR to endeavour to undertake drug and alcohol testing to an evidentiary standard unless undertaken by police, recognising that there will be circumstances where it will not be possible for ONRSR to undertake testing.

## 7.5 Drug and alcohol testing offences

### 7.5.1 Current offences provisions

The RSNL currently includes a number of offences in relation to drug and alcohol testing. These include:

- > A rail safety worker must not carry out, or attempt to carry out, rail safety work:
  - (a) while there is present in his or her blood the prescribed concentration of alcohol; or
  - (b) while a prescribed drug is present in his or her oral fluid or blood; or

(c) while so much under the influence of alcohol or a drug as to be incapable of effectively discharging a function or duty of a rail safety worker.

> A rail safety worker must immediately comply with a direction given by an authorised person.

While these offences are reasonably comprehensive, they do not encompass those scenarios where a person tampers or interferes with a sample.

Inclusion of such offence provisions was considered when the RSNL was initially being developed and it was recommended that it be included in application law in each jurisdiction. It has only been included in NSW application law, and partially in Tasmania's application legislation.

### 7.5.2 Proposed approach

It is proposed that offence provisions for tampering or interfering with a sample be included in the RSNL to apply nationally. This will address the current 'gap'. It would strengthen a nationally consistent offence framework and mean that rail safety workers nationally are subject to the same offence provisions in relation to tampering or interfering with a sample.

### 7.5.3 Impact of proposed approach

There are no identified regulatory burden impacts associated with this approach.

The new offence provisions would impact those rail safety workers or people obstructing authorised evidentiary drug and alcohol testing. While new national offence provisions would result, these would be supportive of existing RSNL provisions.

#### **Recommendation:**

5 Include in the RSNL nationally consistent offence provisions for tampering or interfering with a sample.

## 7.6 ONRSR drug and alcohol testing program

### 7.6.1 Effectiveness of current arrangements

In May 2012, Ministerial Council agreed to ONRSR implementing a drug and alcohol testing program. The three primary objectives of the ONRSR drug and alcohol testing program are:

- > To improve safety by reducing risks associated with rail safety workers undertaking rail safety work while under the influence of drugs and/or alcohol (i.e. by being a deterrent)
- > To monitor compliance with the RSNL
- > To monitor the effectiveness of operator drug and alcohol management programs.

The program consists of post-incident testing, intelligence-led risk-based testing and random testing. It is intended to complement operator and police testing.

In developing the ONRSR drug and alcohol testing program, it was agreed that the testing and evidentiary requirements for the program should mirror those of state law requirements for police road-side testing of drivers. This has enabled Police Officers in their role as authorised persons to be able to test rail safety workers under the RSNL in the same way that they test road users under road laws. It has also meant that testing of rail safety workers by authorised persons who were undertaking testing on behalf of ONRSR would be consistent with testing by Police.

This approach also meant that ONRSR could benefit from the robustness of road drug and alcohol testing laws, which are established and have been tried and tested in court over many years.

However, since implementation of the ONRSR drug and alcohol testing program, the decision to mirror the roads laws has resulted in an extremely complicated and inefficient multitude of processes; prescription of apparatuses; approval of analysts; protocols with Police; testing procedures; and in

most jurisdictions different regulatory challenges. Also, in a number of cases, legislative amendments have taken a number of years to progress, and incomplete or inconsistent mirroring of Police road provisions has further complicated the implementation process. Some of the challenges have included:

- > **Dependency on Police for confirmatory alcohol testing:** Some level of national consistency has been achieved in confirmatory alcohol testing through police undertaking breath analysis testing where required in most jurisdiction. Agreement to have police undertake this has yet to be agreed in Western Australia. However, this has necessitated the establishment of separate agreements and procedural arrangements with each Police agency. Police have also indicated their involvement was not intended to be widespread.
- > **Inconsistencies in drug testing provisions:** The range of testing and evidentiary provisions in jurisdictional road laws has resulted in inconsistency in confirmatory drug testing nationally.
- > **Legislative amendments:** To date, every jurisdiction except Western Australia has required legislative amendment in order for ONRSR to undertake testing to implement the program. These have taken significant time to progress, with some cases taking a number of years. Further, where the police testing provisions have been mirrored in rail legislation (rather than referred to directly) and the police provisions have subsequently been amended, rail legislative amendments to reflect these changes have not been progressed in a timely manner.
- > **Varied and complex procedures:** The process of aligning with different road laws in each jurisdiction has established different processes for the ONRSR program in each jurisdiction. This has presented challenges for Medvet (ONRSR's contracted third party provider). Medvet's Standard Operating Procedures are different for each jurisdiction and extremely complicated due to legislative requirements, particularly around non-negative test result processes and evidentiary requirements.

The program is still not fully implemented and these factors have rendered implementation of the program costly and extremely time consuming.

### 7.6.2 Proposed approach

A nationally consistent program would be more efficient and cost effective, but would require further engagement with jurisdictional stakeholders. There are significant hurdles to overcome in achieving consistency and implementing necessary legislative changes, which are demonstrably complex and would require agreement with many jurisdictional agencies.

In November 2016, Ministerial Council agreed to ONRSR exploring the concept of a single nationally consistent drug and alcohol testing program that could apply to authorised persons when testing rail safety workers anywhere within Australia. A nationally consistent approach would see authorised persons on behalf of ONRSR use the same devices, advices, notices, certificates, testing methods and processes; and the same evidentiary periods applying nationally. It would also mean that rail safety workers had the same defences available to them nationally for all ONRSR testing.

This approach would not impact on the way in which Police would operate. Police would continue to test rail safety workers under the RSNL in the same way that they test road users under road laws. In essence this would create a dual system with one set of parameters for authorised persons testing on behalf of ONRSR and one set of parameters for Police.

### 7.6.3 Impact of proposed approach

A single nationally consistent ONRSR drug and alcohol testing program may be more efficient and cost effective. It would help remove the current risk of testing being undertaken incorrectly due to the vast range of differences between jurisdictions and would be easier for a contracted third party provider to implement. It would substantially reduce if not alleviate any jurisdictional based amendments once implemented.

Even though rail safety workers would potentially be exposed to two different testing regimes they would, unlikely if ever, be subjected to both police testing and ONRSR testing and the differences in

the actual testing “experience” is envisaged to be extremely minimal. Police testing will remain the same and the experience for the rail safety worker would be the same as if they were to undergo roadside testing as a vehicle driver in that jurisdiction.

Whilst the ONRSR program continues to require the use of breath analysis by Police to conduct confirmatory alcohol testing, then a number of the components of the program will still be required to align with Police processes. Even though options are being explored in relation to other means of confirmatory testing at this stage, ONRSR has been unable to identify a cost effective way to avoid the need for Police to continue to do this.

There is still a significant amount of work to be undertaken in progressing this concept which will involve extensive engagement with a large number of stakeholders in all jurisdictions however if a common approach could be achieved, especially as the program expands there would be significant savings and efficiencies gained.

**Recommendation:**

- 6 Continue in researching the possibility of aligning drug and alcohol testing requirements under the national law, to be consistent across Australia.

## 8 Summary of proposed recommendations

The Drug and Alcohol Management Review final report is due to be finalised and considered by Ministerial Council in November 2017. Based on the analysis undertaken in this report, it is proposed that the final report to Ministerial Council makes the following recommendations.

### Recommendation 1

ONRSR and operators should have access to all testing methods in the law and the flexibility to apply the most appropriate method of drug testing based on the organisation’s identified risk.

### Recommendation 2

The level of random testing conducted by rail transport operators should be determined using a risk based approach. ONRSR will issue guidance material outlining their expectations in relation to managing the risk of drug and alcohol use SFAIRP.

### Recommendation 3

Rail transport operators should not be required under the RSNL to conduct drug and alcohol testing to evidentiary standards for use by the Regulator for prosecution purposes. Note the Regulator will increase their testing program.

### Recommendation 4

- 4 (a) Drug and alcohol testing following a prescribed incident to be mandatory in legislation.
- 4 (b) Post incident drug and alcohol testing to be undertaken following those prescribed incidents listed in **Table 10**.
- 4 (c) Rail transport operators to undertake drug and alcohol testing following a prescribed incident if this testing is not undertaken by police or ONRSR.
- 4 (d) ONRSR to endeavour to undertake drug and alcohol testing to an evidentiary standard unless undertaken by police, recognising that there will be circumstances where it will not be possible for ONRSR to undertake testing.

### Recommendation 5

Include in the RSNL nationally consistent offence provisions for tampering or interfering with a sample.

## **Recommendation 6**

Continue in researching the possibility of aligning drug and alcohol testing requirements under the national law, to be consistent across Australia.

## **RAIL REGULATOR: DETERRENCE THEORY BRIEF**

One of the significant behaviour theories that is highly applicable and can be applied to the rail work place drug testing scenario is that of deterrence theory. Originally developed in the field of criminology it is based on the assumptions that an individual's choice toward an act or behaviour is controlled through the threat of legal sanctions and that this threat will bring compliance to a behaviour deters and individual from offending. Within the classical deterrence model the theory argues that individuals would be afraid of the perceived legal punishment or consequences of their illegal act and this result in behaviour compliance. Additionally the effectiveness of the legal punishments are dependent on the perceived *swiftness*, *severity* and *certainty* of the punishment.

The application of this theory has been widely utilised in the road safety area and within this domain the case is particularly so to the area of random roadside breathe testing. Additionally and more recently deterrence theory is now being applied to reviews of Australian enforcement jurisdictions' operations in roadside drug testing.

Importantly within the context of the rail regulator and workplace alcohol and drug testing deterrence theory offers a well designed framework to assist policy makers.

### **DEFINITION OF DETERRENCE**

Homel (1986) and others such as Watson (2004) and Freeman et al (2014) outline three elements of Classic Deterrence theory (i.e. certainty, swiftness and severity of punishment) that function to deter an individual from a specific behaviour. Firstly there must be perceived by an individual that there is a high likelihood of being apprehended and punished. Secondly, the applied punishment must be severe, and the penalty must be administered swiftly. Additionally it is also argued that the perception towards punishment is influenced by the way individuals experience punishment (i.e. direct or indirect punishment).

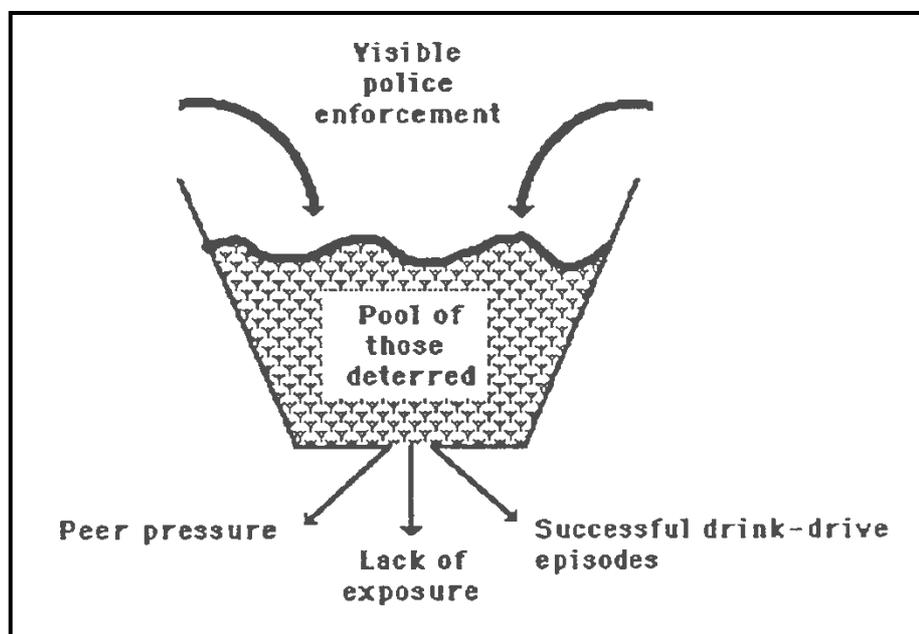
#### **The Certainty of Apprehension**

Certainty of apprehension, or the likelihood of getting caught, is one of the most powerful deterrents to offending behaviour. Freeman (2004) suggests that individuals will not stop or be deterred from specific acts and will not fear punishment if they perceive that the probability of being apprehended for their acts is relatively low.

Mendes (2004) reports that combining the high likelihood of apprehension, severity of sanction and swiftness of punishment has a positive significant impact on deterring road users from violating traffic rules and regulations. Additionally the impact of certainty on the behaviour is as relatively high as compared to the severity of sanctions.

A large and a growing body of literature indicates that certainty of sanctions is a key factor in modifying the behaviour. However Ritchy and Nicholson-Crotty (2011) would suggest that severity of sanctions alone within a perceived or real absence of traffic policing enforcement or detection of an offence is ineffective in changing behaviour. Bottoms (2006) suggests that increasing the probability of apprehension strongly influence the willingness to respect laws and regulations as compared to increasing the severity of sanctions. In an applied scenario Sool (2012) states that individuals are willing to comply with the speed limit when speed enforcement is highly visible.

An important facet in maintaining deterrence is that the impact of enforcement must be maintained. For example Homel's (1986) review of drink driving enforcement found that the deterrent effect is constantly being eroded by a variety of personal, environmental and social factors. Consequently, highly visible enforcement needs to be constant, reinforcing the perception of being caught must be maintained for a continual effect. See diagram below>



Source: Homel, 1986

### **The Severity of Sanctions**

As a parallel to the rail work place testing situation a large body of literature indicates that applying sufficiently severe sanctions is a key factor in achieving road safety and controlling the behaviour of road users. Importantly Freeman (2004) found that the perceived severity of the sanction has a positive relationship on the deterrence effect of a sanction. For example he found that longer periods of licence suspension were more effective than short periods of suspension. In short perceptions of the severity of sanctions strongly influence the behaviour and willingness of an individual to be involved in a specific behaviour. (Tavares, Mendes and Costa, 2008)

However research (Entorf, 2012; Watson 2014) suggests that applying severe punishments with the absence of perceived high probability of apprehension may actually lower the deterrent effect and the sense of obligation to follow specific regulations. The findings would suggest that that severity of punishment (alone) cannot deter individuals without certainty.

### **The Swiftness of Sanctions**

Davey and Freeman (2011) suggest that administering of a punishment (for committing illegal driving acts) soon after the acting illegally, significantly impacts on limiting the illegal behaviour. Thus, administering the associated punishment or sanction swiftly, following the time of apprehension, serves to increase the deterrent effect. Likewise delaying the sanction may decrease its potential influence on changing the behaviours of individuals. Overall it is generally argued that swiftness of sanctions has lowest impact in deterrence theory. However it should also be noted that this is perhaps the most understudied area of the overall theory.

### **General Deterrence and Specific Deterrence**

Within the field of Classical deterrence theory there are considered two separate but related domains or types of deterrence, namely general and specific deterrence. General deterrence involves targeting individuals who have not yet engaged in the illegal or targeted acts, through relying on fear of detection and the threat of punishment of others to alter their behaviour. Through general deterrence, sanctions against an offender can deter a broader population of persons from being involved in a specific activity. Importantly a corner stone of this deterrence approach is there must be a perceived likelihood of being caught if one breaks the rules. Additionally general deterrence has found to be more effective when accompanied by information or education programs (Davey & Freeman, 2011).

In contrast, specific deterrence is focused targeting individuals who have engaged in the act and punished. The incidence of detection and the subsequent punishment influences their further illegal involvement through fear of repeat detection and additional punishment (Davey & Freeman, 2011; Elliott B., 2003). In other words specific deterrence refers to the concept that those who were punished for acting illegally and they will then will obligate to the imposed rules and regulations (Mocan & Rees, 2005).

Within the concept of alcohol and other drug testing in the rail workplace a general deterrent approach could be seen as targeting those employees who normally or almost universally comply with the organisation's requirement around alcohol and other drugs. At the heart of this approach the testing program acts as a deterrent to these type of employees, if they ever considered inappropriate behaviour and taking a risk or found themselves in a situation where they may breach policy by having alcohol or other drugs in their system at work or while presenting for work. In essence this type of general deterrence program is consistently sitting and operating in the background as a reminder that they could and will be detected.

While specific deterrence in its purest form targets repeat offending one could consider that in the rail workplace it could target those specific employees who are breaching the alcohol and other drug policy or have a high possibility of doing so in the near future. In this instance, program operations and activity must be at level and of a type where such employees perceive there is a high probability of specifically being detected when they are at work (or presenting for work alcohol or another drugs in their system. In simple terms one could say specific deterrence is aimed at identifying and managing problem behaviour and general is about preventing problem behaviour.

### **Punishment Avoidance**

More recently an increasing amount of work in the deterrence domain has focused on the notion of punishment avoidance. In its simplest form this notion proposes that increasing the occasions or instances where and individual breaks laws and if failed to be detected for punished will increase and facilitate the likelihood of non-compliant behaviour by the offender and others (Watling, Palk, Freeman and Davey, 2010). Again this reinforces the notion of both perceived and actual detection in deterring unwanted behaviour.

This would suggest that within the rail workforce scenario, testing programs should operate at a level that aims to address the situation persons who have experienced "punishment avoidance" (i.e. those employees who have been at work with alcohol or

other drugs in their system and avoided detection)\_no longer feel comfortable that this avoidance will continue to be the case and that program operations will specifically and certainly detect them breaching the policy

### **Deterrence and the relationship with roadside drug testing**

As commented above the researcher as yet has been unable to identify scholar research articles related to an examination of deterrence theory within the context of alcohol and other drug testing in the work place. However an insightful parallel can be drawn from work in the area of road safety and particularly from the domains of random breath testing and the more contemporary issues of road drug testing.

In regards to deterring drug driving among the Australian motoring population, deterrence theory posits that the likelihood of offending is inversely related to the certainty, severity and swiftness of sanctions. Within this context, motorists are less likely to violate rules if they perceive the likelihood of the corresponding sanction to be certain, swift and severe. Of these constructs, a number of researchers have asserted that the most powerful deterrent effects on offending behaviour are produced by the perceived threat of the certainty of apprehension. That is, increasing perceptions regarding the likelihood of apprehension will produce the strongest deterrent effect in regards to reducing the prevalence of impaired driving. This was clearly demonstrated with regard to the introduction of random breath testing in Australia to combat drink driving, as the widespread implementation of such enforcement (which resulted in the increased likelihood of detection) resulted in reductions in offending rates. From a broader perspective, research has repeatedly demonstrated that committing a road safety violation while avoiding detection is one of the best predictors of recidivism. As a result, creating and maintaining perceptions regarding the high likelihood of detection would be perceived is crucial in the area of work place testing.

# SIGNAL PASSED AT DANGER / AUTHORITY EXCEEDED CATEGORISATION

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

There are eight sub-classifications of SPAD – these are:

SPAD Classification A1 - Limit of Authority (LOA) Missed by Train Crew

SPAD Classification A2 - Signal Irregularity for the LOA

SPAD Classification A3 - Proceed Authority Incorrectly Given by Rail Operator

SPAD Classification A4 - Sub-Optimal Train or Track Infrastructure Conditions

SPAD Classification B1 - Signal Restored and Passed at Danger – Infrastructure Failure

SPAD Classification B2 - Signal Restored and Passed at Danger – Network Control / Signaller Error

SPAD Classification B3 - Signal Restored and Passed at Danger - Emergency

SPAD Classification B4 - LOA Exceeded Through Uncontrolled Movement.