

# Waterfall SCOI Annual Status Report

Recommendations closed subject to implementation  
of an approved program or plan

April 2018 to March 2019



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## 1 Introduction

On 10 March 2017, the Office of National Rail Safety Regulator (ONRSR) assumed responsibility for overseeing the implementation of the NSW Government's response to the recommendations contained within the *Final Report of the Special Commission of Inquiry into the Waterfall Rail Accident (SCOI Final Report)* from the Independent Transport Safety Regulator of NSW (ITSR).

The overseeing role includes verifying that the SCOI Final Report's recommendations have been effectively implemented or that an approved plan is in place for implementation.

In 2013, the former Minister for Transport accepted ITSR's recommendation to change the frequency of public reporting from quarterly to annually given that the majority of recommendations were either closed or subject to an implementation plan. This report is the sixth annual report covering the period from 1 April 2018 to 31 March 2019 and details the status of those recommendations classified as closed subject to implementation of an approved program or plan.

ONRSR will continue to provide the Minister with annual reports for tabling in the NSW Parliament, in relation to the SCOI Final Report. ONRSR's public reporting will continue until the all recommendations are implemented, with reports being published on ONRSR's website.

For clarity, where actions are relevant to both ITSR and ONRSR, the generic term "**regulator**" has been used throughout this report, noting that the expectations of the regulator remain unchanged following the transition from ITSR to ONRSR.

### Organisational changes: train operators

On 1 July 2013, as part of the NSW Government's major reform of rail services, RailCorp's functions were divided between TfNSW and two new agencies; Sydney Trains and NSW Trains. As a result, Sydney Trains is responsible for the implementation of the recommendations contained within this report.

## 2 Report Structure

The SCOI Final Report was released on 17 January 2005 and made 177 recommendations, including 127 recommendations and 50 sub-elements.

This report is produced by ONRSR as part of its responsibility reporting on progress of the SCOI Final Report recommendations with a planned implementation. It details the current status and progress associated with the six recommendations that have an active implementation plan.

ITSR developed a classification system to reflect the progress of recommendations through the various stages of implementation which is being maintained by ONRSR and is described in an appendix to this report. A classification of closed subject to implementation of an approved program or plan was established to acknowledge that implementation of some recommendations would take place over a prolonged period of time and require major capital expenditure.

ONRSR monitors progress of these recommendations through its compliance audit and inspection program to ensure implementation continues as agreed.

### 3 Abbreviations

<b>IEDR</b>	Internal Emergency Door Release
<b>ITSR</b>	Independent Transport Safety Regulator of NSW
<b>NSW</b>	New South Wales
<b>ONRSR</b>	The Office of the National Rail Safety Regulator
<b>RMC</b>	Rail Management Centre
<b>SCOI</b>	Special Commission of Inquiry
<b>TfNSW</b>	Transport for New South Wales

### 4 Recommendations

The following recommendations are classified as closed **subject to implementation of an approved program or plan**:

<b>Recommendation 4</b>	The Rail Management Centre should be equipped by RailCorp with a transcriber system, or mimic board, or such other system as is necessary to enable identification of the precise location at any time of any train on the RailCorp network.
<b>Recommendation 88</b>	<p>The RailCorp passenger containment policy must be abandoned. (RailCorp: Implemented – containment policy abandoned).</p> <p>Note: This recommendation will be finalised once Sydney Trains completes the rollout of its Internal Emergency Door Release (IEDR) retrofit program.</p>
<b>Recommendation 89</b>	There must be a minimum of two independent methods of self-initiated emergency escape for passengers from all trains at all times.
<b>Recommendation 90</b>	All passenger trains must be fitted with an internal passenger emergency door release.
<b>Recommendation 92</b>	The internal passenger emergency door release should be fitted with a facility which prevents it from operating unless the train is stationary.
<b>Recommendation 93</b>	The operation of train doors should have an override facility whereby the train driver or the guard can override an internal passenger emergency door release system if the door release is interfered with when there is no emergency. There should be an alarm, together with an intercom, in the train guard's compartment so that, if a passenger attempts to initiate an emergency door release, there is an appropriate delay during which time an alarm sounds in the train guard's compartment and the guard can then, after first attempting to speak via the intercom to the person concerned, if necessary, override the door release, and make an appropriate announcement over the intercom system in the train.

## 5.1 Recommendation 4

This recommendation was closed subject to the implementation of an approved program or plan during the reporting period July to September 2006 based on RailCorp's (now Sydney Trains) staged implementation plan. In November 2008, the Rail Management Centre (RMC) had coverage (visibility) of 78.7% of train signals on the RailCorp network enabling the location at any time of any train operating within this area. Various projects have progressively increased the area of coverage and specific details are included in previous reports.

As at 31 March 2019, the overall coverage of train signals on the Sydney Trains' network remained at 87.8%. Sydney Trains advised that during the current reporting period no projects have been undertaken that have increased coverage.

The completion of the Waterfall train location system extension works is scheduled to occur in 2022 taking coverage to 88.7%. Projected coverage of 90.5% is expected to be achieved by 2023 following completion of the projects in the Point Clare to Dora Creek area.

## 5.2 Recommendations 88-90 and 92-93

### 5.2.1 Background

These recommendations were closed **subject to the implementation of an approved program or plan** during the reporting period October to December 2006 (recommendation 88) and April to June 2007 (recommendations 89-93, 95, 98-101).

In 2006, RailCorp abandoned its passenger containment policy, following an extensive risk assessment that was overseen by ITSR, and agreed to install internal passenger emergency door release mechanisms. In-principle government funding was approved in 2006 for RailCorp's retrofit program to install IEDRs on CityRail trains and on all new rolling stock.

However, at that time, the retrofit program did not require the fitting of a crew override facility as per recommendation 93.

The risk assessment did not support the use of emergency windows for passenger escape as this may decrease the crashworthiness of the train and possibly pose a higher risk to passengers. ITSR accepted this finding from RailCorp's risk assessment.

Following an incident on the Harbour Bridge in 2007, RailCorp revised its position on the internal emergency door release mechanism and decided to fit a crew override facility as per recommendation 93, to prevent passengers from exiting the train in unsafe circumstances. This facility will enable the crew to make a judgement on the situation and override the unlocking of the doors after speaking with the passenger via a Help Point and reviewing the closed-circuit television images. This additional mechanism required further funding, which was approved in November 2009.

RailCorp's two independent methods of self-initiated emergency egress for passengers are via the external doors and through the inter-car doors into the next carriage. Government funding was provided to implement a staged program from 2010 to the end of 2013 to fit IEDR mechanisms to all new trains and to retrofit existing CityRail trains (that is, H-sets, M-sets and Hunter trains). This program is being monitored by the regulator.

The IEDR fitment of M-sets, Hunter trains has been completed, with the A-set (Waratahs) being supplied with IEDR fitted.

### 5.2.2 H-Set Update

RailCorp commenced an IEDR trial program in 1Q10, during which issues were identified with hardware integration. In 2Q10, RailCorp ran in-service trials of a prototype IEDR system that successfully demonstrated the design concept. Based on the trials, the retrofit program for H-sets was expected to commence 1Q11 but did not occur, resulting in the program being delayed. In February 2011, RailCorp advised ITSR that the H-set retrofit program would commence 1Q13 and be completed by the end of 4Q15.

In December 2015 as planned, the IEDR system had been installed on all 55 of Sydney Trains' H-sets. However, due to a software issue associated with the door override function, the IEDR system on the fleet was isolated. Sydney Trains subsequently rectified this issue and conducted successful on-train testing in July 2016.

Sydney Trains expected to commission its IEDR fitted H-sets into passenger service during September 2016. This was delayed for operational problems associated with dividing and joining the sets between 4 car and 8 car configurations; as well as system compatibility issues between commissioned and non-commissioned sets.

As of 31 March 2019, all 55 H-sets are commissioned to stage 3 of a four-stage commissioning process. In this stage, the system is seen by the crew and heard by the crew but is not accessible by the public. The access doors in the vestibules are still locked and the revised signage explaining the function and location of the IEDR system have not been applied. Stage 4 involves applying the new signage and unlocking the access doors, and is anticipated to be completed by the end of 2019.

### 5.3 Summary Status

The status of IEDR fitment is as follows:

<b>Fleet</b>	<b>Status</b>
A-Sets (Waratah)	complete: supplied fitted
H-Sets (OSCAR)	in progress, due end 2019
M-Sets (Millenium)	complete: November 2014
Hunter Rail cars	complete: September 2016

## Appendix A: Classification system taxonomy

Status		Definition
Open	Await response	This status is automatically assigned to an accepted recommendation. Affected parties will be asked to submit their response for implementing the recommendation to the regulator.
Open	Response received	The regulator has received a response from an affected party and this response is under review by it. It has not yet been accepted by the regulator.
Open	Acceptable response	The regulator agrees that the planned action, when completed, meets the recommendation.
Open	Acceptable alternative response	The regulator agrees that alternative action, when completed, satisfies the objective of the recommendation.
Open	Response rejected by the regulator	The regulator does not agree that the planned or alternate action meets the recommendation. The company or agency is advised of the rejection and requested to provide a revised response.
Open	Company claims closure	The entity claims that the planned or alternate action has been completed. The action has not yet been verified by the regulator, who has not yet agreed that the item is closed.
Closed	Recommendation rejected	The regulator has determined through further analysis and review that the recommendation is not appropriate (i.e. will not achieve the desired safety outcomes) and has rejected the recommendation. It is therefore closed.
Closed	No longer applicable	The recommendation has been overtaken by events and action is no longer required. For example, a new technology has eliminated the reason for the recommendation, it has been superseded by other recommendations issued, or the operator affected has gone out of business.
Closed	Action verified	Completion of the planned or alternate action has been verified by the regulator through a compliance inspection or audit.
Closed	Action not verified	The regulator accepts that the planned or alternate action has been completed following a review of documentation submitted. Field verification is not necessary.
Closed	Subject to the implementation of the approved program or plan	A long term implementation plan has been approved. The regulator will monitor reported progress against the plan to ensure compliance with delivery schedule.