Status of Waterfall rail accident recommendations

Annual Report
1 April 2015 to 31 March 2016
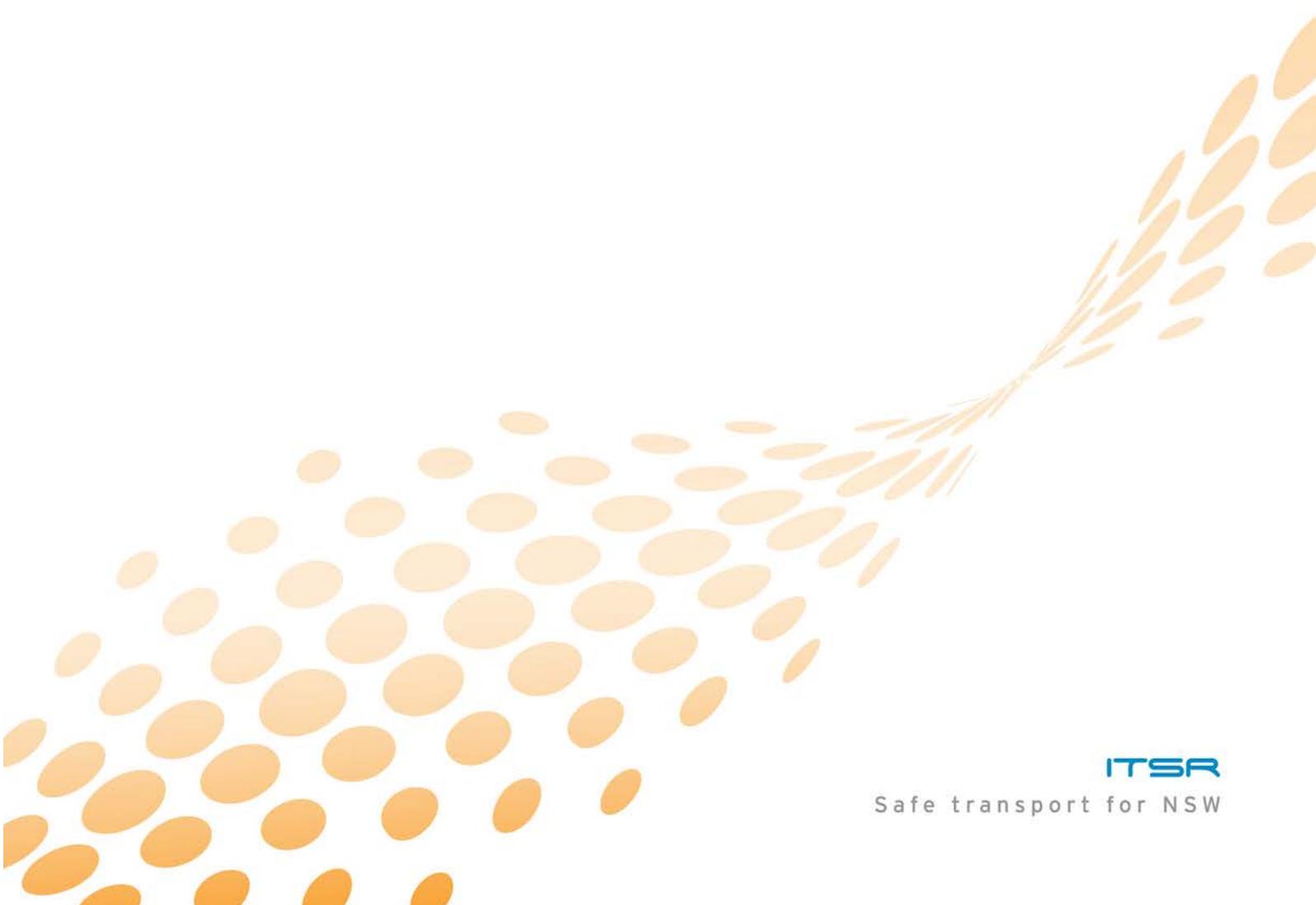
ITSR
Safe transport for NSW

Introduction

This document is produced by the Independent Transport Safety Regulator (ITSR) as part of its responsibility for monitoring implementation of the Waterfall rail accident recommendations.

It provides the current status of all 177 recommendations, including a summary of the government's response to each of the recommendations and ITSR's stated expectation for satisfactory implementation of the recommendations.

The appendix to this document provides definitions of the status classifications. ITSR developed the classification system based on accepted international practice.

Background

The Special Commission of Inquiry (SCOI) into the Waterfall rail accident released its final report on 17 January 2005.

The report, titled the *Final Report of the Special Commission of Inquiry into the Waterfall Rail Accident*, made 177 recommendations (including 127 recommendations and 50 sub-elements).

The recommendations proposed in the SCOI report indicated actions to be taken by a number of organisations including RailCorp (now Sydney Trains), emergency services agencies, ITSR, the Office of Transport Safety Investigations and other rail operators in NSW.

Following the publication of the 33rd quarterly report in April 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 a long term implementation plan.

ITSR will provide the Minister with subsequent reports on an annual basis for the same reporting period (i.e. 1 April to 31 March) for tabling in Parliament. These will detail the status of the remaining recommendations and public reporting will continue until completion of their implementation. All reports are published on ITSR's website.

To enable ITSR to keep abreast of progress on the two open recommendations and the recommendations that have been closed subject to the implementation of an approved program or plan, ITSR requires updates on a four monthly basis from Transport for NSW and Sydney Trains. These assist in the formulation of these annual reports.

Changed organisational arrangements

As of 1 July 2012, responsibility for the delivery of RailCorp's automatic train protection project (recommendation 32) and the digital train radio system project (recommendation 38) were transferred to Transport for NSW (TfNSW).

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.

Recommendations

Recommendation 1

Staff at the Rail Management Centre (RMC) should receive training from RailCorp to enable them to quickly and accurately assess that an emergency has occurred and to provide precise and reliable information to emergency response personnel about the location of the emergency, the available access to the site and the resources necessary.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to provide:

a)   evidence of development of a training program that addresses issues identified in the SCOI (includes development process, training aids/curriculum)

b)   evidence of appropriate assessment competency (delivery of course by appropriately qualified trainers)

c)   evidence of a process to ensure the training of new staff and the refresher training of existing staff

d)   review process built-in, to take into account relevance and changes.

Recommendation 2

A dedicated telephone line should be established by RailCorp between the RMC and any Emergency Services Control Centre for use during any emergency.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented through other means. The RMC has touch screen dial up capability to Police, Fire Brigade and Ambulance. In addition, a dedicated phone line is available for emergency services incoming calls.

ITSR expectation

RailCorp to provide evidence of the connected services. Verification to be confirmed through:

•   evidence by compliance review

•   evidence of testing/exercise to ensure functionality.

Recommendation 3

A designated staff member at the RMC should act as the rail emergency management co-ordinator. He or she should be the sole point of contact at the RMC with other rail personnel involved in the rail accident and emergency services personnel during the rescue phase of the emergency response.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

The initial requirement is for a person to be readily identified. This person needs to have access to the appropriate hardware and procedures and be prepared to act as required in the SCOI report. RailCorp to provide:

a)   evidence of development of training program that addresses issues (includes development process, training aids/curriculum)

b)   evidence of appropriate assessment competency (delivery of course by appropriately qualified trainers)

c)   evidence of process to ensure the training of new staff and the refresher training of existing staff

d)   review process built-in, to take into account relevance and changes

e)   evidence of training of skills assessment

f)   evidence of responsibilities in position descriptions

g)   evidence of responsibilities reflected in plan (verification of elements a-g in relation to training will be covered in recommendation 20).

Recommendation 4

The RMC 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.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed** Subject to implementation of an approved program or plan	See *Waterfall rail accident recommendations – closed subject to implementation of an approved program or plan* for progress	Verified

Government response

Supported in principle. The RMC is equipped with a network mimic panel that currently gives train visibility on approximately 65% of the RailCorp network. Visibility of approximately 90% is targeted for 2008. RailCorp will conduct a study of other options available, including GPS technology to provide a more precise location at any time of all operators' trains on the RailCorp network.

ITSR expectation

RailCorp to provide a detailed program to explain how the trains will be located on a board, or similar, in the RMC. Recognising that this will require some capital expenditure, it is expected that the program will be a funded program with timelines.

Functionality is to include a requirement to enable trains to be readily identified, as a minimum. Conduct a compliance review (to determine if current coverage of the network is 65%). Review the existence planning/funding (that will achieve 90% coverage by 2008). Check the existence of plans/project to review options available.

Recommendation 5

All train guards should be trained by RailCorp in the use, of the MetroNet radio and instructed to use it in any emergency.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

The training of guards in the use of MetroNet radio is supported and being implemented. The use of MetroNet radio by guards in emergencies is supported in principle and RailCorp will review the operational and technical issues the recommendation raises.

ITSR expectation

RailCorp to provide details of the training program that demonstrates that guards are trained in the use of MetroNet radio and know how to use the system in an emergency. The program is to include:

a)   evidence of development of training program that addresses issues (includes development process, training aids/curriculum)

b)   evidence of appropriate assessment competency (delivery of course by appropriately qualified trainers)

c)   evidence of process to ensure the training of new staff and the refresher training of existing staff

d)   review process built-in, to take into account relevance and changes

e)   ensure guard has access to communications

f)   assess project plan for implementation.

Recommendation 6

Procedures should be put in place by RailCorp to ensure that electrical power supply to the area of an accident can be immediately isolated, if necessary, in the event of a rail injury or harm.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to demonstrate that appropriate procedures have been established and that all appropriate staff have been trained in the procedures. The overall program is to demonstrate that procedures have been developed, with appropriate consultation. Project to include:

a)   evidence of development of training program that addresses issues (includes development process, training aids/curriculum)

b)   evidence of appropriate assessment competency (delivery of course by appropriately qualified trainers)

c)   evidence of process to ensure the training of new staff and the refresher training of existing staff

d)   review process built-in, to take into account relevance and changes

e)   ensure that the procedures are included in incident plans.

Recommendation 7

Satellite telephones should be provided by RailCorp to all rail commanders at any emergency.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to provide a schedule for the purchase of satellite telephones. Procedure to deploy to RailCorp rail commander developed. Procedures to include process to ensure telephones are in working order.

Recommendation 8

All signal telephones must be maintained by RailCorp in proper working order.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to demonstrate that a suitable inspection, fault rectification and maintenance plan is in place. The maintenance plan is to include:

- process for reporting faults

- process for responding to faults

- preventative maintenance.

Recommendation 9

All emergency services stations should be provided with access keys to, and maps showing, all gates providing access to RailCorp tracks within their geographic area of responsibility.

Agency	Status	ITSR assessment	Verified
RailCorp and NSW emergency services	**Closed**	Implemented	Verified

Government response

Supported in principle subject to discussion between RailCorp and emergency services regarding operational and security issues.

ITSR expectation

Item requires an agreement between RailCorp and emergency services in place on most effective means of access to information to facilitate immediate access to emergency site agreement with emergency services. RailCorp to demonstrate that details are included in the incident management plans.

Recommendation 10

A railway disaster plan, or rail displan, should be developed by RailCorp and the emergency services to ensure co-ordinated inter-agency response to rail accidents and incidents on the RailCorp network.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented through other means. The State Emergency Management Committee advises a specific sub plan for rail would not provide additional response capability and it would not be consistent with the all hazards approach.

Instead the Commissioner's recommendations about a specific Railway Disaster Plan will be incorporated in the overall State Disaster Plan (Displan) and RailCorp's Incident Management Framework. This framework addresses all level of rail incidents including emergencies and will be implemented early 2005.

ITSR expectation

That a joint or jointly developed plan is produced by the agencies. The details of the plan are to include, amongst other things, immediate response, site management and recovery processes. Also requires the development of:

- comprehensive incident management plans/procedures

- development of network incident management plan with ARTC and RailCorp (track manager)

- training issues to ensure that staff can implement.

Recommendation 11

The rail displan should include the use by all emergency response personnel of a uniform incident command system, involving procedures for such matters as the establishment of inner and outer perimeters, control of access to the site, orderly evacuation of injured passengers and the establishment of a staging area remote from the accident site, in a unified command structure with the site controller co-ordinating the various emergency services through representatives of each service.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented through the RailCorp Incident Management Framework.

ITSR expectation

That a joint or jointly developed plan is produced by the agencies. The details of the plan are to include, amongst other things, immediate response, site management and recovery processes. Also requires the development of:

- comprehensive incident management plans/procedures

- development of network incident management plan with RailCorp (track manager)

- training issues ensuring that staff can implement the procedures will be covered by Recommendation 20.

Recommendation 12

The rail displan should include provision for the appointment of a rail emergency management co-ordinator at the RMC, and an on-site rail commander with the sole function of assisting and supporting the emergency services during the rescue phase of the emergency response.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented through the RailCorp Incident Management Framework.

ITSR expectation

RailCorp to provide:

a)   evidence of development of training program that addresses issues identified in the SCOI (includes development process, training aids/curriculum)

b)   evidence of appropriate assessment competency (delivery of course by appropriately qualified trainers)

c)   evidence of process to ensure the training of new staff and the refresher training of existing staff

d)   review process built-in, to take into account relevance and changes

e)   that a joint or jointly developed plan is produced by the agencies.

The details of the plan are to include, amongst other things, immediate response, site management and recovery processes. Also requires the development of:

- comprehensive incident management plans/procedures.

- development of network incident management plan with RailCorp (track manager)

  training issues to ensure that staff can implement will be covered in Recommendation 20.

Recommendation 13

The rail displan should provide for the site controller to have complete control of the site, with other agencies co-ordinating with and supporting him or her, until the rescue phase of the emergency response has been completed.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented through the RailCorp Incident Management Framework. The RailCorp Incident Management Framework aligns with the State Displan, which requires the site controller to have control of the incident site.

ITSR expectation

That a joint or jointly developed plan is produced by the agencies. The details of the plan are to include, amongst other things, immediate response, site management and recovery processes. Also requires the development of:

- comprehensive incident management plans/procedures

- development of network incident management plan with RailCorp (track manager)

- training issues to ensure that staff can implement will be covered in Recommendation 20.

Recommendation 14

The incident command system should clearly identify the roles of the rail commander, site controller, police commander and commanders of the other emergency services, and the way in which each is to work together during the recovery phase of any rail accident.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented through the RailCorp Incident Management Framework.

ITSR expectation

That a joint or jointly developed plan is produced by the agencies. The details of the plan are to include, amongst other things, immediate response, site management and recovery processes. Also requires the development of:

- comprehensive incident management plans/procedures

- development of network incident management plan with RailCorp (track manager)

- training issues to ensure that staff can implement will be covered in Recommendation 20.

Recommendation 15

The location of the command post for site control at the scene of any rail accident should be identified by NSW Police by a distinctive flashing light.

Agency	Status	ITSR assessment	Verified
NSW emergency services	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

That a joint or jointly developed plan is produced by the agencies. The details of the plan are to include, amongst other things, immediate response, site management and recovery processes. Also requires the development of:

- comprehensive incident management plans/procedures

- development of network incident management plan with RailCorp (track manager)

- training issues to ensure that staff can implement.

Details also include:

- emergency service action

- implementation of distinctive identification of command post.

Recommendation 16

The role of the rail commander should be to provide support and assistance to the site controller and emergency services personnel until the rescue phase of the emergency response to any rail accident is completed.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented through the RailCorp Incident Management Framework.

ITSR expectation

That a joint or jointly developed plan is produced by the agencies. The details of the plan are to include, amongst other things, immediate response, site management and recovery processes. Also requires the development of:

- comprehensive incident management plans/procedures

- development of network incident management plan with RailCorp (track manager)

- training issues to ensure that staff can implement will be covered in Recommendation 20.

Recommendation 17

The rail commander should have complete authority to direct and control any rail employees attending the site of a rail accident, in accordance with directions given or arrangements put in place by the site controller, until the rescue phase of the emergency response to the rail accident has been completed.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented through the RailCorp Incident Management Framework.

ITSR expectation

That a joint or jointly developed plan is produced by the agencies. The details of the plan are to include, amongst other things, immediate response, site management and recovery processes. Also requires the development of:

- comprehensive incident management plans/procedures

- development of network incident management plan with RailCorp (track manager)

- training issues to ensure that staff can implement will be covered in Recommendation 20.

Recommendation 18

RailCorp should develop and implement an emergency response plan for management of all rail accidents. Such a plan should be subsumed by the rail displan in the case of serious accidents or incidents.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented through the RailCorp Incident Management Framework. The RailCorp Incident Management Framework was developed in consultation with emergency service agencies and it aligns with the State Disaster Plan

ITSR expectation

That a joint or jointly developed plan is produced by the agencies. The details of the plan are to include, amongst other things, immediate response, site management and recovery processes. Also requires the development of:

- comprehensive incident management plans/procedures

- development of network incident management plan with RailCorp (track manager)

- training issues to ensure that staff can implement.

Recommendation 19

The RailCorp emergency response plan should include action checklists of the steps that each employee is required to take, and the order for specific employees to follow in case of emergency.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented through the RailCorp Incident Management Framework.

ITSR expectation

That a joint or jointly developed plan is produced by the agencies. The details of the plan are to include, amongst other things, immediate response, site management and recovery processes. Also requires the development of:

- comprehensive incident management plans/procedures

- development of network incident management plan with RailCorp (track manager)

- training issues to ensure that staff can implement will be covered in Recommendation 20.

- development/implementation of checklists

- distribution of the checklists and alignment with the staff training and emergency exercises.

Recommendation 20

All operational rail staff should be trained by RailCorp in the action checklist relevant to each.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

That a joint or jointly developed plan is produced by the agencies. The details of the plan are to include, amongst other things, immediate response, site management and recovery processes. Also requires the development of:

- comprehensive incident management plans/procedures

- development of network incident management plan with RailCorp (track manager)

- training issues to ensure that staff can implement

- development/implementation of checklists

- distribution of the checklists and alignment with the staff training and emergency exercises.

To ensure that training requirements are met under Recommendation 3 namely, RailCorp to provide:

a) evidence of development of training program that addresses issues (includes development process, training aids/curriculum)

b) evidence of appropriate assessment competency (delivery of course by appropriately qualified trainers)

c) evidence of process to ensure the training of new staff and the refresher training of existing staff

d) review process built-in, to take into account relevance and changes

e) evidence of training of skills assessment

f) evidence of responsibilities in position descriptions

g) evidence of responsibilities reflected in plan.

To ensure that staff can implement emergency procedures in respect of:

Recommendation 11 use by all emergency response personnel of a uniform incident command system

Recommendation 12 appointment of a rail emergency management co-ordinator at the RMC and an on-site rail commander

Recommendation 13 site controller to have complete control of the site and the rail commander must report to this position)

Recommendation 14 incident command system has clearly identified roles and that a joint or jointly developed plan is produced by the agencies

Recommendation 16 rail commander should provide support and assistance to the site controller and emergency services personnel

Recommendation 17 the rail commander should have complete authority to direct and control all response personnel from rail organisations

Recommendation 19 the RailCorp emergency response plan should include action checklists of the steps that each employee is required to take and the order for specific employees to follow in case of emergency

Recommendation 21

The RailCorp emergency response plan should be provided to all emergency response agencies. The officers of each emergency service should be trained in any rail specific features of the plan, so as to better ensure inter-agency co-ordination in the circumstances of an emergency.

Agency	Status	ITSR assessment	Verified
RailCorp and NSW emergency services	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented through other means. The RailCorp Incident Management Framework will be given to all emergency response agencies. In addition, RailCorp has provided access to emergency services to railway equipment for training purposes.

RailCorp has also produced a DVD covering rail specific emergency response matters for use by the emergency services for training their staff. 500 DVDs have been given to each of Fire Services, Ambulance and Police.

Emergency services personnel will be trained in rail hazard awareness using material provided by RailCorp. The very large number of emergency response personnel (including volunteer services) that may respond to a rail incident means training of all personnel in the RailCorp framework is unlikely to be achievable. Emergency services will investigate with RailCorp an extension of the DVD into a multimedia resource to improve the ability to educate wider numbers of emergency service workers.

ITSR expectation

The training program needs to be managed and implemented jointly by the emergency services and RailCorp. Details of the implementation program should include:

- existence of comprehensive incident management plans/procedures

- development of network incident management plan with RailCorp (track manager)

- training issues

- liaison communication with emergency services

- the RailCorp incident report framework needs to be provided to emergency services. Emergency services need to determine how best and who to train in the RailCorp Incident Management Framework.

Recommendation 22

The RailCorp emergency response plan should include a requirement for the debriefing of all senior rail and emergency response personnel involved in any rail accident, so as to determine the way or ways in which emergency response arrangements for rail accidents can be continually improved, and thereafter implement such improvements.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

The details of the debriefing sessions is to be included in RailCorp procedures and plans. The content of the debriefs should be reviewed to ensure that it addresses the effectiveness, on a case by case basis, of the incident management plans/procedures especially liaison issues with emergency services, network incident management plan with ARTC and RailCorp, if used, and training issues, if they are found to be a factor.

Recommendation 23

All emergency response personnel should be specifically trained in the features of railways which are relevant to their work, such as the location and means of operation of all emergency door releases on trains, the location and use of signal telephones, the methods by which electrical power can be isolated and the means by which they can readily identify and obtain information from the on-site rail commander.

Agency	Status	ITSR assessment	Verified
RailCorp and NSW emergency services	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented through other means. See Recommendation 21.

ITSR expectation

The training program needs to be managed and implemented jointly by the emergency services and RailCorp. Details of the implementation program should include:

- existence of comprehensive incident management plans/procedures

- development of network incident management plan with RailCorp (track manager)

- training issues

- liaison communication with emergency services

- the RailCorp incident report framework needs to be provided to emergency services. Emergency services to determine how best and who to train in the RailCorp Incident Management Framework.

- appropriate agreements/arrangements in place between rail operators and emergency services.

Recommendation 24

Regular field training exercises should be conducted by RailCorp with the emergency services to ensure that the incident command system and rail displan are able to be fully implemented as quickly as possible and are reviewed and improved.

Agency	Status	ITSR assessment	Verified
RailCorp and NSW emergency services	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

Program established for exercise in consultation with emergency services.

Recommendation 25

Uniform verbal descriptions identifying that power has been isolated should be developed by RailCorp and utilised by all railway personnel, electrical service providers and all emergency response personnel.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to provide:

a) procedures developed (including appropriate consultation development)

b) evidence of development of training program that addresses issues (includes development process, training aids/curriculum)

c) evidence of appropriate assessment competency (delivery of course by appropriately qualified trainers)

d) evidence of process to ensure the training of new staff and the refresher training of existing staff

e) review process built-in, to take into account relevance and changes

f) ensure included in incident management plans.

Recommendation 26

All rail employees should be trained by their employer to commence any emergency communication with the words 'emergency, emergency, emergency', thereafter to identify themselves, the train, its location, what has occurred, the approximate passenger load and whether death or injuries have occurred.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to provide:

a) appropriate training for operational and non-operational staff in emergency communication procedures

b) evidence of development of training program that addresses issues (includes development process, training aids/curriculum)

c) evidence of appropriate assessment competency (delivery of course by appropriately qualified trainers)

d) evidence of process to ensure the training of new staff and the refresher training of existing staff

e) review process built-in, to take into account relevance and changes.

Recommendation 27

A direct line of communication should be established between the RMC and Emergency Services Operations Control Centre by a 'tie line' or otherwise, so as to ensure that in the case of a serious rail accident there is an open line of communication between the officer in charge of the management of the incident at the RMC and the various emergency response services.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented through other means. See also Recommendation 2. The RMC has touch screen dial up capability to Police, Fire Brigade and Ambulance. In addition, a dedicated phone line is available for emergency services incoming calls.

ITSR expectation

RailCorp to provide evidence of the connected services. Verification to be confirmed through:

- evidence by compliance review

- evidence of testing/exercise to ensure functionality.

Recommendation 28

A training centre for emergency services personnel should be established by RailCorp. The emergency services personnel should be required to undertake training at such a centre, which should be equipped with features replicating railway infrastructure and rolling stock.

Agency	Status	ITSR assessment	Verified
RailCorp and NSW emergency services	**Closed**	Implemented	Verified

Government response

Supported and being implemented. An emergency services training facility is in place at Redfern with a platform, double decker carriage and blackout facilities. Petersham now nominated in place of Redfern.

ITSR expectation

RailCorp and emergency services agencies to review appropriateness and suitability of existing facilities. Determine and implement these arrangements.

Recommendation 29

All railway owners and operators should have a quality assurance program for the design and construction of rolling stock and regular review of construction to ensure that the rolling stock satisfies the original functional performance specifications.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

ITSR will ensure through its accreditation process that operators have detailed procedures for the design, construction and introduction of any new rolling stock.

Recommendation 30

The rail safety regulator should set standards for the design, manufacture, testing and commissioning of rolling stock to ensure that the rolling stock is fit for its purpose.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented through other means. ITSR will introduce regulations including for rolling stock that set out the expectations (or performance outcomes) required of industry. The regulations will be developed on a national basis, through the National Transport Commission (NTC) process, to ensure consistent application across the Australian rail industry. Notwithstanding the expectation that industry will develop and maintain appropriate safety standards, ITSR will retain the power to mandate such standards if the industry clearly fails to deliver satisfactory safety outcomes.

ITSR expectation

ITSR will refer the matter to the NTC for development of national regulations. In the interim, ITSR will require operators, through the accreditation process to meet existing industry standards for rolling stock acquisition, including AS4292, rolling stock units, Train Operating Conditions and industry technical codes.

Recommendation 31

All trains must be fitted with a minimum of two independent engineering defences to minimise the risk of derailment or collision in the event of train driver incapacitation.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported in principle for further review. ITSR supports this for driver-only operations and will review its application on an industry-wide basis. It has been implemented on all RailCorp passenger trains. Driver safety systems and train protection systems are interrelated but may also be implemented independently. Recommendations 31-33 need to be reviewed in light of this relationship. All RailCorp passenger rolling stock have a minimum of two engineering defences (deadman, vigilance, trainstops) except 600 class (those operating in the Hunter Valley) which will be replaced from the end of 2005 with rolling stock that complies with this requirement. In the meantime on 600 class, the train guard travels with the driver as added protection for driver incapacitation.

ITSR expectation

ITSR currently requires through the existing accreditation process all driver - only trains (i.e. one person in the drivers cab) to be fitted with two independent engineering defences. ITSR to develop and lead a review of the need for a second engineering defence in other trains. ITSR to establish position following review.

Recommendation 32

RailCorp should progressively implement, within a reasonable time, level 2 automatic train protection with the features identified in chapter 8 of this report.

Agency	Status	ITSR assessment	Verified
RailCorp (now TfNSW)	**Open** Implementation date *31/12/2019	Acceptable alternative response	

Government response (February 2005)

Requires further detailed review. The government supports the implementation of additional train protection systems. Implementation of level 2 automatic train protection (ATP) as detailed in the recommendation would involve the replacement of all line-side signalling on the RailCorp network with on-train control systems. In addition every intra and inter-state train accessing the network would also need to be equipped with level 2 ATP technology.

RailCorp has already retained consultants to undertake evaluation and risk assessment regarding implementation of additional automatic train protection systems on the RailCorp network. RailCorp will work with the Australian Rail Track Corporation (ARTC) - which operates the interstate network - to develop, in conjunction with ITSR and interstate rail regulators, a national standard for an automatic train protection system.

RailCorp will also undertake a comprehensive review which will include a risk assessment, technical feasibility and cost benefit analysis of introducing level 1 ATP as well as level 2 ATP, as recommended by the Commission. Consistent with recommendation 34 any future options will need to be assessed by independent verification of acceptable risk.

ITSR expectation

A detailed technical review of available options.

This project was originally led by RailCorp until June 2012. On 1 July 2012, responsibility for the delivery of the ATP program was transferred to Transport for NSW (TfNSW).

The major outcome of the project is to be implementation of ATP including a trial of level 2 ETCS.

Status at 31 March 2016

In March 2016, ITSR accepted TfNSW's proposal for the Advanced Train Control Migration System (AMS) to be considered as an *"acceptable alternative response"* to the Special Commission of Inquiry's recommendation 32 for ATP.

ITSR's acceptance of TfNSW's proposed alternate response was based on the quantitative risk assessment report; the AMS strategy being completed by December 2019 and the inclusion of an "Early Deployment Scheme" which will deliver in the Berowra to Newcastle area, controlled trialling of AMS protection for passenger trains in October 2018. This will be in preparation for the scheduled milestone of March 2019. The implementation of an ETCS Level 2 system remains in TfNSW's future strategies for the electrified rail network.

Accordingly, ITSR has deemed that the status of recommendation 32 to be classified as *open – acceptable alternative response.*

Recommendation 33

All new rolling stock should be designed to be compatible with at least level 2 automatic train protection discussed in chapter 7 of this report. Risk assessment and risk control procedures.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Requires further detailed review. See Recommendation 32.

ITSR expectation

Recommendation incorporated into review that will be undertaken in response to Recommendation 32. ITSR will refer the matter to NTC for the development of regulation/standards for rolling stock.

Recommendation 34 a

a) Identify the features of the system, subsystem or activities that are to be risk assessed and managed, to determine what makes the system work in terms of equipment, infrastructure and human factors

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented. RailCorp has undertaken the development of a risk management framework, with the assistance of external safety experts. The draft risk management framework will be assessed against Recommendation 34 (a) to (h) to ensure the framework addresses them.

ITSR expectation

RailCorp's new risk management framework will incorporate requirements Recommendation 34 (a) to (h).

Recommendation 34 b - e

b) identify all hazards that may exist within the particular system, subsystem or activity, whether it is a driver safety system, passenger safety system, engineering design system, train maintenance system or involves human factors or performance

c) identify what controls are in place to eliminate or minimise the risks associated with any identified hazard

d) test the validity of the controls to ensure that the risk is eliminated or reduced to an acceptable level and, if not, institute additional or further control measures

e) specify, in safety documentation, the level of any residual risk

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp's new risk management framework will incorporate requirements Recommendation 34 (a) to (h).

Recommendation 34 f

f) in the case of low probability, high consequence risks retain the services of an independent verifier of the risk assessments and controls to certify that all risks of such potentially catastrophic accidents have either been eliminated, or controlled to the extent identified by the independent expert

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported in principle for further review. RailCorp will investigate the availability of independent experts willing to undertake this certification role.

ITSR expectation

RailCorp's new risk management framework will incorporate requirements Recommendation 34 (a) to (h).

Recommendation 34 g

g) the Board of RailCorp certify that it regards any residual risk of a high consequence, low probability accident as acceptable, notwithstanding the severity of the consequences, by reason of the cost of further measures to control the risk

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented through other means the RailCorp Board is prepared to certify that the risk management processes designed to achieve this are in place.

ITSR expectation

RailCorp's new risk management framework will incorporate requirements Recommendation 34 (a) to (h).

Recommendation 34 h

h) provide to ITSR records of the processes of hazard identification, risk assessment, risk control, independent verification and certification, and any board certification relating to any high consequence, low probability accident

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

RailCorp's new risk management framework will incorporate requirements Recommendation 34 (a) to (h).

Recommendation 35

The ITSR should conduct its own risk assessment in relation to the risk of any such high consequence, low probability accident and, if necessary, direct RailCorp to conduct a further risk assessment to reduce the level of residual risk to a level ITSR regards as acceptable.

Agency	Status	ITSR assessment	Verified
Not assigned	**Closed** Recommendation rejected	Implemented	

Government response

Not supported. ITSR is working with industry at the national level to identify appropriate risk assessment methods and consistent standards for regulators to accept risk assessments. This will provide rail operators with guidance on the level and depth of risk assessment required by them as part of accreditation. ITSR has undertaken a risk vulnerability study to identify the significant risks faced by rail operators and the corresponding risk control measures. The National Transport Commission is also developing a risk acceptance criteria project to provide further guidance to the rail industry on acceptable levels of risk. ITSR's role in relation to operator risk assessment is to ensure that they have the competence and capacity to identify and control risks.

ITSR expectation

Rejected. Closed.

Recommendation 36

The ITSR should impose a standard in relation to the collection and use of data from data loggers.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported in principle for implementation through other means. ITSR will introduce regulations including for data loggers that set out the expectations (or performance outcomes) required of industry. The regulations will be developed on a national basis, through the National Transport Commission (NTC) process, to ensure consistent application across the Australian rail industry. Notwithstanding the expectation that industry will develop and maintain appropriate safety standards, ITSR will retain the power to mandate such standards if the industry clearly fails to deliver satisfactory safety outcomes.

ITSR expectation

ITSR will refer matter to NTC for development of national regulations. In the interim, ITSR will review existing standards set in access agreements to ensure adequate standards for collection and use of data.

Recommendation 37

The standard in relation to the collection and use of data from data loggers should provide that such information must be accessed in the circumstances of any accident or incident and can be accessed to monitor driver performance generally.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported in principle for implementation through other means. See Recommendation 36. Information from data loggers can be accessed to monitor for any incident or accident and can be accessed to monitor a driver's performance generally.

ITSR expectation

ITSR will refer matter to NTC for development of national regulations. ITSR will adopt national regulations. In the interim, ITSR will seek from RailCorp proposals to improve the monitoring of driver performance (especially for training purposes).

Recommendation 38

There must be compatibility of communications systems throughout the rail network. It is essential that all train drivers, train controllers, signallers, train guards and supervisors of trackside work gangs in New South Wales be able to communicate using the same technology.

Agency	Status	ITSR assessment	Verified
ITSR	**Open** Slippage - revised implementation date +31/12/2016	Acceptable response	

Government response (February 2005)

Supported and being implemented. The National Standing Committee on Transport endorsed the Australasian Railway Association (ARA) working with operators and regulators, including RailCorp and ITSR, to develop a national approach on communications systems, which has agreed minimum functionality requirements for train radio systems.

RailCorp plans to implement a digital train radio system. An objective of this system is for it to be interoperable with existing analogue radio systems. Because of the technical complexities associated with achieving inter-operability, this has been a longer-term initiative and the first stage of its implementation will commence in 2005.

ITSR expectation

ITSR to ensure functionality and compatibility requirements are included in the national standard developed by the ARA.

This project was originally led by RailCorp until June 2012. On 1 July 2012, responsibility for the delivery of the DTRS project was transferred to Transport for NSW (TfNSW).

ITSR to ensure TfNSW/ARTC radio functionality for next generation technology meets compatibility requirements.

Status at 31 March 2016

The new DTRS currently being designed will enhance communication between trains and network control in an emergency as well as enable communication between other staff for rail operations on the Sydney Trains' network.

The target implementation date of 31 March 2016 for completion of the DTRS project which includes completion of the DTRS fixed network and fit out of the train cabs (on all Sydney Trains and NSW Trains) has been delayed until 31 December 2016.

TfNSW has advised ITSR that by Q3, 2016 (instead of December 2015), Sydney Trains' older passenger train fleets will be fitted with DTRS radios. Installation of DTRS radios on the Waratah (A sets) and Millennium (M sets) passenger train fleets operated by Sydney Trains will be completed by 31 December 2016 (instead of 31 March 2016).

The delay in the implementation of this project is primarily due to issues with the audio quality of the DTRS, the identification of a number of blackspots and insufficient regression and negative testing which resulted in the performance of the DTRS system being unreliable.

TfNSW and Sydney Trains have since rectified these issues. At the end of March 2016, TfNSW and Sydney Trains advised that the required safety assurance documentation (including the results of the negative and regression testing) had been completed. This information will be provided to the Office of the National Rail Safety Regulator (ONRSR) to demonstrate that the DTRS system is safe to operate.

Sydney Trains and TfNSW expect to operate dual fitted DTRS equipped Tangara trains into passenger service within the initial operating sector in April 2016.

All rail safety workers are currently able to communicate with each other but not using the same technology.

Accordingly, ITSR has deemed that the status of recommendation 38 continue to be classified as *open – acceptable response.*

Recommendation 39

Communications procedures must be standardised throughout the rail network, so that all railway employees describe the same subject matter in an identical way.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported. RailCorp Network Procedures contain standardised communications procedures, which are in place across the NSW network. ITSR will introduce regulations including for communications that set out the expectations (or performance outcomes) required of industry. The regulations will be developed on a national basis, through the National Transport Commission process, to ensure consistent application across the Australian rail industry.

ITSR expectation

ITSR to ensure that standard communications procedures are included in Network Rules. ITSR to ensure that appropriate training is provided by operator including:

a)   evidence of development of training program that addresses issues (includes development process, training aids/curriculum)

b)   evidence of appropriate assessment competency (delivery of course by appropriately qualified trainers)

c)   evidence of process to ensure the training of new staff and the refresher training of existing staff

d)   review process built-in, to take into account relevance and changes. ITSR will refer matter to the NTC for development of national regulations.

Recommendation 40

All RMC communications related staff should be selected upon the basis of the ability to convey information clearly, accurately and concisely and to follow strict communications protocols.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

Appropriate selection criteria developed. Appropriate weighting given to developed selection criteria when selecting staff.

Recommendation 41

All communications protocols must be strictly enforced by all accredited rail organisations.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

ITSR to ensure that rail operators have internal processes in place to audit and monitor compliance with protocols. ITSR will enforce these systems through its compliance & inspection program.

Recommendation 42

The ITSR should audit the RMC to ensure communications protocols are being followed. The sanction for non-compliance with communications protocols should be identical to that in the aviation industry and involve immediate removal from duty. Any RailCorp employee not following communications protocols should be required to undertake further training. If, following return to duties after such training, the officer continues to fail to comply with communications protocols, that officer is not to be employed in communications related work.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented through other means. ITSR will take action against operators who fail to manage non-compliance with these protocols.

ITSR expectation

ITSR to ensure that communications protocols are included as a specific compliance/audit criteria in ITSR's compliance and audit program. ITSR will also review operators' processes to ensure they have systems in place to effectively deal with non-compliant staff.

Recommendation 43

Communications protocols and procedures should be standardised and mandated by regulations making them a condition of accreditation.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported. As for Recommendation 39.

ITSR expectation

ITSR will refer matter to NTC for development of national regulations ITSR will adopt national regulations. In the interim, ITSR will enforce compliance with the current protocols through its accreditation, audit and compliance activities.

Recommendation 44

ITSR should ensure, as a condition of accreditation, each of these recommendations is carried into effect and should audit against them to enforce compliance.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported. As for Recommendation 39.

ITSR expectation

ITSR will include these requirements as specific criteria in ITSR's compliance inspection and audit program.

Recommendation 45

The ITSR should conduct random audits of accredited rail organisations for compliance with communications protocols.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

ITSR will specifically audit train recordings to determine actual compliance in the field.

Recommendation 46

There should be interoperability of communications equipment between all trains operating on the New South Wales rail network.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported and being implemented. Interoperability is defined in terms of the driver having one hand-set with interfaces to allow communications with the appropriate operating personnel. It does not imply a single all-users radio system.

The National Standing Committee on Transport endorsed the Australasian Railway Association (ARA) working with operators and regulators, including RailCorp and ITSR, to develop a national approach on communications systems, which has agreed minimum functionality requirements for train radio systems. RailCorp plans to implement a digital train radio system. An objective of this system is for it to be interoperable with existing analogue radio systems. Because of the technical complexities associated with achieving inter-operability, this has been a longer-term initiative and the first stage of its implementation will commence in 2005.

ITSR expectation

ITSR to ensure compatibility requirements included in national standard currently being developed by the ARA. ITSR to ensure RailCorp/ARTC radio functionality for next generation technology addresses compatibility requirements. In the interim ITSR will mandate through regulation the requirement for train radio communications equipment that allows communication between all trains operating on the NSW network in an emergency situation.

Recommendation 47

Defects reporting, recording and rectification should be integrated with the RailCorp regimes for train maintenance.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to have effective maintenance regime in place that ensures integration of defects reporting, recording and recertification.

Recommendation 48

All train drivers' defects reports should be entered by RailCorp into a computerised record and tracked to finalisation.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to have effective procedures and database to ensure all defects reports are endued and tracked to finalisation.

Recommendation 49

No RailCorp train should enter into revenue service or remain in service if, in the opinion of the driver in charge of that train, any defect in it creates a risk of injury.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

RailCorp to have instructions in place clearly identifying issues when a train is not to enter or remain in service. RailCorp to have a process to ensure all relevant staff are aware of requirements.

Recommendation 50

All reported train defects should be certified by a person in a supervisory position in RailCorp as having been rectified.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented. A supervisory position in RailCorp as having been rectified.

ITSR expectation

RailCorp to have identified an appropriate position to sign off train defects that have been rectified. RailCorp to have implemented procedures to support and implement process.

Recommendation 51

The RailCorp defects unit should be combined with the passenger fleet maintenance division of RailCorp.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp defects unit combined with the passenger fleet maintenance division. Appropriate processes and procedures in place.

Recommendation 52

Maintenance plans on all trains should be revised annually.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported in principle for further review. All maintenance plans are being reviewed. RailCorp will incorporate this recommendation in that review.

ITSR expectation

All plans reviewed. Process to ensure regular/appropriate reviews take place.

Recommendation 53

Train inspections should be carried out at the time of stabling RailCorp trains, as well as a part of train preparation prior to entering service.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported in principle for further review. RailCorp is reviewing procedures and resources to rectify defects. RailCorp provides time for drivers of stabling trains to report any noted defect.

ITSR expectation

A documented risk assessment and/or business case by RailCorp, detailing how train integrity on entering into service is to be managed.

Recommendation 54

Random alcohol testing should be continued.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

ITSR to ensure current programs continue.

Recommendation 55

Alcohol and drug testing should be mandatory for any train driver or guard involved in any accident or incident.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported. ITSR will review this recommendation as part of its ongoing involvement in checking drug and alcohol programs of rail operators. RailCorp currently tests randomly for drugs and alcohol and allows for drug and alcohol testing to be undertaken for safety-related accidents and incidents.

ITSR expectation

ITSR to develop guideline on when/which accidents/incidents require mandatory testing.

Recommendation 56

RailCorp should continue its system of voluntary self-identification and rehabilitation of employees with alcohol or related problems.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

RailCorp has voluntary self-identification system and rehabilitation of employees with alcohol and drug related problems. Current program continues.

Recommendation 57 a

a) The ITSR should develop standards for periodic medical examinations which include the following: all medical examinations of safety critical employees must contain a predictive element, including use of a cardiac risk factor predictions chart to assess risk of sudden incapacitation, and follow-up procedures, where indicated

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported and being implemented. A national standard for Medical Health Assessments for the rail industry is in place.

ITSR expectation

Implemented in current standard.

Recommendation 57 b – c

b) medical examinations must be conducted by medical practitioners with an understanding of the duties and responsibilities of the safety critical employees being examined

c) a medical practitioner conducting such a medical examination should, with the employee's consent, have access to his or her medical history. If such consent is not given, the employee must be required to undertake a more exhaustive medical examination with specialist diagnostic procedures

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Implemented.

ITSR expectation

Implemented in current standard.

Recommendation 57 d

d) all such medical examinations must be reviewed on behalf of the employer by an occupational physician

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported. ITSR will submit this recommendation to the National Transport Commission (NTC) for consideration as part of the national standard.

ITSR expectation

ITSR will submit recommendation to NTC for consideration in context of current standard.

Recommendation 57 e

e) appropriate follow up examinations, such as a stress ECG or examination by a cardiologist, must be arranged for any safety critical employee whom the occupational physician believes may be at risk of sudden incapacitation

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported. ITSR will submit this recommendation to the National Transport Commission (NTC) for consideration as part of the national standard.

ITSR expectation

ITSR will submit recommendation to NTC for consideration in context of current standard.

Recommendation 57 f

f) medical histories of employees should be monitored by an occupational physician to enable identification of any trends that may indicate a deteriorating state of health

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented through other means. The standard requires follow-up examinations to be arranged for safety critical workers whom the examining doctor (AHP) believes may be at risk of sudden incapacitation. Note, the Health Assessment Standards refer to an Authorised Health Professional, who is not necessarily an occupational physician but is a doctor who has received the appropriate training.

ITSR expectation

ITSR will submit recommendation to NTC for consideration in context of current standard.

Recommendation 57 g - h

g) routine basic psychological screening, by means of a questionnaire such as the KlO questionnaire, should form part of periodical medical examinations

h) medical standards should be reviewed at least every five years to ensure that recent advances in medical knowledge and technology are utilised

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported and implemented

ITSR expectation

Implemented in current standard.

Recommendation 57 i

i) periodic examination standards prescribed by ITSR should take into consideration medical standards for safety critical rail staff prescribed elsewhere in Australia to ensure, so far as possible, uniformity of such standards

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Implemented. The national standard is to be reviewed every five years.

ITSR expectation

Implemented in current standard.

Recommendation 58

RailCorp should establish a comprehensive safety document management system

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

The RailCorp safety document management system to be implemented which incorporates Recommendations 59-62.

Recommendation 59

The safety document management system should provide for the distribution of electronic versions of safety documentation to relevant staff.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

The RailCorp safety document management system provides for the distribution of electronic versions of safety documentation to relevant staff.

Recommendation 60

RailCorp should employ a Chief Safety Information Officer to manage the collection, collation information within RailCorp.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented through other means. RailCorp has employed a Manager Information Systems within the Corporate Safety Group whose role and accountabilities include these requirements.

ITSR expectation

Position established. Position description reflects appropriate responsibilities and accountabilities.

Recommendation 61

RailCorp should provide access to electronic versions of safety documentation for all operational staff at their workplace.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported in principle for further review. RailCorp is reviewing options for providing all staff with the best and appropriate means of accessing safety documentation, including by electronic means.

ITSR expectation

The RailCorp safety document management system ensures the distribution of electronic versions of safety documentation to relevant staff. Procedures in place so that all operational staff can access safety documentation at appropriate times.

Recommendation 62

ITSR should have permanent access to the RailCorp intranet.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported in principle for implementation through other means. ITSR has a number of means available to it to obtain information from RailCorp and other rail operators when required, including access to an operator's intranet where electronic safety information is maintained. This occurs for example during an audit of an operator.

ITSR expectation

RailCorp and ITSR to reach agreement on the access requirement.

Recommendation 63

ITSR should establish an electronic document control system to enable effective and reliable information to be gathered for monitoring the safety of the New South Wales rail system.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

ITSR establish and implement an electronic document control system. Appropriate policy, procedures and training developed.

Recommendation 64

RailCorp and ITSR should co-operate with national programs for the collection, collation, trend analysis and dissemination of safety critical information.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

ITSR continues its active participation in the National Rail Occurrence Database (NROD) and provides guidelines to Industry on reporting requirements consistent with NROD.

Recommendation 65

Recommendations one to seven of the final report of the Special Commission of Inquiry into the Glenbrook rail accident should be fully implemented, save that the random auditing referred to in recommendations five and seven should be carried out by ITSR

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented. ITSR and RailCorp will review the implementation of all the seven recommendations in light of the Waterfall inquiry.

ITSR expectation

RailCorp to conduct an audit review of Recommendations 1-7 of the Glenbrook report.

RailCorp to develop an overall training development program based on competences identified in Glenbrook Recommendations 1-7. This is expected to deal with training related issues identified in recommendations from SCOI Glenbrook.

Recommendation 66

RailCorp should use its simulators in an interactive manner.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to provide:

a)   evidence of development of training program that addresses issues (includes development process, training aids/curriculum)

b)   evidence of appropriate assessment competency (delivery of course by appropriately qualified trainers)

c)   evidence of process to ensure the training of new staff and the refresher training of existing staff

d)   review process built-in, to take into account relevance and changes.

Recommendation 67

RailCorp should use its simulators to train drivers and guards in methods of dealing with degraded operations on the rail network.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to provide:

a)   evidence of development of training program that addresses issues in recommendations 66-70 (includes development process, training aids/curriculum)

b)   evidence of appropriate assessment competency (delivery of course by appropriately qualified trainers)

c)   evidence of process to ensure the training of new staff and the refresher training of existing staff

d)   review process built-in, to take into account relevance and changes.

Recommendation 68

Train driver and guard training should encourage teamwork and discourage authority gradients.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to provide:

a)   evidence of development of training program that addresses issues in recommendations 66-70 (includes development process, training aids/curriculum)

b)   evidence of appropriate assessment competency (delivery of course by appropriately qualified trainers)

c)   evidence of process to ensure the training of new staff and the refresher training of existing staff

d)   review process built-in, to take into account relevance and changes.

Recommendation 69

RailCorp must establish a task analysis for particular categories of employees, to identify the specific skills and responsibility of those employees or groups of employees, and thereafter undertake a training needs analysis, to develop the skills required in particular areas.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to provide:

a)   evidence of development of training program that addresses issues in recommendations 66-70 (includes development process, training aids/curriculum)

b)   evidence of appropriate assessment competency (delivery of course by appropriately qualified trainers)

c)   evidence of process to ensure the training of new staff and the refresher training of existing staff

d)   review process built-in, to take into account relevance and changes.

Recommendation 70

Training should be based upon a needs analysis, to determine what skills a particular person will require to carry out the tasks of any position safely and efficiently, and instruction and practice, to acquire and demonstrate those skills.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to provide evidence of a corporate system to identify skills development requirements based on a needs analysis.

Recommendation 71

The position of team leader should be created by RailCorp to be responsible for a group of approximately 30 train drivers, with responsibility to ensure that each train driver's training needs are being met and that any safety concerns of train drivers are being properly addressed. The team leaders are to have direct access to the Chief Executive of RailCorp if any safety concerns they have are not addressed

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported in principle for further review. RailCorp is reviewing the current supervisory structure of train crewing in light of this recommendation.

ITSR expectation

Creation of appropriate position to carry out functions outlined in Recommendation 71.

Recommendation 72

The New South Wales Government should make the necessary arrangements with the Australian Government, including any necessary legislation, for the Australian Transport Safety Bureau (ATSB) to have the power to investigate all rail accidents occurring on the New South Wales rail network the investigation of which may advance the knowledge of the causes of rail accidents in Australia.

Agency	Status	ITSR assessment	Verified
Office of Transport Safety Investigation	**Closed**	Implemented	Verified

Government response

Supported in principle. The Minister for Transport has written to the Commonwealth Minister for Transport to initiate negotiations on the appropriate mechanisms to enable the ATSB to undertake investigations referred to it by the NSW Government. This may require legislation in NSW via state referral of power to the Commonwealth.

ITSR expectation

Review and develop appropriate MOU. Mechanisms in place to provide for ATSB to undertake investigations referred to it by the NSW Government.

Recommendation 73

ITSR should ensure that OTSI, as a division of ITSR, co-operates and assists the ATSB in the conduct of any independent investigation by the ATSB of any rail accident or incident in New South Wales.

Agency	Status	ITSR assessment	Verified
Office of Transport Safety Investigation	**Closed**	Implemented	Verified

Government response

Supported in principle. See Recommendation 72

ITSR expectation

Review and develop appropriate MOU.

Recommendation 74

The ATSB should deliver any report of any such rail accident which it investigates to the board of any rail organisation involved in the accident, ITSR and the Minister for Transport Services.

Agency	Status	ITSR assessment	Verified
Office of Transport Safety Investigation	**Closed**	Implemented	Verified

Government response

Supported in principle. See Recommendation 72

ITSR expectation

Review and develop appropriate MOU.

Recommendation 75

All ATSB accident investigation reports should be made public.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported. The NSW Government is advised the accident investigation reports are already published by this Commonwealth agency.

ITSR expectation

ITSR to confirm with ATSB that its investigation reports are made public.

Recommendation 76

The ITSR should establish a data and information management system, containing all data and information that it requires, to continually monitor the safety of the New South Wales rail system.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

ITSR will amend its data and information management system to incorporate requirements of Recommendations 76-77.

Recommendation 77

The data and information management system should be compatible with any data and information management system established by the ATSB for the designated interstate rail network, provided that the establishment of a compatible system does not reduce the amount or quality of the information obtained by ITSR below the optimum levels which it needs to conduct trend analysis, and otherwise properly manage the safety of rail operations in New South Wales.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented through other means. See also Recommendation 64. NSW already shares data with the ATSB and is working with other agencies in a project being managed by ATSB to expand the range of information which can be shared between all relevant agencies.

ITSR expectation

ITSR will amend its data and information management system to incorporate requirements of Recommendations 76-77.

Recommendation 78

The OTSI should continue to conduct rail accident investigations on behalf of ITSR and report directly to the Chief Executive of ITSR.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented other means. OTSI will be established as a separate agency independent of ITSR, reporting directly to the Minister for Transport. OTSI will continue to conduct 'just culture' investigations in NSW.

ITSR expectation

OTSI established as a separate agency to ITSR.

Recommendation 79

The relevant legislation should be amended to provide expressly that OTSI and the Chief Investigator have the power to initiate a rail accident or incident investigation

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

Legislation amended to provide for OTSI Chief Investigator to initiate a rail accident/incident investigation.

Recommendation 80

Any barriers to communication between OTSI and ITSR should be removed, so as to ensure that any findings made by OTSI in relation to any investigation it conducts are reported immediately to ITSR.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

Develop MOU between OTSI and ITSR.

Recommendation 81

All reports of the Chief Investigator of OTSI should be delivered, upon completion and without being reviewed, to ITSR and the Minister for Transport Services.

Agency	Status	ITSR assessment	Verified
Office of Transport Safety Investigation	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

Legislation already provides for OTSI reports to go to the Minister for tabling in parliament. ITSR receives OTSI investigation reports as an interested party. This process will be incorporated into the MOU between OTSI and ITSR.

Recommendation 82

Legislation should be enacted and any necessary arrangements made, to enable the ATSB to review any reports of any investigation by a rail organisation or the OTSI into any serious incident or accident in New South Wales.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported in principle for further review. See Recommendation 72.

ITSR expectation

Review and develop appropriate MOU.

Recommendation 83 a

a) RailCorp should develop a plan to be submitted to ITSR to address the deficiencies in the safety culture of RailCorp, including: the means whereby RailCorp proposes to ensure that all its operational, administrative and managerial staff consider the safety implications of any decision or action undertaken by them.

Agency	Status	ITSR assessment	Verified
Not assigned	**Closed** no longer applicable	No further action	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to develop safety culture program which incorporates Recommendation 83 (a) - (n).

Recommendation 83 b - n

b) the means whereby any distrust between management and operational staff is removed and replaced by a culture in which the whole organisation is motivated towards the safe conduct of its transportation activities

c) the means whereby RailCorp proposes to implement a just culture instead of a blame culture

d) the means whereby RailCorp proposes to establish and implement accountability and responsibility of individuals for the safety of the activities that they undertake

e) the means whereby RailCorp proposes to measure the safety performance of all individuals with accountabilities and responsibilities for safety, for the purpose of determining whether their level of safety performance is satisfactory

f) the means whereby the Board of Directors, the Chief Executive and the Group General Managers intend, by their actions and behaviour, to foster the development of a safety culture in the organisation

g) the means whereby RailCorp proposes to reward employees for bringing safety issues to the attention of management, and the means whereby the management of the organisation proposes to track the safety issues raised, to ensure continual safety improvement

h) the means, generally, whereby RailCorp intends to replace the present culture of on-time running with a culture encouraging safe, efficient and reliable provision of rail services

i) the means whereby RailCorp proposes to ensure that communications protocols are followed by the employees of the RMC and all other employees engaged in safety critical work

j) the means whereby RailCorp proposes to set safety targets for the reduction of incidents overall, and incidents in particular classes, and the means whereby the relevant information is to be kept and collated for the purpose of measuring safety performance in those areas

k) the means whereby employees responsible for particular areas are rewarded for safety improvements in their areas of activity

l) the means whereby RailCorp intends to integrate safety in all aspects and at all levels of the transportation activities which it undertakes

m) the means whereby RailCorp proposes to train staff in processes of hazard analysis and risk management relevant to the particular activities that they conduct

n) the means whereby RailCorp is to integrate the management of safety in all aspects into the general management of its business undertaking

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

The RailCorp safety culture program will be reviewed to ensure compliance with this recommendation.

ITSR expectation

RailCorp to develop safety culture program which incorporates Recommendation 83 (a) - (n).

Recommendation 84

If ITSR accepts such a plan as an appropriate response to the existing weak safety culture, ITSR should approve it and monitor the effectiveness of the plan.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported in principle. ITSR is reviewing the process used to develop the plan. ITSR will also review the plan as submitted and monitor its effectiveness.

ITSR expectation

ITSR reviews RailCorp's plan and assess whether it incorporates Recommendation 83 (a) - (n). ITSR monitors implementation of plan.

Recommendation 85

RailCorp's approach to occupational health and safety should be proactive and involve the systematic analysis of all current hazards, risks and controls and an assessment of their adequacy to reduce the risk of injury to, or death of, employees to an acceptable level overall safety management.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to demonstrate the implementation of an integrated SMS as detailed in their accreditation application.

Recommendation 86

RailCorp should integrate its management of OHS into its overall safety management.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

Requirements to be part of SMS.

Recommendation 87

Risk assessments of occupational health and safety issues by RailCorp should include an analysis of broader public safety risks and not be confined to narrow occupational health and safety issues.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

Requirements to be part of SMS. Appropriate RailCorp Risk Management Framework in place.

Recommendation 88

The RailCorp passenger containment policy must be abandoned

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed** Subject to implementation of an approved program or plan	See *Waterfall rail accident recommendations – closed subject to implementation of an approved program or plan* for progress	Verified

Government response

Supported. RailCorp will review and replace the current containment policy, in consultation with ITSR. The Commission recognised the complexity of determining appropriate policy and operational/technical arrangements for emergency egress from trains. Evidence to the Commission was that on some occasions passengers are best kept inside a train; in others they need to be able to escape. An independent risk assessment of the alternatives to the current policy will be undertaken. This risk assessment will be consistent with Recommendation 34, and the replacement passenger containment policy will be based on its results.

ITSR expectation

Risk assessment conducted. Containment policy reviewed. New policy developed and implemented.

Recommendation 89

There must be a minimum of two independent methods of self-initiated emergency escape for passengers from all trains at all times.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed** Subject to implementation of an approved program or plan	See *Waterfall rail accident recommendations – closed subject to implementation of an approved program or plan* for progress	Verified

Government response

Requires further detailed review, subject to the risk assessment referred to in Recommendation 88.

ITSR expectation

ITSR has undertaken an initial review and recommended options for a standard. ITSR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard.

Recommendation 90

All passenger trains must be fitted with an internal passenger emergency door release.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed** Subject to implementation of an approved program or plan	See *Waterfall rail accident recommendations – closed subject to implementation of an approved program or plan* for progress	Verified

Government response

Requires further detailed review. See Recommendation 89.

ITSR expectation

ITSR has undertaken an initial review and recommended options for a standard. ITSR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSR to ensure operators comply with standard.

Recommendation 91

All passenger trains operating in New South Wales must be fitted with external emergency door releases which do not require any special key or other equipment to operate.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported and being implemented. RailCorp has commenced a modification program to ensure all external emergency door releases do not require special keys or other equipment to operate.

ITSR expectation

ITSR has undertaken an initial review and recommended options for a standard. ITSR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSR to ensure operators comply with standard.

Recommendation 92

The internal passenger emergency door release should be fitted with a facility which prevents it from operating unless the train is stationary.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed** Subject to implementation of an approved program or plan	See *Waterfall rail accident recommendations – closed subject to implementation of an approved program or plan* for progress	Verified

Government response

Requires further detailed review. See Recommendation 89.

ITSR expectation

ITSR has undertaken an initial review and recommended options for a standard. ITSR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSR to ensure operators comply with standard.

Recommendation 93

The operation of the 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.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed** Subject to implementation of an approved program or plan	See *Waterfall rail accident recommendations – closed subject to implementation of an approved program or plan* for progress	Verified

Government response

Requires further detailed review. See Recommendation 89.

ITSR expectation

ITSR has undertaken an initial review and recommended options for a standard. ITSR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSR to ensure operators comply with standard.

Recommendation 94

The risk of abuse of internal passenger emergency door releases should be further reduced by introducing significant penalties for any improper use of such an emergency facility. It should be a criminal offence for anyone to use or tamper improperly with an emergency escape facility in a train.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported.

Recommendation 95

All passenger trains operating in New South Wales must have the external emergency door release clearly marked with the words 'Emergency Door Release'.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

ITSR has undertaken an initial review and recommended options for a standard. ITSR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSR to ensure operators comply with standard.

Recommendation 96

All RailCorp operational personnel should be trained in the location and operation of external emergency door release mechanisms.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

RailCorp to provide:

a)   evidence of development of training program that addresses issues (includes development process, training aids/curriculum)

b)   evidence of appropriate assessment competency (delivery of course by appropriately qualified trainers)

c)   evidence of process to ensure the training of new staff and the refresher training of existing staff

d)   review process built-in, to take into account relevance and changes.

Recommendation 97

All emergency services personnel should be trained in the location and operation of emergency door release mechanisms on all rail cars.

Agency	Status	ITSR assessment	Verified
NSW emergency services	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented through other means. RailCorp has produced a training DVD showing the location and operation of external emergency door release mechanisms. 500 copies have been provided to each of Fire Services, Police and Ambulance.

The very large number of emergency response personnel (including volunteer services) that may respond to a rail incident, means training of all personnel in the RailCorp framework is unlikely to be achievable. Emergency services will investigate with RailCorp extension of the DVD into a multimedia resource to improve the ability to educate wider numbers of emergency service workers.

ITSR expectation

Agreement between RailCorp and emergency services in place on most effective means of communication/training for location and operation of emergency door release mechanisms on all passenger cars. Training aids developed/distributed.

Recommendation 98

All trains should have windows available through which passengers can escape.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Requires further detailed review. See Recommendation 89.

ITSR expectation

ITSR has undertaken an initial review and recommended options for a standard. ITSR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSR to ensure operators comply with standard.

Recommendation 99

All new rail cars must have appropriate signage and lighting identifying escape routes in the case of emergency.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

ITSR has undertaken an initial review and recommended options for a standard. ITSR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSR to ensure operators comply with standard.

Recommendation 100

All new rolling stock must be designed with an area of the roof through which emergency services personnel can access a rail car without encountering wiring or other equipment. That access point must be clearly marked with words such as "emergency services cut here".

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Requires further detailed review. See Recommendation 89.

ITSR expectation

ITSR has undertaken an initial review and recommended options for a standard. ITSR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSR to ensure operators comply with standard.

Recommendation 101

ITSR should initiate and/or participate in the development of a national standard for crashworthiness of all passenger trains.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

ITSR will refer matter to NTC for development of national regulations. ITSR will adopt national regulations. In the interim ITSR will ensure compliance with existing industry standards through its accreditation process.

Recommendation 102

RailCorp should make it a condition of employment that all level 2 managers have or obtain a formal qualification in system safety management.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported in principle for further review. RailCorp has developed and implemented a program of safety science training for senior managers (levels 2, 3 and 4). A comprehensive review of available formal qualifications in system safety management, including international practice, with an option of having RailCorp's training formally recognised.

ITSR expectation

Program implemented to ensure all level 2 managers obtain formal qualifications in system safety management. Position description to reflect criteria.

Recommendation 103

RailCorp should establish clear safety accountability statements and reporting lines for all management positions.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

Accountability statements implemented for all management positions.

Recommendation 104

The RailCorp Board should establish independent external safety auditing processes to regularly audit and report to the Board on the implementation of an integrated safety management system by RailCorp and on safety performance generally. The RailCorp Board should establish independent external safety auditing processes to regularly audit and report to the Board on the implementation of an integrated safety management system by RailCorp and on safety performance generally.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

Program established that provides for independent external safety audit. Independent external safety audits conducted.

Recommendation 105

The RailCorp Board should ensure that RailCorp has an adequate and integrated safety management system, including adequate systems for risk assessment, clearly defined safety responsibilities and accountabilities for persons holding management positions, and specific performance criteria against which evaluations can be made of safety performance and accountability for safety performance of all managers.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented.

ITSR expectation

Implementation of RailCorp safety management system. Clearly defined accountabilities to be in the SMS documents.

Recommendation 106

The RailCorp Board should require a full review of the safety competence of RailCorp managers to ensure that each has the ability to bring about those safety reforms recommended in this report which are applicable to his or her position. The RailCorp Board should require a full review of the safety competence of RailCorp managers to ensure that each has the ability to bring about those safety reforms recommended in this report which are applicable to his or her position.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

Review undertaken by RailCorp. Recertification plans developed.

Recommendation 107

RailCorp should ensure that where the safety competency of any manager is deficient such manager is required to undertake professional development courses to raise his or her safety competency level to an adequate standard.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported.

Review undertaken by RailCorp. Recertification plans developed.

Recommendation 108

RailCorp should conduct internal and external safety audits to evaluate the adequacy of its safety management system and to ensure that any risk control measures are effective.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported and being implemented. RailCorp's annual safety audit plan includes audits to evaluate the adequacy of its safety management system and risk control measures. The 2005 audit plan includes four external audits.

ITSR expectation

Internal/external audit plan developed. Evidence of audits conducted/audit reports. Develop rectification plans (link to Recommendation 104).

Recommendation 109

Following completion of any external audit, a corrective action plan to remedy any identified safety deficiencies should be developed by RailCorp, implemented and followed up within the business groups affected, to ensure appropriate and timely completion of the action plan, by a formal examination of the effectiveness of the controls put in place. Senior management personnel should certify that the corrective action plan has been implemented and is effective. Senior management personnel should be accountable for any such certification.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

Develop rectification plans. Formal closeout procedures/processes in place and monitoring program in place.

Recommendation 110 a - e

a) A Safety Reform Program Director (SRPD), reporting directly to the Chief Executive of RailCorp, should be retained to manage, as head of a Safety Reform Program Office, any safety reform program being undertaken by RailCorp. The SRPD should work with the Chief Executive and senior management to ensure the implementation of an integrated safety management system and the cultural change required. The SRPD must have qualifications suitable for recognition by the Australian Institute of Project Management as a master program director. He or she should report to and be under the control of the Chief Executive, to ensure that the accountability of the Chief Executive is not reduced. The SRPD should co-ordinate and integrate any existing rail safety reform programs and, in consultation with and with the authority of the Chief Executive he or she should:

a) assign responsibility for particular aspects of the project to identifiable employees

b) ensure that each person to whom such an aspect of the program has been assigned has the time and resources to undertake the tasks each is required to perform

c) identify the period of time during which such persons are required to achieve the desired safety outcome for the particular aspect of the program

d) specify a clearly defined scope of work to be undertaken, a schedule setting out when such work is to be completed, and institute a system of measuring whether or not the objectives have been achieved in the time specified

e) report to the Chief Executive of RailCorp on a monthly basis on each aspect of the program, and the Chief Executive is to report on a monthly basis to the RailCorp Board and to ITSR, on the progress of each program

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

Position established/filled. Position description reflects responsibilities in Recommendation 110 (a) - (e).

Recommendation 111

The Advisory Board established under the Transport Legislation Amendment (Safety and Reliability) Act 2003 must be abolished.

Agency	Status	ITSR assessment	Verified
Not assigned	**Closed** Recommendation rejected	No further action	

Government response

Not supported. The statutory obligation of the ITSR Advisory Board to review and provide advice to OTSI in regard to accident investigations and any functions of the Chairman in respect of accident investigation will be removed but the ITSR Advisory Board will be retained as a source of expert advice to ITSR.

ITSR expectation

Rejected. Closed.

Recommendation 112

Legislative changes should be enacted to ensure the complete independence of ITSR from the Minister for Transport Services.

Agency	Status	ITSR assessment	Verified
Not assigned	**Closed** Recommendation rejected	No further action	

Government response

Not supported. The principal objective of ITSR is to facilitate the safe operation of transport services in the state and to promote safety and reliability as fundamental objectives in the delivery of transport services. As such it makes a critical contribution to the transport portfolio. ITSR will be retained as an agency within the Transport portfolio, but its accountability and the responsibility of the CEO, and ITSR's independence will be enhanced by providing explicit reporting requirements of ITSR in the legislation and removing from legislation the requirement for the Advisory Board to review ITSR reports.

ITSR expectation

Rejected. Closed.

Recommendation 113

The Chief Executive of ITSR should have accountability and responsibility for the regulation of rail safety in New South Wales.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported in principle. The Chief Executive of ITSR administers the government's rail safety legislation and provides advice on rail safety to the government.

ITSR expectation

Implemented. Chief Executive has sole accountability for administering the Rail Safety Act.

Recommendation 114

The ITSR should publish guidelines to be followed by accredited organisations.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

Have guidelines in place, ITSR has a process to identify, develop and issue guidelines as required from time to time under the Rail Safety Act.

Recommendation 115

The ITSR should not grant accreditation to any rail organisation unless it has an integrated safety management system in accordance with any safety management system regulation and the guidelines published from time to time by ITSR.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

The National Accreditation Package is the new standard for accreditation which includes requirement for an integrated SMS. The National Accreditation Package will be supported by a regulation.

Recommendation 116

The ITSR should conduct field audits to satisfy itself that all accredited rail organisations conduct their activities in accordance with the safety management system on the basis of which each was accredited.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

Implemented. Audit program in place, compliance program in place, ITSR audit and compliance programs are developed around and focused on the safety management systems as submitted by accredited organisations.

Recommendation 117

Staffing arrangements for ITSR should be reviewed by it to ensure that adequate staff are employed in field positions, actively monitoring the safety of rail operations and compliance with conditions of accreditation.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

Implemented. ITSR reviews its field resources and staff allocation on a regular basis to ensure adequate staff are employed in field positions.

Recommendation 118

All accredited rail organisations should be required to re-apply every three years to ITSR for accreditation.

Agency	Status	ITSR assessment	Verified
Not assigned	**Closed** Recommendation rejected	No further action	

Government response

Not supported. Under the *Rail Safety Act 2002*, ITSR has the right to require an operator to re-submit its safety management system (SMS), the central requirement of operator accreditation, at any time. This provides ongoing opportunity to review and check an operator's SMS as required rather than at a pre-determined frequency.

Additionally, the National Rail Safety Accreditation Package (NRSAP) requires frequent audits of rail operators and evidence of continuous improvement in the operator's SMS.

ITSR expectation

Rejected. Closed.

Recommendation 119

The ITSR, when considering a re-application for accreditation, should conduct a field audit of the organisation to ensure that it is carrying on its activities in accordance with the basis upon which it seeks accreditation.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported

ITSR expectation

Implemented. ITSR conducts regular field audits as part of its accreditation application process.

Recommendation 120

The ITSR should continue to participate in the development of a national system for rail safety regulation, provided that any ultimate agreement between the States and Territories and the Australian Government does not produce a safety outcome for New South Wales that is less than would be achieved by the implementation of all the recommendations contained in this report.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported in principle for further review. ITSR will continue to participate in the development of a national system for rail safety regulation.

ITSR expectation

ITSR actively participates in national reform/NTC processes. ITSR has as a principle, that NSW will not accept national reform proposals which produce less safe outcomes.

Recommendation 121

A safety management system regulation should be promulgated, specifying the requirements of safety management systems in all accredited organisations, using Annexure I to this report as a guide.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported in principle for implementation through other means. ITSR will introduce regulations that set out the expectations (or performance outcomes) required of industry. The regulations will be developed on a national basis, through the National Transport Commission process, to ensure consistent application across the Australian rail industry.

ITSR expectation

ITSR will refer the matter to the National Transport Commission for development of national regulations. ITSR will adopt the national regulations. In the interim, ITSR has developed NAP which sets out requirements and has made NAP a condition of accreditation.

Recommendation 122 a

RailCorp should establish an integrated safety management system which includes the following:

a) a formal performance management system, incorporating measurable safety accountabilities and responsibilities for each managerial position

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported. The RailCorp Board has approved the safety strategic plan and the engagement of external experts to assist in the development of an integrated safety management system for RailCorp. The safety management system has been developed and will be implemented in 2005, consistent with the requirements of RailCorp's provisional accreditation.

RailCorp will review its integrated safety management system against this recommendation to ensure consistency.

ITSR expectation

RailCorp to review its SMS to ensure that it incorporates requirements from Recommendation 122 (a) - (f).

Recommendation 122 b - f

b) defined safety accountability and responsibility statements for senior management

c) an effective means of reviewing and acting upon audit investigation and review findings

d) an effective system for managing audit and investigation findings, to ensure that any identified deficiencies have been rectified

e) criteria for recruitment and promotion of management staff, including safety management qualifications, experience and expertise

f) development of risk management procedures, including:

- analysis of the nature of the activities being undertaken

- identification of all potential hazards within those activities

- analysis of the nature of the hazard

- analysis of the risks of the hazard materialising

- development of controls to mitigate the risk

- development of systems for monitoring the effectiveness of the controls to ensure that they are working

- development of a continuing program to enhance the development of safe practices at all levels of the organisation

- development of key performance indicators for safety performance by all persons in management positions

- development of a safety information data collection system which captures all hazards, occupational health and safety incidents, audit results, non-compliance findings and near miss reports

- development of a system to arrange in priority order, on the basis of data and trend analysis, those safety deficiencies which require the most urgent attention
- design and implementation of communications protocols, including standard phraseology, with particular standard phraseology for emergency situations
- development of training systems, based upon training needs analysis.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

RailCorp will review its integrated safety management system against this recommendation to ensure consistency.

ITSR expectation

RailCorp to review its SMS to ensure that it incorporates requirements from Recommendation 122 (a) - (f).

Recommendation 123

RailCorp should establish a safety management system containing the 29 elements identified in the SMSEP report which is in volume 2 of this report.

Agency	Status	ITSR assessment	Verified
RailCorp	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented through other means. RailCorp's draft integrated safety management system incorporates the substance of all 29 elements identified in the SMSEP.

ITSR expectation

RailCorp to review its SMS to ensure that it incorporates 29 elements identified in SMSEP report.

Recommendation 124

The ITSR should ensure that RailCorp establishes a safety management system containing the 29 elements identified in the SMSEP report, and ensure the ongoing monitoring and improvement of the safety management system established.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported in principle and being implemented through other means. See Recommendation 123.

ITSR expectation

ITSR to review RailCorp's SMS in line with the accreditation requirements outlined in Recommendation 123.

Recommendation 125 a - b

a) The ITSR must provide a quarterly report to the Minister for Transport Services on the progress made by RailCorp in implementing these recommendations, including a statement as to whether or not the recommendation has been implemented and, if so, is working effectively

b) if the recommendation has not been implemented, the means by which the safety objective of the recommendation is otherwise to be achieved

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

Quarterly reports provided outlining issues raised in the recommendation.

Recommendation 126

The Minister for Transport Services must table in Parliament, each such quarterly report by ITSR.

Agency	Status	ITSR assessment	Verified
ITSR	**Closed**	Implemented	Verified

Government response

Supported.

ITSR expectation

Reports tabled in Parliament.

Recommendation 127

The Minister for Transport Services should retain, independently of ITSR, safety auditors to provide a report to the Minister confirming or qualifying the contents of each such ITSR quarterly report.

Agency	Status	ITSR assessment	Verified
Not assigned	**Closed** Recommendation rejected	No further action	

Government response

Not Supported. The government is confident that ITSR has the capacity and competence to effectively monitor and review implementation of the recommendations arising from the Commission's final report. An additional independent auditor would duplicate the work of ITSR and may cause confusion about which agency is the primary regulatory authority.

ITSR expectation

Rejected. Closed.

Status classification system

This table describes the system used by ITSR to classify the progress of Waterfall rail accident recommendations through the various stages of implementation. This classification system is based on accepted international practice.

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 ITSR.
Open	Response received	ITSR has received a response from an affected party and this response is under review by ITSR. It has not yet been accepted by ITSR.
Open	Acceptable response	ITSR agrees that the planned action, when completed, meets the recommendation.
Open	Acceptable alternative response	ITSR agrees that alternative action, when completed, satisfies the objective of the recommendation.
Open	Response rejected by ITSR	ITSR 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 company or agency claims that the planned or alternate action has been completed. The action has not yet been verified by ITSR. ITSR has not yet agreed that the item is closed.
Closed	Recommendation rejected	ITSR 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 ITSR through a compliance inspection or audit.
Closed	Action not verified	ITSR 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. ITSR will monitor reported progress against the plan to ensure compliance with delivery schedule.

Status of Waterfall rail accident recommendations

Independent Transport Safety Regulator

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Business and service hours

ITSR's business hours are 8.30am to 5.00pm, Monday to Friday (except public holidays).

Reception is open from 8.30am to 4.30pm.

After hours contact (for emergencies only): 02 8263 7211