



INDEPENDENT
TRANSPORT
SAFETY AND
RELIABILITY
REGULATOR

safe and reliable transport services for new south wales



IMPLEMENTATION OF THE NSW GOVERNMENT'S RESPONSE to the Final Report of the Special Commission of Inquiry into the Waterfall Accident

Reporting Period: July - September 2005



ITSRR Quarterly Report Three

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to the Final Report of the Special Commission
of Inquiry into the Waterfall Accident

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31 October 2005

The Hon John Watkins MP
Minister for Transport
Level 34, Governor Macquarie Tower
1 Farrer Place
Sydney NSW 2000

Dear Minister

I am pleased to provide the third Quarterly Report on the implementation of the Government's response to the recommendations contained within the Final Report of the Special Commission of Inquiry (SCOI) into the Waterfall Accident.

As with previous Reports, this Report is provided one month after the completion of the quarter and reflects implementation progress from 1 July 2005 to 30 September 2005. The next report will reflect the progress made in the quarter 1 October to 31 December 2005.

A handwritten signature in black ink, appearing to read 'Carolyn Walsh'.

Carolyn Walsh
Chief Executive

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ABBREVIATIONS

| | |
|-------|---|
| ATP | Automatic Train Protection |
| ARTC | Australian Rail Track Corporation |
| CRM | Crew Resource Management |
| D&A | Drug and Alcohol |
| ESA | Emergency Service Agencies |
| ITSRR | Independent Transport Safety and Reliability Regulator |
| MoU | Memorandum of Understanding |
| NROD | National Rail Occurrence Database |
| NRSAP | National Rail Safety Accreditation Package (also known as NAP or National Accreditation Package) |
| NTC | National Transport Commission |
| OH&S | Occupational Health and Safety |
| OTSI | Office of Transport Safety Investigation |
| PN | Pacific National Pty Ltd |
| RIC | Rail Infrastructure Corporation |
| RC | RailCorp |
| RMC | Rail Management Centre |
| RLAP | Rail Legislation Advisory Panel |
| RSRP | Rail Safety Regulators Panel |
| RSW | Rail Safety Workers |
| SCOI | Special Commission of Inquiry |
| SMS | Safety Management Systems |
| SMSEP | Safety Management Systems Expert Panel |

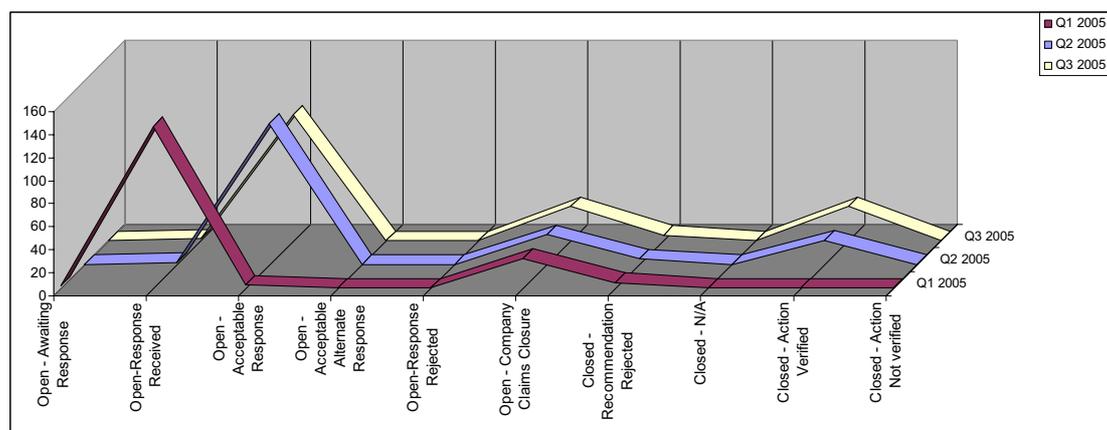
EXECUTIVE SUMMARY

The Special Commission of Inquiry (SCOI) into the Waterfall Rail Accident released its Final Report on 17 January 2005. In accordance with the Commission's recommendations, the NSW Government agreed that the Independent Transport Safety and Reliability Regulator (ITSRR) should report quarterly on implementation progress. This is the third quarterly report. It outlines progress made between 1 July and 30 September 2005.

Implementation Summary

The current status of all of the safety actions, compared to their status in the previous quarter, is summarised below.

GRAPH 1: PROGRESSIVE STATUS ALL RECOMMENDATIONS BY QUARTER



As time progresses, it is expected that the peak will shift along the x-axis until all recommendations are closed.

During the reporting period, 1 July 2005 and 30 September 2005:

- ITSRR reviewed and accepted 112 responses from agencies, which either outlined their plans to implement recommendations; or provided an update on implementation progress;

- RailCorp nominated 30 recommendations for closure, 27 of which are being validated as part of ITSRR's planned audit of RailCorp;
- ITSRR validated and closed out 9 recommendations during the quarter; and
- The total number of closed recommendations is now 35.

The target dates for implementation of accepted recommendations remain on schedule, except for some concerning train radio communications and training of relevant RailCorp personnel in the location and operation of external emergency door release mechanisms on passenger trains (detailed on page 13).

At the end of the reporting period (30 September 2005) the implementation schedule for the 177 recommendations (including 127 recommendations and 50 sub-elements) contained in the Commission's report is as follows:

- **35** recommendations are now closed (including 5 that have been rejected by the NSW Government); compared to 26 as at the end of last quarter;
- **30** recommendations are claimed by agencies to be closed (but are yet to be verified);
- **71** recommendations remain to be implemented by December 2005; (compared to 84 last quarter);
- a further **20** recommendations are scheduled to be implemented by December 2006 (unchanged from last quarter);
- **1** recommendation (the introduction of national communications technical standards) will be implemented by 2010 (unchanged from last quarter); and
- **20** recommendations were referred to the National Transport Commission (NTC) which will report to the Australian Transport Council of Ministers in November 2005. This report will outline a work program for these recommendations which involve the development or review of certain railway standards and regulations. The timeframe for these recommendations are therefore noted as "interim" in the table detailing the status of all outstanding recommendations at Appendix 3.

The public reporting process associated with the Quarterly Reports on implementing the NSW Government's response to the SCOI Final Report sharpens both industry and public focus on rail safety. With 20% of recommendations closed, 17% claimed for closure and 40% scheduled for implementation by the end of the 2005 calendar year, satisfactory progress is being made against the implementation schedule.

ITSRR acknowledges that whilst all of the recommendations are important, some have greater ramifications for improving safety than others. The Commission identified that the implementation of an integrated safety management system (Recommendation 122) which conformed to the principles outlined by the Commission (Recommendation 123) would be necessary to ensure that RailCorp could manage its rail operations safely. In July ITSRR commenced an extensive audit of RailCorp's integrated safety management system (SMS). While full implementation of the SMS is not expected until December 2005, this audit (which will be finalized in November 2005) and subsequent inspections will assess progress in the implementation of the new SMS in the field. The implementation of which will mark a major milestone in improving rail safety in NSW.

Rail safety in NSW does not entirely rest with the implementation of these recommendations. Rail safety is underpinned by comprehensive risk management (through an integrated safety management system) and a continuously improving safety culture in rail operations, both of which were key themes identified by the SCOI in its recommendations. This, combined with the move towards nationally consistent rail regulation and improved standards for rail safety effected by both regulators and rail operators, should deliver improved rail safety in NSW.

Quarterly Progress

Recommendations Verified and Closed

In the reporting period, ITSRR verified and closed **9** recommendations.

2 recommendations for RailCorp were verified and closed:

- Rail Commanders (Network Operations Superintendents, Regional Operations Managers) and the Rail Management Centre have now been supplied with satellite telephones for use in case of an emergency (Recommendation 7); and
- RailCorp's Defects Unit is now combined with the Passenger Fleet Maintenance Division (Recommendation 51).

7 recommendations for ITSRR were verified and closed:

- ITSRR now requires, as a condition of accreditation, all accredited rail operators to have a drug and alcohol monitoring program in place (Recommendation 54);
- ITSRR has implemented an electronic document control system (Recommendation 63);
- ITSRR has established a comprehensive process to identify, develop and implement guidelines for accredited rail operators (Recommendation 114);
- ITSRR grants accreditation when a rail operator has developed and implemented an integrated safety management system (SMS) based on the new National Accreditation Package (NAP) (Recommendation 115);
- ITSRR's Audit and Compliance Program assesses the Safety Management Systems submitted by accredited operator for compliance with the Rail Safety Act, regulations and guidelines (Recommendation 116);

- ITSRR reviewed its resourcing to ensure there are sufficient numbers of field staff to actively monitor and assess compliance of accredited rail operators (Recommendation 117); and
- ITSRR conducts field audits, where applicable, prior to the granting of accreditation to a rail operator (Recommendation 119).

Recommendations Claimed to be Closed (but not yet verified)

RailCorp indicated that in the reporting quarter it completed the implementation of 30 recommendations. These have yet to be verified by ITSRR. ITSRR has a comprehensive verification process for formally closing recommendations. It has combined verification of these recommendations with its planned audit of RailCorp due for completion in November 2005. The audit will enable ITSRR to verify implementation and report results in the next progress report. In summary, the recommendations for which RailCorp has claimed closure in this period include:

- the designation of a staff member in the Rail Management Centre to act as the rail emergency management co-ordinator (Recommendation 3);
- procedures to ensure immediate isolation of electrical power supply to the area of an accident (Recommendation 6);
- the development and implementation of a comprehensive Incident Management Framework outlining command and control procedures for rail emergencies (Recommendations 10, 11, 12, 13, 14, 16, 17, 18, 21 and 22);
- the selection of Rail Management Centre communications staff on the basis of their ability to convey information clearly, accurately and concisely and to follow strict communications protocols (Recommendation 40);

- effective improvements in passenger fleet defects reporting, procedures and management (Recommendations 47, 48 and 49);
- utilisation of simulators to train drivers and guards in an interactive and practical manner (Recommendations 66, 67 and 68);
- proactive management of occupational health and safety, including broader public safety risks, through an integrated safety management system (Recommendations 85, 86 and 87);
- staff trained in the location and operation of external emergency door release mechanisms (Recommendation 96);
- appointment of a Safety Reform Program Director to manage safety reform being undertaken by RailCorp (Recommendation 110 a – e); and
- a revised Safety Management System (SMS) that incorporates the 29 elements identified in the Commission’s Safety Management Systems Expert Panel (SMSEP) Report. The SMSEP was established by the SCOI to oversee and analyse the results and factual findings of a SMS review of the organisations. The SMSEP Report is found in volume 2 of the SCOI Final Report (Recommendation 123).

Priority areas from last quarter

In its last report, ITSRR identified eight areas where it expected progress by agencies or to verify recommendations. These included:

- RailCorp’s risk assessment of passenger evacuation from trains;
- Feasibility of RailCorp’s indicative timeframes;
- Working with the National Transport Commission (NTC);
- Expansion of ITSRR’s audit program;

- Implementation of ITSRR's electronic document management system (closed); and
- Verification of RailCorp's train maintenance program;
- Verification of RailCorp's risk management framework;
- Verification of the integration of Occupational Health & Safety (OH&S) into RailCorp's SMS.

In some of these areas expected action was not completed or verification did not take place in the reporting period. This is outlined in the Slippage section on page 13. Those areas where expectations were met are summarised below:

RailCorp's risk assessment of passenger evacuation from trains

As part of the review of its passenger containment policy, RailCorp contracted Outcome Engineering and Airservices Australia to conduct a risk assessment of passenger initiated self evacuation. This risk assessment was completed in July 2005. RailCorp presented the findings of the risk assessment to ITSRR on the 26 July 2005. ITSRR has reviewed the methodology and the findings of the risk assessment and is satisfied with the processes RailCorp followed in conducting its risk assessment (Recommendation 88).

Feasibility of indicative timeframes provided by RailCorp

ITSRR has reviewed a sample of RailCorp's suggested timeframes and proposed actions in its implementation plan. ITSRR is satisfied that these are feasible and that RailCorp has processes in place to adequately monitor progress as well as to give sufficient notice and justification to ITSRR for any changes to its implementation plan.

Working with the National Transport Commission (NTC)

ITSRR has continued its work with the NTC, meeting twice with Commission staff during the reporting period. The NTC has provided ITSRR with preliminary assessments of the SCOI recommendations that were referred to

it. These preliminary assessments have been subsequently circulated to other jurisdictions. As noted above, it is expected that the NTC will report back to the Australian Transport Council in November 2005.

Expansion of ITSRR's audit program

ITSRR has expanded its audit program to check accredited rail operators' adherence to standardized communications protocols. ITSRR has included questions on standard communications protocol in both the current RailCorp audit and in the scheduled audits for other rail operators.

Slippage

In the last quarter's report, ITSRR identified a number of areas where it expected progress to be made by agencies or to verify recommendations during the July – September 2005 quarter. There were however some areas where these expectations were not met.

During the third quarter RailCorp advised ITSRR that all guards have been trained in the emergency use of MetroNet. Not all CountryLink passenger service staff (PSS) have been trained and the revised completion date is now fourth quarter of 2005 (Recommendation 5).

ITSRR's planned audit of RailCorp to verify its train maintenance program (Recommendation 47) and the integration of Occupational Health & Safety (OH&S) into RailCorp's SMS (Recommendations 85-87) did not take place in September as planned but commenced at the beginning of October. Results will be reported in the next progress report.

Slippage occurred in relation to Recommendation 26 and 65 as ITSRR did not receive RailCorp's claim for closure for these recommendations until the 17 and 12 October respectively, both of which were after the conclusion of the reporting period. ITSRR will verify RailCorp's claim for closure in the next quarter.

Slippage has also occurred in relation to Recommendation 46 and 96:

- Recommendation 46 concerned the implementation of a regulation by September 2005 to require the inter-operability of communications equipment between all trains operating on the NSW rail network in an emergency situation. ITSRR originally anticipated introduction of this regulation to require the inter-operability of communications equipment between all trains operating on the NSW rail network in an emergency situation by September 2005. Slippage occurred in respect to Recommendation 46 because ITSRR is developing a suite of regulations to implement recommendations from the SCOI Final Report. To facilitate this, all regulations will be introduced at the same time. As a result, the timing for this regulation has been changed to reflect this strategy. Drafting instructions for this regulation have been developed and following consultation with the rail industry, ITSRR will progress the development of a regulation along with a number of others with implementation now anticipated by early 2006 (Recommendation 38 and 46). Further detail regarding the communications recommendations may be found at page 24.

- RailCorp advised ITSRR that training of relevant RailCorp personnel in the location and operation of external emergency door release mechanisms on passenger trains has been completed (Recommendation 96). During the quarter ITSRR conducted a number of field inspections to verify implementation. ITSRR found that train drivers and guards were trained in the use of the Emergency Door Release (EDR) however there was a lack of knowledge amongst station staff. ITSRR has requested RailCorp to provide a revised implementation date for the training of station staff. Recommendation 96 will not be closed until station staff are appropriately trained.

METHODOLOGY

This section briefly outlines the processes which ITSRR has instituted to develop and monitor the Implementation Plan for the Government's response to the SCOI Final Report into the Waterfall Rail Accident. Full details of these methods may be found in Appendix 2.

Implementation Plan

ITSRR has reviewed the SCOI Final Report and determined the actions required to implement each recommendation (in line with the Government's response) and which company or agency has responsibility for that action. These expectations formed the basis for determining whether the response put forward by a company or agency is appropriate to meet the recommendation and/or satisfy the safety objective of the recommendation.

Responsible agencies have assigned indicative timeframes for each safety action and ITSRR has reviewed the appropriateness of them. The timeframes are feasible and that RailCorp has processes in place to adequately monitor progress as well as to give sufficient notice and justification to ITSRR for any changes to its implementation plan. Timeframes agreed with responsible companies or agencies have, to the greatest extent possible, been made realistic and achievable. Details of the Implementation Plan and progress against it may be found in Appendix 3.

Classification System for Recommendations

In order to provide a graduated view of progress against the Implementation Plan, ITSRR has developed a classification system to indicate the relative status of each recommendation. The taxonomy for the Classification System has been drawn from accepted international practice. Appendix 1 includes tables and graphs of the current implementation status of recommendations.

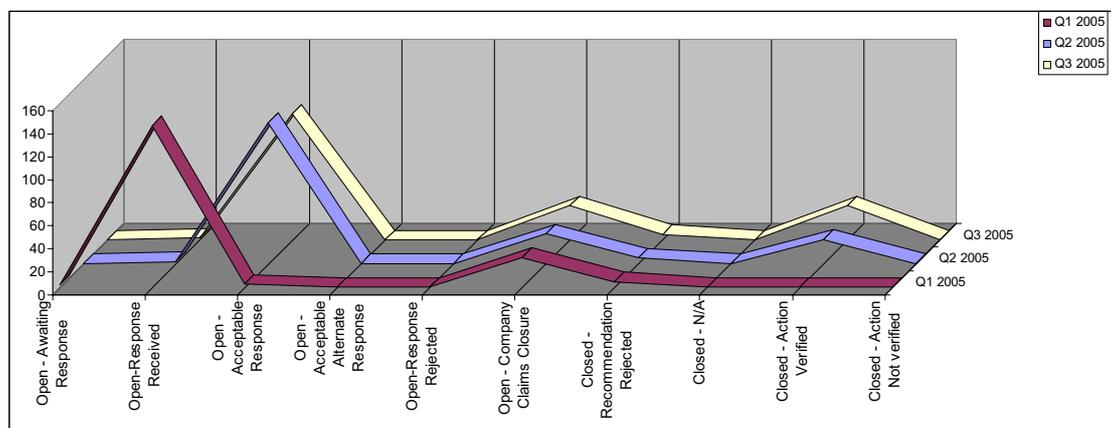
SUMMARY OF PROGRESS

The SCOI was given the task of identifying the causes of the Waterfall Accident and ways of preventing such accidents in the future. The Commission was also asked to examine what might lead to overall improvements in the safety management of rail operations in NSW. The SCOI Final Report grouped recommendations under 19 safety themes. These relate to both the causes of the accident and to suggested improvements in the overall management of safety on the NSW rail network.

In this Report, implementation progress is summarised against these 19 safety themes. It outlines progress in the reporting quarter, any slippage against agreed timeframes, as well as any action taken by the responsible agency and/or ITSRR to address slippage. This approach provides the necessary transparency to ensure appropriate public scrutiny of progress made in implementing the Government's response to the SCOI Final Report.

The graph below illustrates the status of recommendations as of the 30 September 2005. As time progresses it is expected that the peak will shift along the x-axis until all recommendations are closed.

GRAPH 1: PROGRESSIVE STATUS OF ALL RECOMMENDATIONS BY QUARTER



Emergency Response

SCOI Final Report Recommendations 1-28

These recommendations relate to the Commission's findings that emergency response procedures to the Waterfall Rail Accident were inadequate. They are intended to ensure that RailCorp has effective procedures in place in the event of a future rail accident that will enable it to locate the accident site, secure and isolate it and facilitate access of emergency services. The recommendations also aim to ensure that any such emergency response is coordinated between relevant parties and is timely. This includes for example the provision of supporting emergency procedures and appropriate training in those procedures.

In the reporting period:

- Recommendation 7 which concerned the provision of satellite telephones for rail commanders at any emergency, was closed following ITSRR's verification that RailCorp had:
 - provided a satellite telephone to likely Rail Commanders (network operations superintendents, regional operations managers) and the Rail Management Centre;
 - provided procedures for the maintenance and use of the satellite telephones;
- ITSRR's verification procedures included citing a risk assessment for the satellite CDMA telephones, confirming that a spare battery was provided, that each duty officer was responsible for charging the battery and that procedures were in place to ensure batteries were charged, that the Regional Network Operations Manager would periodically audit each satellite phone and keep appropriate records and that instructions for the use, care and maintenance of the mobile satellite phones had been provided and circulated to all relevant staff. A master list was also cited

which detailed the unit number and the officer to whom the satellite phone had been assigned. ITSRR also contacted RailCorp officers to verify that they had mobile satellite phones in their possession and were aware of the associated protocols and procedures. These combined procedures gave ITSRR confidence that the recommendation had been implemented and could therefore be closed;

- ITSRR assessed RailCorp's response to Recommendation 4 as "Acceptable". This recommendation requires RailCorp to provide a detailed program to explain how its trains will be located on a mimic board, or similar, in the Rail Management Centre (RMC). RailCorp's proposed program will require capital expenditure. ITSRR expects receipt of the detail of the capital expenditure program by March 2006; and
- RailCorp claimed closure of Recommendation 6 which concerned RailCorp's procedures to ensure that electrical power supply to the area of an accident can be immediately isolated, if necessary. For ITSRR to close this recommendation, RailCorp must demonstrate that appropriate procedures have been established and that all relevant staff have been trained in the procedures.

RailCorp claimed closure on the following recommendations:

- a designated staff member at the RMC has been assigned to act as the rail emergency management co-ordinator and be the single point of contact at the RMC to coordinate liaison between other rail personnel and emergency services personnel during the rescue phase of an emergency response (Recommendation 3); and
- RailCorp's Incident Management Framework now incorporates immediate response, site management and recovery processes (Recommendations 10, 11, 12, 13, 14, 16, 17, 18, 21, 22, 23, and 28). ITSRR will verify the development of comprehensive Incident Management Plans/Procedures

and supporting training as part of this framework. The implementation of Recommendations 21, 23 and 28 which concern the content of and facilities for training of RailCorp and emergency services personnel, are the joint responsibility of both agencies.

- ITSRR received RailCorp's claim for closure on 17 October 2005 for Recommendation 26 which concerned the training of all RailCorp staff 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. Receipt of this recommendation occurred after the conclusion of the reporting period. ITSRR will verify this claim for closure in the next quarter.

The priority for the next quarter is verification of those recommendations claimed for closure by RailCorp which are being examined as part of ITSRR's audit of RailCorp.

Design and Procurement of Rolling Stock SCOI Final Report Recommendations 29 & 30

The Commissioner recommended that all railway operators should have a quality assurance program in place for the design and construction of rolling stock and that the rail safety regulator should set standards for the design, manufacture, testing and commissioning of rolling stock to ensure that it is fit for purpose.

To progress this, the NSW Minister for Transport through the Australian Transport Council (ATC) referred the development of a new regulation on rolling stock to the National Transport Commission. In addition, the Australasian Railway Association (ARA) through its Code Management Company (CMC) is redeveloping Volume 5 of the Code of Practice for rail operators. This will provide nationally consistent and accepted rolling stock standards for the Australian rail industry (broad, standard and narrow gauge).

Until this new standard is developed, ITSRR will continue to use Australian Standard 4292 on Railway Safety Management as the benchmark for safely managing and procuring rolling stock. ITSRR is implementing a new National Accreditation Package for rail operators. This package includes procedures for the design, manufacture, testing and commissioning of rolling stock as a key element of an operator's safety management system.

All NSW accredited operators are required to comply with the "Minimum Operating Standards for Rolling Stock" (MOSRS) - a set of detailed technical safety standards. Compliance with the MOSRS is also a standard condition of rail access agreements between rolling stock operators and the three NSW infrastructure owners (RailCorp, CountryRIC, and the ARTC). It is proposed to review the MOSRS as part of the initiative to establish a nationally consistent set of technical railway safety standards.

In the reporting period, the following progress was made:

- On 10 August 2005 RailCorp issued rail industry operators with its revised draft Minimum Operating Standards for Rolling Stock (MOSRS). These have been revised to address the concerns of the SCOI Final Report recommendation 29. RailCorp is seeking comment from the rail industry following which it expects to issue a revised standard as part of its access agreement with rail operators; and
- On 16 May 2005 RailCorp's Rolling Stock Division achieved certification in AS/NZS ISO 9001:2000 for the design and construction of rolling stock. The Public Private Partnership (PPP) initiative which manages the acquisition of new rollingstock for RailCorp is working towards a similar certification. The PPP project documentation also requires the successful tendering companies to be quality accredited to the relevant Australian/International standards (ISO9001) thus meeting the objective of recommendation 29.

ITSRR expects accredited rolling stock operators to have effective procedures and protocols in place to ensure that any rolling stock brought into service is fit for purpose. Through its existing compliance program for accredited rail operators, ITSRR continues to review the rolling stock procedures and protocols of accredited rail operators.

During the next quarter the NTC is expected to report back to the ATC in regards to the development of a new national regulation on rolling stock.

Driver Safety Systems

SCOI Final Report Recommendations 31-33

These recommendations are intended to minimise the risk of an accident in the event of train driver incapacitation by requiring the fitting of two independent engineering defences to all trains as an interim measure until automatic train protection (ATP) is introduced to the NSW rail network. In the longer term, the SCOI recommended the introduction of “Level 2 type ATP”. ATP systems are more advanced technologies which can automatically override a driver if a train is behaving in an unauthorised way in relation to network constraints.

Engineering Defences

As noted in previous reports, RailCorp has progressively installed vigilance devices in all its passenger trains (with the exception of the soon to be retired 600 class railcars that operate in the Hunter Valley) in addition to deadman systems and has removed material from train cabs that could be used to deliberately circumvent the deadman pedal (Recommendation 31). RailCorp’s passenger services are therefore now compliant with the SCOI recommendation.

However, there are other types of rolling stock on the NSW rail network that do not have two independent engineering defences, e.g. freight and heritage trains. Instead these trains generally have a second driver. However, where

there are “driver only operations”, ITSRR requires through its accreditation processes that rolling stock be fitted with two independent engineering devices.

To assist in its assessment of whether these trains require a second engineering defence ITSRR will commission an international literature search on driver safety engineering defences and their effectiveness utilised on rail systems overseas. ITSRR will review the application of such defences in NSW to determine whether adequate defences are in place for different types of rolling stock operations.

Automatic Train Protection

As discussed in the last quarter’s report, there is no consistent terminology for ATP used around the world. ATP is a generic term used for a wide range of technologies used to “intervene” with the train driver in certain circumstances. To address this:

- ITSRR has released an information paper to define the various forms of ATP used in major world railways. This paper is available on ITSRR’s website;
- On 29 August 2005 RailCorp awarded a contract to an external Project Team to carry out a comprehensive review of ATP Options for the metropolitan network; and
- ARTC (which manages the non-metropolitan rail lines in NSW) is progressing its project to introduce ATP on the interstate and Hunter Valley networks.

The introduction of ATP into the NSW rail network may require changes to be made to rolling stock standards. It was reported above that the NSW Minister for Transport referred the development of a national regulation for rolling stock to the National Transport Commission (NTC) in April. In its deliberations, the NTC is expected to address the incorporation of requirements for ATP

(Recommendation 33). The NTC is to report back to the ATC in November 2005.

Risk Assessment and Risk Control Procedures

SCOI Final Report Recommendations 34 and 35

Recommendation 34 and its sub-elements seek to make the rail network safer by ensuring that RailCorp has in place processes to systematically identify and assess risks on the network and put appropriate control measures in place to reduce or eliminate circumstances which might result in an accident.

Following the Waterfall Accident, RailCorp engaged Lloyd's Register Rail, a recognised safety engineering firm, to work with it to develop a risk management framework and implementation strategies that would provide RailCorp with good risk management processes and a robust risk control register.

The following progress was made in the reporting period:

- RailCorp continued the implementation of its new risk management framework across all of its divisions and conducted a Systems Validation Audit (SVA) of the new framework. This involved a desktop audit of the new framework between 26 and 29 July 2005, followed by field audits from 22 August to 29 September 2005; and
- ITSRR was involved in both of these assessments and also conducted its own assessment of the operation of RailCorp's new risk management framework through field inspections. This information will be used to verify whether the framework has enabled RailCorp to undertake more sophisticated risk analysis, review the impact of new safety measures on its risk profile, and better manage and monitor the effectiveness of control measures.

Data Loggers

SCOI Final Report Recommendations 36 and 37

Effective use of data loggers can provide investigators with information to help them in the conduct of any accident or incident investigation to understand the causes of accidents or incidents on the rail network. Data loggers can also assist rail operators to monitor driver's performance and train operations. Data loggers record information on a train's operations, including, for example, speed during a journey.

During the next quarter the NTC is expected to report back to the ATC in regards to the development of a new national regulation on data loggers.

In the reporting period, ITSRR progressed the development of a guideline covering the use of data loggers and the nature of data to be collected by data loggers. This guideline is being developed in consultation with the rail industry and will serve as an interim measure until a national regulation is in place.

Communications

SCOI Final Report Recommendations 38- 46

These recommendations address two important issues. First, that standardised communications protocols should be in use on the NSW rail network so that rail employees use clear and well understood language when communicating with each other. This is particularly important in emergency situations. Second, the compatibility and interoperability of communications equipment (radios for example), so that in an emergency drivers, signalers, train controllers and other relevant personnel (with different types of equipment) are able to talk to each other.

During the reporting period, the following progress was made:

- ITSRR progressed the development of a regulation to mandate requirements for the inter-operability of train radio communications between

all trains operating on the NSW network in an emergency situation. The draft regulation aims to:

- provide consistent radio communications for trains operating on the NSW network during emergency situations;
 - overcome the existing limitations of the lack of integration and standardisation of train radio communications systems in NSW during emergency situations;
 - ensure inter-operability of communications equipment between all trains operating on the NSW network during an emergency situation;
- ITSRR originally anticipated introduction of this regulation to require the inter-operability of communications equipment between all trains operating on the NSW rail network in an emergency situation by September 2005. Slippage occurred in respect to Recommendation 46 because ITSRR is developing a suite of regulations to implement recommendations from the SCOI Final Report. To facilitate this, all regulations will be introduced at the same time. As a result, the timing for this regulation has been changed to reflect this strategy; and
- RailCorp claimed closure on recommendation 40, having revised its Position Descriptions for safety critical staff working in the Rail Management Centre (RMC) to include requirements for the successful completion of a communications assessment module. This action is aimed at ensuring all communications staff in the RMC are selected on the basis of their ability to convey information clearly, concisely and to follow strict communications protocols (Recommendation 40).

To progress recommendations in relation to communication technologies:

- in the short term, RailCorp has advised it has developed a technical solution to establish an interoperability link for train control and signaling to manage emergency calls originating from either Metronet or Countrynet

radio systems. These two different systems are on metropolitan trains and freight trains respectively. RailCorp advises the interim solution has been trialed and that it will be fully implemented in the fourth quarter of 2005 (Recommendation 46); and

- in the longer term, compatibility will be ensured through the development of a national standard for communications which is currently being developed by the Australasian Rail Association (ARA) with the input of both RailCorp and ITSRR. This will include a national digital radio system and will be implemented by 2010. The Australian Transport Council (ATC) also resolved at its 3 June meeting to have regular updates on the progress of communications standard development to ensure timeliness in development and implementation (Recommendation 46).

In the next quarter ITSRR will:

- verify RailCorp's claim for closure in respect to Recommendation 40;
- circulate the draft regulation regarding train radio communications for industry comment (Recommendation 38 and 46 – short term solution);
- verify, as part of its planned audit of RailCorp, that the communications protocols contained in RailCorp's current Network Procedures are adequately conveyed to new and existing staff by way of competency based training (Recommendations 39, 40, 41, and 42); and
- continue its compliance audit program to check adherence to standardized communications protocols by all accredited rail operators (Recommendations 44 and 45).

Train Maintenance

SCOI Final Report Recommendations 47-53

The purpose of these recommendations is to ensure there are minimum standards and inspections in place for RailCorp trains entering service and

adequate maintenance plans and systems in place to record and rectify train defects, as well as certification of work by an appropriately qualified individual.

The following progress was made during the reporting period:

- ITSRR verified RailCorp's claim for closure of Recommendation 51 that RailCorp's Defect Unit has now been integrated into its Passenger Fleet Maintenance (PFM) Division;
- RailCorp reorganised the reporting function of the Defects Unit from the Operations Division to the PFM Division following consultation with staff and unions, process mapping and safety validation conducted by external consultants. ITSRR's verification processes included interviewing the responsible RailCorp project manager, a review of the Memorandum of Understanding between RailCorp and the Rail Tram and Bus Union (RTBU) and the Australian Services Union (ASU), and interviews with the relevant RailCorp staff. The implementation of this recommendation should lead to better functional control and a better understanding of the day to day performance of the fleet by the PFM area; and
- ITSRR commenced verification of a number of projects under RailCorp's Train Services Safety Improvement Program (TSSIP). The results will be included in the next quarterly report. These projects are designed to address several Waterfall recommendations including:
 - the development of an electronic reporting, recording and rectification capability within its existing maintenance regime for both the electric and diesel fleets which permits tracking to finalisation of defect reports (Recommendation 47 and 48);
 - the existence of a RailCorp Train Operations Manual which contains the standard for determining when a train is permitted to enter service and remain in service (Recommendation 49); and

- the development of suitable processes to ensure that defect rectification is certified, reported and attended to by competent personnel (Recommendations 50).

Alcohol and Drug Testing

SCOI Final Report Recommendations 54-56

These recommendations are intended to ensure random Drug and Alcohol (D&A) testing continue and that testing is made mandatory following an incident. The Rail Safety Act 2002 and supporting regulations which commenced in 2003 require accredited operators to have a D&A program in place.

ITSRR has previously reported that RailCorp has its own D&A testing program in place which includes post-incident testing and random testing.

During the reporting period, ITSRR verified that all remaining accredited rail operators have drug and alcohol programs in place which, for larger operators, include random D&A testing. It may not be appropriate or practical for some operators such as volunteer-based heritage railway associations to have random D&A testing programs. In these cases, ITSRR has commenced its own D&A testing regime as advised in the previous report.

ITSRR receives information from accredited rail operators about their D&A programs, including testing, which allows ITSRR to monitor the amount of testing being undertaken and outcomes of testing. These documents include quarterly reports of operators' testing programs detailing the number of workers, number of D&A tests undertaken and the number of positive tests and notifications of all positive or refused D&A tests.

During the next quarter ITSRR will complete the review of D&A program guidelines to define the types of incidents for which post-incident D&A testing is mandatory (Recommendation 55).

Periodic Medical Examination

SCOI Final Report Recommendations 57(a)-(j)

This recommendation is directed at minimising the risk of incapacitation of a train driver through more stringent standards for periodic medical examinations for railway safety critical workers. The majority of safety actions required for this recommendation have been implemented, verified and closed through the adoption of the National Health Assessment Standard.

Recommendations 57(d)-(f) were referred to the National Transport Commission for review and potential inclusion in the existing national standard as part of its maintenance program for the national standard. The NTC is expected to respond by November 2005.

Safety Document Control

SCOI Final Report Recommendations 58-64

Effective document control, particularly document control of safety information, is a critical element of a rail operator's safety management system. Employers and employees must be confident that the safety information they are operating under is current and accurate. It is also important that the Regulator has robust document control processes in place.

During the reporting period, ITSRR completed full implementation of its electronic document management system (Recommendation 63). This system enables ITSRR to capture and store the information it needs to effectively regulate the safety of the NSW rail system. The acquisition of the electronic document management system (EDMS) was endorsed as a critical project in the ITSRR Information Management and Technology Strategic Plan in March 2004. A software tool, Objective, was purchased in June 2004, configured during the second quarter of 2005 and fully implemented in September 2005.

ITSRR's EDMS provides a single integrated solution for managing electronic and physical documents, one that allows quick and easy access to information, facilitates collaboration between work teams and allows more effective and efficient business processes to be adopted. This Recommendation has been verified and is now closed.

RailCorp has also progressed in the implementation of a safety document management system to enable all relevant staff to access accurate and up to date safety documentation when required (Recommendations 58 and 59). RailCorp advised that during the quarter scoping of a software solution for its safety document management system, Safety Knowledge Management System (SKMS) was completed and that it anticipates the first safety database components of SKMS will "go live" at the end October 2005.

Train Driver and Guard Training

SCOI Final Report Recommendations 65 - 71

It is important that train drivers and train guards are adequately trained in the performance of their duties. This issue was also raised by the SCOI into the Glenbrook accident. Of particular interest for training is the appropriate use of simulators, encouragement of teamwork, and the development of training based on a needs analysis.

In the reporting quarter:

- RailCorp is also reviewing the current training program for different categories of rail safety worker to ensure training:
 - meets the needs determined by a thorough needs analysis;
 - reflects an appropriate competence management regime based on the skills and attributes required to carry out the defined tasks (Recommendation 70);

- ITSRR commenced verification of the following initiatives as part of its current audit of RailCorp:
 - RailCorp's use of interactive simulator training for its guards and drivers in circumstances such as passing signals at stop or trespassers in the rail corridor (Recommendations 66 and 67); and
 - RailCorp's claimed closure on implementation of training for train drivers and guards which encourages teamwork and discourages authority gradients (Recommendation 68).

In the next quarter:

- RailCorp expects to have created and introduced appropriate positions with responsibility for ensuring each train driver's training needs are being met and any safety concerns of drivers are being properly addressed (Recommendation 71); and
- ITSRR received RailCorp's claim for closure with respect to the completion of its review of recommendations 1-7 from the Glenbrook Report. RailCorp claim to have audited the measures it had already implemented to assess their efficacy. RailCorp provided a copy of the audit to ITSRR on 12 October 2005 which was after the conclusion of the reporting period, consequently ITSRR will verify this claim for closure in the next quarter (Recommendation 65).

Rail Accident Investigation

SCOI Final Report Recommendations 72 - 82

The SCOI Final Report promulgated "just culture" investigations (ie, those aimed at determining all the factors contributing to an accident, including systemic factors, the root causes of an accident rather than attempting to allocate blame or liability), as more likely to contribute to improved safety outcomes in the longer term. Recommendations 72 -74 and 82 concern the

powers of, and relationship between, the NSW Office of Transport Safety Investigation (OTSI) and the Australian Transport Safety Bureau (ATSB).

In the reporting quarter negotiations continued in the establishment of a Memorandum of Understanding (MOU) between OTSI and ITSRR (Recommendations 80 and 81) following the separation of OTSI from ITSRR. It is expected that the MOU between OTSI and ITSRR will be completed by December 2005.

Safety Culture

SCOI Final Report Recommendations 83 - 84

It is accepted safety practice that a positive safety culture works in tandem with a safety management system to deliver safe operations. RailCorp has advised that it will submit its safety culture plan to ITSRR in October 2005 which incorporates recommendations 83 (a) – (n). RailCorp has indicated that it is on target to meet this submission date. Recommendation 84 requires ITSRR to review RailCorp's Safety Culture Plan.

Occupational Health and Safety

SCOI Final Report Recommendations 85- 87

Recommendations 85-87 articulated the SCOI's concern that RailCorp's approach to safety management was overly focused on occupational health and safety (OHS). By this it meant that RailCorp primarily sought to implement risk control measures for risks of relatively low consequence, but high frequency, to the detriment of more significant risks of relatively high consequence, but low frequency. The SCOI recommended integration of OHS management into RailCorp's overall safety management system, so that broader public safety concerns, such as derailment or collision, would receive greater attention.

RailCorp has claimed closure on these recommendations. In the reporting quarter, ITSRR commenced verification of these recommendations as part of its current audit of RailCorp's SMS.

Passenger Safety

SCOI Final Report Recommendations 88-101

These recommendations address emergency egress and access (ie, ways in which passengers can escape from trains in an emergency and the way emergency services and other rescuers can get into trains), emergency evacuation procedures and associated training and standards. In particular, the SCOI recommended the abandonment of the RailCorp "containment" policy which does not allow for self-initiated evacuation by passengers in the event of a serious accident or emergency.

It was previously reported that RailCorp contracted Outcome Engineering and Airservices Australia to conduct a risk assessment of passenger initiated self evacuation in the event of an emergency as part of the review of its containment policy. This risk assessment was completed in July 2005.

During the reporting period:

- RailCorp presented the findings of the risk assessment to ITSRR. ITSRR has reviewed the methodology and the findings of the risk assessment and is satisfied with the processes RailCorp followed in conducting its risk assessment. RailCorp is now assessing the technical feasibility of options explored in its risk assessment. A submission outlining options for emergency egress will be submitted by RailCorp to Government in the first quarter of 2006;
- ITSRR continued its work on developing principles for a standard on emergency access and egress. The development of these principles drew on research conducted for the ITSRR Report on *Train Door Emergency*

Egress and Access and Emergency Evacuation Procedures
(Recommendations 89-93, 95 and 98-101);

- RailCorp commenced a program to fit keyless emergency external door release mechanisms to the external doors of its passenger trains. It is expected that this program will be complete by the end of March 2006 (Recommendation 91); and
- RailCorp advised ITSRR that training of relevant RailCorp personnel in the location and operation of external emergency door release mechanisms on passenger trains has been completed. ITSRR independently verified this claim through field inspections. ITSRR found that train drivers and guards were trained in the use of the Emergency Door Release (EDR) however there was a lack of knowledge amongst station staff. ITSRR has requested RailCorp to provide a revised implementation date for the training of station staff. This recommendation will not be closed until station staff are appropriately trained (Recommendation 96).

During the next quarter, ITSRR expects the NTC to report back to the Australian Transport Council of ministers in respect to the development of a national standard for emergency egress (Recommendations 89 – 93, 95, 98-101).

Corporate Governance

SCOI Final Report Recommendations 102- 109

These recommendations introduce requirements for formal qualifications in system safety management for managers who report to the CEO of RailCorp. They also require development of safety accountability statements and reporting lines for all management positions and the introduction of independent external and internal audit processes to be managed by the RailCorp Board.

During the reporting period RailCorp claimed closure on the following two recommendations:

- implementation of an external auditing program to regularly audit and report to the RailCorp Board on the implementation of an integrated safety management system by RailCorp and on safety performance generally (Recommendation 104); and
- introduction of an internal and external audit program to evaluate the adequacy of its safety management system and to ensure that any risk control measures are effective (Recommendation 108).

During the next quarter ITSRR will verify these two recommendations as part of its audit of RailCorp.

Safety Reform

SCOI Final Report Recommendation 110(a)-(e)

This recommendation sought to create a position of Safety Reform Program Director to manage the safety reform program being undertaken by RailCorp and detailed various aspects of the duties that should be undertaken by this position.

During the reporting quarter, RailCorp claimed closure on this recommendation. The role of the current Just Culture Program Director has been changed to Cultural Change Program Director, retaining the function for delivery of the Just Culture Program while incorporating the requirements of recommendation 110(a)-(e). The revised Position Description was provided to ITSRR for review as evidence of implementation of this recommendation.

During the next quarter, ITSRR will review the revised Position Description of the Cultural Change Program Director and verify the Director's understanding of their new role to determine if this recommendation may be closed.

Safety Regulation

SCOI Final Report Recommendations 111-120

These recommendations addressed the role of ITSRR in relation to safety regulation, the governance of ITSRR and the need for more explicit guidelines from ITSRR.

During the reporting quarter ITSRR verified and closed the following recommendations:

- ITSRR now has a process in place to identify, develop and issue revised and future guidelines as required from time to time under the *Rail Safety Act*; (Recommendation 114);

- ITSRR took the lead nationally in developing the National Accreditation Package (NAP) which includes enhanced requirements for SMS from those existing previously. That package was endorsed by Transport Ministers in November 2004. In January 2005, rail regulators around the country agreed that all new accreditations should be assessed against NAP criteria and that for existing accredited operators compliance was expected by July 2006. ITSRR now applies NAP to all new applications for accreditation and re-accreditation. For existing accredited operators, ITSRR conducts a planned program of field audits to assess the ongoing competence, capacity and systems of accredited operators. ITSRR has developed an audit tool based on the NAP which is now used in this audit program(Recommendations 115, 116 and 119); and

- Staffing needs were reviewed prior to the establishment of ITSRR in January 2004. Resources were significantly increased at that time to approximately 80 personnel from a previous staffing level of about 25 in the former Transport Safety Bureau (TSB). Currently, ITSRR and OTSI have 42 authorised field officers, rising from approximately 13 in the TSB. OTSI's authorised field officers are dedicated to accident investigation. ITSRR regularly reviews staffing arrangements and adjusts them to reflect

current operational needs. In doing so, two additional field staff have recently been recruited to undertake compliance investigations (Recommendation 117).

Integrated Safety Management

SCOI Final Report Recommendations 121- 124

These recommendations advocated that a regulation be promulgated specifying the requirements of a safety management system (SMS) (Recommendation 121) and the steps RailCorp needs to take to ensure that its SMS is integrated (Recommendation 122 – 124). Integration should occur at two levels. Firstly, the different components of the SMS must be integrated with each other, and secondly, the SMS must be integrated into the business processes of a rail operator. Such integration is essential to ensure that all hazards, and their associated risks, are identified by an operator, and are properly treated in its SMS - that is, that there are appropriate preventive and recovery control measures in place to reduce, or minimize, the probabilities of occurrence, and the negative consequences of these risks to levels which are as low as reasonably practicable.

As mentioned in the previous section, ITSRR took the lead nationally in developing the National Accreditation Package which includes enhanced requirements for SMS. That package was endorsed by Transport Ministers in November 2004. In January 2005, rail regulators around the country agreed that all new accreditations should be assessed against NAP criteria and that for existing accredited operators compliance was expected by July 2006. ITSRR referred the development of a national regulation for SMS to the National Transport Commission (NTC). The NTC is expected to report back to the ATC in November 2005. In the reporting quarter, ITSRR commenced using NAP in accordance with agreements at the national level. NAP incorporates the 29 elements recommended by the SCOI for an SMS (Recommendations 121).

In the next quarter:

- the NTC will provide a revised work program to the Australian Transport Council of Ministers on the development of a national regulation for SMSs (Recommendation 121); and
- ITSRR will assess against the NAP criteria as part of the planned audit of RailCorp. Full implementation of RailCorp's now integrated SMS is expected by December 2005 (Recommendations 122 and 124);

Summary

The public reporting process associated with the Quarterly Reports on implementing the NSW Government's response to the SCOI Final Report sharpens both industry and public focus on rail safety. With 20% of recommendations closed, 17% claimed for closure and 40% scheduled for implementation by the end of the 2005 calendar year, satisfactory progress is being made against the Implementation Plan.

The implementation of the NSW Government's response to the Special Commission of Inquiry into the Waterfall Accident must be seen in context. As recognised by the Commissioner, there are no quick fixes. Making the NSW rail network safer requires a comprehensive approach to achieve fundamental and long lasting change to reduce the likelihood of accidents like the one at Waterfall from occurring again in the future.

ITSRR acknowledges that whilst all of the recommendations are important, some have greater ramifications for improving safety than others. The Commission identified that the implementation of an integrated safety management system (Recommendation 122) which conformed to the principles outlined by the Commission (Recommendation 123) would be necessary to ensure that RailCorp could manage its rail operations safely. At the beginning of October, ITSRR commenced auditing RailCorp's integrated safety management system. While full implementation of the SMS is not

expected until December 2005, this audit and subsequent inspections will assess progress in the implementation of the new SMS in the field. The implementation of the new SMS will mark a major milestone in improving rail safety in NSW.

Rail safety in NSW does not entirely rest with the implementation of these recommendations. Rail safety is underpinned by comprehensive risk management (through an integrated safety management system) and a continuously improving safety culture in rail operations, both of which were key themes identified by the SCOI in its recommendations. This, combined with the move towards nationally consistent rail regulation and improved standards for rail safety effected by both regulators and rail operators, should deliver improved rail safety in NSW.

APPENDIX 1 – TABLES AND GRAPHS

This table lists the recommendations for which each agency is responsible:

TABLE 1: RECOMMENDATIONS BY RESPONSIBLE AGENCY

| RESPONSIBLE AGENCY | RECOMMENDATIONS FROM SCOI FINAL REPORT | NUMBER OF RECOMMENDATIONS INCLUDING SUB-ELEMENTS |
|--|---|--|
| RailCorp | 1-8, 10-14, 16-20, 22, 25-27, 32, 34(a) – (h), 40, 47-53, 56, 58-62, 65-71, 83(a)-(n), 85-88, 96, 102-110(a)-(e), 122(a)-(f(i-xii)), 123, | 103 |
| Emergency Services Agencies | 15, 97 | 2 |
| Emergency Services Agencies & RailCorp | 9, 21, 23, 24, 28 | 5 |
| ITSRR | 29, 30, 31, 33, 36-39, 41-46, 54-55, 57(a)-(i), 63-64, 75-80, 84, 89-95, 98-101, 113-117, 119-121, 124-125(a)-(b), 126 | 57 |
| OTSI | 72, 73, 74, 81, 82 | 5 |
| Not assigned | 35, 111, 112, 118, 127 | 5 |
| TOTAL | 127 | 177 |

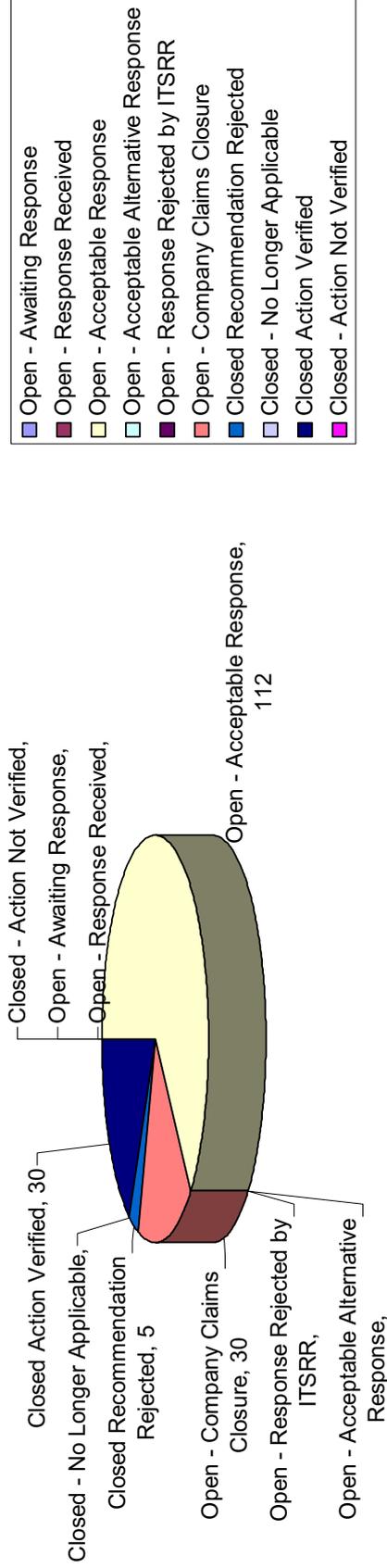
At the end of the third quarter 2005, the status of the 177 Recommendations including sub-elements of the SCOI Final Report is detailed in the following table:

TABLE 2: STATUS OF RECOMMENDATIONS INCLUDING SUB-ELEMENTS FOR THIRD QUARTER 2005

| Operator | Open-Awaiting Response | Open-Response Received | Open-Acceptable Response | Open-Acceptable Alternate Response | Open-Response Rejected | Open-Company Claims Closure | Closed-Recommendation Rejected | Closed-No Longer Applicable | Closed-Action Verified | Closed-Action Not Verified | Total |
|--|------------------------|------------------------|--------------------------|------------------------------------|------------------------|-----------------------------|--------------------------------|-----------------------------|------------------------|----------------------------|------------|
| Not Assigned | | | | | | | 5 | | | | 5 |
| RailCorp | | | 66 | | | 30 | | | 7 | | 103 |
| Independent Transport & Safety Reliability Regulator | | | 34 | | | | | | 23 | | 57 |
| Office of Transport Safety Investigation | | | 5 | | | | | | | | 5 |
| NSW Emergency Services | | | 2 | | | | | | | | 2 |
| RailCorp and NSW Emergency Services | | | 5 | | | | | | | | 5 |
| TOTAL | 0 | 0 | 112 | 0 | 0 | 30 | 5 | 0 | 30 | 0 | 177 |

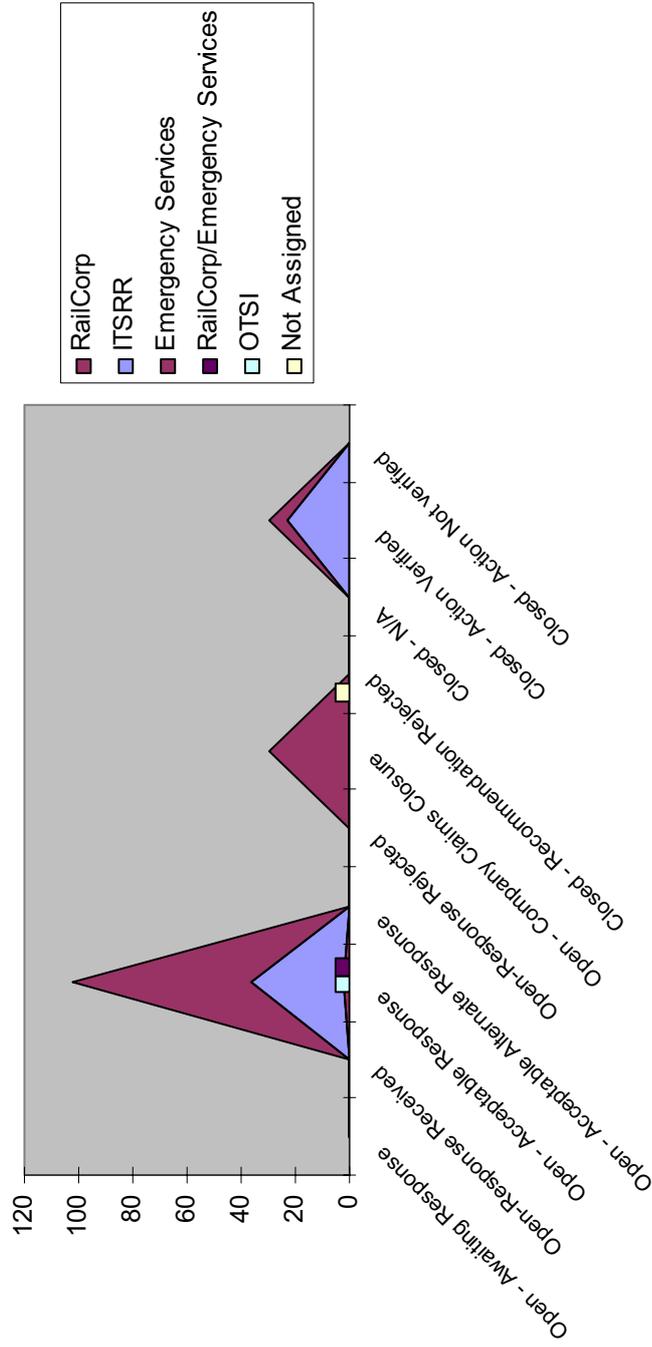
The graph below illustrates the recommendations according to their respective status.

GRAPH 2: CURRENT STATUS OF AGGREGATE RECOMMENDATIONS INCLUDING SUB-ELEMENTS AS OF THIRD QUARTER 2005



The graphs below illustrate the progressive status and the responsible agency for the recommendations. As time progresses it is expected that the peak will shift along the x-axis until all recommendations are closed.

GRAPH 3: STATUS OF RECOMMENDATIONS AND SUB-ELEMENT BY RESPONSIBLE AGENCY AS OF THIRD QUARTER 2005



In the SCOI Final Report recommendations were listed against specific themes or topics relating to the causal factors associated with the Waterfall Rail Accident. The following table presents the status of recommendations by these themes:

TABLE 3: STATUS OF RECOMMENDATIONS BY THEME AS OF THIRD QUARTER 2005

| Theme | Open-Awaiting Response | Open-Response Received | Open-Acceptable Response | Open-Acceptable Alternate Response | Open-Response Rejected | Open-Company Claims Closure | Closed-Recommendation Rejected | Closed-Longer Applicable | Closed-Action Verified | Closed-Action Not Verified | Other | Total |
|--|------------------------|------------------------|--------------------------|------------------------------------|------------------------|-----------------------------|--------------------------------|--------------------------|------------------------|----------------------------|-------|------------|
| Emergency Response 1-28 | | 14 | | | | 11 | | | 3 | | | 28 |
| Procurement & design of rolling stock 29-30 | | 2 | | | | | | | | | | 2 |
| Driver Safety Systems 31-33 | | 3 | | | | | | | | | | 3 |
| Risk assessment and Control procedures 34-35 | | 8 | | | | | 1 | | | | | 9 |
| Data loggers 36-37 | | 2 | | | | | | | | | | 2 |
| Communications 38-46 | | 8 | | | | 1 | | | | | | 9 |
| Train Maintenance 47-53 | | 3 | | | | 3 | | | 1 | | | 7 |
| Alcohol & Drug Testing 54-56 | | 1 | | | | | | | 2 | | | 3 |
| Periodic Medical Examinations 57 | | 3 | | | | | | | 6 | | | 9 |
| Safety Document Control 58-64 | | 3 | | | | | | | 4 | | | 7 |
| Train Driver and Guard Training 65-71 | | 4 | | | | 3 | | | | | | 7 |
| Rail Accident Investigation 72-82 | | 7 | | | | | | | 4 | | | 11 |
| Safety Culture 83-84 | | 15 | | | | | | | | | | 15 |
| OH&S 85-87 | | | | | | 3 | | | | | | 3 |
| Passenger Safety 88-101 | | 13 | | | | 1 | | | | | | 14 |
| Corporate Governance 102-109 | | 6 | | | | 2 | | | | | | 8 |
| Safety Reform 110 | | | | | | 5 | | | | | | 5 |
| Safety Regulation 111-120 | | | | | | | 3 | | 7 | | | 10 |
| Integrated Safety Management 121-124 | | 20 | | | | 1 | | | | | | 21 |
| Implementation of Recommendations 125-127 | | | | | | | 1 | | 3 | | | 4 |
| TOTAL | | 112 | | | | 30 | 5 | | 30 | | | 177 |

APPENDIX 2 – METHODOLOGY

This section outlines the processes which ITSRR has instituted to develop and monitor the Implementation Plan for the Government's response to the SCOI Final Report into the Waterfall Rail Accident.

Implementation Plan

ITSRR has reviewed the SCOI Final Report and determined action required to implement each recommendation in line with the Government's response and which company or agency has responsibility for that action. These expectations then formed the basis for determining whether the response put forward by a company or agency is appropriate to meet the recommendation and/or satisfy the safety objective of the recommendation. Responsible agencies have assigned indicative timeframes for each safety action and ITSRR will review the appropriateness of each. Timeframes agreed with responsible companies or agencies have, to the greatest extent possible, been made realistic and achievable. Details of the Implementation Plan and progress against it may be found in Appendix 3 at page 49.

Classification System for Recommendations

In order to provide a graduated view of progress against the Implementation Plan, ITSRR has developed a classification system to indicate the relative status of each recommendation. The taxonomy for the Classification System has been drawn from accepted international practice and is listed in Table 5 at page 50 below.

The process for assigning status to a recommendation is as follows:

Step 1 The Government's response to the SCOI Final Report determined which recommendations were accepted. ITSRR has articulated its expectations in regards to all remaining recommendations.

- Step 2 All accepted recommendations are assigned the status "Open - Await Response". These recommendations are then referred by ITSRR to the relevant company or agency to prepare a response to the recommendation(s) and submit it to ITSRR.
- Step 3 ITSRR reviews the response and determines whether it is acceptable or not. If it is acceptable then the status of the recommendation is assigned either "Open - Acceptable Response" or "Open - Acceptable Alternative Response". A recommendation would be assigned an "Open - Acceptable Alternative Response" status when the intent of a recommendation will be met but will be implemented by alternative means. If the response is not acceptable then the recommendation is assigned the status of "Open - Response Rejected". In this case, the company or agency is informed of the decision and requested to re-submit a revised response taking into account ITSRR's concerns. This process continues until the response to the recommendation is accepted by ITSRR.
- Step 4 ITSRR monitors progress of all accepted responses to ensure a company or agency is meeting agreed implementation timeframes. This is done through both desktop reviews of reports received by agencies and in-field inspections to verify progress claimed.
- Step 5 Once a company or agency has completed a required action it will submit to ITSRR a claim for closure of the recommendation. This application indicates that the company or agency believes it has completed the required action. The status of the recommendation is changed to "Open – Company Claims Closure".
- Step 6 In most cases, ITSRR will verify closure through an in field compliance inspection or audit. Once verification has taken

place the recommendation status is changed to indicate it is "Closed - Verified".

This process will continue until all recommendations are closed.

TABLE 4: TAXONOMY FOR CLASSIFICATION SYSTEM

| | STATUS | DEFINITION |
|----|--|--|
| 1. | 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 ITSRR. |
| 2. | Open – Response Received | ITSRR has received a response from an affected party and this response is under review by ITSRR. It has not yet been accepted by ITSRR. |
| 3. | Open – Acceptable Response | ITSRR agrees that the planned action, when completed, meets the recommendation. |
| 4. | Open – Acceptable Alternative Response | ITSRR agrees that alternative action, when completed, satisfies the objective of the recommendation. |
| 5. | Open – Response Rejected by ITSRR | ITSRR 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. |
| 6. | 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 ITSRR. ITSRR has not yet agreed that the item is closed. |
| 7. | Closed – Recommendation Rejected | ITSRR 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. |

| | | |
|-----|-------------------------------|---|
| 8. | 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. |
| 9. | Closed – Action Verified | Completion of the planned or alternate action has been verified by ITSRR through a compliance inspection or audit. |
| 10. | Closed – Action Not Verified | ITSRR accepts that the planned or alternate action has been completed following a review of documentation submitted. Field verification is not necessary. |

RailCorp & Other Rail Operators

The SCOI Final Report primarily focused on RailCorp and actions required by it to improve safety as a consequence of the Waterfall Rail Accident. In quarterly reports therefore, ITSRR will report on recommendations specific to RailCorp. However, some recommendations from the Final Report may also be relevant to other rail operators in NSW. In light of this, ITSRR has reviewed the recommendations and identified where other rail operators may also be required to improve safety operations.

Where recommendations have applicability to the wider rail industry, ITSRR will report on progress of its own actions to ensure other operators also meet the intent of SCOI recommendations and on any general areas of concern about implementation issues across the industry. Progress on specific safety actions by other rail operators will not be reported upon in ITSRR quarterly reports.

ITSRR

ITSRR is also responsible for implementing recommendations from the SCOI Final Report. These quarterly reports will assess progress made by ITSRR on those recommendations. The same methodology as outlined above will be used to assess the implementation status of recommendations for which ITSRR is responsible. ITSRR has established an internal process between Divisions which allows for an independent assessment of whether recommendations are being implemented according to the Implementation Plan and to ensure status reports accurately reflect progress against the Plan. The Chief Executive must sign off on all completed actions before a recommendation is closed.

Other Agencies

ITSRR has held meetings with the Office of Emergency Services and the Office of Transport Safety Investigation (OTSI) to review and discuss the implementation and reporting of recommendations under their responsibility. Review of responses from these agencies will also follow the process outlined above and will be reported quarterly. ITSRR has agreed to timeframes and actions with each of these agencies.

APPENDIX 3 – IMPLEMENTATION PLAN: OUTSTANDING RECOMMENDATIONS

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|---|---|--|-----------------|-------------|----------------------------|------------------|
| <p>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.</p> | <p>Supported and being implemented.</p> | <p>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.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>1/03/2006</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|--|---|---|-----------------|-------------|------------------------------|-------------------|
| <p>3. A designated staff member at the RMC should act as the rail emergency management coordinator. 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.</p> | <p>Supported and being implemented.</p> | <p>The initial requirement is for a person to be readily identified. This person need 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 PD. g) Evidence of responsibilities reflected in plan.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Agency Claims Closure</p> | <p>31/07/2005</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|---|---|--|-----------------|-------------|----------------------------|-------------------|
| <p>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.</p> | <p>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.</p> | <p>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. Compliance review (r.e. Current coverage of network, e.g. does it cover 65%.) Review existence planning / funding (r.e. 90% coverage 2008.) Existence of plans / project to review options available.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/03/2006</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|---|--|---|-----------------|-------------|----------------------------|-------------------|
| <p>5. All train guards should be trained by RailCorp in the use, of the MetroNet radio and instructed to use it in any emergency.</p> | <p>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.</p> | <p>RailCorp to provide details of the training program that demonstrates that Guards are trained in the use of MetroNet 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.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>30/12/2005</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|--|----------------------------------|---|----------|--------|-----------------------|-------------|
| 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. | Supported and being implemented. | 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. | RailCorp | Open | Agency Claims Closure | 31/10/2005 |
| 7. Satellite telephones should be provided by RailCorp to all rail commanders at any emergency. | Supported and being implemented. | 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. | RailCorp | Closed | | 31/07/2005 |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|--|--|---|-------------------------------------|--------|-----------------------|-------------|
| 8. All signal telephones must be maintained by RailCorp in proper working order. | Supported and being implemented. | 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. - preventative maintenance. | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 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. | Supported in principle subject to discussion between RailCorp and emergency services regarding operational and security issues. | 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. | RailCorp and NSW Emergency Services | Open | Acceptable Response | 30/06/2006 |
| 10. A railway disaster plan, or rail disaster plan, 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. | 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 | 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 RailCorp (Track Manager). - Training Issues to ensure that staff can implement. | RailCorp | Open | Agency Claims Closure | 31/07/2005 |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|----------------|---|-------------------|--------|--------|------------------|-------------|
| | <p>the all Hazards approach. Instead the Commissioner's recommendations below 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.</p> | | | | | |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|--|--|---|-----------------|-------------|------------------------------|-------------------|
| <p>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 coordinating the various emergency services through representatives of each service.</p> | <p>Supported and being implemented through the RailCorp Incident Management Framework.</p> | <p>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.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Agency Claims Closure</p> | <p>31/07/2005</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|--|--|--|-----------------|-------------|------------------------------|-------------------|
| <p>12. The rail displian 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.</p> | <p>Supported and being implemented through the RailCorp Incident Management Framework.</p> | <p>RailCorp to provide: a) Evidence of Development of Training Program that addresses issues identified in the SCOL. (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. 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</p> | <p>RailCorp</p> | <p>Open</p> | <p>Agency Claims Closure</p> | <p>31/07/2005</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|---|---|---|-----------------|-------------|------------------------------|-------------------|
| <p>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.</p> | <p>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.</p> | <p>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.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Agency Claims Closure</p> | <p>31/07/2005</p> |
| <p>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.</p> | <p>Supported and being implemented through the RailCorp Incident Management Framework.</p> | <p>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.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Agency Claims Closure</p> | <p>31/07/2005</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
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| 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 | Supported and being implemented. | 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. Detail also in include: - Emergency Service Action - Implementation of distinctive identification of command post. | NSW Emergency Services | Open | Acceptable Response | 31/03/2006 |
| 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. | Supported and being implemented through the RailCorp Incident Management Framework. | 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. | RailCorp | Open | Agency Claims Closure | 31/07/2005 |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|---|--|---|-----------------|-------------|------------------------------|-------------------|
| <p>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.</p> | <p>Supported and being implemented through the Incident Management Framework.</p> | <p>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.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Agency Claims Closure</p> | <p>31/07/2005</p> |
| <p>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.</p> | <p>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</p> | <p>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.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Agency Claims Closure</p> | <p>31/07/2005</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|--|---|--|-----------------|-------------|----------------------------|-------------------|
| <p>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.</p> | <p>Supported and being implemented through the Incident Management Framework.</p> | <p>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.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/10/2005</p> |
| <p>20. All operational rail staff should be trained by RailCorp in the action check list relevant to each.</p> | <p>Supported.</p> | <p>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.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>30/06/2006</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|---|---|--|--|-------------|----------------------------|-------------------|
| <p>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 coordination in the circumstances of an emergency.</p> | <p>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</p> | <p>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 Incident Management framework.</p> | <p>RailCorp and NSW Emergency Services</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/03/2006</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|----------------|--|-------------------|--------|--------|------------------|-------------|
| | <p>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 extension of the DVD into a multimedia resource to</p> | | | | | |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
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| | <p>improve the ability to educate wider numbers of emergency service workers.</p> | | | | | |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|--|---|--|-----------------|---------------|------------------------------|--------------------|
| <p>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.</p> | <p>Supported and being implemented.</p> | <p>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 RailCorp, if used, and Training Issues, if they are found to be a factor.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Agency Claims Closure</p> | <p>31/07/2005</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|--|--|---|--|-------------|----------------------------|-------------------|
| <p>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.</p> | <p>Supported in principle and being implemented through other means. See R 21.</p> | <p>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 Incident Management framework. - Appropriate agreements/ arrangements in place between Rail Operators and Emergency Services.</p> | <p>RailCorp and NSW Emergency Services</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/03/2006</p> |
| <p>24. Regular field training exercises should be conducted by RailCorp with the emergency services to ensure that the incident command system and rail display are able to be fully implemented as quickly as possible and are reviewed and improved.</p> | <p>Supported and being implemented.</p> | <p>Program established for exercise in consultation with Emergency Services.</p> | <p>RailCorp and NSW Emergency Services</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/10/2005</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|--|---|--|-----------------|-------------|----------------------------|-------------------|
| <p>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.</p> | <p>Supported and being implemented.</p> | <p>RailCorp to provide: Procedures Developed (Including Appropriate Consultation Development.) 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 included in Incident Management Plans.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/10/2005</p> |
| <p>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.</p> | <p>Supported and being implemented.</p> | <p>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.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>30/09/2005</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
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| <p>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.</p> | <p>Supported and being implemented.</p> | <p>Program established for exercise in consultation with Emergency Services.</p> | <p>RailCorp and NSW Emergency Services</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/03/2006</p> |
| <p>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.</p> | <p>Supported and being implemented.</p> | <p>ITSRR will ensure through its accreditation process that operators have detailed procedures for the design, construction and introduction of any new rolling stock.</p> | <p>Independent Transport Safety & Reliability Regulator</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>30/06/2006</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
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| <p>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.</p> | <p>Supported in principle and being implemented through other means. ITSRR will introduce regulations for rolling stock that set out the expectations (or performance outcomes) of the 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. Notwithstanding the expectation that industry will develop and maintain appropriate safety</p> | <p>ITSRR will refer matter to NTC for development of National Regulation. In the interim, ITSRR 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.</p> | <p>Independent Transport Safety & Reliability Regulator</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>* November 2005</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
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| | <p>standards, ITSRR will retain the power to mandate such standards if the industry clearly fails to deliver satisfactory safety outcomes.</p> | | | | | |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
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| 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 | Supported in principle for further review. ITSRR 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. Recommendation s 31-33 need to be reviewed in light of this relationship. All RailCorp passenger rollingstock have a minimum of two engineering defences (deadman, vigilance, | ITSRR currently requires through the existing accreditation process all driver - only trains (ie one person in the drivers cab) to be fitted with two independent engineering defences. ITSRR to develop and lead a review of the need for a second engineering defence in non-driver only trains. ITSRR to establish position following review. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | 31/12/2005 |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
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| | <p>trainstops) except 600 class (those operating in the Hunter Valley) which will be replaced from the end of 2005 with rollingstock that complies with this requirement. In the meantime on 600 class, the train guard travels with the driver as added protection for driver incapacitation.</p> | | | | | |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
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| <p>32. RailCorp should progressively implement, within a reasonable time, level 2 automatic train protection with the features identified in chapter 8 of this report.</p> | <p>Requires further detailed review. The Government supports the implementation of additional train protection systems. Implementation of level 2 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</p> | <p>A detailed technical review of available options. This is to be a project lead by RailCorp. The major outcome of the project is to be a business case for Government concerning ATP.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>30/09/2006</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|----------------|--|-------------------|--------|--------|------------------|-------------|
| | <p>regarding implementation of additional train protection systems on the RailCorp network. RailCorp will work with the Australian Rail Track Corporation (which operates the interstate network) to develop, in conjunction with ITSRR 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</p> | | | | | |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|----------------|--|-------------------|--------|--------|------------------|-------------|
| | <p>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.</p> | | | | | |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|--|--|--|---|-------------|----------------------------|------------------------|
| <p>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.</p> | <p>Requires further detailed review. See R 32.</p> | <p>Recommendation incorporated into review that will be undertaken in response to Recommendation 32. ITSRR will refer matter to NTC for the development of regulation/standards for rolling stock.</p> | <p>Independent Transport Safety & Reliability Regulator</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>* November 2005</p> |
| <p>34. 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;</p> | <p>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 Recommendations 34 (a) to (h) to ensure the Framework addresses them.</p> | <p>RailCorp's new Risk Management framework will incorporate requirements Recommendation 34(a) to (h).</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/10/2005</p> |
| <p>34. 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;</p> | <p>Supported and being implemented.</p> | <p>RailCorp's new Risk Management framework will incorporate requirements Recommendation 34(a) to (h).</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/10/2005</p> |

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| 34. c) identify what controls are in place to eliminate or minimise the risks associated with any identified hazard; | Supported and being implemented. | RailCorp's new Risk Management framework will incorporate requirements Recommendation 34(a) to (h). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 34. 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; | Supported and being implemented. | RailCorp's new Risk Management framework will incorporate requirements Recommendation 34(a) to (h). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 34. e) specify, in safety documentation, the level of any residual risk | Supported and being implemented. | RailCorp's new Risk Management framework will incorporate requirements Recommendation 34(a) to (h). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 34. 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; | Supported in principle for further review. RailCorp will investigate the availability of independent experts willing to undertake this certification role. | RailCorp's new Risk Management framework will incorporate requirements Recommendation 34(a) to (h). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 34. 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; and | Supported in principle and being implemented through other means. The RailCorp Board is prepared to certify that the risk management | RailCorp's new Risk Management framework will incorporate requirements Recommendation 34(a) to (h). | RailCorp | Open | Acceptable Response | 31/10/2005 |

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| | processes designed to achieve this are in place. | | | | | |
| 34. h) provide to ITSRR 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. | Supported. | RailCorp's new Risk Management framework will incorporate requirements Recommendation 34(a) to (h). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 36. The ITSRR should impose a standard in relation to the collection and use of data from data loggers. | Supported in principle for implementation through other means. ITSRR will introduce regulations including for data loggers that set out the expectations (or performance outcomes) of required industry. The regulations will be developed on a national basis, | ITSRR will refer matter to NTC for development of National Regulation In the interim, ITSRR will review existing standards set in access agreements to ensure adequate standards for collection and use of data. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | * November 2005 |

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| | <p>through the National Transport Commission process, to ensure consistent application across the Australian rail industry. Notwithstanding the expectation that industry will develop and maintain appropriate safety standards, ITSRR will retain the power to mandate such standards if the industry clearly fails to deliver satisfactory safety outcomes.</p> | | | | | |
| <p>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.</p> | <p>Supported in principle for implementation through other means. (See R 36) Information from data loggers can be accessed to monitor for any</p> | <p>ITSRR will refer matter to NTC for development of National Regulation ITSRR will adopt National Regulation In the interim, ITSRR will seek from RailCorp proposals to improve the monitoring of driver performance (especially for training purposes)</p> | <p>Independent Transport Safety & Reliability Regulator</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>* November 2005</p> |

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| | incident or accident and can be accessed to monitor a driver's performance generally. | | | | | |
| 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. | Supported and being implemented. The National Standing Committee of Transport endorsed the Australasian Railway Association working with operators and regulators, including RailCorp and ITSRR, to develop a national approach on communications systems, which has agreed minimum functionality requirements for train radio systems. RailCorp plans to | ITSRR to ensure functionality and compatibility requirements included in national standard, currently under development by the Australasian Railway Association. ITSRR to ensure RailCorp/ARTC Radio Functionality for next generation technology compatibility requirements. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | 31/12/2010 |

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| | <p>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 interoperability, this has been a longer-term initiative and the first stage of its implementation will commence in 2005.</p> | | | | | |

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| 39. Communications procedures throughout the rail network, so that all railway employees describe the same subject matter in an identical way. | Supported. RailCorp Network Procedures contain standardised communications procedures, which are in place across the NSW network. ITSRR will introduce regulations for communications that set out the expectations (or performance outcomes) required of the 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. | ITSRR to ensure that standard communications procedures are included in Network rules. ITSRR 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. ITSRR will refer matter to the NTC for development of National regulations. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | * November 2005 |

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| 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. | Supported. | Appropriate Selection Criteria Developed. Appropriate weighing given to Developed Selection Criteria when selecting staff. | RailCorp | Open | Agency Claims Closure | 31/07/2005 |
| 41. All communications protocols must be strictly enforced by all accredited rail organisations. | Supported. | ITSRR to ensure that rail operators have internal processes in place to audit and monitor compliance with protocols. ITSRR will enforce these systems through its compliance & inspection program. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | 31/12/2005 |
| 42. The ITSRR 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. | Supported in principle and being implemented through other means. ITSRR will take action against operators who fail to manage non-compliance with these protocols. | ITSRR to ensure that Communications protocols are included as a specific compliance/audit criteria in ITSRR's compliance and Audit program. ITSRR will also review operators processes to ensure they have systems in place to effectively deal with non-compliant staff. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | 31/12/2005 |

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| 43. Communications protocols and procedures should be standardised and mandated by regulations making them a condition of accreditation. | Supported. As for R 39. | ITSRR will refer matter to NTC for development of National Regulation. ITSRR will adopt National Regulation. In the interim, ITSRR will enforce compliance with the current protocols through its accreditation, audit and compliance activities. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | * November 2005 |
| 44. ITSRR should ensure, as a condition of accreditation, each of these recommendations is carried into effect and should audit against them to enforce compliance. | Supported. As for R 39. | ITSRR will include these requirements as specific criteria in ITSRR's compliance inspection and audit program. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | 31/12/2005 |
| 45. The ITSRR should conduct random audits of accredited rail organisations for compliance with communications protocols. | Supported and being implemented. | ITSRR will specifically audit train recordings to determine actual compliance in the field. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | 31/12/2005 |

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| <p>46. There should be interoperability of communications equipment between all trains operating on the New South Wales rail network.</p> | <p>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 of Transport endorsed the Australasian Railway Association working with operators and regulators, including RailCorp and ITSRR, to develop a national approach on communications systems, which has agreed</p> | <p>ITSRR to ensure compatibility requirements included in national standard currently being developed by the ARA. ITSRR to ensure RailCorp/ARTC Radio Functionality for next generation technology addresses compatibility requirements. In the interim ITSRR 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.</p> | <p>Independent Transport Safety & Reliability Regulator</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>30/09/2005</p> |

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| | <p>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 interoperability, this has been a longer-term initiative and the first stage of its implementation will commence in 2005.</p> | | | | | |
| <p>47. Defects reporting, recording and rectification should be integrated with the RailCorp regimes for train maintenance.</p> | <p>Supported and being implemented.</p> | <p>RailCorp to have effective Maintenance Regime in place that ensures integration of defects reporting, recording and recertification.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Agency Claims Closure</p> | <p>30/06/2005</p> |

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| 48. All train drivers' defects reports should be entered by RailCorp into a computerised record and tracked to finalisation. | Supported and being implemented. | RailCorp to have effective procedures and database to ensure all defects reports are ended and tracked to finalisation. | RailCorp | Open | Agency Claims Closure | 30/06/2005 |
| 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. | Supported. | RailCorp to have instructions in place clearly identifying issue when a train is not to enter or remain in service. RailCorp to have process to ensure all relevant staff aware of requirements. | RailCorp | Open | Agency Claims Closure | 30/06/2005 |
| 50. All reported train defects should be certified by a person in a supervisory position in RailCorp as having been rectified. | Supported and being implemented. a supervisory position in RailCorp as having been rectified. | 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. | RailCorp | Open | Acceptable Response | 30/09/2006 |
| 51. The RailCorp defects unit should be combined with the passenger fleet maintenance division of RailCorp. | Supported and being implemented. | RailCorp defects unit combined with the passenger fleet maintenance division. Appropriate processes and procedures in place. | RailCorp | Closed | | |
| 52. Maintenance plans on all trains should be revised annually. | Supported in principle for further review. All maintenance plans are being reviewed. RailCorp will incorporate this recommendation in that review. | All plans reviewed. Process to ensure regular / appropriate reviews take place | RailCorp | Open | Acceptable Response | 31/12/2006 |

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| 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. | 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. | A document risk assessment and/or business case by RailCorp, detailing how train integrity on entering into service is to be managed. | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 54. Random alcohol testing should be continued. | Supported. | ITSRR to ensure current programs continue. | Independent Transport Safety & Reliability Regulator | Closed | | |
| 55. Alcohol and drug testing should be mandatory for any train driver or guard involved in any accident or incident. | Supported. ITSRR will review this recommendation as part of its ongoing involvement in checking Drug & Alcohol Programs of rail operators. RailCorp currently tests randomly for drugs and alcohol and allows for | ITSRR to Develop guideline on when/which accidents/incidents require mandatory testing. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | 31/12/2005 |

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| | drug and alcohol testing to be undertaken for safety-related accidents and incidents. | | | | | |
| 57. d) The ITSRR 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; all such medical examinations must be reviewed on behalf of the employer by an occupational physician. | Supported. ITSRR will submit this recommendation to the National Transport Commission (NTC) for consideration as part of the National Standard. | ITSRR will submit recommendation to NTC for consideration in context of current standard | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | * November 2005 |
| 57. 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 | Supported. ITSRR will submit this recommendation to the National Transport Commission for consideration as part of the National Standard. | ITSRR will submit recommendation to NTC for consideration in context of current standard | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | * November 2005 |

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| 57. 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 | 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. | ITSRR will submit recommendation to NTC for consideration in context of current standard. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | * November 2005 |
| 58. RailCorp should establish a comprehensive safety document management system | Supported. | RailCorp Management Implemented Safety System which incorporates Document to be incorporated | RailCorp | Open | Acceptable Response | 31/10/2005 |

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| | | recommendation 59-62. | | | | |
| 59. The safety document management system should provide for the distribution of electronic versions of safety documentation to relevant staff. | Supported and being implemented. | RailCorp Safety Management System provides for the distribution of electronic versions of safety documentation to relevant staff. | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 61. RailCorp should provide access to electronic versions of safety documentation for all operational staff at their workplace. | 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. | The Rail Safety 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. | RailCorp | Open | Acceptable Response | 30/06/2006 |
| 63. The ITSRR 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 | Supported and being implemented. | ITSRR establish and implement electronic document control system. Appropriate policy, procedures and training developed. | Independent Transport Safety & Reliability Regulator | Closed | | 30/09/2005 |

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| 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 ITSRR | Supported and being implemented. ITSRR and RailCorp will review the implementation of all the seven recommendations in light of the Waterfall Inquiry. | RailCorp to conduct an Audit review of Recommendations 1-7 of 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. | RailCorp | Open | Acceptable Response | 31/07/2005 |
| 66. RailCorp should use its simulators in an interactive manner. | Supported and being implemented. | 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. | RailCorp | Open | Agency Claims Closure | 30/06/2005 |

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| 67. RailCorp should use its simulators to train drivers and guards in methods of dealing with degraded operations on the rail network. | Supported and being implemented. | 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. | RailCorp | Open | Agency Claims Closure | 30/06/2005 |
| 68. Train driver and guard training should encourage teamwork and discourage authority gradients. | Supported and being implemented. | 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. | RailCorp | Open | Agency Claims Closure | 31/07/2005 |

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| 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. | Supported and being implemented. | 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. | RailCorp | Open | Acceptable Response | 30/06/2006 |
| 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. | Supported and being implemented. | RailCorp to provide evidence of a corporate system to identify skills development requirements based on a needs analysis. | RailCorp | Open | Acceptable Response | 31/12/2006 |
| 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 | Supported in principle for further review. RailCorp is reviewing the current supervisory structure of train crewing in light of this recommendation. | Creation of appropriate position to carry out functions outlined in Rec 71. | RailCorp | Open | Acceptable Response | 30/09/2006 |

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| addressed | | | | | | |
| 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. | 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 | Review and develop appropriate MOU. Mechanisms in place to provide for ATSB to undertake investigations referred to it by the NSW Government. | Office of Transport Safety Investigation | Open | Acceptable Response | 31/12/2005 |

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| | of power to the Commonwealth. | | | | | |
| 73. The ITSRR should ensure that OTSI, as a division of ITSRR, 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. | Supported in principle. See R 72 | Review and develop appropriate MOU. | Office of Transport Safety Investigation | Open | Acceptable Response | 31/12/2005 |
| 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, ITSRR and the Minister for Transport Services. | Supported in principle. See R 72 | Review and develop appropriate MOU. | Office of Transport Safety Investigation | Open | Acceptable Response | 31/12/2005 |
| 76. The ITSRR 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. | Supported and being implemented. | ITSRR will amend its Data and Information management system to incorporate requirements of recommendation 76-77. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | 31/12/2005 |

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| 80. Any barriers to communication between OTSI and ITSRR should be removed, so as to ensure that any findings made by OTSI in relation to any investigation it conducts are reported immediately to ITSRR. | Supported. | Develop MOU between OTSI and ITSRR. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | 31/12/2005 |
| 81. All reports of the Chief Investigator of OTSI should be delivered, upon completion and without being reviewed, to ITSRR and the Minister for Transport Services. | Supported. | Legislation already provides for OTSI reports to go to Minister for tabling in parliament. ITSRR receives OTSI investigation reports as an interested party. This process will be incorporated into the MOU between OTSI and ITSRR | Office of Transport Safety Investigation | Open | Acceptable Response | 30/12/2005 |
| 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 | Supported in principle for further review. See R 72. | Review and develop appropriate MOU. | Office of Transport Safety Investigation | Open | Acceptable Response | 31/12/2005 |
| 83.a) RailCorp should develop a plan to be submitted to ITSRR to address the deficiencies in the safety culture of RailCorp, including: a) 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 | Supported and being implemented. | RailCorp to develop safety culture program which incorporates recommendation 83 (a) - (n). | RailCorp | Open | Acceptable Response | 31/10/2005 |

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| 83. 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. | The RailCorp safety culture program will be reviewed to ensure compliance with this recommendation. | RailCorp to develop safety culture program which incorporates recommendation 83 (a) - (n). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 83. c) the means whereby RailCorp proposes to implement a just culture instead of a blame culture; | The RailCorp safety culture program will be reviewed to ensure compliance with this recommendation. | RailCorp to develop safety culture program which incorporates recommendation 83 (a) - (n). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 83. d) the means whereby RailCorp proposes to establish and implement accountability and responsibility of individuals for the safety of the activities that they undertake; | The RailCorp safety culture program will be reviewed to ensure compliance with this recommendation. | RailCorp to develop safety culture program which incorporates recommendation 83 (a) - (n). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 83. 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; | The RailCorp safety culture program will be reviewed to ensure compliance with this recommendation. | RailCorp to develop safety culture program which incorporates recommendation 83 (a) - (n). | RailCorp | Open | Acceptable Response | 31/10/2005 |

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| 83. 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; | The RailCorp safety culture program will be reviewed to ensure compliance with this recommendation. | RailCorp to develop safety culture program which incorporates recommendation 83 (a) - (n). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 83. 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; | The RailCorp safety program will be reviewed to ensure compliance with this recommendation. | RailCorp to develop safety culture program which incorporates recommendation 83 (a) - (n). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 83. 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. | The RailCorp safety program will be reviewed to ensure compliance with this recommendation. | RailCorp to develop safety culture program which incorporates recommendation 83 (a) - (n). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 83. 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 | The RailCorp safety program will be reviewed to ensure compliance with this recommendation. | RailCorp to develop safety culture program which incorporates recommendation 83 (a) - (n). | RailCorp | Open | Acceptable Response | 31/10/2005 |

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| 83. j) the means whereby RailCorp proposes to set safety targets for the reduction of incidents overall, and the means whereby the relevant information is to be kept and collated for the purpose of measuring safety performance in those areas | The RailCorp safety culture program will be reviewed to ensure compliance with this recommendation. | RailCorp to develop safety culture program which incorporates recommendation 83 (a) - (n). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 83. k) the means whereby employees responsible for particular areas are rewarded for safety improvements in their areas of activity; | The RailCorp safety program will be reviewed to ensure compliance with this recommendation. | RailCorp to develop safety culture program which incorporates recommendation 83 (a) - (n). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 83. l) the means whereby RailCorp intends to integrate safety in all aspects and at all levels of the transportation activities which it undertakes | The RailCorp safety program will be reviewed to ensure compliance with this recommendation. | RailCorp to develop safety culture program which incorporates recommendation 83 (a) - (n). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 83. 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; and | The RailCorp safety program will be reviewed to ensure compliance with this recommendation. | RailCorp to develop safety culture program which incorporates recommendation 83 (a) - (n). | RailCorp | Open | Acceptable Response | 31/10/2005 |

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| 83. n) the means whereby RailCorp is to integrate the management of safety in all aspects into the general management of its business undertaking. | The RailCorp safety culture program will be reviewed to ensure compliance with this recommendation. | RailCorp to develop safety culture program which incorporates recommendation 83 (a) - (n). | RailCorp | Open | Acceptable Response | 31/10/2005 |
| 84. If ITSRR accepts such a plan as an appropriate response to the existing weak safety culture, ITSRR should approve it and monitor the effectiveness of the plan. | Supported in principle. ITSRR is reviewing the process used to develop the Plan. ITSRR will also review the Plan as submitted and monitor its effectiveness. | ITSRR reviews RailCorp's plan and assess whether it incorporates recommendation 83(a) - (n) ITSRR monitors implementation of plan. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | 31/12/2005 |
| 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 | Supported and being implemented. | RailCorp to demonstrate the implementation of an integrated SMS as detailed in their accreditation application. | RailCorp | Open | Agency Claims Closure | 30/06/2005 |
| 86. RailCorp should integrate its management of OHS into its overall safety management | Supported and being implemented. | Requirements to be part of SMS. | RailCorp | Open | Agency Claims Closure | 30/06/2005 |

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| 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. | Supported and being implemented. | Requirements to be part of SMS. Appropriate Risk Management Framework in place. | RailCorp | Open | Agency Claims Closure | 30/06/2005 |
| 88. The RailCorp passenger containment policy must be abandoned | Supported. RailCorp will review and replace the current containment policy, in consultation with ITSRR. 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 | Risk Assessment conducted. Containment Policy reviewed. New Policy developed and implemented. | RailCorp | Open | Acceptable Response | 31/03/2006 |

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| | <p>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.</p> | | | | | |
| <p>89. There must be a minimum of two independent methods of self-initiated emergency escape for passengers from all trains at all times.</p> | <p>Requires further detailed review, subject to the risk assessment referred to in R88.</p> | <p>ITSRR has undertaken an initial review and recommended options for a standard. ITSRR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard.</p> | <p>Independent Transport Safety & Reliability Regulator</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>* November 2005</p> |

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| 90. All passenger trains must be fitted with an internal passenger emergency door release. | Requires further detailed review. See R 89. | ITSRR has undertaken an initial review and recommended options for a standard. ITSRR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSRR to ensure operators comply with standard. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | * November 2005 |
| 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. | 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. | ITSRR has undertaken an initial review and recommended options for a standard. ITSRR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSRR to ensure operators comply with standard. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | * November 2005 |
| 92. The internal passenger emergency door release should be fitted with a facility which prevents it from operating unless the train is stationary. | Requires further detailed review. See R 89. | ITSRR has undertaken an initial review and recommended options for a standard. ITSRR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSRR to ensure operators comply with standard. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | * November 2005 |

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| <p>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.</p> | <p>Requires further detailed review. See R 89.</p> | <p>ITSRR has undertaken an initial review and recommended options for a standard. ITSRR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSRR to ensure operators comply with standard.</p> | <p>Independent Transport Safety & Reliability Regulator</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>* November 2005</p> |
| <p>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.</p> | <p>Supported.</p> | <p>Appropriate Legislation introduced.</p> | <p>Independent Transport Safety & Reliability Regulator</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/12/2005</p> |

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| 95. All passenger trains operating in New South Wales must have the external emergency door release clearly marked with the words 'Emergency Door Release'. | Supported and being implemented. | ITSRR has undertaken an initial review and recommended options for a standard. ITSRR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSRR to ensure operators comply with standard. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | * November 2005 |
| 96. All RailCorp operational personnel should be trained in the location and operation of external emergency door release mechanisms. | Supported and being implemented. | 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. | RailCorp | Open | Agency Claims Closure | 30/06/2005 |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
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| <p>97. All emergency services personnel should be trained in the location and operation of emergency door release mechanisms on all rail cars.</p> | <p>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</p> | <p>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.</p> | <p>NSW Emergency Services</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>30/03/2006</p> |

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| | <p>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.</p> | | | | | |
| <p>98. All trains should have windows available through which passengers can escape.</p> | <p>Requires further detailed review. See R 89.</p> | <p>ITSRR has undertaken an initial review and recommended options for a standard. ITSRR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSRR to ensure operators comply with standard.</p> | <p>Independent Transport Safety & Reliability Regulator</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>* November 2005</p> |

| Recommendation | Government Response | ITSRR Expectation | Agency | Status | ITSRR Assessment | Target Date |
|--|---|--|--|--------|---------------------|-----------------|
| 99. All new rail cars must have appropriate signage and lighting identifying escape routes in the case of emergency. | Supported. | ITSRR has undertaken an initial review and recommended options for a standard. ITSRR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSRR to ensure operators comply with standard. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | * November 2005 |
| 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". | Requires further detailed review. See R 89. | ITSRR has undertaken an initial review and recommended options for a standard. ITSRR to develop principles for an appropriate standard incorporating review findings and refer matter to NTC for development of a national standard. ITSRR to ensure operators comply with standard. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | * November 2005 |
| 101. ITSRR should initiate and/or participate in the development of a national standard for crashworthiness of all passenger trains. | Supported. | ITSRR will refer matter NTC for development of National Regulation. ITSRR will adopt National Regulation. In the interim ITSRR will ensure compliance with existing industry standards through its accreditation process. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | * November 2005 |

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| <p>102. RailCorp should make it a condition of employment that all level 2 managers have or obtain a formal qualification in system safety management.</p> | <p>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.</p> | <p>Program Implemented to ensure all level 2 Managers obtain formal qualifications in System Safety Management. Position description to reflect criteria.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/10/2005</p> |
| <p>103. RailCorp should establish clear safety accountability statements and reporting lines for all management positions.</p> | <p>Supported.</p> | <p>Accountability implemented for all positions. Statements for all management</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/10/2005</p> |

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| <p>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.</p> | <p>Supported and being implemented.</p> | <p>Program established that provides for Independent External Safety Audits conducted.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Agency Claims Closure</p> | <p>31/07/2005</p> |
| <p>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.</p> | <p>Supported and being implemented.</p> | <p>Implementation of RailCorp Safety Management System. Clearly defined accountabilities to be in the SMS documents.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/12/2005</p> |
| <p>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.</p> | <p>Supported.</p> | <p>Review undertaken by RailCorp. Recertification plans developed.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/10/2005</p> |

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| 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. | Supported. | Review undertaken by RailCorp. Recertification plans developed. | RailCorp | Open | Acceptable Response | 30/09/2006 |
| 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. | 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 4 external audits. | Internal/External Audit plan developed. Evidence of Audits conducted/Audit Reports. Develop rectification plans. (link to 104) | RailCorp | Open | Agency Claims Closure | 31/07/2005 |

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| <p>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.</p> | <p>Supported.</p> | <p>Develop rectification plans. Formal closeout procedures/processes in place and monitoring program in place.</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/03/2006</p> |

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| <p>110. A Safety Reform Program Director (hereafter referred to as 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;</p> | <p>Supported.</p> | <p>Position established/filled. Position Description reflects responsibilities in recommendations 110 (a) - (e).</p> | <p>RailCorp</p> | <p>Open</p> | <p>Agency Claims Closure</p> | <p>31/07/2005</p> |

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| 110. 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 | Supported. | Position established/filled. Position Description reflects responsibilities in recommendations 110 (a) - (e). | RailCorp | Open | Agency Claims Closure | 31/07/2005 |
| 110. 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; | Supported. | Position established/filled. Position Description reflects responsibilities in recommendations 110 (a) - (e). | RailCorp | Open | Agency Claims Closure | 31/07/2005 |
| 110. 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; and | Supported. | Position established/filled. Position Description reflects responsibilities in recommendations 110 (a) - (e). | RailCorp | Open | Agency Claims Closure | 31/07/2005 |
| 110. 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 ITSRR, on the progress of each program. | Supported. | Position established/filled. Position Description reflects responsibilities in recommendations 110 (a) - (e). | RailCorp | Open | Agency Claims Closure | 31/07/2005 |
| 114. The ITSRR should publish guidelines to be followed by accredited organizations. | Supported. | Have guidelines in place, ITSRR has a process to identify, develop and issue guidelines as required from time to time under the Rail Safety Act. | Independent Transport Safety & Reliability Regulator | Closed | | 30/09/2005 |

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| 115. The ITSRR 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 ITSRR. | Supported. | National Accreditation Package is the new standard for accreditation which includes requirement for an integrated SMS. - National Accreditation Package will be supported by a regulation. | Independent Transport Safety & Reliability Regulator | Closed | | 31/07/2005 |
| 116. The ITSRR should conduct field audits to satisfy itself that all accredited rail organizations conduct their activities in accordance with the safety management system on the basis of which each was accredited. | Supported | Implemented. - Audit Program in place - Compliance Program in place - ITSRR Audit and Compliance programs are developed around and focused on the Safety Management Systems as submitted by accredited organisations. | Independent Transport Safety & Reliability Regulator | Closed | | 30/06/2005 |
| 117. Staffing arrangements for ITSRR 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. | Supported. | Implemented ITSRR reviews its field resources and staff allocation on a regular basis to ensure adequate staff are employed in field positions. | Independent Transport Safety & Reliability Regulator | Closed | | 30/06/2005 |
| 119. The ITSRR, 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. | Supported | Implemented. ITSRR conducts regular field audits as part of its accreditation application process. | Independent Transport Safety & Reliability Regulator | Closed | | 30/06/2005 |

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| 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. | Supported in principle for implementation through other means. ITSRR 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. | ITSRR will refer matter National Transport Commission for development of National Regulation. ITSRR will adopt National Regulation. In the interim, ITSRR has developed NAP which sets out requirements and has made NAP a condition of accreditation. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | * November 2005 |

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| <p>122. RailCorp should establish an integrated safety management system which includes the following:</p> <p>a) a formal performance management system, incorporating measurable safety accountabilities and responsibilities for each managerial position;</p> | <p>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. (a) RailCorp will review its integrated safety management system against this recommendation to ensure</p> | <p>RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f).</p> | <p>RailCorp</p> | <p>Open</p> | <p>Acceptable Response</p> | <p>31/12/2005</p> |

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| | consistency. | | | | | |
| 122. b) defined safety accountability and responsibility statements for senior management; | RailCorp will review its integrated safety management system against this recommendation to ensure consistency. | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |
| 122. c) an effective means of reviewing and acting upon audit investigation and review findings | RailCorp will review its integrated safety management system against this recommendation to ensure consistency. | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |

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| 122. d) an effective system for managing audit and investigation findings, to ensure that | RailCorp will review its integrated safety management system against this recommendation to ensure consistency. | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |
| 122. e) criteria for recruitment and promotion of management staff, including safety management qualifications, experience and expertise | RailCorp will review its integrated safety management system against this recommendation to ensure consistency. | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |
| 122. f) development of risk management procedures, including | RailCorp will review its integrated safety management system against this recommendation to ensure consistency. | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |
| 122. i) analysis of the nature of the activities being undertaken | RailCorp will review its integrated safety management system against this | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |

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| | re recommendation to ensure consistency. | | | | | |
| 122. ii) identification of all potential hazards within those activities | RailCorp will review its integrated safety management system against this recommendation to ensure consistency. | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |
| 122. iii) analysis of the nature of the hazard | RailCorp will review its integrated safety management system against this recommendation to ensure consistency. | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |
| 122. iv) analysis of the risks of the hazard materialising | RailCorp will review its integrated safety management system against this recommendation to ensure consistency. | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |
| 122. v) development of controls to mitigate the risk; | RailCorp will review its integrated safety | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |

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| | management against this recommendation to ensure consistency. | | | | | |
| 122. vi) development of systems for monitoring the effectiveness of the controls to ensure that they are working; | RailCorp will review its integrated safety management system against this recommendation to ensure consistency. | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |
| 122. vii) development of a continuing program to enhance the development of safe practices at all levels of the organisation; | RailCorp will review its integrated safety management system against this recommendation to ensure consistency. | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |
| 122. viii) development of key performance indicators for safety performance by all persons in management positions; | RailCorp will review its integrated safety management system against this recommendation to ensure consistency. | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |

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| 122. ix) 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; | RailCorp will review its integrated safety management system against this recommendation to ensure consistency. | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |
| 122. x) 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; | RailCorp will review its integrated safety management system against this recommendation to ensure consistency. | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |
| 122. xi) design and implementation of communications protocols, including standard phraseology, with particular standard phraseology for emergency situations; and | RailCorp will review its integrated safety management system against this recommendation to ensure consistency. | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |
| 122. xii) development of training systems, based upon training needs analysis. | RailCorp will review its integrated safety management system against this | RailCorp to review its SMS to ensure that it incorporates requirements from recommendation 122 (a) - (f). | RailCorp | Open | Acceptable Response | 31/12/2005 |

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| 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. | 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. | RailCorp to review its SMS to ensure that it incorporates 29 elements identified in SMSEP report. | RailCorp | Open | Agency Claims Closure | 30/06/2005 |
| 124. The ITSRR 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. | Supported in principle and being implemented through other means. See R 123. | ITSRR to review RailCorp's SMS in line with the accreditation requirements outlined in recommendation 123. | Independent Transport Safety & Reliability Regulator | Open | Acceptable Response | 31/12/2005 |