

# Ordinary Rail Safety Assessment Report KiwiRail Network

Rail licence holder	:	KiwiRail Network (KRN)
Rail licence number	:	ORA-05-03-01
Address	:	Level 4 Wellington Railway Station Wellington
Assessment type	:	Ordinary Rail Safety Assessment
Assessment scope	:	Operation of Rail Safety Management System for the National Rail System (NRS)
Assessment standard	:	Railways Act 2005
Assessment date(s)	:	Monday, 20 June 2011 to 14 July 2011, and 22 July 2011
Safety assessor(s)	1	Bryan Graham (Telarc) John Freeman (NZTA) Adrian Douglas (NZTA) Graeme Hudson (NZTA) Maree Henderson (NZTA) Rob Gould (NZTA)
Report prepared by	:	Bryan Graham
Signature	:	3,92
Report issued by (NZTA)	:	Merv Harvey
Signature :		Melaney

Responses to conditions rated as "high"

• 30 September 2011

• 31 October 2011

All other conditions and recommendations

Findings response due

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# **Section 1**

## Assessment against Railways Act 2005 requirements

1.1 Document History				
Issue	Author(s)	Issue date		
1. Initial report	Bryan Graham	26 July 2011		
2. Submission to the initial report	KiwiRail Network	9 Aug 2011		
3. Report received	Merv Harvey	29 July 2011		
4. Final report	Merv Harvey	15 Sept 2011		
5. Response to report	KiwiRail Network			
6. Assessor review	Bryan Graham			
7. NZTA close-out	Merv Harvey			

#### 1.2 Executive Summary

This report relates to an ordinary safety assessment undertaken by an assessment team led by Mr Bryan Graham to verify compliance with the requirements of the Railways Act 2005 (the Act), the rail licence holder's safety case, and its rail safety management system.

The assessment was carried out by assessors appointed by the NZ Transport Agency (NZTA). Standard rail safety assessment techniques were applied, in conjunction with the NZTA *Rail Safety Licensing and Safety Assessment Guidelines* to ensure the ordinary safety assessment complied with the criteria set down by the NZTA.

This assessment concentrated on KiwiRail Network's (KRN) management processes and activities in Head Office, a review of how plant and equipment is managed at Palmerston North, and field activities in Auckland (the Rail Weld Depot), and on the eastern side of the South Island between Blenheim and Invercargill.

Overall, this assessment reports a total of 39 Conditions and 46 Recommendations, though five of the Conditions and nine of the Recommendations relate to the Special Assessment undertaken in November 2010. These latter findings are not included in the graphs in Section 1.7, so direct comparisons of the numbers and patterns can be made with previous reports. Of the conditions maintained "open", or raised in this Report, 4 are rated "high", 21 "medium", and 14 "low".

Four areas of significance stand out.

- 1. **The inspection, administration and management of private sidings**. Four conditions; two rated high (with one retained "OPEN" from 2006), and two rated medium.
- 2. Code and/or rule compliance. Nine issues identified; with one rated 'high', which relates to the management and maintenance of the basic codes themselves. Again, this condition was raised a number of years ago. In part, to facilitate the closure process, the original condition has been split in half so each aligns with a specific discipline.
- 3. In **Network Control**, **issues** around the safety observation process have re-surfaced, inferring the actions taken previously have either been allowed to slide somewhat, or implicitly, the steps initiated did not address all the issues or include adequate preventative action and lead indicators.
- 4. Audit and Change Management. Three non-compliances identified with one (from the special assessment up-rated to 'high' because that assessment indicated "timely" action was required.

Further information, on all findings, is set out below in Section 1.3 (General Observations).

On the other side of the equation, the following points are noted as real progress and/or as strong positives:

- the level of conditions and recommendations being held open
- the initiation of the Talk Safe campaign
- reviewing and updating as required, numerous old Codes and Code Supplements
- solid action on assessing, and managing the risks associated with weather, hydrology, topography and geology
- the effective management of plant and equipment via the 155 system
- further bedding in of IRIS
- the traction upgrade program (Wellington)
- steps taken in and around Network Control
- planning (in respect of the Rugby World Cup)
- the introduction of 155 reporting for priority tracks faults to both expedite action and provide an enhanced process for closing the loop
- the strong commitment to H&S by those involved on the Wairio Line upgrade
- the general tidiness, and tagging of equipment, plus the attention to detail generally in and around the Invercargill Depot.

And one last positive - the influx of capital is clearly making a huge difference, both in terms of asset upgrade, but more importantly morale. Top marks to all of the management team for the work in getting approval and now pushing on with the Turn Around Plan.

Please refer to Section 6 at the end of this report for a detailed guide to the report structure and the definitions applied to the 'high', 'medium' and 'low' condition ratings.

#### 1.3 General Observations

The following observations and comments are in no specific order. They have been categorised by groups to assist interpretation. Generally, processes, systems and procedures were well established and baring the exceptions noted, were well implemented. Areas where potential improvements could be considered are included throughout the notes below.

## **Field Operations/Activities**

As noted earlier, the field component of this assessment was predominately disposed to the South Island's east coast. Work sites visited included:

- Bridge 3 MSL (nr Heathcote) a bridge replacement after the Canterbury quakes
- Bankside (MSL) standby generator checks
- Bridge 71 (MSL) (nr Temuka) a cap replacement
- Hinds (MSL) field safety observation of Engineering Inspector
- Timaru Yard (MSL) Track Gang undertaking yard track and turnout repairs
- Bridge 140 (MSL) (nr Morven) bridge resleepering
- Stirling (MSL) Track Gang reviewing mud spots on the mainline
- Fairfax (Wairio Brch) Contractors undertaking line upgrade
- Weedons (MSL) Weld Team member checking a broken rail
- Rakaia (MSL) Track Gang and Contractor undertaking spot resleepering
- Spotswood (MNL) Code Compliance and Switch Obstruction Tests
- Tunnel 14 (MNL) face resleepering and reballasting through tunnel
- Ohau (Tunnel 19 MNL) Contractors undertaking tunnel re-lining works
- Clarence Bridge (MNL) Pier renewal and span replacements
- · Lake Grassmere to Vernon (MNL) Hi-rail ride with Track Inspector

As noted above, this year's assessment reviewed a wide mix of field activities from all disciplines. From a rail safety perspective, all works observed were carried out using appropriate forms of protection (Track Warrants, blocking and ITD) although some minor deviations were noted, see 11/06 C20. Where checked, all Bulletins were correct, and where structural works were occurring, the plans were verified to ensure all those on-site were identified as "for construction".

Further, where precise measurements was an inherent function of the works, a selection of measuring devices were verified to ensure such equipment was calibrated and exhibiting an appropriate label. Items verified included track gauges, meggers and flukes.

At Field Depots and work sites, a selection of vehicles were viewed to confirm they were compliant with all statutory and KRN requirements. A random selection was also checked to confirm they carried the appropriate documentation. This was not the case in the Canterbury area, refer see 11/06 C 24. Plant and equipment was also checked to ensure it displayed the required "fit-for-purpose" labels. As appropriate, electrical equipment, ladders, and scaffolding was verified for appropriate tags and/or certificates.

One area of potential weakness in respect of track occupancy safety was noted. It may, or may not be of significance. 11/06 R 34 and 11/06 R 8 refer.

#### Occupational Health and Safety

From a field perspective, where gangs or teams were involved, Job Plans were in existence at all work sites with hazards identified. Where contractors were on-site, visitor controls and site "sign-ons" were in existence. Weaknesses were noted however, at sites were the work was being undertaken by individuals, refer 11/06 R 18. Some deficiencies were noted around the management of safety equipment and vehicle inspections, see 11/06 R 17, however for most part, things were "as they should be". Areas noted for potential improvement were: in relation to First Aid Kits, 11/06 R 22; in relation to recording track information 11/06 R 21, and in HSE Inspections, refer 11/06 R 19 and 11/06 C 19.

At the Rail Weld Depot in Otahuhu (near Auckland) issues were identified with respect to visitor safety - see 11/06 R 4, and also access to KiwiRail's HSE Toolkit, refer 11/06 R 20.

While the "TalkSafe" program was acknowledged as new, and still gaining momentum, a number of sites, notably the Rail Weld Depot and both bridge sites (71 and 140 MSL) would have benefitted from a more pro-active application of the "TalkSafe" campaign with respect to enhancing safety behaviours, refer 11/06 C 7 for example.

Larger, continuously occupied Depots/facilities all had visitor management systems in-place, their fire safety equipment was all current, and at Christchurch (Midas Place) the Building Warrant of Fitness was confirmed as current.

#### Occurrence Management

This aspect showed positive progress, especially around the set-up and implementation of IRIS. One potential downside of the current set up is the lack of correlation between incidents and hazard/risk registers; refer 11/06 R 12.

With respect to IRIS, it was noted there is no process (or system) to keep NZTA abreast of changes made to IRIS data after the initial notification. 11/06 R 13 refers.

During a review of the data contained, a few variations were noted in the incident severity rankings entered into IRIS, and on that point, it is recommended a paper be prepared to better differentiate the boundaries between the severity codes established in NRSS/5, refer 11/06 R 15. Some incident severities were also noted in IRIS. 11/06 R 14 refers. Further, KRN may wish to review its organisation structure around IRIS and NRSS/5 states investigators must be "experienced" – but no information was forthcoming on how this is assessed, see 11/06 R 16 and 11/06 R 7 respectively.

Two other matters also came to attention; the first stems from last year's report where it was reported many returning empty rail weld trains had their bond chains stored at variance with established requirements. Questions directed to the site manager indicated little had changed from last year – but no loading irregularities were present in the occurrence data forwarded to NZTA! Condition 11/06 C 18 refers. The second relates to an incomplete investigation. Condition 11/06 C 17 refers.

#### Personnel/Training

While KRN has robust systems for identifying personnel working extended hours per fortnight (>90 hours), the process as implemented, does not identify employees who for one reason or another work such hours with some regularity. For some high profile roles, e.g. Train Controllers, this means the potential for fatigue related "hiccups" may be unintentionally raised. Recommendation 11/06 R 3 refers.

Also recommended for review is Clause 5.1 (of Section 10.3 of the Rail Operating Rules and Procedures). This clause sets out the re-assessment criteria for Safety Observations. A review may be warranted, refer  $11/06\ R\ 2$ . A minor training records opportunity was also identified at the Rail Weld site, refer  $11/06\ R\ 5$ , and an opportunity for improving the national training database, see  $11/06\ R\ 6$ .

One other matter of concern was noted – a STF 23 Form was produced purporting to show a Rail Weld staff member had been trained for all Rules, Code and Core Stationery Shunt duties including how to service and shunt a locomotive. Discussion indicated the member concerned had not been trained to drive a shunt locomotive. It is critical that certification forms are completed correctly as the integrity, and safety, of staff members and perhaps the public, are dependent on the certification process. This anomaly has not been raised a Condition as only one, isolated instance was observed.

As noted above under Occupational Health and Safety, a behavioural based "TalkSafe" program has been initiated to enhance safety in the workplace. This is supported with, and by, a poster campaign, however, from our observations this initiative had not arrived at all depots around the South Island. 11/06 R 1 refers.

### **Network Control**

Some issues were again recorded around the safety assessment process within Network Control; two Train Controllers being identified overdue for desk assessments, and twelve overdue for voice assessments, refer Conditions 11/06 C 3 and C 4 and recommendation 11/06 R 33. These non-conformances were previously observed some years ago but have again resurfaced.

#### **Plant and Equipment**

Last year's assessment identified a significant amount of basic equipment without the appropriate 155 "fit-for-purpose" tag. This year's assessment found that this issue had been very effectively actioned – with no plant and/or equipment on a vehicle, or in use, being observed with an 'out-of-date' label – with one exception. Two apparently 'new' track jacks supplied to the Blenheim Depot had expired 155 tags, 11/06 C 8 refers.

Old recommendation, 10/03 R 6 (re Crane Inspections) was followed up at the Plant Depot in Palmerston North, and an effective system is now being worked through and implemented in conjunction with SGS (the third party certifier). From the records sighted at Palmerston North, and the process observed at Christchurch where SGS were undertaking on-site inspections, all the previous concerns, and gaps, would seem to be identified and under active management.

Three minor documentation issues relating to L&P Mechanisation and the Rail Weld Depot were recorded during the assessment and are referenced here to ensure these aspects are corrected/updated. 11/06 R 25, R 26 and R 27 refer.

## Private Sidings: the Inspection, Administration and Management of

This element, as noted in the Executive Summary, stands out as one of the four major areas of concern. The issues were initially raised in 2006 (Condition **06/04 C 16**) and have yet to be put to bed. This report shows a multitude of issues exist, including (but not limited to):

- current standards
- the interpretation of those standards by Track Inspectors and Area Managers
- the legibility/readability of the M 122 (Inspection Report form), and
- what the "rules" are when a siding is declared "unfit-for-use".

Other interrelated issues exist. These include the currency of Siding Agreements (refer 10/03 C 3), certificates of assurance (11/06 C 9), inspection and maintenance procedures (11/06 C 27), having assurances that sidings are safe for KRN equipment (11/06 R 23), and the effective management of the related processes (11/06 C 1).

#### **Special Assessment**

Of the twenty two findings raised in the Special Assessment undertaken in November 2010, nine have been closed out as part of this assessment. Those nine include four (4) conditions and five recommendations. **Table 2** (in Section 1.4) summarizes the details by Assessment ID.

Of the conditions originally raised, 10/11 C 7 has been upgraded. It identified a requirement in NRSS/4 (and NRSS/9) whereby changes need to be checked and verified to ensure the changes made have effectively reduced the risks (and no risks have been added) and that compliance with the new (changed) procedures has occurred. No evidence was forthcoming on either of these two counts, even though (in Network Control) the new procedures have been in-place and used a number of times since May this year – refer comments included into the 2011 Assessment notes for Recommendation 10/11 R 10.

As at the date of this report five (5) conditions remain OPEN, that is 10/11 C 1 (Low), 10/11 C 2 (Medium), 10/11 C 4 (Medium), and 10/11 C 7 (High). Nine recommendations also remain OPEN.

## Code Compliance

Several areas of non-compliance were noted. Firstly, some 40% of South Island mainlines and branches had gone between two, and three years, between their previous and last annual engineering inspection. This included most of the Main North and the Stillwater Westport Line. The Hokitika and Rapahoe Branches have not been inspected since June 2009! Condition 11/06 C 10 refers. Further, one of the recent inspections identified some rail that was beyond the maximum wear limits set in the Track Handbook; see 11/06 C 11.

Adding to the above, a small sample of M125 and M126's showed some P1 and P2 faults, again on mainlines, were not fixed, or mitigated, within the defined action periods defined in SIN T-044. In the Christchurch area an initiative had been implemented to overcome one of the key impediments in the process and this if this is not a universal approach, then 11/06 R 9 recommends it be adopted forthwith. Also in the track area, 11/06 R 10 is suggested to enhance the current track log print-outs.

On the STE side of the business, although compliance was reported to be very high, a close review of the Relay Workshop database showed innumerable relays, due for replacement as far back as June 2005, as outstanding. Also sighted was one relay (W/O 1031389) which had not been installed; refer 11/06 C12. In relation to the relay database, whether tasks had been completed or not, accurate record keeping is an essential part of the being able to demonstrate conformance.

A minor compliance issue was likewise noted with respect to the non-testing of ASP (shunt radios). A more definitive set of responsibilities needs to be established to ensure non-tested equipment does not continue in use beyond its defined tolerance period, refer 11/06 C 13.

Also noted was the fact hi-rail radios are not tested in any way. This equipment was previously (up to June 2006) tested via a regime very similar to that used for loco radios and ASP radios. A condition is raised (11/06 C 14) to review the risks around, and associated with, these radios.

Along similar lines, two sections of isolated poles were observed on the MNL between Claverley and Goose Bay. No evidence was able to be produced on who owned the lines/poles, and likewise, no information was forthcoming on who has responsibility for ensuring the poles are inspected under the relevant safety/telecommunications regulations. 11/06 C 15 refers. A random of a pole line near Weedons also identified a pole adjacent to Jones Rd that had been "red tagged". 11/06 C 16 refers.

Two instances, relating to inadequate track protection, were identified by the KiwiRail Assessment team. One concerned a Track Machine (without protection) and the other about concerning an in-operational siding which was not "spiked". 11/06 C 21 and C 22 refer.

Finally under this heading, two prospects for improvement were recorded. 11/06 R 11 and R 21 refer. Both opportunities relate, in part, to the activities being undertaken when Condition 11/06 C 20 was observed.

#### **Audit (and Change Management)**

As noted above, NRSS/4 (Section 7) establishes very clear guidelines, and process, for change management. Limited evidence was provided to indicate NRSS/4 is <u>always</u> followed. Further, NRSS/4 establishes a two stage process for risk screening <u>and</u> risk assessment when the residual risks are "medium" or "high". Again limited evidence was found to confirm this two stage process is always adhered to. Conditions 10/11 C 7, 11/06 C 31 refer also 11/06 R 32.

Two other Conditions have been raised: one relating to the fact no internal audits took place between mid 2010 and July 2011 (refer 11/06 C 32) and that the process of internal audit has not been managed in accordance with your Safety Case and the Railways Act. 11/06 C 2 refers.

## **Documentation (including Records and Reporting Systems)**

Several areas of weakness were identified in this area. Two of the Conditions raised this year relate to old Condition 07/04 C 17 which was raised to address issues with the Engineering Codes and Code Supplements. It is pleasing to report significant action on this front, but some work remains to be done. The two newly raised conditions relate to the finalisation of the review and update process, see 11/06 C 25, C 26 and C 28 respectively.

Two similarly related recommendations are also included into this Report to enhance process and procedure. The recommendations are 11/06 R 24 and 11/06 R 28.

Condition 11/06 C 29 has been raised because records required by NRSS documentation for the approval of changes to new operating rules as established for the NRS Joint Technical Committee (JTC-RORP) could not be provided. A recommendation has also been raised around the records/reporting system used within Signals to manage code and asset maintenance outcomes. Condition 11/06 R 29 refers.

#### Freight Handling

One condition has been identified under this category. It relates to KiwiRail's Freight Handling Code. This document sets out the safe loading instructions and standards for the company's road and rail operations. As it stands the code has no safe loading information for the transportation of rails. While no incidents have been reported in this category, previous assessments have noted on-going issues around the poor stowage of bond chains, dunnage and other items on returning (empty) wagons. These issues continue to go unreported. 11/06 C 23 refers.

#### Risk Management

As indicated above earlier under occurrence management, current event and non-conformance data is not collated and analysed in relation to the risks identified on the Risk Register. Without this information a Risk Register is, or becomes, a simply a static record of the initial risks. 11/06 R 30 refers.

A review of the STE Code (S-005) shows the requirement to test the radios in hi-rail vehicles were deleted in June 2006. No variation to your Safety Case/System could be located, nor could any evidence be found to support a risk assessment was undertaken. 11/06 C 14 refers.

A new risk management policy became effective from 1 June 2011. It introduced a new risk matrix which is different to the model defined in NRSS/4 ... however the KRN Register still follows the old format. While KiwiRail can choose to have a system at variance to NRSS/4, it cannot be at variance with its own risk management policy. 11/06 C 32 and 11/06 R 32 refer.

During discussions with the Southern Regional Manager, it was clear considerable thought was given to identifying what could be learned from the devastating earthquakes that have impacted Christchurch. An excellent report was sighted and it is recommended the lessons learned be incorporated back into the Network Risk Register where they can to ensure the risks so identified are carried forward as part of KRN's institutional knowledge. 11/06 R 33 refers. Lastly, the KRN Risk Register does not identify any "system risks". 11/06 C 30 refers.

### **Previous Ordinary Assessments - Closure Rate**

This assessment found KiwiRail Network has made excellent progress in actioning the issues raised in last year's Assessment Report. Table 1 (in Section 1.4 below) sets out the current situation. Of the 92 items outstanding at end of that assessment only six conditions and five recommendations remained outstanding at the outset of this review. Of those, seven (three conditions and four recommendations), still remain OPEN at the end of this Assessment. Overall, that represents an effective closure rate of 92%. The one weakness is that the oldest condition (06/04 C 16) still remains OPEN!

#### Appreciation

This assessment was undertaken by a joint assessment team appointed by the NZTA. The team comprised a Lead Auditor (from Telarc Limited) and various members of the NZTA Rail Safety Section. This resulted in an experienced, cross-organisational, assessment team with significant experience in both auditing technique and railway knowledge.

The success of any assessment comes from sourcing information, viewing processes and identifying areas for improvement. This process can be greatly assisted by the willingness of those interviewed to share their knowledge and information with the assessment team. Those involved, wish to thank all the KiwiRail Network employees who participated for their openness and constructive co-operation. Although invited to participate in this assessment, no RMTU representatives took part directly during the assessment.

## 1.4 Compliance with the Approved Safety Case and Safety System

With the exception of the conditions noted in this report, KiwiRail Network was found to be in compliance with its approved Safety Case.

In total there are 39 conditions (non-compliances) and 46 recommendations noted in this report which KiwiRail Network needs to address. This includes 5 conditions and 9 recommendations carried forward from the 2010 Special Assessment. All are expanded In Sections 2 and 3, but are summarised in the three tables immediately below:

TABLE 1:	TABLE 1:			
Open condit	ions and recommendations raised in previous (	Ordinary		
_Assessment	S			
Reference	Subject	Status	Rating	
	t Responsibility			
10/03 C 3	Ports and Sidings Agreements	OPEN	MEDIUM	
10/03 R 2	Monthly Reports - Structures	OPEN		
Mechanical S	Safety			
09/03 C 3	Radio Code Compliance Checks	CLOSED		
Infrastructu	re			
06/04 C 16	Inspection Reports for Private Sidings	OPEN	HIGH	
10/03 R 6	Crane Inspections Vehicle (Status)	CLOSED		
10/03 C 14	Rail Weld Test Failure Procedures	OPEN	LOW	
10/03 R 7	Radio Disaster Plan, Radio Network Upgrade	OPEN		
Personnel				
10/03 R 11	Succession Planning	OPEN		
Accidents, Incidents and Occurrences				
10/03 R 12	On site Management of Significant Occurrences	OPEN		
Document Control				
07/04 C 17	Code Update	CLOSED		

08/04 C 26	Onsite Document Control by KiwiRail Network and Contractors	CLOSED	
*	Contractors		i

TABLE 2:				
	ions and recommendations raised in 2010 Specia			
Reference	Subject	Status	Rating	
	ngineering and Slope Stability Risk Management		T	
10/11 R 1	Slope Stability Risk Ranking	CLOSED		
10/11 R 2	Structures Project Plan for Slope Stability Initiatives	CLOSED		
10/11 R 3	Slope Stability Risk Ranking and Slope Monitor Priorities	OPEN		
10/11 C 1	Engineering Risk Register	OPEN	LOW	
Track Engine				
10/11 R 4	Track Geometry and Video Car	OPEN		
Rail Operation	ng Standards and Codes			
10/11 C 2	Rule 6b Reporting Unusual Weather Conditions - Training	OPEN	MEDIUM	
10/11 R 5	Rule 6b Reporting Unusual Weather Conditions - Training	OPEN		
10/11 R 6	Training and Documented Guide of Major Landslide Features	OPEN		
10/11 C 3	Risk and Safety Manager Responsibilities	CLOSED		
10/11 C 4	Rule 6b and Risk Assessment Process Document Control	OPEN	MEDIUM	
10/11 R 7	Rule 6b Reporting Unusual Weather Conditions - Risk Assessment	OPEN		
10/11 R 8	NRSS 4 and ONTRACK RSSM Update Timeliness	OPEN		
·, · · · · · · · · · · · · · · · · · ·		CLOSED		
Network Cor				
10/11 C 5	Rule 6b Reporting Unusual Weather Conditions Implementation	CLOSED		
10/11 C 6	Severe Weather Warning Aide Memoire Form	CLOSED		
10/11 R 10	Severe Weather Warning Aide Memoire Form Update	CLOSED		
Internal Aud	lit			
10/11 C 7	Audit Changed Processes	OPEN	regraded to <b>HIGH</b>	
Occurrence Management				
10/11 C 8	Incident Investigations	CLOSED	MEDIUM	
10/11 R 11	ATRS report - 30 Sep 2010, North of Plimmerton Incident	CLOSED		
10/11 R 12	Emergency Rail Protection Plan Wellington	OPEN		
Internal Audit				
10/11 R 13	Specific Incident Based Emergency Plans	OPEN		
10/11 R 14	Local Emergency Plans	OPEN		

TABLE 3:			
	ditions and recommendations from current asses		D .:
Reference	Subject	Status	Rating
	Responsibility	OBEN	MEDIUM
11/06 C 1	On-going Management of Private Sidings Inspections	OPEN	MEDIUM
11/06 C 2	Management of Internal Audit	OPEN	MEDIUM
11/06 R 1	Occupational Health & Safety Initiatives	OPEN	
Personnel	Cafata Observations Deal Assessments	OBEN	1.004/
11/06 C 3	Safety Observations - Desk Assessments	OPEN	LOW
11/06 C 4	Safety Observations - Voice Assessments	OPEN	MEDIUM
11/06 R 33	Random Network Graph Assessments	OPEN	
11/06 R 2	Safety Observation Code Requirement	OPEN	
11/06 R 3	Fitness for Work Safety of Staff and Contractors Working on Track	OPEN	
11/06 R 34	Non-Observance of newly introduced Eye Protection	OPEN	
11/06 C 7	requirements	OPEN	MEDIUM
11 /06 D /	Visitors on site not compliant with Site Safety Plan	ODEN	
11/06 R 4 11/06 R 5	Training Records - Rail Weld Depot	OPEN	
11/06 R 6	National Training Database	OPEN	
	Training of Incident Investigators	OPEN	
11/06 R 7 Mechanical Sa		OPEN	
11/06 R 8	Equipment Safety	OPEN	_
11/06 C 8	Newly supplied Track Lacks with out-dated 155 tags	OPEN OPEN	1.0\\\
Infrastructure		UPEN	LOW
	Certificates of Assurance for Privately owned structures	OPEN	MEDILIM
11/06 C 9	Engineering Inspections outside Code Requirements	OPEN	MEDIUM
11/06 C 10	Track Standards for Worn Rails	OPEN	MEDIUM
11/06 C 11		OPEN	MEDIUM
11/06 R 9	Reporting of Priority 1 (& 2) Track Faults	OPEN	
11/06 R 10	Data shown on Track Logs	OPEN	MEDILIM
11/06 C 12	Relay Database	OPEN	MEDIUM
11/06 C 13	Overdue Checks on ASP Radios	OPEN	LOW
11/06 C 14	Testing of Hi-Rail Radios	OPEN	MEDIUM
11/06 C 15	Pole Lines	OPEN	MEDIUM
11/06 C 16	Compliance with Statutory Requirements	OPEN	MEDIUM
11/06 R 11	Improvement Initiative for Testing Switch Machines	OPEN	
Accidents, inc	idents and Other Occurrences  Complete Investigation into Occurrence 111080 on the	1	
11/06 C 17		OPEN	LOW
11/06 D 12	Mission Bush Branch	OPEN	
11/06 R 12 11/06 R 13	No link between Network Risk Register and IRIS	OPEN	
	Updating of IRIS	OPEN	
11/06 R 14	Occurrence Severity Errors in IRIS	OPEN	
11/06 R 15	Review and update of Severity Codes in NRSS/5	OPEN	
11/06 R 16	Occurrence Management	OPEN	MEDILIM
11/06 C 18	Occurrence Reporting	OPEN	MEDIUM
Railway Opera		OBEN	
11/06 R 17	Management of Safety Equipment (incl. PPE)	OPEN	
11/06 R 18	Job Plans and TalkSafe Initiatives	OPEN	+
11/06 R 19	HSE Inspections - Rail Weld	OPEN	
11/06 R 20	HSE Tool Kit	OPEN	1.014
11/06 C 19	HSE Inspections - Invercargill	OPEN	LOW
11/06 C 20	Recording of Track Occupancy Details	OPEN	LOW
11/06 R 21	Possible Enhancement for Recording Track Occupancy	OPEN	
•	Information		
11/06 R 22	Employee Well-being	OPEN	
11/06 C 21	Track Machine Protection	OPEN	LOW
11/06 C 22	Spiking of Points - Hatuma Siding	OPEN	LOW
11/06 C 23	Freight Handling Code	OPEN	MEDIUM
Interface with	Other Operators	1	
11/06 R 23	Management of KRN Equipment venturing off KRN trackage	OPEN	
	ntrol and System Review	_	
11/06 C 24	Rail Operating Rules and Procedure Books	OPEN	MEDIUM

Reference	Subject	Status	Rating	
11/06 C 25	Documentation Reviews and Updates - Structures	OPEN	LOW	
11/06 C 26	Documentation Reviews and Updates - Track	OPEN	HIGH	
11/06 C 27	Review and updating of all documentation relating to the maintenance and inspection of Private Sidings	OPEN	HIGH	
11/06 C 28	Updated Documentation	OPEN	LOW	
11/06 R 24	Contractor Medical Verifier Statement	OPEN		
11/06 R 25	References to Relevant Acts etc	OPEN		
11/06 R 26	Machine Condition Checklists	OPEN		
11/06 R 27	Review and Updating of Flash Butt Welding documentation	OPEN		
11/06 R 28	Updating of NRSS Documentation	OPEN		
11/06 C 29	Maintenance of Records Required by NRSS Standards	OPEN	LOW	
11/06 R 29 Disparate STE Reporting Systems		OPEN		
Risk Managen	Risk Management			
11/06 R 30	Management of Risk and Hazard Registers	OPEN		
11/06 C 30	Documentation of System Risks	OPEN	MEDIUM	
11/06 R 31	Management of Risk (and Lessons Learned) from Canterbury Earthquakes	OPEN		
11/06 C 31 Managing Change		OPEN	MEDIUM	
11/06 C 32	Risk Management Policy	OPEN	LOW	
11/06 R 32 Management of Change		OPEN		
Internal Audit				
11/06 C 33	No Internal Audits Undertaken	OPEN	MEDIUM	

## 1.5 Safety Case Variations

In the 15 months since the last ordinary assessment in March 2010, there had been twenty three (23) safety case variation requests approved by the NZTA. These were as follows:

Reason for application	NZTA sign-off
	date
Wellington Traction System Upgrade	12/3/2010
Platform Modifications - Wellington Electrified Area	16/3/2010
DART 2: Construction of Grafton Station	17/3/2010
Change of Name (rebranding) Ontrack now trading as KiwiRail Network	3/5/2010
Henderson Train Stabling	6/5/2010
DART 4, 5, & 6: Double Tracking Avondale to New Lynn	26/5/2010
DART 19: Onehunga Br. Rehabilitation and opening to Passenger Trains	10/8/2010
Operation of six car SA/SD Trains on Western Line from 19 Sept 2010	23/8/2010
Low Loader Type Approval	7/9/2010
Low Loader Approval for Introduction to Service	7/9/2010
Invensys - Design, Checking and Approval of Modular Signals Design	17/11/2010
Resignalling Grafton to Morningside	17/11/2010
Double Tracking McKays Crossing to Waikanae	26/11/2010
Transfer of Auckland Signal Control to Wellington	26/11/2010
Auckland Signalling Phase 1b - Quay Park to Britomart	23/12/2010
Amendment to Safety Case - Baldwin Ave North Auckland Line	28/1/2011
Organisational Changes – establishment of GM Network Performance and GM Projects	12/4/2011
Alternative Track safety Rules - Northern Region	14/4/2011
New Automatic Signalling Rules - Auckland and parts of Northern Region	14/4/2011
Hi-Rail Pivot Steering Vehicles - Type Approval	15/4/2011
Reactivation of Castlecliff Line	11/5/2011
Wellington EMU Depot Protection System	8/6/2011
Operation six Car SA/SD Trains on Southern and Eastern Lines - Auckland Metro	8/7/2011

## 1.6 Next Assessment

Quarterly Meetings and Progress Review

To ensure timely corrective action is being taken with respect to issues notes in this report, it is recommended that progress toward closure of each Condition and Recommendation noted in this report, and any open TAIC Recommendations, be reviewed at KRN's quarterly meetings. At these meetings KRN should provide a written report describing actions taken to date on each condition and recommendation, actions proposed, and resources allocated.

#### Follow-up

As noted earlier, four conditions have been given a 'high' rating. These will require a response to NZTA no later than 30 September 2011.

Given the progress resolving some of the outstanding issues, especially those related to inspection, administration and management of private sidings, a CVA is recommended to specifically verify that the safety concerns and issues related to the management, monitoring, definition of standards, and the promulgation of new Agreements is reviewed in depth.

The next Ordinary Assessment will be scheduled for March 2012.

## 1.7 Safety System Rating

## Non-compliance safety system rating

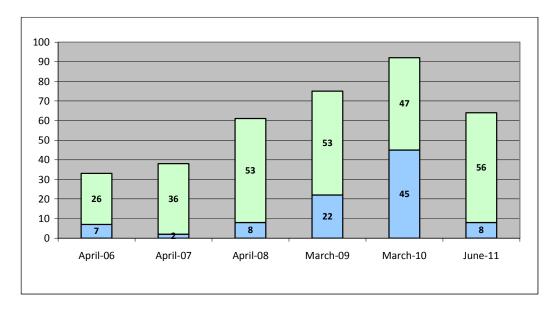
Each non-compliance condition is considered by the assessor and graded High (H), Medium (M), or Low (L). This grading is noted in the boxes detailing each condition throughout the report. The determination of the condition ratings is explained in Section 6 at the end of the report. Each is given a weighted value rating score of H (5), M (2), or L (1).

The ratings scores are then added together to give a total value for the collated non-compliances found during the assessment.

Recommendations and observations relating to other operators do not count towards the safety system rating.

## Note:

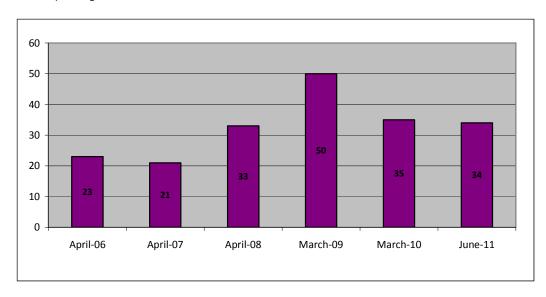
For comparative purposes the graphs below <u>exclude</u> the conditions raised in the November 2010 Special Assessment.



Safety system rating for conditions from the current assessment.
Safety system rating for conditions remaining open from previous assessments.

## Total conditions open at completion of this assessment

This graph simply shows the total number of open conditions for the assessment. It includes previously open conditions as well as conditions raised during this assessment. It does not have any rating attached to the conditions.



Total number of conditions "open" for this assessment.

### Results

The upper graph shows excellent progress has been made this year in reducing the carry-over component from previous years, and this facet alone has aided the safety rating graph to show a marked improvement over 2010. While the total open conditions graph shows a very slight improvement, reflection of this back to the Safety Rating graph, shows a steadily rising trend line in the current conditions – something that clearly needs attention going forward.

## 1.8 Assessment Programme

Assessors	Topic	Operator Personnel involved		
Date: 20 June 2011				
John Freeman	Opening Meeting	Phil O'Connell		
Merv Harvey		David Gordon		
Rob Gould		Robyn Horan		
Ivan Cowell				
Bryan Graham				
Rob Gould	Overview of Network Business Unit	Rick Van Barneveld		
Bryan Graham				
Rob Gould	Engineering and Standards Management	Peter Steel		
Bryan Graham				
Date: 21 June 2011				
John Freeman	Review of KiwiRail Occurrence Management	Robyn Horan		
Maree Henderson	System	Phil O'Connell		
Bryan Graham				
John Freeman	Track Engineering	Mark Gullery		
Maree Henderson				
Bryan Graham				
Date: 22 June 2011				
Rob Gould	Traction and Electrical Engineering	Allan Neilson		
Bryan Graham				
Rob Gould	Traction Control	Craig Harbour		
Bryan Graham		Derek Lorimer		
		Carl Mills		

Rob Gould Bryan Graham  Network Training Nathan Dodd Nicole Wijngaarden David Webb  Network Performance Network Performance Notwork Perfo	Assessors	Topic	Operator Personnel
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Bryan Graham  Relay Workshop Structures Inspector Heathcote (Br 3 MSL) Bankside Temuka (Br 71 MSL)  Bryan Graham  Field Activities - Timaru to Dunedin Bryan Graham Field Activities - Timaru to Dunedin Timaru Morven (Br 140 MSL)  Mike Booth Graeme Pauley Bruce Barwick		Field Activities Christshursh to Timeru	Wayna Pamsay
Structures Inspector     Heathcote (Br 3 MSL)     Bankside     Temuka (Br 71 MSL)      Date: 6 July 2011  Rob Gould Bryan Graham  Field Activities – Timaru to Dunedin Bryan Graham  Field Activities – Timaru to Dunedin  Timaru  Morven (Br 140 MSL)  Mike Booth Graeme Pauley Bruce Barwick			
Heathcote (Br 3 MSL)     Bankside     Temuka (Br 71 MSL)  Date: 6 July 2011  Rob Gould Bryan Graham  Field Activities - Timaru to Dunedin Bryan Graham  Hinds Yard Timaru Morven (Br 140 MSL) Oamaru  Oraeme Pauley Bruce Barwick	יש אוו טומוומווו	·	
Bankside Temuka (Br 71 MSL)  Date: 6 July 2011  Rob Gould Bryan Graham Field Activities – Timaru to Dunedin Field Activities – Timaru to Dunedin Timaru Morven (Br 140 MSL) Oamaru Brian McAllister Peter Duncan Graeme Smart Mike Booth Graeme Pauley Bruce Barwick		-	
Temuka (Br 71 MSL)  Pate: 6 July 2011  Rob Gould Bryan Graham  Field Activities - Timaru to Dunedin  Hinds Yard  Timaru  Morven (Br 140 MSL)  Oamaru  Field Activities - Timaru to Dunedin  Graeme Smart  Mike Booth  Graeme Pauley  Bruce Barwick			Dian Nathan
Pote: 6 July 2011  Rob Gould Bryan Graham  Field Activities - Timaru to Dunedin  Hinds Yard  Timaru  Morven (Br 140 MSL)  Oamaru  Field Activities - Timaru to Dunedin  Peter Duncan  Graeme Smart  Mike Booth  Graeme Pauley  Bruce Barwick			
Rob Gould Bryan Graham  • Hinds Yard • Timaru • Morven (Br 140 MSL) • Oamaru  Field Activities - Timaru to Dunedin • Hinds Yard • Timaru • Morven (Br 140 MSL) • Oamaru  Brian McAllister  Peter Duncan  Graeme Smart  Mike Booth  Graeme Pauley  Bruce Barwick	Date: 6 July 2011	▼ IEIIIUKA (DI / I IVISL)	
Bryan Graham      Hinds Yard     Timaru     Morven (Br 140 MSL)     Oamaru      Hinds Yard     Graeme Smart     Mike Booth     Graeme Pauley     Bruce Barwick		Field Activities - Timaru to Dunedin	Rrian McAllister
<ul> <li>Timaru</li> <li>Morven (Br 140 MSL)</li> <li>Oamaru</li> <li>Graeme Smart</li> <li>Mike Booth</li> <li>Graeme Pauley</li> <li>Bruce Barwick</li> </ul>			
<ul> <li>Morven (Br 140 MSL)</li> <li>Oamaru</li> <li>Mike Booth</li> <li>Graeme Pauley</li> <li>Bruce Barwick</li> </ul>	Diyan Gianani		
Oamaru     Graeme Pauley     Bruce Barwick			
Bruce Barwick			
		- Juniara	

Date: 7 July 2011	Date: 7 July 2011			
Rob Gould	Area Manager (Dunedin)	Brian McAllister		
Bryan Graham	Service Manager, South Island (Dunedin)	Neil Campbell		
Rob Gould	Field Activities - Dunedin to Invercargill	Brian McAllister		
Bryan Graham	- · · · · · · · · · · · · · · · · · · ·	Bert Te Raki		
Date: 8 July 2011				
Rob Gould	Field Activities - Invercargill plus Wairio Line	Brian McAllister		
Bryan Graham		Charlie Watson		
,		Mark Burton		
		Toby Sellwood		
		Murray Deans		
Date: 11 July 2011				
Adrian Douglas	Field Activities - Christchurch Area	Wayne Ramsay		
Bryan Graham	<ul> <li>Weedons (MSL)</li> </ul>	Roger Utera		
	Rakaia (MSL)	Ruki Andrews		
Date: 12 July 2011				
Adrian Douglas	Field Activities - Christchurch to Kaikoura	Wayne Ramsay		
Bryan Graham	<ul> <li>Spotswood (MNL)</li> </ul>	Rachel Tucker		
	<ul> <li>Tunnel 14 MNL</li> </ul>			
	<ul> <li>Kaikoura Depot</li> </ul>			
Date: 13 July 2011				
Adrian Douglas	Field Activities - Kaikoura to Blenheim	Wayne Ramsay		
Bryan Graham	<ul> <li>Kaikoura Depot</li> </ul>	Dave Williams		
	<ul> <li>Ohau (Tunnel 19 MNL)</li> </ul>	Bruce Smith		
	<ul> <li>Clarence (Br xxx MNL)</li> </ul>	Dennis Gapper		
	<ul> <li>Grassmere</li> </ul>	Rob McDonald		
	<ul> <li>Blenheim</li> </ul>	Peter Stringer		
Date: 14 July 2011				
Bryan Graham	Risk Management	Graeme Dilks		

### 1.9 Consultation, Planning and Specific issues

#### Consultation

A pre-assessment planning meeting was held between the NZTA, Veolia, KiwiRail Ltd, KiwiRail Network and Telarc. Rail and Maritime Transport Union (RMTU) officials accepted an invitation to attend the meeting but did not attend on the day. Requests were made for the following issues to be reviewed during this assessment:

#### **NZTA** issues

Issues brought up for potential inclusion into the assessment plan, were:

- a review of IRIS, including the effectiveness of the reporting system both internally and externally (reporting to NZTA)
- follow up on a selection of individual occurrences to verify the strength of each investigation, and the effectiveness of the corrective action(s) taken
- how the occurrences are reviewed against the hazard register and vice versa
- · what trending is undertaken
- how the above is communicated information along with corrective actions reported to KiwiRail's senior management
- Private siding inspection, certification and maintenance where siding operated by KRL e.g. Fonterra Edendale
- The process and procedures used to train contractors to operate on track and how this training is monitored and follow up to ensure it is effectively applied out were it counts, at the work site. There appears to be a lot of incidents occurring that directly concern contractors.
- Track inspection and maintenance at private sidings and ports. While looked at in the past, it still gives the appearance that the processes, and procedures put in place by KiwiRail Network are still not working, and siding operators are not getting the required information to effect the necessary repairs until well past their due date. This is because they have not received the inspection report or were unaware that the inspection had been carried out. This needs to be reviewed from top to bottom, to ascertain where the process is breaking down and also looking at the effectiveness of process and if there is a way it can be improved.
- area inspection processes looking at structures inspection and track inspections
- there is need to look at the Codes and Standards team; looking at the issue of Bulletins in general, and the process used to make changes to the Codes and Rules, and how KRN is managing the risk behind this process
- KiwiRail Network staff training their training material and organisation needs quite an update from our recent experience

#### KiwiRail Network issues

 No specific areas identified. Statement made that KRN "happy to run with NZTA's program requirements"

#### Safety Assessor items

- Plant and Equipment (155 system)
- STE Inspection (compliance) processes (incl. S&I circulars, code requirements, radio compliance etc.)
- Responsibilities
- whether all the defined responsibilities as set out in Appendix A of the Rail Safety System Manual are still current, accurate and appropriate
- Rail Weld
- the effectiveness of the KRN audit process

All the above issues were reviewed throughout the assessment.

## Observers to the assessment

No Rail and Maritime Transport Union (RMTU) representatives attended this assessment.

# **Section 2A**

## Open Conditions and Recommendations Identified From Previous Ordinary Safety Assessments

This section includes open conditions and recommendations raised and transferred from assessments of other licensees.

## 2A.1 Management Responsibility

Reference: 10/03 C3 Non-compliance grading: M		
Ports and Sidings Agr	Ports and Sidings Agreements	
Observations:	It was stated that new agreements are to be established between KRN and all	
	users of rail in ports and sidings, (of 167 active sidings there are 131 with no	
	formal agreements in place).	
Action required:	All users of active rail sidings, (either at ports or other network	
	locations), must have formal operating agreements in place.	
Condition Status	OPEN	
Response:	Being worked through by Lease Managers. It will take approx 12 months to get agreements in place over the operating sidings. Pro forma agreements documents have been approved by KR.	
	Priority system developed for delivery with a target of three agreements per week per lease manager. The three lease managers will be appointed and functional on this by end of September at which time this target will begin to be monitored.	
	Request that this be reduced to a Medium for the duration of the project as long as evidence of continued implementation is visible at quarterly reviews.	
Assessor review 5 August 2010	Response noted and regrading accepted. To be reviewed at subsequent assessments.	
Condition Status	OPEN	
Discussed 24 March 2011	No additional evidence provided to show that implementation is proceeding as proposed.	
Assessor review	Comment noted and given the slow progress on this key condition it now	
7 April 2011	reverts to a "High" non-compliance grading.	
Condition Status	OPEN	
2011 Assessment	The project to update all siding agreements is proceeding, but at a much slower pace than originally forecast. As at June 2011 some 110 agreements remain outstanding. The target completion rate is 3 agreements per week, giving a final completion date approx. one year away.	
Condition Status	OPEN	

Reference: 10/03 R2	
Monthly Reports - Str	
Observation:	While reviewing the role of the Area Manager at Stratford, it was noted that the structures monthly report does not differentiate between the Manager for the Taranaki area and the Manawatu.
Action required:	Separate the monthly reports to the Area Manager's of Taranaki and Palmerston North so each has clear visibility of the respective performance of the groups they have responsibility and accountability for.
Status	OPEN
Response:	Currently one member of the Structures team separates Taranaki and Palmerston North out in his reports as he does them by area, however another member of the team does his by inspectorate and Taranaki does not exist yet.
	This issue will be resolved when Maximo (Asset Management Database) comes on stream in the middle of next year.

	Closure requested for this recommendation.
Assessor review 10 November 2010	Response noted but closure not accepted as issue yet to be resolved. Review at next assessment.
10 November 2010	
Status	OPEN
Response:	Nil received
2011 Assessment	Maximo has not been implemented, therefore reporting continues to be as noted in the original Recommendation above.
Status	OPEN

## 2A.3 Mechanical Safety

Reference: 09/03 C3	Non-Compliance Grading: M
Radio Code Complian	ce Checks
Group / Division:	Telecommunications
Observations:	It was stated that Radio Code Compliance checks were overdue because of a lack of staff resources in the Christchurch region. Currently there is a backlog of about 50 radio checks to be done.
Action required:	KiwiRail Network must provide adequate resources for carrying out the scheduled radio code compliance checks.
Response:	No response issued in relation to this condition
Assessment March 2010	No evidence was provided on the provision of resources to address the backlog in testing and the current status of radio checks in Christchurch.
Condition Status	OPEN
Response:	Nil received
2011 Assessment	A review of the ST&E Overdue Code Report (27 June 2011), showed all Work Orders, bar three, were complete.
	Follow-up, with the Comms team in Christchurch, was able to confirm only one Work Order was outstanding – and that work order covered a number of ASP radios. In fact, only two radios for the entire Christchurch area had not had their C22f radio tests.
Status	CLOSED

## 2A.4 Infrastructure

Reference: 06/04 C1	
Inspection Reports fo	r Private Sidings
Group / Division:	Operations
Observations:	During the Safety Assessment the requirement for the issuing of Inspection reports to private sidings was unclear. Various sources stated that they issue inspection reports; however some sources stated there was no requirement to issue them. Document – TMF-9701-OP-0008 (dated June 2005, Revision 1) was presented, However this clearly has a mixture of KiwiRail Network and Transfield Logos and documentation identification, and as such, the use of this document needs to be clarified.  1. Is this covered within the NRSSs?  2. Is it a requirement that is placed upon KiwiRail Network by the private siding and stated within the individual Site Safety Plans?  3. Is this document current or has it been superseded?
Action required:	The clarification of the requirements for the issuing of inspection reports is needed, as well as distribution to all Staff conducting Inspections, and additionally, visibility of the reports given to the Private Sidings.
Response:	The matter of private sidings and their inspection/maintenance requirements is currently being addressed by KiwiRail Network
CVA October 2006	Further action required.
Condition Status	OPEN
Assessment April 2007	During discussions with Mr Allan Neilson it became evident that the current documentation relating to Inspection reporting (i.e. M125 & M126 Forms) was ineffective, and a new form (M122 Private Siding / Yard Inspection Report) was presented. The current 125 & 126 documents are susceptible to

	misinterpretation. This new document allows for instant visibility to the end user as to the condition of their track. However, though this new document is designed to enhance the current process, there was no visibility within any documented procedure or process for the actual use of this document. It was established that an email had been sent out to Regional Managers and Area Managers, but at the time of Safety Assessment no evidence could be provided that this new documentation was in effective use, nor any evidence that a documented process/procedure had been established/created to support its use.
Action Required:	When changes are made that affect the operation, processes and procedures utilised by KiwiRail Network, there is a need to review the procedure that ensures documents required by the system are available at the point of use and are effectively managed.
Condition Status	OPEN
Response:	The M122 form is available on the OSP as a trial document (Rev: A published 18/01/07) to allow comment from field Staff prior to change in procedure. Feedback is being gathered during field visits as to usability and suitability of form. The changes will come about initially through a SIN, this will then be incorporated into the code when P20 - P29 of the Railnet Code and Instructions for the T100 Track Supplements are reviewed. This is due for completion by the end of 2008. Considered a low priority at this point.
CVA November 2007	The M122 forms are now being used. However, as noted above further work is required to close this condition.
Condition Status	OPEN
Assessment April 2008	No evidence was available during the assessment to show that progress has been made to address this condition since the CVA.
Condition Status	OPEN
Response:	This ties to 05/04 S4. (Further discussion on 27 November 2008)
CVA November 2008	M122 is not formally incorporated into the Track Code System as the document needs to be moved from 'Draft" to an approved status or an acceptable alternative implemented.
Condition Status	OPEN
Assessment March/April 2009	It was agreed in consultation with KRN that due to insufficient evidence being provided, this condition remains open. KRN are to provide further evidence of corrective action.
Condition Status	OPEN
Response:	Nil
CVA February 2010	Progress was reviewed. Although discussed, a copy of the amended documentation needs to be provided.
Condition Status	OPEN
Response:	No response issued in relation to this condition
Assessment March 2010	The M122 form was reviewed in use but the design and use of the form is not providing assurance that the processes for follow up to track faults are effective. The condition will remain open until a regime to manage track faults at sidings is implemented and demonstrated to be working effectively. Further given the ongoing nature of this condition, and concerns such as the one mentioned below, the condition rating has also been increased.  In addition discussions with the General Manager, Commercial indicated that
	there are 131 of 167 active sidings that have no agreement in place as to their operation and maintenance. A separate condition has been raised for this purpose.
Condition Status	OPEN
Response:	Nil received
2011 Assessment	<ul> <li>A review of a number of M122 Inspection Reports for various Private Siding operators showed:         <ul> <li>(a) some Track Inspectors were allowing faults with a priority code of "1" (which pre June 2009 required fault rectification or mitigation in 30 days, and subsequently in just 2 days) to remain in normal operational service for periods exceeding 12 months</li> <li>(b) that Areas Manager were not detecting, and enacting, appropriate remediation as defined by the Code (or subsequent to 29 June 2009, SIN T 044)</li> </ul> </li> </ul>
	(c) that while the Code permits mitigations to ameliorate risk levels, the

risk existed), and  (d) in no case reviewed by this Assessor was either the private siding holder verbally advised, or more importantly and significantly, was KiwiRail Freight being advised so it could prohibit KiwiRail locomotives and wagons from operating on such track and thereby eliminate the risk to its employees and those of the private siding holder.  In one case sighted, KiwiRail was operating Dx class locomotives with loaded	Status	OPEN
risk existed), and  (d) in no case reviewed by this Assessor was either the private siding holder verbally advised, or more importantly and significantly, was KiwiRail Freight being advised so it could prohibit KiwiRail locomotives and wagons from operating on such track and thereby eliminate the		In one case sighted, KiwiRail was operating Dx class locomotives with loaded "C" class coal wagons across track with reputedly P1 faults for considerably longer than twelve months!
actions taken by some inspectors has been to list either 'fictional'		(d) in no case reviewed by this Assessor was either the private siding holder verbally advised, or more importantly and significantly, was KiwiRail Freight being advised so it could prohibit KiwiRail locomotives and wagons from operating on such track and thereby eliminate the

Reference: 10/03 R6		
Crane Inspections Sta	Crane Inspections Status (Vehicles)	
Observations:	During the review of routine crane inspections and the apparent delay in receiving the SGS certificates, part of the issue was the delay in getting a purchase order to SGS. In some cases actual inspections had taken place up to two months before a purchase request was submitted to SGS. SGS only send certificates out with the issuing of the invoice. It was also noted that the crane inspections are currently not synchronised with vehicle 155's.	
Action	Consideration could be given to the following:	
recommended:	<ol> <li>Reviewing the current process of organising crane inspections with SGS in regard to supplying a purchase order to SGS.</li> <li>Aligning the vehicle crane inspections with the routine 155 vehicle checks.</li> </ol>	
Status	OPEN	
Response:	Purchase Orders can only be created if a dollar value exists. To get around the current situation, SGS have been asked to provide us with a handwritten certificate (if the crane passes inspection). SGS has also established a 'read only' database which we can access to verify the status of all of the certificates they supply.  It is impracticable to align SGS's inspections with our own 155B inspect as	
	they (SGS) can do three or four checks in a day, whereas the 155B inspect takes a complete day.	
2011 Assessment	The new 'interim' certificates were sighted, as was the SGS database. From the evidence sighted the crane inspection process is now well controlled/managed with KRN able to demonstrate all cranes are compliant.	
Status	CLOSED	

Reference: 10/03	C14 Non-compliance grading: <del>HIGH</del> LOW
Rail Weld test failure	procedures
Observations:	The section kept very good records of testing, traceability and other details related to the production of welded rail. The local Manager and Supervisor had made efforts to determine what actions should be taken if a weld fails under test, in particular what actions should be taken to rail produced prior to the failure and to rail made by subsequent production, (before another test is carried out).
Action required:	KRN must provide clear instructions on the steps that are to be taken following a production test failure. Similar instructions are also to be provided to address the actions to be taken following a field failure.
Condition Status	OPEN
Response:	<ul> <li>Break testing process to be clarified and system put in place to deal with failed welds- Meeting held with Pens Cook, Dave Martin, Peter Morton and myself where we discussed possible options to clarify what is to be done if a failed weld is encountered. Please see attached email for more information.</li> <li>Regarding the break testing of welded rail, a designated NDT machine has been ordered and received for Rail Weld Depot, this machine is currently with Pens Cook. Once Pens is finished with it</li> </ul>

	the intention is to train two RWD staff members (Abe Whare- Depot Supervisor and one other) to be able to operate this machine in the case of a failed test.  • Procedure has been written for this process, copy attached  Apply for closure
Assessor review	Response noted, but until all actions noted in response are confirmed as
5 August 2010	complete and fully implemented this item remains open.
Condition Status	OPEN
2011 Assessment	A procedure has been written and implemented, however the new procedure has not been incorporated into Infrastructure core Codes, Code Supplements and/or Task Instructions.
Status	OPEN

Reference: 10/03 R7 Disaster recovery plans, Radio Network Upgrade	
Observations:	The Radio Network Upgrade project plan refers to a need for "Disaster Recovery" and "Network Security" plans that are to be established. These have still to be developed and tested.
Action recommended:	The Disaster Recovery and Network Security plans should be documented, implemented and tested to validate them as soon as practicable.
Status	OPEN
Response:	A Business Continuity assessment for Train Control is currently being scoped by AECOM and will then feed into the technical requirements for Train Control and the radio network.
2011 Assessment	No discrete development action so far.
Status	OPEN

## 2A.5 Personnel

Reference: 10/03 R11 Succession Planning	
Observations:	The Northern Region Managers acknowledged the existing risk of an aging workforce demographic, and the need to up-skill new staff to replace those people leaving in order to maintain a safe system. They demonstrated a good succession plan utilising Excel spreadsheets and the buy-in/support of local management.
Action recommended:	Consider applying this project basis across the organisation to mitigate future loss of knowledge and maintain a competent workforce to ensure safety obligations are maintained.
Status	OPEN
Response:	Nil received
2011 Assessment	While a number of examples involving the introduction of 'new blood' were noted, these tended to be case specific. No one demonstrated a "groupwide" approach, which included references to either a comprehensive succession plan or organised spreadsheet.
Status	OPEN

## 2A.6 Accidents, Incidents and other Occurrences

Reference: 10/03 R1	Reference: 10/03 R12	
Onsite manageme	ent of significant occurrences	
Observation:	On 12 March 2010 the assessment team reviewed the activities at Tokomaru where Train 210 had derailed the previous evening.	
	While on-site activities were being very competently managed by the senior KRN and KRL representatives, subsequent review shows one aspect of site management requires further clarification.	
	Notwithstanding discussions with KRN representatives after the site visit, the role of the Rail Incident Controller (RIC) in relation to site induction responsibilities under an integrated site management plan.	
	The RIC was a KRL representative, but site induction duties were done by a KRN representative, using a KRN sign-in form and induction processes, without direct reference to the RIC.	
Action recommended:	KRN (working with other relevant parties) should review Section 11 (Emergency Procedures), of the RORP, in conjunction with NRSS/5 to ensure that for future events there is clarity on how the RIC is managing or assigning site sign-in responsibility.	
Status	OPEN	
Response:	Nil received	
2011 Assessment	Preliminary discussions undertaken without resolution. Consideration being given to promoting the KRN Job Plan methodology to ensure consistency across all sites.	
Status	OPEN	

## 2A.7 Document Control and Systems Review

Reference: 07/04 C1 Code Update	7 Non-compliance grading: H
Group / Division:	Engineering
Observations:	A number of Code supplements are out of date, and/or memos have been used to override the Codes, which themselves have become outdated. For example:  • CWS0301: A memo was released on 16 March 2006 specifying a change to the symbols used in the Code dated 1 September 1997 (no SIN raised),  • CWS0302 clause 6, references responsibilities for the TSL Contract Manager which are no longer applicable W200 clause 6.2 refers to Rule 228 which is now obsolete.
Action required:	A structured process needs to be established for the review and amendment of Codes and Code supplements.
Response:	The Engineering and Operations Groups have an objective to undertake a complete review of all codes and code supplements including for track the T200. The will be completed by the end of 2009. Action by Engineering Manager
CVA November 2007	Progress to be reviewed during future assessments.
Condition Status	OPEN
Assessment April 2008	Progress in the review of Code Supplements is slow due to the lack of resources for this project.
Condition Status	OPEN
Response:	<ul> <li>Work is in progress to establish which of the four following categories applies to each code which has passed the review date:</li> <li>Code requires technical updating</li> <li>Existing code refers to a previous organisation structure but is technically adequate</li> <li>Existing code has passed a review date but is satisfactory to continue without specific updating</li> <li>Code no longer required</li> </ul>

	Code updating continues to progress under the management of each of the
	Technical Committees which oversee the relevant codes. Work is in hand and is expected to meet the 2009 deadline.
CVA November 2008	Progress is being made, however not yet complete.
Condition Status	OPEN
Assessment	Progress in updating these documents is being managed. There are still
March/April 2009	approximately 200 documents to up date.
Condition Status	OPEN
Response:	The review of code supplements continues, priorities set and is regularly monitored. A dedicated resource has now been provided to accelerate the process.
CVA February 2010	It is acknowledged that progress is being made. However, the condition will remain open until the project of review and amendment has been completed.
Condition Status	OPEN
Response:	No response issued in relation to this condition
Assessment March 2010	Based on initial response in 2007, this condition has been modified to apply to both Track and Structures documentation.  Structures: The total outstanding is about 42 documents. Twenty one (21) have been accorded Priority 'A' status, and the stated aim was to review these at the April Technical Committee Meeting and re-issue soon after.
	All the Track documentation has been prioritised for action. The two main documents are T 003 (the Track Code itself) and T 200 (the Infrastructure Engineering Handbook). The stated aim is for T 200 to be issued by Christmas this year. No target was nominated for T 003. While both the above await action, the National Track Manager is considering a Design Code for track works. While the need for new codes is to be commended, the backlog around old, and 'expired' documentation must not be allowed to sit idle.
	Other related documentation: Also outstanding, are all the old "CSG" (Code Supplement General) Codes. These do not appear to have an "owner" within the organisation.
	The overall status of all critical (and other related Code documentation) must be re-assessed by the Engineering Standards Manager. Many of the Codes show expiry dates from the mid to late 1990's indicating that little coherent urgency has been given to this basic essential to Ontrack's business over the entities entire lifetime.
Condition Status	OPEN
Response:	Nil received
2011 Assessment	Full reviews, by each Technical Committee, have been undertaken of all the relevant discipline codes, code supplements and other related documentation. These reviews were completed in June and early July 2011.
	At the closing meeting held on 18th July 2011, it was admitted further work is required to completely update and overhaul elements of subsidiary documentation to make it more sensible and practical especially from a compliance perspective. To assist this process, this condition has been closed with new, targeted conditions generated to allow each element to be actioned and closed as separate entities. Conditions 11/07 C23 and 11/07 C24 have therefore been raised, each referencing this old condition, to provide a simpler, and smarter, process for the effective close-out of all the components which go to make up this multifaceted condition.
Condition Status	Note: New Network documentation has been issued to address the concerns raised about the old Land and General Codes and Code Supplements.  CLOSED
- Juliana Januari	V-V-2

Reference: 08/04 C Onsite document co	26 Non-compliance grading: M entrol by KRN & Contractors
Group / Division:	Corporate
Observations:	That the documentation held by KRN and by contractors engaged by KRN is lacking in detail and adequate control. Examples of this were:  - No copy of the KRN rail operating code available at Kai lwi site.  - Noise monitoring was conducted to establish realistic sound levels at
	Kai lwi; however the calibration status of the equipment used to monitor the sound levels was unknown.  The Kai lwi Tunnel Environmental Management Plan was dated 14
	November 2007 and had a revision status of draft. Other documents in the Kai lwi quality control plan were listed but again failed to clearly identify revision status.
	<ul> <li>The Contract Quality Plan held by the contractor, including pages regarding Quality Control &amp; Inspection outlined no document numbering system for documents, and not all documents were onsite - e.g. the Traffic Control document - despite the Plan stating that they would be.</li> </ul>
	- The contractor had a fuel pump onsite, but no fuel-handling certificate was held on the site.
	<ul> <li>The contract quality plan was prepared and approved by contractor staff in November 2007. There is no evidence on the document presented of KRN's approval.</li> </ul>
	<ul> <li>R.O.R.P held at KRN Taihape depot hard to locate, when found, had last been updated 16/02/03</li> <li>Railnet code versions going unchecked for periods of over 2 years e.g.</li> </ul>
	T.Moore's copy was last checked by P.Dix 13/10/05  No copy of the Site Safety Plan held onsite at Sturges Rd DART Site C. Staff assumed they were working under Sturges Rd main plan. No copy of the contractor's Safety Plan that staff were to be working in conjunction with was available onsite and it was believed to contain Traffic Management plan.
	At Britomart Train Operations Centre training matrices and requirements were sighted by the Assessors. These stated that each Signal Box Controller (SBC) was required to have a safety review every 8 months. RORP 10.1 also dealt with these requirements but the Centre's copy was not able to be shown to the assessors. See also condition 08/04 C19 above.
Action required:	That a system is put in place whereby all required documentation is held at all KRN and KRN contractor sites. That all other documentation - outdated etc - is purged and that both of these processes - the holding and the purging - are checked or carried out on at least a yearly basis.
Response:	The issue of updated codes and code supplements to KRN sites and the provision of relevant information to allow KRN Contractors to complete their contract works as required by their Contract and in accordance with KRN safety procedures (which are included as part of the specification). Issuing of updated code documentation to KRN sites is managed through the Library, who issue updated code documents to holders of controlled copies of
	the relevant code. This is a managed process and examples of the covering instructions which accompany the release of a code update are attached. The codes are available on the KRN Intranet and any KRN employee can access code documents through this means.  For external Contractors, code copies are not issued as part of contract
	procedures. It is a requirement for Contract formation that each Contract Specification holds all relevant information relating to the performance of the contract and required standards (including any Code excerpts) for the works to be delivered under the Contract. At this stage it is not intended to change this Contract document structure.
	For Kai lwi, the contractor had protection for rail operation provided for him and the protectors who were external to the contractor are required to have the Rail Operating Code. Engineering staff responsible for the preparation of Contract documents have been reminded that these should include any Code Excerpts required for the performance of the Contract.
	As a reminder to the internal KRN holders of Codes, an email will be issued by the KRN library giving the shortcut to the location of the codes on the

	Intranet.
CVA November 2008	The issue of the condition relates to the management of the documentation on site. The above response is accepted with respect to the issuing of documentation but not site document control.
Condition Status	OPEN
Assessment March/April 2009	It was agreed in consultation with KRN that due to insufficient evidence being provided, this condition remains open. KRN are to provide further evidence of corrective action.
Condition Status	OPEN
Response:	<ul> <li>It is entirely up to the contractor to maintain and update their documents on site, for example; Health and Safety Plan, Environmental Management Plan, Quality Assurance etc.</li> </ul>
	Rail specific documents such as the KRN Rail Operating Code are held by the appointed protector on site.
	• It is a condition of Contract that "the Contractor shall only use drawings issued "for construction" to execute the contract works and shall at all times only use the most recent revision of any drawing issued by the Principal" as per Clause 2.8.2
CVA February 2010	Response is acknowledged, however, this needs to be reviewed onsite during the March 2010 assessment.
Condition Status	OPEN
Response:	No response issued in relation to this condition
Assessment March 2010	In view of the general lack of systems for selection, engagement and monitoring of contractors that were noted at various points during this assessment this condition will be left open until these systems are established in full.  It may be the responsibility of the Contractors to manage various documents but it is KRN's responsibility to manage this process and ensure that it is done in accordance with specified requirements.
Condition Status	OPEN
Response:	Nil received
2011 Assessment	All contractors reviewed between Hinds (MSL) and nr Ohau (Tunnel 19 MNL) had current documentation in their vehicles, or on-site and available. The Contractors sighted were undertaking a range of activities from:  • spot resleepering (MSL)  • the replacement of tunnel linings (MNL), and  • span replacement work on the Clarence River Bridge (MNL).
	At the Clarence span replacement works, all the plans were stamped "Fit for Construction".
	Apart from one issue with not recording track occupancy details, see Condition 11/07 C 20, all activities and other functions observed were compliant.
<b>Condition Status</b>	CLOSED

# **Section 2B**

# Open Conditions and Recommendations Identified From Special Safety Assessment

## 2B.1 Structural Engineering and Slope Stability Risk Management

Reference: 10/11 R1 Subject title: Slope Stabilit	v Pick Panking
Observation	The KRN Geotechnical Assessment Report, Derailment due to Landslide at Tunnel 1, WL37.23km dated August 2009 summarises that, 'there may be a significant length of track within the Wellington commuter network which is at risk from landslides initiating under high/extreme rainfall or seismic events. The risks posed to the railway network are unlikely to be significantly higher than those posed to private property and public infrastructure throughout the Wellington Region.' The report also identifies that 'with the current level of information, it is not possible to quantify the levels of risk and risk reduction works that may be required.' Thus the report proposes 'that a site ranking system is developed to identify critical slopes within the Wellington Commuter Network.
	As a direct and indirect result of the above, the following initiatives are currently being undertaken or investigated by Structures Engineering to 'weather proof' the network infrastructure with respect to slope stability:
	A slope stability risk ranking assessment for the Wellington Region currently being undertaken and is planned to be rolled out to the entire network over the next two to five years.
	2. Obtaining funding from The Greater Wellington Regional Council (GWRC), as the Wellington Metro Rail funder, to install slope monitors and conduct slope instability risk reduction works at sites of high slope stability risk in the Wellington Metro Area. The meeting between KRN and GWRC to discuss this was to be held 25 November 2010.
	<ul> <li>3. A program of works to reduce the risk of land slides is being undertaken December 2010 - February 2011 in the Wellington Metro Area. The works will be conducted on the top ten identified sites with a high risk rating as determined in the slope stability risk ranking assessment. As detailed in the Preliminary Draft Slope Risk Ranking Report dated September 2010, 'these works will comprise a combination of: <ul> <li>anchored rock fall netting,</li> <li>anchored sprayed concrete walls where tight</li> </ul> </li> </ul>
	clearances exist adjacent to the track,  toe fences to prevent fretted material from the rock slopes near track level accumulating in cess drains, and  reconstruction and/or replacement of the existing
Action recommended	fences at Beanpole and Little Beanpole.'  With respect to the above slope stability initiatives the following is recommended:
	The Preliminary Draft Slope Risk Ranking Report dated September 2010 details a risk rating system based on Geotechnical Engineering practices for assessment. An

	additional risk assessment should be completed following the engineering risk assessment to include a risk factor for track usage levels and type i.e. metro areas, double tracks, track usage levels.
	2. Section 5 of the Preliminary Draft Slope Risk Ranking Report details the 'Wider Network Implementation' plan for the systematic assessment and rating of slopes in the wider network over the next several years. This implementation plan should be reviewed to ensure the implementation strategy is based on risk. i.e. the prioritising of high risk sites, where previous slips have occurred, tunnels and metro areas.
	3. The Slope Stability Risk Management Reference Sheet (Slope Hazard Proforma) included in the Preliminary Draft Slope Risk Ranking Report details the risk matrix used, the measures of likelihood and measures of consequence. A Risk Level Action Plan should be included to provide guidance as to the actions required when the Qualitative Level of Risk is determined, i.e. the actions required when an Extreme level of risk is the outcome of the risk assessment and so forth for each risk level. The action plan should include timeframes for action, responsibilities and immediate control measures as appropriate.
	4. Figure 3 included in the Preliminary Draft Slope Risk Ranking Report is a graph of the Ranked Slopes - Top 50 Sites in the Wellington Metro Area. The key for the 'blue' coloured sites indicates that these sites are where either minor works are required, or the current level of risk is acceptable. As the graph is concerning the Top 50 sites assessed and are thus the sites with the higher risk it is recommended the validity for the categorising of the blue coloured sites be reviewed.
	5. The Slope Risk Ranking process needs to be formally documented to ensure all personnel undertaking a ranking assessment undertake it in the same manner to ensure the validity and consistency of the rankings.
	6. It is recommended that NZTA receive an update on the outcomes and subsequent action following KRN's meeting with GWRC regarding funding for slope monitors and slope risk reduction works.
Status	OPEN
Response	A slope study has been developed and is now in final draft with GWRC. Work has also been carried out at North/South Junction and on the Johnsonville line.
	Project documentation and procedures will cover changes to principle network risk register. Repeat work in future may use different technical framework. We will not be codifying but will monitor risk ranking of slip risk sites and review single sites on a periodic basis.
	GWRC global funding has now been clarified as per newspaper headlines. This includes continued funding for this work.
2011 Ordinary	Studies have been completed covering the Metro areas in both
Assessment	Wellington and Auckland, the NIMT (Wellington - Auckland) and the MNL. This covers the prime routes and the main, high, risk
	areas.  Further reviews will occur as time, and resources, permit.
Status	CLOSED
	OLUJED

Reference: 10/11 R2 Subject title: Structures Project Plan for Slope Stability Initiatives	
Observation	Currently there is no formal KRN Structures global project plan, or like document, to govern the above mentioned 'slope stability' initiatives discussed above in R1.
Action recommended	A formal global slope stability project plan, or like document, should be established to manage and monitor the slope stability initiatives discussed above.
Status	OPEN
Response	A project plan has been developed.
2011 Ordinary	Plan sighted.
Assessment	
Status	CLOSED

Reference: 10/11 R3	
Subject title: Slope Stability Risk Ranking and Slope Monitor Priorities	
Observation	The funding for the slope stability initiatives is from the current ONTRACK Asset Management Plan 2009/10 version 3 dated 24 February 2010, Table 7.4 KRN (ONTRACK) capital expenditure, Structures Assets – Post WRRP; other structures including seawalls, tunnels, culverts and weatherproofing account code. In addition \$3.5 million funded by KRN has been allocated to undertake the works for the slope stability initiative No. 3 above.
Action recommended	The slope stability risk ranking assessment and the installation of slope monitors should be reviewed and
	prioritised as appropriate by KRN and other rail funders.
Status	OPEN
Response	This has not yet been considered outside of the metro area as the slip risk ranking is incomplete.
2011 Ordinary	No information provided either during the Assessment or
Assessment	immediately post assessment for closure of this Recommendation.
Status	OPEN

Reference: 10/11 C1	Non-compliance grading: L
Subject title: Engineering Risk Register - update with latest treatment option initiatives	
Observation	The Engineering Risk Register (current) does not include the
	slope stability initiatives in the Treatment Options for weather
	proofing risks to the network.
Action required	The Engineering Risk Register requires to be updated as per
	NRSS/4 Risk Management, Issue 2 dated 11 June 2007, Part 5
	Monitor and Review.
Condition status	OPEN
Response	1. Root cause: Landslide
	2. Corrective action: A new KRN Risk Register has been
	developed and relevant risks incorporated into this.
	3. Preventative action: On-going Management
	4. Evidence:
2011 Ordinary	No information or evidence provided either during the
Assessment	assessment, or immediately post assessment, for closure of this
	Condition.
Condition status	OPEN
<u>l</u>	

## 2B.2 Track Engineering

Reference: 10/11 R4	
Subject title: Track Geometry and Video Car	
Observation	An initiative currently being reviewed by the Track Engineer is the Acquisition of a Track Geometry and Video Car to improve the information obtained by track engineers on the structural soundness of the track foundations and general environment.
Action recommended	It is recommended that the NZTA be informed of the progress towards this initiative and if purchased the subsequent processes that will be developed as a result.
Status	OPEN
Response	As per previous discussions held with Merv Harvey. A review of options is continuing.
2011 Ordinary Assessment	No information or evidence provided either during the assessment, or immediately post assessment, for closure of this Recommendation.
Status	OPEN

or

## 2B.3 Rail Operating Standards and Codes

Reference: 10/11 C2	Non-compliance grading: M
	rting Unusual Weather Conditions - Training
Observation	Since the Maymorn incident involving a passenger train hitting a slip and derailing, Rule 6b, Reporting Unusual Weather Conditions, has been reviewed and changes made to clarify the responsibilities and the process for managing and conducting a risk assessment as a result of receiving severe weather warnings from the MetService. The changes were approved in the Semi Permanent Bulletin No. 624, Rule 6b dated 1 September 2009 and issued by electronic fax and included in the New Bulletin and Effects Summary. No special briefing was conducted as a result of the changes. The Manager Network Operation sent an email dated 3 September 2009 to Regional Managers notifying them of the change to Rule 6b with the Semi Permanent Bulletin No. 624 attached. The email requested Regional Managers to, 'brief your Area Managers (and relieving Managers) in updated Rule 6, and in turn ensure all field staff understand their authority and obligations.' On the 25 Nov 2010 the Central Regional Manager and the Wellington Area Manager appeared unfamiliar with the Semi Permanent Bulletin No. 624 and the Area Manager referenced the superseded Rule 6b in his Rule Book. They did confirm that discussion of Bulletins occur during the Monday Meeting Conference calls, however, there is no evidence of the discussion concerning the Semi Permanent Bulletin No. 624, as no minutes are taken of the conference calls and no diary notes.
Action required	Training is required when significant process changes and responsibilities occur to rules, codes and SOPs. Awareness training must be undertaken for all Network Control Managers, Area Managers (and relieving Managers) and Track Inspectors with respect to Semi Permanent Bulletin No. 624, Rule 6b dated 1 September 2009.
Condition status	OPEN
Response	1. Root cause: Initial induction ineffective
	2. Corrective action: The induction will be redone and will then be redelivered to relevant Managers concerned.
	3. Preventative action: On-going Management
	4. Evidence:
2011 Ordinary	No information and/or evidence provided either during the
Assessment	assessment, or immediately post assessment, for closure of this Condition.
Condition status	OPEN

Reference: 10/11 R5	
	orting Unusual Weather Conditions - Training
Observation	As discussed in 10/11 C2
Action recommended	<ul> <li>The above mentioned training in 10/11 C2 should include:</li> <li>the risk assessment process to be undertaken upon receipt of severe weather warnings from the MetService,</li> <li>the information to be obtained during the risk assessment, and</li> <li>the understanding of that information.</li> <li>This training could also be conducted in conjunction with awareness training of features that might be noticed before major landslides and flooding (as recommended below in 10/11 R6).</li> </ul>
Status	OPEN
Response	As per C2 above.
2011 Ordinary	No information and/or evidence provided either during the
Assessment	assessment, or immediately post assessment, for closure of this Recommendation.
Status	OPEN

Reference: 10/11 R6 Subject title: Training and Documented Guide of Major Landslide Features	
Observation	As per 10/11 C2
Action recommended	Area Managers and Track Inspectors should be provided awareness training and a documented guide of features that might be noticed before major landslides and flooding, to base their risk assessment upon when they receive severe weather warnings and conduct track weather inspections. It is acknowledged that this undertaking would be a minimal risk reduction measure for slope instability as Area Managers and Track Inspectors are not experienced geotechnical engineers. Even experienced geotechnical engineers cannot accurately predict landslides.
Status	OPEN
Response	No response received
2011 Ordinary Assessment	No information and/or evidence provided either during the assessment, or immediately post assessment, for closure of this Recommendation.
Status	OPEN

Reference: 10/11 C3	Non-compliance grading: M
Subject title: Risk and Safe	ty Manager Responsibilities
Observation	The ONTRACK RSSM, Issue 3 dated 4 April 2008, Appendix A-Key Rail Safety Responsibilities, details the responsibilities for the Risk and Safety Manager (Chief Officer, Risk Assurance and HSE). KRN sent a letter to NZTA on 25 August 2009 as Notification of Interim Change of ONTRACK RSSM Key Responsibilities, in particular for the Risk and Safety Manager. In discussion with the Management Team during the assessment it became evident that the key responsibilities for the Risk and Safety Manager as defined in the RSSM and the above mentioned letter are different to that in practice. For some responsibilities defined in the RSSM it is unclear in practice the Manager with the responsibility, i.e.  • 'Overview of the accident/incident investigation process and follow-up as it affects rail activity.  • Ensuring sufficient audits are carried out to validate
	compliance with the Rail Safety System.'
Action required	The Key Rail Safety Responsibilities for the Risk and Safety Manager must be reviewed and the responsibilities and accountability for each key responsibility clearly delegated to the relevant manager and appropriate training provided.
Condition status	OPEN

Response	1. Root cause: Lack of clarity of responsibilities during restructure process.
	2. Corrective action: Safety system responsibilities have been reviewed and reallocated.
	3. Preventative action: This is now superseded.
	4. Evidence: As per Safety System Variation approved on 12 April 2011.
2011 Ordinary	Confirmed NZTA received, accepted a Variation on
Assessment	Organisational Change. Variation approved 12 April 2011.
Condition status	CLOSED

Reference: 10/11 C4	Non-compliance grading: M
	isk Assessment Process Document Control
Observation	In reviewing documents for the assessment the following
	document control issues were found:
	<ul> <li>Severe weather warning procedures are detailed in ONTRACK ROP Section 10, General Operating Instructions,</li> </ul>
	Issue 1 dated 25 November 2008, Part 6.3.2, 6.3.4 and
	6.3.5. These references should, at a minimum, be cross
	referenced in Semi Permanent Bulletin No. 624, Rule 6b
	dated 1 September 2009, Special Precautions for Safe
	Operations, Reporting Unusual Weather Conditions.
	ONTRACK ROP Section 11 Emergency Procedures, Issue 1
	dated 30 June 2008, Part 35, is a duplicate procedure of
	the superseded Rule 6b and has not been withdrawn
	following the issuing of Semi Permanent Bulletin No. 624 dated 1 September 2009, Special Precautions for Safe
	Operations, Reporting Unusual Weather Conditions, and
	should be.
	ONTRACK RSSM, Issue 3 dated 4 April 2008 and NRSS 4
	Risk Management, Issue 2 dated 11 June 2007, have
	different Risk Screening 5x5 Matrix's. For general risk
	assessment purposes these matrix's should be the same.
	The risk management process should allow for a special
	purpose specific risk screening matrix to be developed as
Action required	is the case for slope stability risk assessments.  The above mentioned document control issues must be
•	addressed as discussed above.
Condition status	OPEN
Response	1. Root cause:
	2. Corrective action: This is Work in Progress. The ONTRACK
	RSSM is being updated into the KiwiRail Safety Case which will
	include a new Risk Management Matrix Structure. This is being
	undertaken by Karen Paterson.
	3. Preventative action
	4. Evidence
2011 Ordinary	No information and/or evidence provided either during the
Assessment	assessment, or post assessment, for closure of this Condition.
Condition status	OPEN

Reference: 10/11 R7	Reference: 10/11 R7	
Subject title: Rule 6b Reporting Unusual Weather Conditions - Risk Assessment		
Observation	The Semi Permanent Bulletin No. 624 dated 1 September 2009, Rule 6b - Reporting Unusual Weather Conditions, requires Area Managers to undertake a risk assessment. The Bulletin does not provide a process for undertaking this risk assessment or cross reference NRSS/4 Risk Management.	
Action recommended	It is recommended that the Semi Permanent Bulletin No. 624 provide a risk assessment process for Area Managers in assessing the risks of Severe and Adverse weather conditions.	
Status	OPEN	
Response	Work in Progress. Timeframe 30 June 2011.	
2011 Ordinary	No evidence or information provided either during, or	
Assessment	immediately post assessment, to close this recommendation.	
Status	OPEN	

Reference: 10/11 R8	
Subject title: NRSS 4 and ONTRACK RSSM Update Timeliness	
Observation	The following documents are under review by the relevant
	parties.
	<ul> <li>NRSS/4 Risk Management, Issue 2 dated 11 June 2007.</li> </ul>
	ONTRACK RSSM, Issue 3 dated 4 April 2008. The KRN Rail
	Operating Standards and Projects Manager provided an
	indicative completion time of 31 March 2011 for this
	document. Its review is currently overdue for submission
	to NZTA.
Action recommended	The undertaking to review documents should be time bound
	with set times established for the different stages of review.
Status	OPEN
Response	Refer to C4 comments.
2011 Ordinary	No evidence or information provided either during, or
Assessment	immediately post assessment, to close this recommendation.
Status	OPEN

Reference: 10/11 R9		
Subject title: Zero Harm Ple	Subject title: Zero Harm Pledge	
Observation	KRN have undertaken a Zero Harm Pledge.	
Action recommended	The Zero Harm Pledge should be included in the ONTRACK	
	RSSM for all personnel to understand the organisation's	
	executive management's commitment to safety, and thus	
	factored in to their risk assessments.	
Status	OPEN	
Response	The Zero Harm Pledge (ZHP) will be included in the Health &	
	Safety Policies which will be referenced in the new Safety Case	
	for the KiwiRail Group.	
2011 Ordinary	More succinctly, an A3 size version of the pledge has been	
Assessment	produced and this sighted at most sites throughout the South	
	Island.	
	This approach is likely to be more effective than including the	
	document in the RSSM - a document not widely circulated.	
	Further, e-mails and newsletters were sighted announcing that	
	the Executive Management team would tour the country to	
	promote the ZHP during July 2011.	
Status	CLOSED	

#### 2B.4 Network Control

## Reference: 10/11 C5 Non-compliance grading: H Subject title: Rule 6b Reporting Unusual Weather Conditions Implementation

Observation

The Network Control Manager was instrumental in the review and development of ONTRACK Semi Permanent Bulletin No. 624 dated 1 September 2009, Special Precautions for Safe Operations, Reporting Unusual Weather Conditions. As part of this assessment the process detailed in the bulletin was reviewed with the Manager Network Operations and the Wellington Area Manager for the incident which occurred on 30 September 2010, North of Plimmerton involving a Tranz Metro train which derailed as a result of colliding with a slip. As a result the derailment put the train foul of the adjacent mainline resulting in a collision with the south bound service.

The evidence available to demonstrate compliance with the Bulletin is as follows:

- The SWW Aide Memoire form for SWW received over the period 27 September 2010 to 1 October 2010 records one notification to the Wellington Area Manager at 16.25 hours on 29 September 2010, and a Telecom NZ Ltd email sent messages report verifies this. The text message read, 'heavy rain warning from Wgtn to Wdville .Wgtn to Taihape & Wngi to Stfd from 0900hrs Thursday upto 15hrs NCM.' It was noted by the Area Manager that the terminology used in the text message was not in line with Rule 6b which details warning types to be:
  - Level 1 Severe Weather Warning
  - Level 2 Adverse Weather Restriction
- There is no record of an acknowledgement from the Area Manager on the SWW Aide Memoire form and no evidence available to confirm an acknowledgement was sent. Note the SWW Aide Memoire form at the time of the incident did not have a column for entering acknowledgements in even though the Bulletin dated 1 September 2009 required acknowledgements to be received from the Area Managers.
- Further SWW were received from the MetService involving the Wellington Region however there were no further texts or emails to the Area Manager from the NCM recorded on the SWW Aide Memoire form.
- The speed restriction database records an entry of SWW, 'heavy rain for upto 15 hours,' for the NIMT line at 2100 hours on 29 September 2010. This entry was lifted on 3 October 2010 at 0330hours.
- A pre-planned Wet Weather Inspection, Work Order R1011449, for the NIMT line from Kaiwharawhara to Otaki was undertaken on 29 September 2010 from 1500 -1600 hours with the comment of 'pooling at Muri'. No report for this inspection was initially received thus the Area Manager contacted the Track Inspector and verbally received the report and completed the Track Inspection record form. The form is not signed by either party.
- Essential Feature List, for the NIMT line dated 26 October 2010, has an entry for the line where the incident occurred as follows:
  - 'NIMT MainL from 25.740 to 27.000km, Area Co-ord
     Wgtn, Gang MT3,
  - 4 November 2002, Feature Formation, Frequency During Heavy Rain, Reason/Comment - SLIPS BUT NONE IN RECENT MONTHS'

The above evidence shows the Semi Permanent Bulletin No. 624 dated 1 September 2009 concerning Rule 6b Reporting Unusual Weather Conditions was not implemented in its entirety with

Action required  The Semi Permanent Bulletin No. 624 dated 1 September 2009 concerning Rule 6b Reporting Unusual Weather Conditions must be implemented as documented and serious consideration be given to the recommendations made in this report to improve this process with respect to: the recording of information, detailing the acknowledgement process, detailing the risk assessment process, providing training for all parties, and providing more detailed knowledge and information concerning the risk factors involved in severe weather.  Condition status  OPEN  1. Root cause  2. Corrective action: A new instruction has been issued to Network Control Managers regarding the process for notifying SWW. Extra columns have also been added to the Aide Memoire.  3. Preventative action  4. Evidence: SWW Aide Memoire Form Attached.  New Instruction M007 re SWW promulgated effective from 21 December 2010.  New SWW Aide Memoire sighted.  Condition status  CLOSED		respect to the North of Plimmerton incident which occurred on 30 September 2010. The SWW Aide Memoire form being used at the time of the incident was not designed to record the information required to be recorded as detailed in the Bulletin.
Response  1. Root cause  2. Corrective action: A new instruction has been issued to Network Control Managers regarding the process for notifying SWW. Extra columns have also been added to the Aide Memoire.  3. Preventative action  4. Evidence: SWW Aide Memoire Form Attached.  New Instruction M007 re SWW promulgated effective from 21 December 2010.  New SWW Aide Memoire sighted.	Action required	Conditions must be implemented as documented and serious consideration be given to the recommendations made in this report to improve this process with respect to: the recording of information, detailing the acknowledgement process, detailing the risk assessment process, providing training for all parties, and providing more detailed knowledge and information concerning the risk factors
2. Corrective action: A new instruction has been issued to Network Control Managers regarding the process for notifying SWW. Extra columns have also been added to the Aide Memoire.  3. Preventative action  4. Evidence: SWW Aide Memoire Form Attached.  New Instruction M007 re SWW promulgated effective from 21 December 2010.  New SWW Aide Memoire sighted.	Condition status	OPEN
Assessment December 2010.  New SWW Aide Memoire sighted.	Response	<ol> <li>Corrective action: A new instruction has been issued to Network Control Managers regarding the process for notifying SWW. Extra columns have also been added to the Aide Memoire.</li> <li>Preventative action</li> <li>Evidence: SWW Aide Memoire Form Attached.</li> </ol>
	_	December 2010.
	Condition status	3

Reference: 10/11 C6	Non-compliance grading: M
Subject title: Severe Weath	er Warning Aide Memoire Form
Observation	The ONTRACK Semi Permanent Bulletin No. 624 dated 1 September 2009, Special Precautions for Safe Operations, Rule 6b - Reporting Unusual Weather Conditions is supported by the Severe Weather Warning Aide Memoire form used by the Network Control Managers (NCM) to record the receipt and distribution of Severe Weather Warnings (SWW) from the MetService. This form was recently reviewed and updated 1 November 2010 to improve the recording process for receiving Acknowledgements from Area Managers as discussed above in 10/11 C5. The updated form still does not effectively record the process requirements of the bulletin.
Action required	The Severe Weather Warning Aide Memoire form must be updated to effectively record information as defined in ONTRACK Semi Permanent Bulletin No. 624 Rule 6b Reporting Unusual Weather Conditions dated 1 September 2009.
Condition status	OPEN
Response	<ol> <li>Root cause:</li> <li>Corrective action: This form has now been modified</li> <li>Preventative action: Ongoing monitoring of process</li> <li>Evidence: As per C5 above.</li> </ol>
2011 Ordinary	Updated SWW Aide Memoire sighted.
Assessment	
Condition status	CLOSED

Reference: 10/11 R10	
Subject title: Severe Weather Warning Aide Memoire Form Update	
Observation	As discussed in 10/11 C5
Action recommended	<ul> <li>It is recommended that the Severe Weather Warning Aide Memoire Form be improved as follows:</li> <li>A row is required for the date SWW are received from the Met Service, and distributed to Area Managers.</li> <li>Another column(s) is required to record the email of the SWW to Area Managers.</li> <li>Include on the form the process, and recording of the process for the NCM to undertake when an acknowledgement is not received from the Area Managers and the escalation process to be undertaken.</li> <li>Include a check box for the removal of the SWW comment in the speed restriction database,</li> <li>Include a comments section for any action undertaken by the NCM, or Traffic Controller, with respect to closing a line.</li> </ul>
Status	OPEN
Response  2011 Ordinary	An extra row has been added for the date the SWW was received and distributed to Area Managers.  We will not be adding an extra column to record the email to Area Managers.  The process for the NCM to undertake when an acknowledgement is not received from the Area Managers has been implemented. See attached  The closing of a line due to a Severe Weather Incident is logged into the IRIS system with relevant details, therefore no requirement is necessary to include a comments section on the Aide Memoire for any action undertaken.  Updated form sighted (as used) on, or between, following dates:
2011 Ordinary	1- 3 May 2011
Assessment	• 4 May 2011
	• 6 May 2011
	• 11 – 14 May 2011
	• 18 – 19 May 2011, and
Status	• 24 May 2011.
Status	CLOSED

# 2B.5 Internal Audit

Reference: 10/11 C7	Non-compliance grading: <del>M</del> H
Subject title: Audit Changed	Processes
Observation	There is no evidence that Semi Permanent Bulletin No. 624 dated 1 September 2009 concerning Rule 6b Reporting Unusual Weather Conditions, has been audited since approved. NRSS/2 Safety Management, Issue 2 dated 11 June 2007, part 8.3 The Change Management Process, requires that following the promulgation of a change the final step is: 'system integrity – evaluated reviewed/enhanced.' NRSS/4 Risk Management, Issue 2 dated 11 June 2007, Part 7 requires following a change that risk screening and risk assessment occur if required to ensure that the changes made have effectively reduced the risks and no new risks have been added as a result of the change. The RSSM Issue 3 dated 4 April 2008, Part 7, and NRSS/9 Audit, Issue 2 11 June 2007, require internal audits to be conducted to ensure compliance with the rail safety system. This is of particular importance following changes to processes.
Action required	Processes that are changed must be audited in a timely
	manner to ensure they are implemented and have effectively

	reduced the relevant risks.
Condition status	OPEN
Response	1. Root cause
	2. Corrective action: Post implementation processes are in place.
	3. Preventative action: This work is on-going.
	4. Evidence: For review in the June assessment.
2011 Ordinary	Refer to 11/07 C 28.
Assessment	No internal audits across Network undertaken in last twelve months.
	Given one of the critical elements of this Condition was to undertake timely audits to verify that the change management process has been effectively managed and implemented, this Condition has been re-graded to HIGH.
Condition status	OPEN

# 2B.6 Occurrence Management

Reference: 10/11 C8	Non-compliance grading: M
Observation	The following action has been taken with respect to incident reporting and investigation for incidents being reviewed as part of this special assessment:  25 Sep 2010, Manawatu Gorge - freight train derailment as a result of a slip. A MLD1 has been completed 11 Oct 2010. It should be noted that it took 9 days for the track to be operational. No investigation report has been done.  25 Sep 2010, North of Taumarunui - freight train derailment as a result of colliding with a slip (as was initially reported). MLD1 has been completed dated 6 October 2010, site information completed 8 October 2010, and drivers report completed 1 October 2010. No investigation report has been done.  30 Sep 2010, North of Plimmerton – Tranz Metro train derailment as a result of colliding with a slip; derailment put the train foul of the adjacent mainline resulting in a collision with the south bound service. ATRS consultants (Australia) are investigating this incident. The report should be completed in draft by 3 December 2010. It is currently unavailable.  Kaikoura slips following the Christchurch earthquake, 4 Sep 2010 - property damage (no derailment or train collisions involved). No reports and no investigation was carried out into these incidents.  The reports mentioned above are incident site management reports and no occurrence investigation has occurred, except in the case of the 30 Sep 2010, north of Plimmerton incident where ATRS Consultants have been employed to undertake the incident investigation.
Action required	NRSS/5 Occurrence Management, Issue 2 dated 23 May 2010, Part 6.1 Table 5 details the reporting requirements for occurrences. Incident investigations must be undertaken as detailed in NRSS/5.
Condition status	OPEN
Response	1. Root cause:
	2. Corrective action: Investigations were carried out into the Manawatu Gorge and Taumarunui incidents. As Kaikoura was a slip that covered the road and onto the railway line due to the Christchurch earthquake an investigation by KiwiRail would not

	have been required,  3. Preventative action  4. Evidence:
2011 Ordinary Assessment	Investigations Reports were sighted for both the Taumarunui and Manawatu Gorge incidents, IRIS references 104581 and 104578 respectively. Both reports were dated "May 2011". Both reports found the primary cause to be a "slip which obstructed the line". At Plimmerton, an independent investigator (ATRS) was chosen to undertake the investigation. Proof that investigation was undertaken and completed, is provided by the closure of Recommendation 10/11 R 11, see below.
Condition status	CLOSED

Reference: 10/11 R11		
Subject title: ATRS report - 30 Sep 2010, North of Plimmerton Incident		
Observation	As discussed in 10/11 C8	
Action recommended	It is recommended that the ATRS report for the 30 Sep 2010, north of Plimmerton incident be presented to NZTA when available.	
Status	OPEN	
Response	This was sent to NZTA on 1 April. Closure requested.	
2011 Ordinary	Confirmed that NZTA (MEH) received e-mailed report.	
Assessment	Copy received 6 April 2011 - with Report dated January 2011.	
Status	CLOSED	

Reference: 10/11 R12	
	il Protection Plan Wellington
Observation	From previous incident investigation reviews conducted in the Wellington Region an Emergency Rail Protection Plan has been developed. It is currently in a draft state dated 22 October 2010. The plan has been developed to ensure the protection is maintained during the incident management phase of returning to normal operations.
Action recommended	It is recommended that NZTA be informed of the progress and implementation of this plan.
Status	OPEN
Response	Nil response received.
2011 Ordinary Assessment	The Emergency Rail Protection Plan document remains in a "draft" state (as at 22 July 2011).  An associated, but separate, Tsunami Response Plan has also been developed. This, as its name suggests, sets out actions to be undertaken/initiated if such an event was to occur. The plan includes potential inundation areas.
	It is recommended that consideration be given to bringing together all the emergency plans, into a single regional document, with hard copies being provided to key management staff so that in the event of emergency they can, immediately, grab their copy and initiate appropriate responses. A hard copy format provides an extra element of redundancy if communications are lost, or down.
	It is also recommended the final response to this recommendation include evidence that similar plans have been prepared, and implemented, for all other regions.
Status	OPEN

# 2B.7 Crisis Management

Reference: 10/11 R13	Reference: 10/11 R13	
Subject title: Specific Incident Based Emergency Plans		
Observation	The RSSM Part 8 refers to 'ONTRACK Crisis Management Plan (document Q371) as the key document for managing Emergencies. Document Q371 KiwiRail Network Incident Management Plan, Issue 6 dated July 2010 is written at a global level and does not include specific incident based emergency planning for particular types of emergency scenario's. Part 3.1 identifies significant incidents that may require activation of the Incident Management Plan, but does not have specific plans for significant incident type.	
Action recommended	It is recommended that Emergency Planning be developed	
	for specific incident types as is best practice to improve the timeliness and effectiveness of response to incidents.	
Status	OPEN	
Response	Some work has been started around these. There is basic plans for both Earthquakes and Tsunami's.	
2011 Ordinary	This recommendation is intertwined with 10/11 R13. Plans were	
Assessment	sighted for handling/managing Tunnel Emergencies, and also for the Whangaehu River. As noted above, it may be advantageous to integrate all emergency planning (and response plans) into separate, regionalized, plans.	
Status	OPEN	

Reference: 10/11 R14	
Subject title: Local Emergency Plans	
Observation	ONTRACKS ROP Section 11 Emergency Procedures, part 2.1 Emergency Planning refers to Local Emergency Plans, in that, 'Each manager is responsible for ensuring appropriate emergency response plans are developed for sites under their control, that rail personnel are trained in these plans and the plans are tested to ensure they are fit for purpose.' It appears no Local Plans have been developed and the managers interviewed were not familiar with this requirement at the local level.
Action recommended	It is also recommended that the need for Local Emergency Plans be reviewed and established where required.
Status	OPFN
	0
Response	These should be covered in the Site Plans for each site. Every depot has site plans which hold details of Emergency Procedures.
2011 Ordinary	Refer 10/11 R 13 and R 14.
Assessment	No evidence presented to close Recommendation.
Status	OPEN

# Conditions and recommendations identified in current safety assessment

# 3.1 Management Responsibility

Reference: 11/06 C 1	Non-compliance grading: M
On-going Management of	Private Siding Inspections
Group/Division	GM Engineering Standards, and GM Commercial
Observation	As noted in past reports issues have surrounded the management and inspection of private sidings since 2006 (refer Condition 06/04 C 16).
	These issues have never been 'put-to-bed' and continue to this day. Further discussions confirm the Commercial Manager will take responsibility for ensuring KRN's obligations to siding holders are met and appropriate measures established.
Action required	Establish an appropriate monitoring system that provides assurance that all sidings are current and compliant with KiwiRail Codes etc Potential measures could include, or extend to, the following:
	<ul> <li>inspection report provided to private siding holder prior to expiry of previous 'certificate'</li> </ul>
	<ul> <li>where defects identified appropriate repairs have been made so the siding is, and will remain, code compliant for the 'certification' period, and</li> </ul>
	<ul> <li>where defects of a serious safety nature have been identified appropriate notifications have been made to affected parted parties, eg. the siding holder and KiwiRail Freight.</li> </ul>
Condition status	OPEN
Response	1. Root cause 2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition status	

Reference: 11/06 C 2	Non-compliance grading: M
Management of Internal Au	dit
Group/Division	GM Engineering and Standards
Observation	The Network Risk Register identifies Internal Audit as a mitigation control for some eight (8) risks. Seven of the eight identified risks have a "high" residual risk based on the controls being effective. These seven constitute approximately one third of all the identified "high" risk activities/functions for KRN.  Looking somewhat closer at both the register, and the type of audits that were being undertaken, audit was being used to provide a much wider level of assurance than simply for the eight areas identified and therefore was not always concentrating on the risk areas identified.

Action required	Further, NRSS/2 in Section 6 (Safety Process Management), and Section 8 (Change), references audit as a fundamental safety management process for ensuring the integrity of the business's safety management system.  To undertake no audits for twelve months, refer 11/06 C 31, was (and is) a significant breech of KRN's Safety Case and Safety System.  Review the scope, and focus areas of the internal audit program to ensure all areas identified as medium or higher risk are included, and as appropriate, establish or develop a Safety Performance Measure, or indicator, that is reported to top management to ensure:  • an effective internal audit regime is in-place, active, and audits are being undertaken in accordance with the scope and schedule  • that issues raised (by both internal and external audits) are actioned and closed within any agreed timeframe (including any 'response by' date), and  • consider the question that where the risk profile of the gap(s) identified, and/or the level of non-conformance, is either 'medium' or higher, that details be provided to
	the risk manager and/or the Audit and Risk Committee, for due consideration.
Condition status	OPEN
Response	1. Root cause 2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition status	

Reference: 11/06 R 1	
Occupational Health & Safety Initiatives	
Group/Division	HR & Safety Manager
Observation	During discussions with Kevin Morgan and Annabel Reynolds (HR/HSE) it was indicated 'new' safety posters are being rolled out to all KRN sites.
	No evidence of this initiative was observed at Timaru, Oamaru or Invercargill. Further, at Oamaru, the H&S Committee Rep was wholly unaware of this program.
Action recommended	Ensure the program, and H&S Committee Members, are fully updated on this new safety initiative.
Status	OPEN
Response	
Assessor comment (date)	
Status	

#### 3.2 Personnel

Reference: 11/06 C 3	Non-compliance grading: L
Safety Observations for Tr	ain Controllers - Desk Assessments
Group/Division	GM Network Performance - Network Operations
Observation	A review of the safe operating procedures for Train Controllers showed that two staff members were overdue for their desk assessments. One staff member was non-active (acting as a NCM), however the other staff member was on a reduced frequency (monthly versus the standard frequency of 8 monthly). The member was almost two months overdue for assessment.
Action required	Ensure the requirements established in Clause 5.3.4 (of Section 10.3 of the Rail Operating Procedures and Rules) are continuously met.
Condition status	OPEN
Response	<ol> <li>Root cause</li> <li>Corrective action</li> <li>Preventative action</li> <li>Evidence</li> </ol>
Assessor comment (date)	
Condition status	

Reference: 11/06 C 4	Non-compliance grading: M
Safety Observations for Tra	ain Controllers - Voice Assessments
Group/Division	GM Network Performance - Network Operations
Observation	A review of the safe operating procedures for Train Controllers
	showed that twelve staff members were overdue for their six
	monthly voice recording assessments. The above twelve excludes
	two staff members acting as NCMs.
	The average overdue period was just over two (2) months with one member 5.5 months overdue!
Action required	Ensure the requirements established in Clause 5.3.4 (of
	Section 10.3 of the Rail Operating Procedures and Rules) are
	continuously met.
Condition status	OPEN
Response	1. Root cause
	2. Corrective action
	3. Preventative action
	4 Fyidence
	4. LVIUETICE
Assessor comment (date)	
Condition status	

Reference: 11/06 R 33	
Random Network Graph Checks	
Group/Division	GM Network Performance - Network Operations
Observation	In addition to the formal Safety Observation process set in Clause 5.3.4 (of Section 10.3 of the Rail Operating Rules and Procedures) Train Controllers are also subject to a random review of graphs.
	Analysis of this processes (for June) confirmed the process is "random".
	Using a random selection approach would be appropriate if the data was discrete and consistent – however as noted above, in Conditions 11/06 C 3 and C 4, the Safety Observation process has classified Train Controllers into two separate categories: compliant and non-compliant.
	Given those that are not are non-compliant form the higher risk group, and a subset of those require special attention, a totally random approach will, on occasions, select no one from the "at risk" group(s). Indeed, from the sample reviewed, none were subject to a graph audit in June!
Action required	Review the approach being used, and consider alternative approaches that will provide increased confidence levels on sub-optimal performers, as well providing assurance that everyone is, at a minimum, meeting the standards required.
	It may be that two alternative approaches are necessary to provide the degree of confidence necessary, and more importantly, that those identified as "needing support" are verified in such a way that any risk they present is within the bounds of acceptability.
	Note: This was initially listed in this report as condition 11/06 C 5 but after further discussion it agreed as a recommendation. To avoid having to renumber conditions and recommendations C5 is now not used at all and this recommendation was added to the number sequence.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 2	
Safety Observation Code Requirement	
Group/Division	GM Network Performance - Network Operations
Observation	Clause 5.1 (of Section 10.3 of the Rail Operating Rules and Procedures) requires re-assessments of those whose operating certificate is about to expire to be undertaken by the end of the month in which the certificate expires.
	Note: Issues in respect of conformance were observed in Training Group and Network Operations, but the lack of a tolerance period with respect to this Code requirement affects potentially all Operating staff.
Action recommended	KRN may wish to consider providing a longer (and more realistic) tolerance period to arrange and undertake refresher training, especially for contractor staff.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 3	
Fitness for Work	
Group/Division	GM Network Performance - Network Operations, and
	GM Operations - Logistics & Production (L&P)
Observation	As part of the 'fitness-for-work' review of Network Staff a very
	simple, yet effective, process was presented that identified all
	staff members who had worked a fortnight of greater than 90
	hours.
	The process however did not consider, or identify, the aggregate
	effect on individuals, i.e. was it the same group of employees
	who were working extended hours? No data was available for
	Managers, or those undertaking the rostering function.
	A similar situation was also observed with the L&P team.
Action recommended	KRN may wish to establish a similar "rule" to that used to
	identify persons who have worked over 90 hours in a
	fortnight so that anyone working consistently over that
	figure (or some other number) are identified so the rostering
_	process can take cognisance of any aggregate effects.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 34	
Safety of Staff and Contrac	
Group/Division	GM Network Performance - Network Operations
Observation	The Training Group assiduously undertakes operational training to assure those who work on, or adjacent to railway lines, have
	the necessary skills to 'protect' themselves and their colleagues.
	The training process is well documented and appropriate records are maintained.
	However, KRN could present no evidence it has an effective process to ensure only those who have current 'qualifications' are in fact allowed by Train Control to be where they are.
	Further, no evidence was provided to show this risk had been recognised.
Action required	Undertake a preliminary risk screening exercise, and depending on the outcome, initiate appropriate action.
	Notes:  1. A small part of the above issue may be able to be ameliorated as part of a solution to an equipment issue – see Recommendation 11/06 R 8.  2. This was initially listed in this report as condition 11/06 C 6 but after further discussion it agreed as a recommendation. To avoid having to renumber conditions and recommendations C6 is now not used at all and this recommendation was added to the number sequence.
Condition status	OPEN
Response	
Assessor comment (date)	
Condition status	

Reference: 11/06 C 7	Non-compliance grading: M
Non-observance of newly	introduced Eye Protection Requirements
Group/Division	GM Operations - Logistics and Production (Rail Weld), and GM Operations - Area Management
Observation	At least two (of the six staff) employed at the Rail Weld Depot were observed undertaking weld related activities without their required eye-protection in-place.
	Both bridge gang members (on Br 71 MSL) were undertaking works associated with the replacement of a cap on one pier without their required eye-protection.
Action required	Ensure all site safety requirements are continuously met.  Further emphasis on the recently introduced 'TalkSafe' program may well assist the necessary behaviour changes.
Condition status	OPEN
Response	Root cause     Corrective action
	3. Preventative action
	4. Evidence
	1. Evidence
Assessor comment (date)	
Condition status	

Reference: 11/06 R 4		
	Visitors allowed on site when not compliant with Site Safety Plan	
Group/Division	GM Operations - Logistics and Production (Rail Weld)	
Observation	Consultants to KRN visited the site while the assessment was in	
	progress. Both signed the Visitors Book which references the	
	sites health and safety requirements.	
	Neither visitor was wearing the prescribed safety shoes.	
Action recommended	Rail Weld should review the current process, and requirements, and determine what standards will apply, and how they will be enforced.	
Status	OPEN	
Response		
Assessor comment (date)		
Status		

Reference: 11/06 R 5	
Training Records - Rail Weld Depot	
Group/Division	GM Operations - Logistics and Production (Rail Weld)
Observation	The Rail Weld Manager maintains an overarching table that sets
	out what qualifications each member of the Rail Weld team has.
Action recommended	The table could be enhanced by incorporating all expiry
	dates so that Manager has a ready reference of key
	training/certification data.
	If the table and information was placed into (for example) an
	Excel spread sheet, conditional formatting could be utilised
_	to provide an extended warning system.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 6	
National Training Databas	e
Group/Division	HR & Safety Manager - Training
Observation	The training database established in Wellington was established to co-ordinate all training across KRN. As part of the establishment process individual records were established for each person.
	Now the system is in 'maintenance' mode, the database needs to be modified to better reflect how courses are structured, i.e. some core courses include a range of separate skills, e.g. Level C includes Tunnel Awareness and other components.
Action recommended	Modify the database and update all records so the database reflects reality.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 7	
Training of Incident Investigators	
Group/Division	HR & Safety Manager - Training
Observation	NRSS/5 states investigators must be experienced.
	No one was able to point me to anything substantive within the KRN system that defined any of the following elements usually associated with competency:  • educational, training qualifications, or skill levels and/or
	<ul> <li>educational, training qualifications, of skill levels and/of</li> <li>minimum experience levels.</li> </ul>
Action recommended	Establish, or define, a minimum standard for investigators.  This may include standards, or specific skills sets, for low level and/or more complex events.
Status	OPEN
Response	
Assessor comment (date)	
Status	

# 3.3 Mechanical Safety

Reference: 11/06 R 8 Equipment Safety	
Group/Division	GM Operations - Logistics and Production (Mechanisation)
Observation	During discussions around the 155 equipment inspection process, and the weaknesses inherent in the current processes, an opportunity was perceived for KRN to (as it were) kill two birds with one stone.
	The 155 process requires all pieces of plant and equipment to be inspected at various frequencies to ensure that all mechanical equipment is "fit (and safe)-for-use". The current process has one significant weakness – if the operator does not present the vehicle for inspection there is nothing that physically stops that piece of equipment from being used unless the fitter can attach some form of 'do not use' tag. For mobile equipment that can present difficulties.
Action recommended	KRN may wish to consider integrating its 155 inspection process into the GPS system it is currently rolling out. Integration of the two would provide an enhanced layer of safety assurance by preventing equipment which is non-compliant (i.e. not fit-for-use) from being on-tracked.
	Note:

	The protection potentially available could be further extended to by integrating the equipment assurance process with an identity swipe card to also ensure the operator was also fully compliant with all rail operational requirements, and thereby address the potential safety issue identified in Condition 11/06 C 6 above.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 C 8	Non-compliance grading: L
Newly supplied Track Jacks	s with out dated M155 Certs
Group/Division	GM Operations - Logistics and Production (Mechanisation)
Observation	Track Jacks supplied new from Christchurch to Blenheim on 21
	June 2011 displayed 155 tags which displayed a "Feb 2011"
	expiry tag.
Action required	Ensure all newly supplied equipment displays correctly
	dated tags and//or labels
Condition status	OPEN
Response	1. Root cause
	2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition status	

#### 3.4 Infrastructure

Reference: 11/06 C 9	Non-compliance grading: M
Certificates of Assurance f	or privately owned structures
Group/Division	GM Commercial
Observation	Traditionally, rail has required the Port Authorities to provide an engineering certificate as assurance that their wharf structures are capable of carrying rail loads.
	No evidence could be provided that this safety requirement is actively managed and such documentation is available.
Action required	Ensure Port Authorities provide the required engineering certificates for all wharves, and bridges, under their jurisdiction as part of the siding management process.
Condition status	OPEN
Response	1. Root cause
	2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition status	

Reference: 11/06 C 10	Non-compliance grading: M
Engineering Inspections or	utside Code P 29 Requirements
Group/Division	GM Engineering & Standards - Track Engineering
Observation	A review of the engineering inspection process for the South Island main lines and branches showed some 40% of South Island went between two and three years between the previous, and last, annual engineering inspection (as required by the Track Code T 003).
	This included much of the MNL and SWL. Further, on the evidence sighted, neither the Hokitika and/or Rapahoe Branch had been inspected since June 2009.
	As noted below in 11/06 C 11, the catch-up inspections have identified some rail that is beyond the maximum wear limits set in the Track Handbook (T 200).
Action required	Establish appropriate processes and reporting systems to ensure all codified inspections are undertaken at the appropriate intervals and that qualified and suitable resources are available.
Condition status	OPEN
Response	1. Root cause
	2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition status	

Reference: 11/06 C 11	Non-compliance grading: M
Track Standards for Worn I	Rails
Group/Division	GM Engineering & Standards - Track Engineering
Observation	While the EM80 records code compliance with respect to gauge, there is no requirement, or system, that requires rails (which are beyond their wear limits) to be reported as a code violation.  Also, while various clauses set out when rails should be transposed because of rail wear, the code is not emphatic that rail must be replaced before it reaches the wear limits established. Further there is no discrete linkage (or guidance) as to whether (or what) speed restrictions, or other mitigations, should be placed on track that has rails at, or beyond, the maximum allowable wear limits.
Action required	Establish appropriate standards and processes.
Condition status	OPEN
Response	<ol> <li>Root cause</li> <li>Corrective action</li> <li>Preventative action</li> <li>Evidence</li> </ol>
Assessor comment (date)	
Condition status	

Reference: 11/06 R 9	
Reporting of Priority 1 (& 2) Track Faults	
Group/Division	GM Operations - Area Management
Observation	One item identified as a P1 track fault on 14 April 2011 not actioned until 11 May 2011 (ie. well outside the requirements established in SIN T 044).
	Process of actioning P1 and P2 track faults has now been modified to have all such faults identified by Track and Engineering Inspectors to phone such faults to the 155 "hot line" so prioritised responsive action can be implemented immediately.
Action recommended	If this process is not universal, consideration be given to making it a national requirement.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 10	
Data shown on Track Logs	
Group/Division	GM Engineering & Standards - Track
Observation	Track Logs for various parts of the SI network were presented as evidence of Engineering Inspections.
	While comprehensive in nature, the Tracks Logs did not show any detail on the ballast section, nor the condition and depth of the ballast.
Action recommended	Consideration could be given to including such detail on to the Track Logs.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 C 12	Non-compliance grading: M
Relay Database	
Group/Division	GM Operations - S&T Asset & Performance
Observation	A review of the Relay Workshop and Signals work area showed:
	<ul> <li>one relay (on Works Order 1031389 dated 6 April 2011) that had an end installation date of 5 May 2011, had yet to be installed (by 5 July 2011), and</li> <li>over 66 items were overdue in the Wellington area with one item (ref 932) being (reputably) overdue since January 2005.</li> </ul>
	While code compliance is managed closely, via monthly reports, the evidence suggests relays, in some areas, are managed much less effectively.
Action required	Ensure the relay database is updated to reflect reality, or if indeed, some of the outstanding relays have not been replaced, ensure those replacements are made at the earliest opportunity.
Condition Status	OPEN
Response	<ol> <li>Root cause</li> <li>Corrective action</li> <li>Preventative action</li> <li>Evidence</li> </ol>
Assessor comment (date)	
Status	

Reference: 11/06 C 13	Non-compliance grading: L
Overdue Checks on ASP Ra	dios
Group/Division	GM Operations - S&T Asset and Performance
Observation	The Code Compliance Report for the Christchurch area noted three sets of ASP radios which were over 3 months overdue for their six monthly Code C 22f code compliance checks.
	Subsequent checks indicated two of the above work orders were actioned in late June/early July, but one (WT02 2048747) was still outstanding as at 4 July 2011. The radios concerned were located at Picton, and while most had been checked, two remained unchecked.
	At a local level, it was unknown whether the radios were still in- use, out-of-use, or "lost", and more importantly who had the responsibility for ensuring non-compliant radios are not used on the network.
Action recommended	Clear responsibility should exist as to whether items not within code are allowed to be used on the network, and who (Freight or Network), has the ultimate responsibility for ensuring such items are code compliant.
Condition Status	OPEN
Response	Root cause     Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition Status	

Reference: 11/06 C 14	Non-compliance grading: M
Testing of Hi-Rail Radios	
Group/Division	GM Engineering & Standards - ST&E Engineering
Observation	Of all track users, only those who move on the controlled or
	operator controlled network are not required to have their radio
	tested. This is at variance with every other authorised user on
	the KiwiRail network.
	Further, those who use a hi-rail vehicle undertake a wide variety of tasks, they often work away from their vehicle, and are often deployed to remote sites and at times when the weather is at its worst. Their safety relies on having a serviceable radio at all times, both for protection and in the case of an emergency.
	Current rule (Rule 918) allows hi-rail users to request "foul time" access with an agreed termination time to be off-track and clear. While the Rule provides a safety buffer (minimum 15 minutes) a failure of either their radio or the network at this critical time, places them at a distinct disadvantage, as almost all trains are (or will be) heavier than any hi-rail vehicle.
	Note: A requirement to test all such radios existed (Code Ref R22c) and was removed from the STE Code in June 2006.
Action required	Undertake a comprehensive review of the risks associated with operating radios on the network giving special attention to the risks associated with Rule 918 (Foul Time) and action accordingly.
Condition Status	OPEN

Response	1. Root cause
	2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition Status	

Reference: 11/06 C 15	Non-compliance grading: M
Pole Lines	
Group/Division	GM Engineering & Standards - ST&E Engineering
Observation	There are two sections of isolated pole lines on the MNL between Claverley and Hundalee, and between Oaro and Goose Bay. These pole lines used to carry signals block circuits in addition to Telecom Lines. The Signals block wires were removed with the introduction of Track Warrant Control (TWC) in the early nineties while the Telecom wires remained.
	No evidence was able to be produced as to who owned the poles, and who was contractually responsible for inspecting the poles to ensure none presented a risk to KiwiRail, Telecom, and/or the public at large.
Action required	Verify ownership of the poles, or who is contractually responsible for inspecting the poles/pole line, and ensure all the required inspections are occurring as required and the required evidence is maintained.  If the pole line belongs to another party, then ensure a process, or document exists, that requires the other party to provide KRN with a certificate of assurance that no hazard exists under the relevant safety/communications regulations.
Condition Status	OPEN
Response	<ol> <li>Root cause</li> <li>Corrective action</li> <li>Preventative action</li> <li>Evidence</li> </ol>
Assessor comment (date)	
Condition Status	

Reference: 11/06 C 16	Non-compliance grading: M
Compliance with statutory	requirements
Group/Division	GM Operations - S&T Asset and Performance
Observation	A random inspection of some line side poles on the MSL between Hornby and Rolleston showed that one pole adjacent to Jones Rd had been red tagged by 'MTT' in March 2011.
	Hazardous poles must be replaced in accord with Electricity (Safety) Regulations Clauses 41 (3) and (4) i.e. within 3 months if failure could affect persons or property other than the owner, or within 12 months (if the structure was incapable of supporting its design loads).
Action required	Ensure where statutory requirements exist that such requirements are met.
	Note: The pole was adjacent to a public roadway therefore, if it was the pole itself that was at risk, then replacement must occur within 3 months!

Condition status	OPEN
Response	1. Root cause
	2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition status	

Reference: 11/06 R 11 Improvement Initiative for testing Switch Machines	
Group/Division	GM Operations - S&T Asset and Performance
Observation	While observing the 3 monthly C12a Code Check being undertaken at the No 3 Points (south end Spotswood) it was noted the signalling technician used a 'modified' test relay device to assist with the switch obstruction test procedure. The device was modified to:  • facilitate the easy switching of the points motor, and • to 'fail safe' if it was mistakenly left in-place.
Action recommended	Recommended ST&E give consideration to adopting the relay
	test device as part of its Betterway (improvement) program.
Status	OPEN
Response	
Assessor comment (date)	
Status	

# 3.5 Accidents, Incidents and Other Occurrences

Reference: 11/06 C 17	Non-compliance grading: L
Complete Investigation into Occurrence 111080 on the Mission Bush Branch	
Group/Division	GM Operations - Area Management (Auckland)
Observation	As part of the review of the IRIS database occurrence 111080 was examined.  The file in IRIS identified the investigation did not conform to all
	the requirements established, and set out, in NRSS/5.
Action required	Complete the investigation, ie. the identification of root causes, plus develop appropriate actions and recommendations to prevent a further recurrence of this type of occurrence.
Condition status	OPEN
Response	1. Root cause
	2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition status	

Reference: 11/06 R 12	
No Link between Network Risk Register and IRIS	
Group/Division	GM Engineering and Standards
Observation	No apparent linkage between Network Risk Register and the occurrences being recorded in IRIS.
	<ul> <li>By collating occurrence data against identified risks, one can</li> <li>Update, or confirm, occurrence frequencies and consequence statistics</li> <li>verify that the controls identified are effective (or not as the case may be) and</li> <li>by linking COPQ data versus risk types build stronger and more effective cases for mitigation strategies (or doing nothing, depending on the overall risk context.)</li> </ul>
Action recommended	Establish a simple system to collate occurrence data against each entry in your Risk Register
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 13 Updating of IRIS	
Group/Division	GM Network Performance
Observation	No process and/or system exists to ensure when 'material occurrence data' is updated in IRIS that NZTA is provided with that changed information.
Action recommended	Establish a system to ensure NZTA is supplied with any data which has, or is, material to the occurrence and/or categorisation of that occurrence.
Status	OPEN
Response	
Assessor comment (date)	
Status	

recommendations apply equally to KiwiRail Limited. Closure will therefore require KiwiRail Network to obtain the necessary evidence to confirm both parties have made the necessary changes/corrections.

Reference: 11/06 R 14	
Occurrence Severity Errors in IRIS	
Group/Division	GM Network Performance
Observation	It was noted that a small number of occurrences currently
	recorded in IRIS had their severity category at variance with
	TABLE 2 in NRSS/5.
	Where identified, these should be corrected.
Action recommended	Where identified, the irregularities should be corrected.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 15		
Review and Update of Seve	Review and Update of Severity Codes in NRSS/5	
Group/Division	GM Network Performance	
Observation	As part of the IRIS review it was conceded that TABLE 2 (in NRSS/5) is not as 'clear cut' as those tasked with reviewing the preliminary data entering into IRIS would like.	
Action recommended	It is recommended a paper be prepared and presented to the NRSS Executive to better clarify, and differentiate, the boundaries of the severity codes as currently tabulated in NRSS/5.	
Status	OPEN	
Response		
Assessor comment (date)		
Status		

Reference: 11/06 R 16	
Occurrence Management	
Group/Division	GM Network Performance
Observation	While KRN is meeting all the basic requirements of NRSS/5 it may wish to review the organisational structure KRL has in -
	place for occurrence management and mirror that concept.
	Alternatively, KRN and KRL's executives may wish to consider the advantages, and potential benefits, of consolidation in respect of occurrence management and investigation.
Action recommended	Review the options available and if benefits exist, consider adopting the most beneficial option.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 C 18 Occurrence Reporting	Non-compliance grading: M
Group/Division	GM Operations - Logistics and Production (Rail Weld)
Observation	Discussion during the Rail Weld Assessment indicated a high proportion of returning wagons did not have the 'bond chains' secured in the manner prescribed.
	Further, a review of the Occurrence Database showed no instances where this irregularity had been reported into IRIS.  All events which are defined in NRSS/5 must be reported, and as appropriate, investigated.
Action required	All occurrences must be reported in accordance with NRSS/5.
Condition status	OPEN
Response	<ol> <li>Root cause</li> <li>Corrective action</li> <li>Preventative action</li> <li>Evidence</li> </ol>
Assessor comment (date)	
Condition status	

#### 3.6 Railway Operations

Reference: 11/06 R 17	
Management of Safety Equipment (including PPE)	
Group/Division	GM Operations - Area Manager, and S&T Asset and Performance
Observation	At various sites between Hinds and Invercargill, checks of vehicles and their associated equipment showed that while all major equipment had current 155 stickers, deficiencies were now appearing in how some of the ancillary systems and equipment, including how PPE is managed.
	Deficiencies were noted in respect of:  • Hard Hats (some sighted were dated/issued 2003/2005)  • Detonators (some up to 4 years beyond expiry), and  • the odd piece of electrical equipment.
	Current systems, including support systems like completion of the monthly vehicle inspection sheets, are clearly ineffective or simply not occurring.
Action recommended	A comprehensive review of all associated support systems should be undertaken to simply the systems and mechanisms used. A greater emphasis to self-managed verification systems linked to 'TalkSafe' and the Job Plan books may be appropriate for vehicles and PPE for example.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 18	
lob Plan and TalkSafe Initiatives	
Group/Division	HR & Safety Manager
Observation	These two systems work in tandem - job planning focussed on ensuring site hazards are identified and appropriate controls put in place, and the TalkSafe initiative aimed at raising the awareness of individuals that behaviours can become, and play, a significant role in hazards becoming dangerous.  While the Job Plan system has been in-place for some time,
	TalkSafe is a relatively new initiative.  From the evidence noted during this assessment, the Job Plan
	systems has been well inculcated into work teams, but many working alone do not use the system for a variety of reasons. While it is acknowledged the TalkSafe package is new and just gaining momentum, the behavioural approach has much to offer in reinforcing safe attitudes. As noted in this Report, an increased emphasis on, and toward fellow workers (and visitors) could have circumvented the need for this report to raise condition 11/06 C 7 and recommendation 11/06 R 4. These were not the only instances noted during this assessment but in no case sighted did a KiwiRail Supervisor or Manager use the TalkSafe package to bring-up the points raised in these, and other, examples
Action recommended	Continue the push with the TalkSafe program, but look to reinforce the program with Supervisors and Managers taking a more pro-active position.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 19 HSE Inspections - Rail Wel	d
Group/Division	GM Operations - L&P (Rail Weld)
Observation	The Rail Weld Depot uses the Site Hazard Inspection checklist from the KiwiRail HSE Toolkit. Certain elements on the checklist, which were applicable to the site, had been marked N/A (Not Applicable).
Action recommended	HSE inspections must be carried out diligently and if doubts exist, a check should be made to the nearest Co-ordinator to clarify the requirement.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 20	
HSE Tool Kit	
Group/Division	GM Operations - L&P (Rail Weld)
Observation	As noted in 11/07 R 19 above, the Rail Weld facility uses the Site Hazard Inspection Check sheet from the HSE Tool Kit; however the site does not possess a copy of the above document.
Action recommended	Obtain a copy.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 C 19	Non-compliance grading: L
<b>HSE Inspections - Invercar</b>	gill
Group/Division	GM Operations - Area Manager, and S&T Asset and Performance
Observation	During a review of the combined Structures/Signals facility at Invercargill it was noted that gas cylinders used for welding were not restrained.
	Additionally, one fire extinguisher was positioned right behind the gas cylinders. This made access difficult, as well as positioning the safety equipment right beside a potential hazard.
Action recommended	Ensure HSE inspections review the Hazard Register and
	ensure
	<ul> <li>the controls identified are in-place and effective, and</li> </ul>
	<ul> <li>no other significant hazards exist.</li> </ul>
Status	OPEN
Response	1. Root cause
	2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Status	

Reference: 11/06 C 20	Non-compliance grading: L
Recording of Track Occupa	ncy Details
Group/Division	GM Operations - Area Manager, and S&T Asset and
	Performance
Observation	In preparation for undertaking the C12a Code Checks on the
	north end (Spotswood) points, a signals technician took their
	track occupancy details down from Control and recorded those
	details on their trouser leg.
	Further one Contractor did not complete their MIS 70 form when
	obtaining authority to place their track protection boards.
Action required	Train Control information must always be recorded on the provided forms.
Condition status	OPEN
Response	1. Root cause
	2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition status	

Reference: 11/06 R 21	
Possible enhancement option for recording Track Occupancy Information	
Group/Division	GM Operations - S&T Asset and Performance
Observation	With reference to Condition 11/07 C 21 above, discussions with the person involved, indicated they did so because it had one singular benefit - the information was always in sight and a visual reminder to their operating limits.
Action recommended	KRN may wish to give some consideration to the above points, and reflect on whether some form of "patch" material on overalls, or alternatively, linking the information provided to the recipients mobile (which includes an alarm timer facility) could be used to ensure track occupancy times are not, unintentionally, overlooked or forgotten.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 22 Employee Well-being	
Group/Division	GM Operations - Area Manager, and S&T Asset and Performance
Observation	Many first aid kits have the latex gloves either at or near the bottom of the kit.
Action recommended	KRN may wish to consider ensuring all first aid kits have the latex gloves at either the top, or the front of each kit.  This means when someone grabs the kit, particularly in an emergency, the immediate sighting of the latex gloves will serve as a reminder they should consider their well-being as
	part of response process (as some uncertainty will always exist over whether the patient may have hepatitis or AIDS.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 C 21	Non-compliance grading: L
Subject title : Track Machin	e protection
Group/Division	KRN
Observation	Track Machine group (including ETM 268) was sighted parked up at the Whareroa yard with out appropriate protection as prescribed under rule 909B (rule 914U also refers).  This incident was promptly raised in the IRIS system.
Action required	Track Equipment that is parked up requires to be appropriately protected as required under Rule 909B. (Rule 914u also refers).
Condition status	Open
Response	<ol> <li>Root cause</li> <li>Corrective action</li> <li>Preventative action</li> <li>Evidence</li> </ol>
Assessor comment (date)	
Condition status	

Reference: 11/06 C 22	Non-compliance grading: L
Subject title : Spiking of po	ints - Hatuma Siding
Group/Division	KRN
Observation	During the walkthrough of the Hatuma siding it was noted that a set of points that are not to be operational at the siding had not been 'spiked'.  It is acknowledged a '155' was going to be raised in regard to this matter.
Action required	All non operational points at the Hatuma siding requires to be appropriately locked out of action (i.e. 'spiked').
Condition status	
Response	<ol> <li>Root cause</li> <li>Corrective action</li> <li>Preventative action</li> <li>Evidence</li> </ol>
Assessor comment (date)	
Condition status	

Reference: 11/06 C 23 Freight Handling Code	Non-compliance grading: M
Group/Division	GM Operations - Logistics and Production
Observation	The Freight Handling Code, as its name suggests, sets out KiwiRail's instructions for the safe loading and transportation of freight. Section 23 sets the requirements for Track Materials but only covers the movement of sleepers.
Action required	The Code must be expanded to cover the safe loading, and transportation, of rails.
Condition status	OPEN
Response	<ol> <li>Root cause</li> <li>Corrective action</li> <li>Preventative action</li> <li>Evidence</li> </ol>
Assessor comment (date)	
Condition status	

#### 3.7 Interface with Other Operators

Reference: 11/06 R 23		
Management of KRN Equip	Management of KRN Equipment venturing off KRN trackage	
Group/Division	GM Engineering Standards - Track Engineering, and/or	
	GM Operations - Regional/Area Management	
Observation	Recently the EM 80 Inspection Car travelled up the Taieri Gorge	
	Railway. No evidence could be provided to confirm the line was	
	actually safe for the 'car' to run over the line.	
	Indeed, the Taieri Gorge Railway had not conducted a number of	
	its own checks and inspections its Safety System required as	
	essentials precautions it must undertake before allowing the car	
	to proceed.	
Action recommended	Establish an appropriate regime for ensuring that KRN is	
	provided with assurance that track that its equipment (which	
	is authorised to travel off KRN inspected trackage) is to	
	travel on is in a satisfactory state/condition to allow the	
	journey to take place safely.	
Status	OPEN	
Response		
Assessor comment (date)		
Status		

#### 3.8 Document Control and Systems Review

Reference: 11/06 C 24	Non-compliance grading: M
Rail Operating Rules and P	rocedure Books
Group/Division	GM Operations - Area Management
Observation	A random check of a number of Hi-rail vehicles at various
	locations showed they did not hold a current copy of the Rail
	Operating Rules and Procedures (RORP). It was stated that a local
	decision had been made that RORPs would be kept in Depots.
	Even using this reasoning, no RORP was available for
	infrastructure staff at the Kaikoura Depot.
	A similar situation was also noted at Oamaru, where originally updates were provided from Wellington via Dunedin, but subsequent (downstream) checks showed this process had been a one-off to setup the new documentation.
	Clause 6.0 of Section 10.3 of the RORP requires all mobile track maintenance vehicles and High Rail Vehicles to have a copy of the RORP.
Action required	Ensure
	<ul> <li>all Hi-Rail vehicles comply with the RORP</li> <li>where appropriate and thought necessary, a back-up copy is held at infrastructure depots, and</li> <li>this item is detailed on the Monthly Vehicle Check Sheet.</li> </ul>
Condition status	OPEN
Response	1. Root cause
	2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition status	

Documentation Reviews and Updates - Structures	on 16 on the nemo for a lause ewed t-forwere ect or
Observation  This condition derives from old Condition 07/04 C 17 veriated to a requirement to update Network Code and Supplement documentation.  The original condition noted that a memo was released of March 2006 which specified a change to symbols used in Code [W-003] dated 10 September 1997". The memory purportedly overrode CSW 0301.  Further, CSW 0302 (Clause 6) referenced responsibilities TSL Contract Manager which no longer existed. W 200 (C 6.2) also referenced Rule 228 which is now obsolete.  All the Structures Codes and Code Supplements were revised by the Structures Technical Committee and signed off as "fingurpose" by the Structures Manager on 8 June 2011. Six notated for further review as part of either the SIRIUS Projection CIMW implementation. One, SIN W 011, was noted as "I with Susan Ali for distribution".  A review of the downstream documentation shows:  Seventeen (17) code Supplements have been updated.	on 16 on the nemo for a lause ewed t-forwere ect or
March 2006 which specified a change to symbols used in Code [W-003] dated 10 September 1997". The mpurportedly overrode CSW 0301. Further, CSW 0302 (Clause 6) referenced responsibilities TSL Contract Manager which no longer existed. W 200 (C 6.2) also referenced Rule 228 which is now obsolete.  All the Structures Codes and Code Supplements were reviby the Structures Technical Committee and signed off as "fipurpose" by the Structures Manager on 8 June 2011. Six notated for further review as part of either the SIRIUS Projection CIMW implementation. One, SIN W 011, was noted as "lewith Susan Ali for distribution".  A review of the downstream documentation shows:  • Seventeen (17) code Supplements have been upda	n the nemo for a lause ewed t-for- were ect or
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Seventeen (17) code Supplements have been upda	
W 301 (one of the originally notated documents had been updated, but     W 302 has been updated, and     SIN W 011 has been issued	
Comments were noted, during this years Assessment, that inspection frequency for bridges has been amended, after consideration and external reports, from an eight (8) year to a six (6) yearly cycle. The Structures Code and Supplements have not been updated to reflect this change.	due cycle Code
Action required  Review the Codes/Code Supplements referenced al including Code Supplement W 301, and update/re-issumecessary.	
Note that as part of increased inspection frequency this may result in some bridges and/or structures becoming code compliant upon promulgation of the changed frequency. The process of change management must therefore addres effects of any transitional change such that no structu deemed non-compliant during the change period simply becof the re-issued instructions.	non- s the re is
Condition status OPEN	
Response 1. Root cause	
2. Corrective action	
3. Preventative action	
4. Evidence	
Assessor comment (date)	
Condition status	

Reference: 11/06 C 26	Non-compliance grading: H
Documentation Reviews ar	
Group/Division	GM Engineering and Standards - Track Engineering
Observation	This condition derives from old Condition 07/04 C 17 which related to a requirement to update Network Code and Code Supplement documentation.
	The response to the original condition noted that the Engineering and Operations Group have an objective to undertake a complete review of all codes and code supplements, including T 200, by the end of 2009.
	The 2008 response noted work was in-hand and the expectation was that the 2009 deadline would be met.
	In February 2010, it was acknowledged the Condition should remain open until the project was completed.
	At the March 2010 Assessment, a target date for the release of T 200 was quoted as Christmas, but no such deadline was put forward for T003.
Action required	At this (2011) Assessment the target for T 200 was quoted as 1 July, but more recent documentation now suggests a release date of 1 September. It was acknowledged the Track Code (T-003) and Code Supplements would follow T 200.  Issue T 200 (Track Handbook), and complete the review of the Code (T 003) and all Code Supplements Code
	Supplements and re-issue as necessary.
	As noted in the closure of Condition 07/04 C 17, Network senior management conceded future revisions need to consider the practicality and workability of the standards and requirements defined.
	Given progress and the time taken to date, this condition is reraised with a HIGH priority.
	Note: A subsidiary condition, 11/06 C 27 (see below) has been raised separately, to ensure documentation related to the inspection, administration and management of private sidings is also accorded urgency.
Condition status	OPEN
Response	1. Root cause
	2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition status	
Codicion status	1

Reference: 11/06 C 27	Non-compliance grading: H
Review and updating of all	documentation relating to the maintenance and inspection of
Private Sidings	
Group/Division	GM Engineering and Standards
Observation	As noted earlier in this Report significant issues exist around the management of Private Sidings. This includes, amongst other things:
	• old, or outdated Agreements (refer 10/03 C3)
	<ul> <li>a lack of performance measures (11/06 C 2), and</li> <li>Inspection Reports for Private Sidings (06/04 C 16).</li> </ul>
Action required	Develop a seamless set of instructions to ensure all elements of the process relating to the inspection, administration and management of the private sidings exists.  Urgency should be accorded to this project given the extended nature of the issue and the potential risks identified, and noted, in Condition 06/04 C 16.  Note: This should include a revamp of the M122 Form.
Condition status	OPEN
Response	1. Root cause 2. Corrective action 3. Preventative action 4. Evidence
Assessor comment (date)	
Condition status	

Reference: 11/06 C 28 Updated documentation	Non-compliance grading: L
Group/Division	GM Engineering and Standards
Observation	A number of revised and/or updated documents have been produced as part of the Code and Code Supplement reviews.
	It was noted some of these newly produced documents do not comply fully with <u>all</u> the requirements established in NRSS/8.
Action required	Newly created documentation, including new electronic documentation, must comply fully with the requirements set out in NRSS/8.
Condition status	OPEN
Response	1. Root cause 2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition status	

Reference: 11/06 R 24	
Contractor Medical Verifier Statement	
Group/Division	HR and Safety Manager - Training
Observation	The Training team have introduced a "Verifier Statement" form to confirm those about to undertake track access training (or retraining) meet KiwiRail Requirements
Action recommended	Incorporate the Form into KRN's Safety System
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 25	
References to relevant Acts etc	
Group/Division	GM Operations - L&P (Mechanisation)
Observation	A short review of the NZQA (Competenz) training material
	showed that the documents referenced:
	<ul> <li>Transport Licensing Amendment Act, and</li> </ul>
	Rail Service Licences.
Action recommended	KRN should ensure that training documentation references current Acts and other relevant elements. The TSLA should be replaced by the Railways Act 2005 and 'rail service licence' simply by "rail licence".
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 26	
Machine Condition Checklist	
Group/Division	GM Operations - L&P (Mechanisation)
Observation	Most checklists utilised by mechanisation staff are contained, or
	referenced in OM 94001 (which is accessed from the KRN
	internal website). The Machine Condition Checklist shows no
	document control (and resides on the R:\ drive).
Action recommended	The Mechanisation team may wish to consider including their Machine Condition Checklist into OM 94001.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 27 Review and updating of Flash Butt Welding documentation	
Group/Division	GM Operations - L&P (Rail Weld)
Observation	Progress continues to be made toward the installation and operation of the new weld unit at the Otahuhu site.
Action recommended	As part of commissioning process for the new flash butt welder, the Rail Weld team should review all the current Code Supplements and Task Instructions and update as, or if, necessary.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 R 28	
Updating of NRSS Documentation	
Group/Division	GM Network Performance
Observation	The process of consultation whereby NRSS documentation is reviewed and updated tends to be exceedingly longwinded.
Action recommended	KRN may wish to review the effectiveness of the processes for updating NRSS documentation to ensure faster, and more efficient, reviews/updates.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 C 29	Non-compliance grading: L
Maintenance of Records required by NRSS Standard	
Group/Division	GM Network Performance - Rail Operating Standards and Projects
Observation	A review of the processes undertaken as part of the application for the Safety Case variation for bi-directional running in the Auckland urban area indicated the final change management step was that the new operating rules would be "approved" by the NRS Joint Technical Committee (JTC-RORP).  Although an agenda for such a meeting was sighted, no evidence by way of minutes was provided to show the technical committee agreed, and approved, the changes.
Action required	Ensure records are maintained as required by Section 8.4.2 (of NRSS/2 - Safety Management).
Condition status	OPEN
Response	<ol> <li>Root cause</li> <li>Corrective action</li> <li>Preventative action</li> <li>Evidence</li> </ol>
Assessor comment (date)	
Condition status	

Reference: 11/06 R 29	
Disparate STE Reporting Systems	
Group/Division	GM Engineering & Standards - ST&E
Observation	A number of systems were observed for managing various parts of key systems within STE.
	Code compliance was managed via SAP, Relay records via a stand-alone Access database, and Engineering Inspection Actions and Recommendations by reference to individual reports.
	As noted in Condition 11/07 C13 above, the relay replacement records show some relays have, by reference to the records database, been left in service some 6 years beyond their specified replacement date.
Action recommended	If not part of the current package to revamp asset maintenance records, strong consideration should be given to integrating all records related to both code compliance and asset maintenance to ensure a full and complete picture is available at all times.
Status	OPEN
Response	
Assessor comment (date)	
Status	

#### 3.9 Risk Management

Reference: 11/06 R 30	
Management of Risk and F Group/Division	HR & Safety Manager, and
Group/Division	GM Engineering and Standards
Observation	During discussions with the HR and HS Manager, and similarly on the risk side of the business, it was ascertained little direct correlation is undertaken to measure, and understand, the effectiveness of controls.
Action recommended	It is strongly recommended KRN give consideration to recording occurrence numbers against all identified hazards (and risks) on both the HSE Register and Risk Register to gain a solid insight of the range, type, pattern and frequency of actual events in KRN.
	The data can also be used to verify the adequacy of current controls, and to evaluate how successful changes have been.
	Furthermore, over extended timeframes, the data can be interrogated to determine actual probabilities and frequencies thereby adding value to the hazard/risk management process.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 C 30	Non-compliance grading: M
Documentation of System	n Risks
Group/Division	GM Engineering and Standards
Observation	Review of the KRN Risk Register showed that no system risks, i.e. the monitoring of change (refer C 10/11 C7), the ineffective monitoring of high risks, the deferral of audits (11/07 C28) etc were included in the Risk Register.
Action required	Document all the system risks that apply to KRN's activities and operations.
Status	OPEN
Response	<ol> <li>Root cause</li> <li>Corrective action</li> <li>Preventative action</li> <li>Evidence</li> </ol>
According to manage (data)	
Assessor comment (date)	
Status	

Reference: 11/06 R 31	
Management of Risks (and Lessons Learned) from Canterbury Earthquakes	
Group/Division	GM Operations - Southern Regional Management
Observation	Some excellent work has been done in the Southern Region to "tease out" the "lessons that have been learned" from the devastating earthquakes which have impacted Christchurch and Canterbury since 4 September 2011.
	While the reports prepared contains a number of recommendations none of these lessons learned have been incorporated back into Network Risk Register.
Action recommended	Where and as appropriate, incorporate the findings back into the Network Risk Register so the risks identified are carried forward as 'institutional knowledge'.
Status	OPEN
Response	
Assessor comment (date)	
Status	

Reference: 11/06 C 31 Managing Change	Non-compliance grading: M
Group/Division	GM Engineering and Standards
Observation	NRSS/4 (Section 4) establishes very guidelines, and process, for change management. Limited evidence was provided to indicate NRSS/4 is <u>always</u> followed. Further, NRSS/4 establishes a two stage process for risk screening <u>and</u> risk assessment when the residual risks are "medium" or "high". Again limited evidence was found to confirm this two stage process is always adhered to.
Action required	Ensure mandated processes are always followed and records maintained.
Condition status	OPEN
Response	<ol> <li>Root cause</li> <li>Corrective action</li> <li>Preventative action</li> <li>Evidence</li> </ol>
Assessor comment (date)	
Condition status	

Reference: 11/06 C 32 Risk Management Policy	Non-compliance grading: L
Group/Division	GM Engineering and Standards
Observation	A new risk management policy became effective from 1 June 2011. It introduced a new risk matrix which is different to the model defined in NRSS/4 however the KRN Register still follows the old format.
	While KiwiRail can choose to have a system at variance to the example in NRSS/4 provided the intent is met, it cannot be at variance with its own risk management policy.
Action required	Ensure mandated processes are followed and systems (and records) updated as required.
Condition status	OPEN
Response	1. Root cause
	2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition status	

Reference: 11/06 R 32 Management of Change	
Group/Division	GM Engineering and Standards
Observation	Referring to 11/06 C 30 above, the KiwiRail Corporate Office introduced a new Risk Management Policy.
Action recommended	When introducing new or updated processes and/or policy, consider establishing a transitional arrangement so that the new systems etc can be implemented in a logical and rationale way so that old codes and/or policies are not broken during the change process.
Status	OPEN
Response	
Assessor comment (date)	
Status	

#### 3.10 Internal Audit

Reference: 11/06 C 33	Non-compliance grading: M
No Internal Audits Underta	ken
Group/Division	GM Network Performance - Rail Operating Standards and
	Projects
Observation	The only KRN Internal Auditor was transferred to a new role in 2010, and no evidence was able to be produced to show internal audits had occurred in any part of the Network Group between mid 2010 and June 2011.
	A consultant was contracted to review the company's internal audit requirements and provide recommendations for moving forward. As a result a new Audit/Investigation Manager has been appointed.
	Further, of the eighteen (18) audits planned for 2010, only three (3) were actually completed (though the schedule showed four had been completed.)
Action required	Establish an appropriate plan, taking cognisance of missed audits, and develop and implement an appropriate audit schedule.
Condition status	OPEN
Response	1. Root cause
	2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Condition status	

# Observations relating to other licensees and/or interested parties

The observations in this section of the report relate to other licensees and/or interested parties. It is the responsibility of the NZTA to determine the action to be taken (i.e. should the observation be passed on the other operator/interested party and what follow up action is to be taken.

#### To NZTA:

Reference: 11/06 O1	
NRSS/5	
Group/Division	NZTA
Observation	During discussions on, and around, occurrence management KRL's representative suggested that certain occurrences currently recorded as rail related should be reviewed to be more reflective of the actual disposition of the event.
Action recommended	NZTA may wish to encourage and support changes to:  • Table 2 (of NRSS/5), and  • give consideration to supporting a view held by the KRL HSQE Manager that fatalities and serious injuries resulting from public level crossing accidents should be classified as "road related statistics".  Note:  Accidents and incidents occurring at illegal crossings should however remain as rail related events.  Further, if factual evidence supports the situation, suicides should also be recorded officially as other than rail related events.
Status	
Response	
Assessor comment (date)	
Status	

Reference: 11/06 O2	
Pavement Marking at LX 266.6km MNL	
Group/Division	NZTA
Observation	It was noted the road marking on the level crossing at approx. 266.6km MNL does not comply with Element 09 of NZTA's TCD Manual, ie. the pavement markings are not in alignment with the RG 32 (Stop) signage on the western side of the crossing.
Action recommended	Council should be advised to correct the pavement markings.
Status	
Response	
Assessor comment (date)	
Status	

#### To KiwiRail Freight:

Note the Condition below has been transferred to the KiwiRail Report and referenced as 11/06 C 17.

Reference: 11/06 03 Yard Safety	
Group/Division	Freight Operations - Blenheim
Observation	While traversing through Lake Grassmere a number of transition heads were noted lying, randomly, about the Yard.
	One was noted between the main and loop, one between the 2 <sup>nd</sup> and 3 <sup>rd</sup> roads and several adjacent to the outer siding.
	Some had been placed neatly, and out-of-the-way, near poles or other structures.
Action required	Ensure that trip hazards are not left in positions where shunters or locomotive drivers could be placed at risk.
Status	
Response	1. Root cause
	2. Corrective action
	3. Preventative action
	4. Evidence
Assessor comment (date)	
Status	

#### Operator response

The findings in this report have been discussed, at the exit meeting, with KiwiRail Network representatives.

I consulted on my draft report with KiwiRail Network and representatives of the rail personnel, and have incorporated necessary changes into the report.

A response to the findings is expected from KiwiRail Network as shown on the cover of this Report.

The operator is to enter their response into the applicable sections in the Condition and Safety Recommendation boxes in this report, and provide documented evidence to the assessor (and the NZTA if appropriate) to support those responses. This must be done in compliance with the following section 6 information regarding addressing the report findings.

It is the responsibility of the licence holder to distribute this report to interested parties within its organisation.

#### Guide to this report

#### Assessment findings

The assessment findings detailed in this report can fall into one of three broad categories: Conditions, Recommendations and Observations.

#### Conditions

Conditions are findings of non-compliance which may arise in one of two ways. Firstly, the safety system procedures may meet the requirements of the Act but are not being implemented and complied with in practice. Secondly, the organisation's procedures may not conform to the Act's requirements – even though those documented procedures may be being followed.

Conditions, indicated by a [C] code, are given either a High, Medium or Low rating and are included in the Safety System Rating calculation (refer section 1.7).

The rating of Conditions is based upon the following definitions:

- HIGH: a significant risk of death or serious injury and/or damage to property or equipment currently exists.
- MEDIUM: an identified safety critical risk that if not addressed could result in serious injury, death and/or significant damage to property or equipment.
- LOW: an identified safety risk that is unlikely to result in death, serious injury or significant damage to property or equipment.

However if a condition is not addressed in a timely manner, or re-occurs at a subsequent assessment, the assessor may see fit to raise the rating at the next assessment drawing attention to the need for continual compliance with the Act and the licence holder's safety case.

#### Recommendations

Recommendations are actions that the organisation is strongly urged to implement in the interests of good safety management practice but are not considered non-compliances and are not included in the safety rating calculation. Recommendations are indicated by an [R] code.

#### **Observations**

Observations are either Conditions or Recommendations that are applicable to another rail participant but need to be identified for follow up. It is not necessarily expected that the organisation being assessed address these observations, as they will be reviewed, managed and passed on by the NZTA to the parties concerned. Observations are indicated by an [O] code.

#### Report referencing format

All Conditions, Recommendations and Observation are given a prefix unique to the assessment period by year and month (e.g. August 2010 = 10/08). These items are sequentially numbered in the form "10/08 C4" (Condition No. 4 identified in the assessment of August 2010). This identification system must be used when referring to Conditions, Recommendations and Observations in all correspondence relating to this report.

#### Addressing report findings

Conditions (non-compliances) must be responded to by the rail licence holder with either evidence of completed corrective action taken, or with an acceptable corrective action plan, to modify behaviour to match the complying process, or to improve the system to meet the requirements of the Act. Recommendations must be responded to as either accepted or rejected with reasons given. If accepted, the proposed plan of action needs to be included in the response.

It is essential conditions are managed and addressed to prevent recurrence. Therefore a four phase process must be implemented as follows:

- 1. Identify the root cause
  - Identify what went wrong that resulted in the condition being raised.
- 2. Establish a corrective action
  - What has been done to correct the non-compliance
- 3. Establish a preventative action
  - What system/procedure has been put in place to prevent recurrence of this noncompliance
- 4. Provide evidence
  - Provide evidence to the assessor that the condition has been adequately addressed.
  - Assessors will follow up with organisations to ensure that this is done correctly.

It is important to realise that a root cause is not 'X' was away/unavailable. The root cause is an underlying system issue that needs to be addressed in order to cope or manage such absences for example.

Each stage of the process must be evident in the documented response. If these stages of condition closure are not addressed effectively, neither the assessor nor the NZTA will accept the condition for closure.

#### **Report Ends**