Oliver Stewart RAIB Recommendation Handling Manager



10 April 2025

Mr Andy Lewis
Deputy Chief Inspector of Rail Accidents

Dear Andy,

RAIB Report: Freight train derailment at East Somerset Junction on 20 March 2017

I write to provide an update¹ on the action taken in respect of recommendation 1 addressed to ORR in the above report, published on 13 December 2017.

The annex to this letter provides details of actions taken in response to the recommendation and the status decided by ORR. The status of recommendation 1 is 'Closed'.

We do not propose to take any further action in respect of the recommendation, unless we become aware that any of the information provided has become inaccurate, in which case I will write to you again.

We	will	publish	this	response	on the	ORR	website

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Oliver Stewart

In accordance with Regulation 12(2)(b) of the Railways (Accident Investigation and Reporting) Regulations 2005

Recommendation 1

The purpose of this recommendation is to reduce the risk from sub-optimal track configurations resulting from plain-lining of S&C.

Network Rail should enhance its procedures covering the emergency and/or temporary replacement of switches and crossings with plain line. Appropriate measures should be included to manage the risk where the newly-installed plain line is curved. Consideration should be given to limiting the duration of such installations without an independent inspection, permanent design and/or track renewal taking place.

ORR decision

- 1. Network Rail has updated standards NR/L2/TRK/001 Module 05 and NR/L2/TRK/2500 Appendix B to provide clarity on method of checking and approval in such occurrences where this has been undertaken. This enhances the existing procedures covering the emergency and/or temporary replacement of S&C with plain line. The revised standards do not distinguish between curved or straight S&C/plain line layouts, instead providing methods for replacement of all components, irrespective of curvature.
- 2. NR/L2/TRK/001 Module 05 has been updated to reflect an amber clause timescale of 6 months where full S&C reinstatement, or a permanent plain lining should be undertaken. (Independent reinspection has not been included, but this is a less restrictive activity than that that has been adopted by Network Rail).
- 3. In addition to the revision of standards, new designs of plain-lining baseplates have been developed for a solution on concrete bearer S&C, thus allowing direct replacement of S&C with plain rail using the same baseplate mounting holes/positions. This removes requirements of interlacing timbers.
- 4. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail has:
 - taken the recommendation into consideration; and
 - has taken action to close it.

Status: Closed.

Previously reported to RAIB

5. On 12 December 2018 ORR reported the following:

We support the methodology outlined by Network Rail. Network Rail's initial response did not define the risk the standard is aiming to control and analysis of gaps in the current standards. We also asked Network Rail to confirm that any

noncompliance and associated exposure to residual risk identified by the proposed process will be managed to be ALARP through their noncompliance processes. These three issues have been addressed in the updated response.

ORR issued an Improvement Notice to Network Rail on 25 May 2017 as there wasn't a process in place to cover a change in layout or asset configuration initiated by track maintenance teams, including the plain lining of points.

The notice was complied with on 17 October 2017 by Network Rail taking the following action:

- 1) Western addendum to NR/L2/TRK/2500 covering changes in asset configuration or layout carried out by maintenance teams.
- 2a) Other sites in the Western Route that may have been subject to similar changes were identified.
- 2b) Mitigation identified and implemented for the sites identified in 2b.

We will consider this RAIB recommendation to be implemented when the revised standard has been published and briefed out (December 2019).

Update

6. On 11 June 2023 Network Rail provided the following closure statement:



Previously reported to RAIB

Recommendation 1

The purpose of this recommendation is to reduce the risk from sub-optimal track configurations resulting from plain-lining of S&C.

Network Rail should enhance its procedures covering the emergency and/or temporary replacement of switches and crossings with plain line. Appropriate measures should be included to manage the risk where the newly-installed plain line is curved. Consideration should be given to limiting the duration of such installations without an independent inspection, permanent design and/or track renewal taking place.

ORR decision

- 1. We support the methodology outlined by Network Rail. Network Rail's initial response did not define the risk the standard is aiming to control and analysis of gaps in the current standards. We also asked Network Rail to confirm that any noncompliance and associated exposure to residual risk identified by the proposed process will be managed to be ALARP through their noncompliance processes. These three issues have been addressed in the updated response.
- 2. ORR issued an Improvement Notice to Network Rail on 25 May 2017 as there wasn't a process in place to cover a change in layout or asset configuration initiated by track maintenance teams, including the plain lining of points.
- 3. The notice was complied with on 17 October 2017 by Network Rail taking the following action:
 - 2) Western addendum to NR/L2/TRK/2500 covering changes in asset configuration or layout carried out by maintenance teams.
 - 2a) Other sites in the Western Route that may have been subject to similar changes were identified.
 - 2b) Mitigation identified and implemented for the sites identified in 2b.
- 4. We will consider this RAIB recommendation to be implemented when the revised standard has been published and briefed out (December 2019).
- 5. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail has:
 - taken the recommendation into consideration; and
 - is taking action to implement it by December 2019.

Status: Implementation ongoing. ORR will advise RAIB when actions to address this recommendation have been completed.

Information in support of ORR decision

6. On 26 October 2018 Network Rail provided the following initial response:

The proposed analysis and outputs as listed below in the action plan items are predicated on the assumption that the proposed revised Standards and procedures will reduce the inherent risk to an acceptable level; however, any non-compliance to the proposed process will leave some exposure to residual risk. The technical elements of the analysis will examine through sensitivity testing that the emergent changes to Standards address the identified risk scenarios adequately. The action plan core activities shown below will be included into a detailed project plan with individual tasks ensuring that the emerging solutions are reviewed and validated. The actions will be monitored by the Professional Head of Track via the direct line management reporting chain. The effectiveness of the revised Standard will be subjected to a post implementation review. It is proposed that two reviews would be applied at the 6 and 12-month periods. Any resulting changes required shall be implemented through the normal Standards Change processes.

Action Plan

- 1. Investigate existence of NR processes / Standards for conducting urgent and /or temporary track interventions associated with "plain lining" of any element of an S&C unit. (end Oct 18)
- 2. Produce Standards Change remit specification for design integrity check of activity defined in item 1 above divided into the application of the Standards Change on:-
- a) straight track,
- b) curved track (by Jan 19)
- 3. Contact Standards owners and confirm through stakeholder review agreement of standards change remit specification. (end March 19)
- 4. Produce draft revised Standards documents in accordance with remit (July 19)

Publish and brief out revised Standards in accordance with NR procedures. Target formal issue date is to be the quarterly Standards Briefing session scheduled for the end of 2019 (by Dec 19)

- 5. A post implementation review shall be completed at the 6 months and 12-month period. This based on the current planning is scheduled for June and December 2020. The review will be conducted by previous members of the original drafting panel and independent subject matter experts drawn from within NetworkRail's STE department. The review will be formal and comprising the following scope: -
- a) Collation of National event activity within the scope of item 1.
- b) Audit of compliance against processes defined in previously revised Standards.
- c) Based on findings make recommendations for additional amendments to Standards.

Timescale: Feb 2021

7. In response to our feedback, Network Rail provided an updated action plan on 27 November 2018:

The proposed analysis is predicated on the assumption that the proposed revised Standards and procedures will reduce the inherent risk to an acceptable level; however, any non-compliance to the proposed process will leave some exposure to residual risk. The action plan core activities shown below will be included into a detailed project plan with individual tasks ensuring that the emerging solutions are reviewed and validated. The actions will be monitored by the Professional Head of Track via the direct line management reporting chain. The effectiveness of the revised Standard will be subjected to a post implementation review. It is proposed that two reviews would be applied at the 6 and 12 month periods. Any resulting changes required shall be implemented through the normal Standards Change processes.

Action Plan

- Conduct analysis to identify/ define the risks associated with addressing the plain lining of S&C systems. (end Dec18)
- Investigate existence of NR processes / Standards for conducting urgent and /or temporary track interventions associated with "plain lining" of any element of an S&C unit. With the explicit aim of identifying any gaps in Standards (Jan 18)
- 3. Produce Standards Change remit specification for design integrity check of activity defined in item 1 above divided into the application of the Standards Change on :
 - a) straight track,
 - b) curved track

(by Feb 19)

- 4. Contact Standards owners and confirm through stakeholder review agreement of standards change remit specification. (end March 19)
- 5. Produce draft revised Standards documents in accordance with remit (July 19)
- Publish and brief out revised Standards in accordance with NR procedures. Target formal issue date is to be the quarterly Standards Briefing session scheduled for the end of 2019 (by Dec 19)
- 7. A post implementation review shall be completed at the 6 month and 12 month period. This based on the current planning is scheduled for June and December 2020. The review will be conducted by previous members of the original drafting panel and independent subject matter experts drawn from within Network Rail's STE department. The review will be formal and comprising the following scope:
 - a) Collation of National event activity within the scope of item 6.
 - b) Audit of compliance against processes defined in previously revised Standards. Any noncompliance and associated exposure to residual

- risk following implementation of the Standard will be managed to "ALARP" through NR noncompliance processes.
- c) Based on findings make recommendations for additional amendments to Standards.