

## Recommendation Status Report: Collision between passenger trains at Salisbury Tunnel Junction

This report is based on information provided to the RAIB by the relevant safety authority or public body.

The status of the recommendation(s), as reported to us, are described by the following categories:

### Key to Recommendation Status

<b>Open</b> (replaces Progressing and Implementation On-going)	Actions to address the recommendation are ongoing.
<b>Closed</b> (replaces Implemented, Implemented by alternative means, and Non-implementation)	ORR consider the recommendation to have been taken into consideration by an end implementer and evidence provided to show action taken or justification for no action taken.
<b>Insufficient response:</b>	The end implementer has not provided sufficient evidence that the recommendation has been taken into consideration, or if it has, the action proposed does not address the recommendation, or there is insufficient evidence to support no action being taken.
<b>Superseded:</b>	The recommendation has been superseded either by a newer recommendation or actions have subsequently been taken by the end implementer that have superseded the recommendation.
<b>Awaiting response:</b>	Awaiting initial report from the relevant safety authority or public body on the status of the recommendation.

RAIB concern over the way that an organisation has responded to a recommendation are indicated by one of the following:

**Red** – RAIB has concerns that no actions have been taken in response to a recommendation.

**Blue** – RAIB has concerns that the actions taken, or proposed, are inappropriate or insufficient to address the risk identified during the investigation.

**White** – RAIB notes substantive actions have been reported, but the RAIB still has concerns.

# Recommendation Status Report



<b>Report Title</b>	Collision between passenger trains at Salisbury Tunnel Junction
<b>Report Number</b>	12/2023
<b>Date of Incident</b>	31/10/2021

Rec No.	Status	RAIB Concern	Recommendation	RAIB Summary of current status
12/2023/01	Awaiting Response	None	<p>The intent of this recommendation is for Network Rail to have autumn working arrangements that more effectively manage the low adhesion risk, as a result of leaf fall</p> <p>Network Rail should consider the findings from this report to inform a review of the processes, standards and guidance documents and supporting management arrangements relating to the management of leaf fall low adhesion risk. The review should result, where appropriate, in the creation or revision of documents suitable to support Network Rail staff in having an appropriate understanding of the risks when creating autumn working arrangements. It should also identify the necessary resource and competence required for their effective implementation. The review should examine both the roles of operations and maintenance (track and off track) and specifically include consideration of:</p> <ul style="list-style-type: none"> <li>a. leaf fall risk assessments, including consistency in their implementation</li> <li>b. capture, sharing and tracking of data and planned mitigations, especially those related to vegetation management</li> <li>c. definition of responsibilities and necessary competences, including knowledge of the factors affecting leaf fall risk and low adhesion from contamination build-up and the effectiveness of mitigation measures</li> <li>d. required resource to effectively undertake the main roles</li> <li>e. alignment of the requirements and processes across all related departments to promote a co-ordinated approach and a common understanding of the risks and mitigations.</li> </ul> <p>Network Rail should ensure that any revised processes, standards</p>	

# Recommendation Status Report



			and guidance are produced to a timebound plan, and supported by appropriate training and briefing and that this includes any contracting staff involved in the process (paragraphs 322a (i) and (ii), and 323a (ii) to (vi)).	
12/2023/02	Awaiting Response	None	<p>The intent of this recommendation is for Network Rail to have seasons delivery specialists that are more effective in managing Network Rail's seasonal risk.</p> <p>Network Rail, building on the work that has already started in this area, should develop an appropriate competency framework for the role of the seasons delivery specialist. This framework should include:</p> <ul style="list-style-type: none"> <li>a. a job description that accurately reflects the responsibilities of the role</li> <li>b. the necessary technical skills required to undertake the role effectively</li> <li>c. the necessary non-technical and management skills needed to undertake the communication and co-ordination required of this role</li> <li>d. appropriate training material</li> <li>e. arrangements to confirm that staff have achieved, and continue to have, the required level of competence.</li> </ul> <p>Network Rail is to arrange for provision of the necessary staff to fulfil the roles and develop a time-bound programme for implementation of the associated training, supported by suitably qualified assessment staff (paragraphs 322a (i) and (ii) and 323a (i), (ii), (v) and (vii)).</p>	
12/2023/03	Awaiting Response	None	<p>The intent of this recommendation is that Network Rail off track staff are sufficiently competent and confident to undertake the tasks assigned to them by Network Rail standards.</p> <p>Network Rail should produce a time-bound programme to train and assess the competence of off track maintenance staff in the requirements of standard NR/L2/CIV/1000/01 Module 01, 'Competence</p>	

# Recommendation Status Report



			Management for Drainage and Lineside' (paragraphs 322a (i) and 323a (i), (ii) and (vii))	
12/2023/04	Awaiting Response	None	<p>The intent of this recommendation is for Network Rail to be able to make more effective decisions regarding the management of emerging and potential low wheel/rail adhesion conditions.</p> <p>Network Rail, working in co-operation with train operators, Rail Safety and Standards Board and other relevant stakeholders, should undertake research into real-time data that could be used to give an indication of the wheel/rail adhesion conditions on its network and how this could be used to support operational decisions to implement mitigation measures. This review should include consideration of the following:</p> <ul style="list-style-type: none"> <li>a. monitoring data, including that drawn from on-train data recorders, wheel slide protection activity, and records of wrong side track circuit failures</li> <li>b. reports of low adhesion from train drivers and staff</li> <li>c. weather and low adhesion forecasts.</li> </ul> <p>This review should take account of good practice in other parts of the rail sector both in the UK and abroad (paragraphs 322a (ii) and 323a (vi))</p>	
12/2023/05	Awaiting Response	None	<p>The intent of this recommendation is for Network Rail to improve wheel/rail adhesion conditions through the application of improved understanding of the effectiveness of railhead treatment regimes.</p> <p>Network Rail should undertake research to better understand:</p> <ul style="list-style-type: none"> <li>a. the factors that affect the rate of build-up of leaf fall contamination, for instance, the environment, meteorological conditions, topography, tree species and railway operations</li> <li>b. the relationship between different types of contamination and low railhead adhesion</li> <li>c. the effectiveness and longevity of currently available alternative railhead treatment regimes.</li> </ul> <p>The findings from this research are to be used to support the seasons delivery specialist in decision-making relating to the necessary frequency</p>	

# Recommendation Status Report



			of railhead treatment and understanding the impact of missed or delayed treatment (paragraphs 322a (ii) and 323a (vi))	
12/2023/06	Awaiting Response	None	<p>The intent of this recommendation is to enable the effective assessment by Network Rail of the risk of overrun at signals which have HRLA sites on their approach.</p> <p>Network Rail should review its signalling standard NR/L2/SIG/14201/Mod04, 'Signalling Risk Assessment Handbook' to ensure that signal overrun risk assessments appropriately consider the impact of any high risk of low adhesion sites on approach to the signal. Network Rail should also consider if the reassessment of signal overrun risk is required when a new high risk of low adhesion site is identified on approach to any signal capable of displaying a red aspect. Any revised standard or process should be suitably briefed to all relevant parties and consideration should be given to whether a revised overrun risk assessment against the new standard should be required where existing signals capable of displaying a red aspect have a high risk of low adhesion site on their approach (paragraph 324a).</p>	
12/2023/07	Awaiting Response	None	<p>The intent of this recommendation is to reduce the risk of overrunning signals at danger where there is a line speed change on the approach after the preliminary caution signal</p> <p>Network Rail should review the decision not to retrospectively apply technical instruction TI022 'Provision of TPWS at signals' issue 4 to existing signals. Should retrospective application of TI022 be found appropriate, Network Rail should implement the required changes to existing Train Protection and Warning System equipment (paragraph 324b).</p>	
12/2023/08	Awaiting Response	None	The intent of this recommendation is that South Western Railway drivers are able to identify areas of low adhesion and report them, if appropriate	

# Recommendation Status Report



			<p>South Western Railway should review its arrangements for training and briefing drivers to ensure that they are able to effectively identify areas of low adhesion and that they report them if appropriate. This review should specifically understand the effectiveness of the relevant provisions of the railway Rule Book in informing drivers as to the requirements for reporting low adhesion, as well as other methods. South Western Railway should evaluate its processes for monitoring and reviewing the reporting of low adhesion by drivers to ensure that these arrangements remain effective (paragraphs 322b and 323b). This recommendation may apply to other transport undertakings.</p>	
12/2023/09	Awaiting Response	None	<p>The intent of this recommendation is for industry to realise the potential benefits of future technologies to enable trains to better cope with low wheel/rail adhesion when braking.</p> <p>The Rail Delivery Group working with the train operating companies and Rail Safety and Standards Board should create a framework and mechanism for the assessment of future technologies to enable trains to better cope with low adhesion when braking. The framework should set out criteria and establish the process for cost benefit analysis to apply to the assessment of future technologies as they arise (paragraph 322c).</p>	
12/2023/10	Awaiting Response	None	<p>The intent of this recommendation is to minimise the risk that passengers are unable to evacuate from class 158 and 159 carriage.</p> <p>Porterbrook, Angel Trains and Eversholt Rail, working in conjunction with the operators of class 158 and class 159 trains, should review the design of the internal sliding doors on these carriages and determine if there is a practicable means to prevent these doors becoming jammed in the event of a collision. They should develop a time-bound plan to implement measures identified by this review (paragraph 325b).</p>	