### Recommendation(s) Status: Derailment and fire involving a tanker train at Llangennech, Carmarthenshire

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

The status of implementation of the recommendations, as reported to us, has been divided into eight categories:

### **Key to Recommendation Status**

Open (replaces Progressing and Implementation On-going)	Actions to address the recommendation are ongoing.
Closed (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.
Insufficient response:	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.
Superseded:	The recommendation has been superseded either by a newer recommendation or actions have subsequently been taken by the end implementer that have superseded the recommendation.
Awaiting response:	Awaiting initial report from the relevant safety authority or public body on the status of the recommendation.

RAIB concerns on actions taken by organisations in response to recommendations are reflected in this report and are indicated by one of the following:

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

Blue – The blue triangle shows recommendations where the RAIB has concerns that the actions taken, or proposed, are inappropriate or insufficient to address the risk identified during the investigation.

White – The white triangle shows recommendations where the RAIB notes substantive actions have been reported, but the RAIB still has concerns.



Report Title	Derailment and fire involving a tanker train at Llangennech, Carmarthenshire		
Report Number	01/2022		
Date of Incident	26/08/2020		

Rec No.	Status	RAIB Concern	Recommendation	RAIB Summary of current status
01/2022/01	Open	None	The intent of this recommendation is for Touax to validate, and where necessary improve, the way it manages the risk associated with its maintenance responsibilities for freight wagons operating in the United Kingdom.  Touax should commission an independent review of the actions it has taken to improve its management of maintenance following the accident at Llangennech and assess their completeness and effectiveness. In particular, this review should address:  a. the effectiveness of the processes that have been put in place to ensure that safety critical systems and components are fully and correctly maintained by those contracted to do so;  b. the appropriateness of current instructions concerning the inspection, maintenance, removal and reattachment of safety critical components;  c. the traceability of safety critical components;  d. its processes for learning from the experience of its own people and other maintainers;  e. the dissemination of safety critical information including the reporting of dragging brake events and similar irregularities affecting the safety of its freight wagons; and  f. the extent to which its staff understand their maintenance responsibilities and are competent to perform them.  The findings of the review should be fully assessed and implemented to the extent necessary to reduce the risk of accidents linked to the	ORR has reported that Touax has a proposed action plan and timescale for delivery to be taken in response to the recommendation. ORR will advise when the status of this recommendation changes.



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			condition of wagons.	
			(paragraphs 213a.ii, 213a.iii and 219).	
01/2022/02	Open	None	The intent of this recommendation is to identify and mitigate the risk	ORR has reported that Touax has
			associated with the maintenance of safety critical components on freight	a proposed action plan and
			wagons at Robeston.	timescale for delivery to be taken
				in response to the
			Touax Rail, in conjunction with DB Cargo Maintenance, should carry out	recommendation. ORR will advise
			a task analysis of the processes that are used for the maintenance of	when the status of this
			fuel tank wagons operating out of Robeston terminal, taking full account	recommendation changes.
			of the risk associated with tasks being completed incorrectly and the	
			working environment at the site. A time-bound plan should be developed	
			for any necessary improvements that are identified (paragraph 213a.ii)	
			This recommendation may also apply to other ECMs.	
01/2022/03	Insufficient Response	None	The intent of this recommendation is to mitigate risks involved in the	ORR has reported that AFSL is
			overhaul of the safety critical components of freight wagons maintained	taking suitable actions to address
			by Arlington Fleet Services Ltd.	the recommendation although an
				accurate plan for full
			Arlington Fleet Services Ltd, in conjunction with Touax Rail, should	implementation has not been
			review and improve its quality management arrangements for	formulated. ORR is not content
			maintaining and overhauling safety critical systems and components	with duty-holder response,
			of wagons at Eastleigh works. This should include completing a task	further engagement ongoing /
			analysis of the processes that are used for undertaking and verifying	proposed.
			the work done in accordance with Touax's work instructions. It should	
			also check that the instructions issued to staff are complete and suitable	
			for the task. A time-bound plan should be developed for the areas of	
			improvement that are identified (paragraph 213a.ii).	
01/2022/04	Insufficient Response	None	The intent of this recommendation is to validate the design of the	ORR has reported that Wabtec
			interface between the relay valve and the pipe bracket on the GF4-SS1	Faiveley has not provided a
			brake group.	response, or the response does
				not adequately satisfy the ORR
			Wabtec Faiveley should use the findings of this investigation to review	that sufficient action is being
			the design of the interface between the VCAV relay valve and GF4-SS1	taken to address the
			pipe bracket and implement any necessary improvements. This should	recommendation. ORR is not

Created on 09 June 2023



			include a review of the position of the equipment on the vehicle, the type and number of fastenings, specified torque values, related instructions for the detachment and reattachment of a relay valve, and how the security of safety critical component fixings is monitored. A time-bound plan should be developed for any necessary improvements that are identified (paragraph 213a.i).	content with duty-holder response, further engagement ongoing / proposed.
01/2022/05	Awaiting Response	None	The intent of this recommendation is to improve the surveillance and certification processes of entities in charge of maintenance (ECM) of wagons carrying dangerous goods.	
			BELAC, the Belgium National Accreditation Body, should use the findings from this report to carry out a review of the processes that are used to assess certification bodies who apply for or undertake surveillance and assurance certification of entities in charge of maintenance of wagons transporting dangerous goods.  Any areas for improvements that are identified should be incorporated into the surveillance and certification process (paragraph 213a.iv).  This may also apply to the arrangements which the United Kingdom Accreditation Service (UKAS) has for accreditation of bodies engaged in certification of entities in charge of maintenance.	
01/2022/06	Open	None	The intent of this recommendation is to provide practical guidance on good practice in wagon maintenance.  RSSB, in conjunction with the National Freight Safety Group and entities in charge of maintenance (ECMs) with UK certification, should commission guidance on the practical application of the ECM regulations in the freight sector. This guidance should provide existing and new ECMs with examples of good practice that can be adopted to meet the legal requirements for all four ECM functions. It should also document ORR's regulatory strategy for freight wagon maintenance and its reasonable expectations of ECMs when operating in the UK, particularly in respect of outsourced maintenance delivery activities (paragraph 218).	ORR has reported that RSSB has a proposed action plan and timescale for delivery to be taken in response to the recommendation. ORR will advise when the status of this recommendation changes.



01/2022/07	Open	None	The intent of this recommendation is to reduce the risk that wagons will	ORR has reported that Network
			continue to run with undetected dragging brakes or locked wheelsets.	Rail has a proposed action plan and timescale for delivery to be
			Network Rail in conjunction with RSSB and the National Freight Safety	taken in response to the
			Group should review the technology and systems currently being used	recommendation. ORR will advise
			in the UK and other European countries to identify how improvements	when the status of this
			can be made to the railway's ability to alert a train driver, signaller or	recommendation changes.
			control room to a wagon defect that may lead to a derailment, such as	
			dragging brakes or an axle bearing failure. This review should include consideration of:	
			• the use of existing or new trackside equipment that is designed to	
			detect overheated wheels and transmit an alarm; and	
			equipment installed on wagons that is capable of detecting a safety	
			critical fault and transmitting an alarm.	
			A risk-based plan should be formulated for the introduction of such	
			improved systems, that accounts for the likelihood and consequences of	
			a dangerous goods train derailment (paragraph 213b).	
01/2022/08	Open	None	The intent of this recommendation is to improve the management of	ORR has reported that RSSB has a
			wagon maintenance on GB railways. This recommendation should	proposed action plan and
			be implemented in parallel with the existing programme of work for	timescale for delivery to be taken
			condition monitoring of freight wagons on the network (CFVN) and any	in response to the
			actions taken in response to recommendations 1, 2, 3 and 4.	recommendation. ORR will advise
			The Netional Fusiont Cofety Cusys and the Fusiont Technical Committee	when the status of this
			The National Freight Safety Group and the Freight Technical Committee, in conjunction with Network Rail and other industry stakeholders	recommendation changes.
			should develop a comprehensive programme of measures designed	
			to promote the improvement of freight wagon maintenance in the UK.	
			The programme should address all areas of significant risk, and aim to	
			address the following issues:	
			a. how to capture and record high quality data relating to events which	
			are recognised precursors to accidents, such as dragging brakes, to	
			enable the better identification of the root causes and trends;	
			b. how to encourage the effective sharing of safety related	



01/2022/09	Open	None	information between wagon owners and maintainers; c. the promotion of improved maintenance instructions, equipment, working conditions, methods and levels of compliance; d. quality and management assurance processes that encompass ECMs, workshops, contractors and suppliers of specialised services; and e. how to develop the competence of those undertaking maintenance of freight wagons, including the ability to spot defects that may affect the safe operation of freight wagons. Once developed and agreed by stakeholders, the programme of measures should be implemented and progress monitored by the National Freight Safety Group (paragraphs 213a.iii and 214). The intent of this recommendation is to address a gap in the regulatory	ORR has reported that ORR has a
			oversight of freight wagon maintenance.  The Department for Transport and the Office of Rail and Road should jointly review the current arrangements for the oversight of entities in charge of maintenance (ECMs) and certification bodies that are not based in the UK. As a minimum the review should include consideration of:  • the effectiveness of current arrangements for the oversight of ECMs that are not based in the UK;  • current barriers to effective engagement with ECMs and certification bodies that are based outside the UK; and  • avenues for closer engagement with EU national safety authorities on matters related to rolling stock maintenance.  The outcome of the review should be used to inform any necessary changes to policy or legislation in this area (paragraph 215a.).	proposed action plan and timescale for delivery to be taken in response to the recommendation. ORR will advise when the status of this recommendation changes.