Recommendation(s) Status: Class investigation into factors affecting safety-critical human performance in signalling operations on the national network

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

Implemented:	All actions to deliver the recommendation have been completed.

Implemented by alternative means:	The intent of the recommendation has been satisfied in a way that was not identified by the RAIB during the investigation.

Implementation ongoing:	Work to deliver the intent of the recommendation has been agreed and is in the process of being delivered.

Insufficient response:	The end implementer has failed to provide a response; or has provided a response that does not adequately satisfy ORR that sufficient action is being taken to properly consider and address a recommendation.

Progressing:	The relevant safety authority has yet to be satisfied that an appropriate plan, with timescales, is in place to implement the recommendation; and work is in progress to provide this.

Non-implementation:	Regulation 12(2)(b)(iii) = recommendation considered and no implementation action to be taken.

Closed - carry forward:	ORR intends to take no further action as it has been superseded by another recommendation.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.

Recommendation Status Report

Report Title	Class investigation into factors affecting safety-critical human performance in signalling operations on the national network
Report Number	03/2020
Date of Incident	31/03/2014

Rec No.	Status	RAIB Concern	Recommendation	RAIB Summary of current status
03/2020/02	Implemented	None	The intent of this recommendation is to optimise the working environment of signallers by ensuring that any changes impacting on their tasks, processes or equipment, take account of their views and experience, through involving them in the change management process. Network Rail should review its processes for incorporating a user- centred approach into any changes that have the potential to affect signallers' work. This review should include Network Rail's standard relating to ergonomic design, to determine whether its scope is appropriately defined, and whether it is being properly complied with. Network Rail should then implement any necessary changes to address the relevant factor in this investigation (paragraph 115b).	ORR has reported that Network Rail has reported that it has completed actions taken in response to this recommendation. ORR proposes to take no further action unless they become aware that the information provided becomes inaccurate.
03/2020/03	Progressing	None	The intent of this recommendation is to improve signaller performance and reduce the occurrence of incidents by addressing shortcomings in the competence management of signallers. Network Rail should provide development and support for all those involved in delivering training and assessment of signallers at local level to ensure that they are suitably qualified, experienced and resourced to do	ORR has reported that (Dutyholder name) is taking suitable actions to address the recommendation although an accurate plan for full implementation has not been formulated. ORR will advise when the status of this recommendation changes.

			so. This should include, but not be limited to, providing additional 'train-the-trainer' guidance in coaching for relevant non-technical skills as well as encouraging the use of simulators as tools to develop signallers' capabilities (paragraph 115c).	
03/2020/04	Awaiting Response	None	The intent of this recommendation is to improve the capabilities of all signallers through training that better understands the information, strategies and knowledge used by experienced signallers. Network Rail should carry out research with the objective of better understanding what constitutes experiential knowledge of experienced signallers (both in general and specific to a location), how such knowledge contributes to safe and efficient performance, and then incorporating the findings into the training and development of all signallers (paragraph 115d). This may include, but not be limited to, training at signalling school and/or local initiatives, such as structured mentoring, simulated scenarios or operational exercises for both initial and refresher training.	In progress, but we have concerns about the adequacy of the approach being adopted. ORR has reported that Network Rail is taking suitable actions to address the recommendation although an accurate plan for full implementation has not been formulated. ORR will advise when the status of this recommendation changes.
03/2020/05	Progressing	None	The intent of this recommendation is to improve the supervision, monitoring and competence management of signallers by addressing the organisational factors associated with the current line management arrangements. Network Rail should implement measures in its National Operations Programme aimed at revising management arrangements to ensure that those with the responsibility for supervising and managing signallers (such as Shift Managers and Local Operations Managers) have the time, people skills, knowledge and status that are needed to undertake their role effectively (paragraphs 115c and 115e). These arrangements should include the capacity, capability and organisational structure to facilitate	ORR has reported that (Dutyholder name) is taking suitable actions to address the recommendation although an accurate plan for full implementation has not been formulated. ORR will advise when the status of this recommendation changes.

Recommendation Status Report

			competence management as well as the personal, professional and career development of signallers.	
03/2020/06	Progressing	None	The intent of this recommendation is to improve Network Rail's learning from operational incidents. Network Rail should review and, as appropriate, modify or reinforce its processes for investigating incidents in the following areas (paragraph 116): l appropriate use of the 'fair culture' flowchart and subsequent analysis of underlying factors (such as use of the 10 incident factors from RIS-3119-TOM) to ensure the causes of incidents are appropriately categorised l wider trend analysis across all levels of investigation to identify deeper systemic issues l achieving full separation of safety investigations from the disciplinary process.	ORR has reported that (Dutyholder name) is taking suitable actions to address the recommendation although an accurate plan for full implementation has not been formulated. ORR will advise when the status of this recommendation changes.
03/2020/01	Progressing	None	The intent of this recommendation is to reduce the risks associated with excessive signaller workload through better understanding of mental workload, reflecting the fact that contemporary signalling increasingly imposes demands on the thought processes of signallers that are unobservable and hence not easily captured by existing metrics. Network Rail should develop improved techniques for measuring and predicting cognitive aspects of signaller workload, building on the existing research it has conducted in this area, and integrate the use of such techniques in its management of signaller workload (paragraph 115a).	ORR has reported that (Dutyholder name) is taking suitable actions to address the recommendation although an accurate plan for full implementation has not been formulated. ORR will advise when the status of this recommendation changes.

Recommendation Status Report