

## Recommendation(s) Status: Incident at Llanbadarn Automatic Barrier Crossing (LM) nr Aberystwyth

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 six categories:

### Key to Recommendation Status

<b>Implemented:</b>	All actions to deliver the recommendation have been completed.
<b>Implemented by alternative means:</b>	The intent of the recommendation has been satisfied in a way that was not identified by the RAIB during the investigation.
<b>Implementation ongoing:</b>	Work to deliver the intent of the recommendation has been agreed and is in the process of being delivered.
<b>In-progress:</b>	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.
<b>Non-implementation:</b>	Regulation 12(2)(b)(iii) = recommendation considered and no implementation action to be taken.
<b>Awaiting response:</b>	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:

-  The red triangle shows recommendations where the RAIB has concerns that no actions have been taken in response to a recommendation.
-  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.
-  The white triangle shows recommendations where the RAIB notes substantive actions have been reported, but the RAIB still has concerns.

Note: The tables which follow, report the status of recommendations on 31 December 2015. In some other cases the end implementer has already sent information to the relevant safety authority about the actions it has taken, or proposes to take and the safety authority is considering whether it is satisfied that those actions and the associated timescales are accepted.

Number/ Date/ Report No/ Inv Title / Current Status	Safety Recommendation	Summary of current status (based on latest report from the relevant safety authority or public body)
<p>1            19/06/2011    11/2012</p> <p>Incident at Llanbadarn Automatic Barrier Crossing (LM) nr Aberystwyth</p> <p>Status: Implementation ongoing</p>	<p>The intention of this recommendation is that high risk locally monitored automatic crossings in areas signalled by ERTMS should be provided with an engineered safeguard to reduce the risk of train driver error.</p> <p>Network Rail should develop an engineered safeguard to reduce the risk of trains being operated under ERTMS passing over locally monitored automatic crossings (ie AOCL and ABCLs) when the crossings have not operated. This solution should then be applied at Llanbadarn ABCL crossing and, if appropriate, at higher risk crossings on the Cambrian lines and as part of future ERTMS installations. Assessments of risk should include an evaluation of human factors, previous history, including recorded incidents and accidents (paragraph 179).</p>	<p>ORR has reported that Network Rail has outlined the actions to be taken in response to the recommendation. ORR will advise RAIB when actions to address this recommendation have been completed.</p>
<p>2            19/06/2011    11/2012</p> <p>Incident at Llanbadarn Automatic Barrier Crossing (LM) nr Aberystwyth</p> <p>Status: Implemented by alternative means</p>	<p>The intention of this recommendation is to provide automatic protection at Llanbadarn crossing (similar to that provided at manned barrier crossings) and to remove the plunger at Aberystwyth station.</p> <p>Network Rail should change the design of circuitry at Llanbadarn ABCL to remove the need for a train driver on Network Rail to operate the plunger before departing Aberystwyth station, but still retain an interface between Network Rail and Vale of Rheidol Railway at the crossing to avoid 'blocking back' of road vehicles (paragraphs 178 and 180).</p>	<p>Network Rail has reported that it has taken actions in response to this recommendation. Office of Rail Regulation (ORR) proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>
<p>3            19/06/2011    11/2012</p> <p>Incident at Llanbadarn Automatic Barrier Crossing (LM) nr Aberystwyth</p> <p>Status: Implemented by alternative means</p>	<p>The intention of this recommendation is that the train operating company undertake a study into drivers workload when departing Aberystwyth station.</p> <p>Arriva Trains Wales should carry out a human factors analysis and risk assessment of the workload of drivers when departing Aberystwyth station under different ERTMS modes and implement any findings (paragraph 178).</p>	<p>Arriva Trains Wales has reported that it has taken actions in response to this recommendation. Office of Rail Regulation (ORR) proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>
<p>4            19/06/2011    11/2012</p> <p>Incident at Llanbadarn Automatic Barrier Crossing (LM) nr Aberystwyth</p> <p>Status: Implemented by alternative means</p>	<p>The intention of this recommendation is to improve the style of driving.</p> <p>Arriva Trains Wales should review the way in which drivers interact with ERTMS and DMIs and develop new training and on-going competence checks to encourage a move away from the 'head down' style of driving undertaken by some drivers under ERTMS (paragraphs 118 and 178).</p>	<p>Arriva Trains Wales has reported that it has taken actions in response to this recommendation. Office of Rail Regulation (ORR) proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>

**Number/ Date/ Report No/  
Inv Title / Current Status**

**Safety Recommendation**

**Summary of current status (based on latest report from  
the relevant safety authority or public body)**

5            19/06/2011    11/2012  
Incident at Llanbadarn Automatic Barrier  
Crossing (LM) nr Aberystwyth  
Status: Implemented

The intention of this recommendation is to clarify the type and quality of documents being submitted as part of a deviation (including a derogation) from Railway Group Standards.  
  
Network Rail should review its processes for seeking deviation (including derogation) from Railway Group Standards and Technical Specifications for Interoperability. The review should include consideration of the extent and nature of the risk assessments that should be carried out, and the supporting information provided, for each deviation request (paragraph 179).

Network Rail has reported that it has taken actions in response to this recommendation.  
Office of Rail Regulation (ORR) proposes to take no further action unless they become aware that the information provided becomes inaccurate.

6            19/06/2011    11/2012  
Incident at Llanbadarn Automatic Barrier  
Crossing (LM) nr Aberystwyth  
Status: Implemented

The intention of this recommendation is to ensure that location specific risks are considered when standards committees approve, and RSSB authorise, deviations (including derogations). The outcome of these considerations should be recorded.  
  
RSSB should review and, if necessary, amend the processes and guidance applicable to Standards Committees and RSSB when taking decisions about applications to deviate from Railway Group Standards. This should include:  
  
I considering the provision of guidance for Standards Committees on how to make the necessary judgement about whether the risk assessment and supporting analysis is suitable and sufficient and the extent to which location specific risks should be taken into account; and  
  
I guidance on how the basis of the Standards Committee's decisions should be recorded.  
  
(paragraphs 179 and 180.)

The RAIB is aware that the RSSB and the Industry Standards Co-ordination Committee have reviewed the recommendation and has produced some guidance on applications for deviations from Railway Group Standards and this has been published on the RSSB website. This guidance encourages applicants to use the method for risk management set out in the Common Safety Method. In addition the Railway Group Standards code has been re-issued and the decision taking principles of deviations from Railway Group Standards have been clarified and briefed to Standards Committees, guidance has also been produced on recording decisions of Standards Committees.