

News story: Loss of speed restrictions on the Cambrian line

During the morning of Friday 20 October 2017, a train driver travelling on the Cambrian coast line in North Wales reported that long standing temporary speed restrictions were not indicated on their in-cab display. As signalling staff at the control centre in Machynlleth investigated this report, they became aware that this failure applied to several trains under their control. The temporary speed restrictions were required on the approach to level crossings so that people crossing the line had sufficient warning of an approaching train.

The Cambrian lines were equipped in 2011 with a pilot installation of the European Rail Traffic Management System (ERTMS), a form of railway signalling. ERTMS removes the need for signals along the track by transmitting data directly to the train. This data is used to display movement authorities and other information such as temporary and permanent speed restrictions, on a screen in front of the driver.

Subsequent investigation found that the signalling system stopped transmitting temporary speed restriction data after a routine shutdown and restart at around 23:10 hrs the previous evening. The signallers had no indication of an abnormal condition and signalling control centre displays showed these restrictions as being applied correctly.

The RAIB has decided to undertake an independent investigation because to date, the signalling system supplier has not identified the cause of the failure. It is possible that finding the cause would have been assisted by downloading of suitable data from the signalling system before it was restarted during correction of the failure.

An additional procedure, since introduced at the control centre, is intended to identify and avoid any recurrence of the failure.

The RAIB investigation will consider:

- the geographic extent of the failure and the effect it had on the safety of railway operations
- why trains were permitted to operate without information about temporary speed restrictions
- practices for the gathering of data needed for investigation before restarting computer based signalling systems after a potentially unsafe failure

Our investigation is independent of any investigation by the railway industry or by the industry's regulator, the [Office of Rail and Road](#).

We will publish our findings, including any recommendations to improve safety, at the conclusion of our investigation. This report will be available

on our website.

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