



## Safety recommendation no. 152

<b>Date of the publication</b>	25.02.2020
<b>Number of the final report</b>	2019051401
<b>Safety deficit</b>	<p>On 14 May 2019, early in the morning, prior to the start of operations, the closed track between Horgen Oberdorf and Thalwil was reported to be clear. Because there were still shunted vehicles waiting at the Thalwil entry signal, a configuration was displayed to the movements inspector that he was unable to remove by resetting the axle counter. A passenger train was therefore required to proceed from Horgen Oberdorf to Thalwil 'running at sight'. The train was able to stop behind the shunted vehicles in time.</p> <p>A hazard can arise between shunted vehicles and a passenger train owing to a failure to comply with a number of regulations. A section of the track was reported to be clear, despite still being occupied by vehicles.</p> <p>The following risks were identified during the investigation:</p> <ul style="list-style-type: none"><li>- If vehicles leave a track section monitored by axle counters and other vehicles remain behind it, it is possible to reset the axle counter for this section. In such a case, the first train can run without restriction even though the track is still occupied.</li><li>- The parties involved did not seem to be aware that only consistent implementation of the relevant regulations could ensure there was the necessary degree of safety to declare the track clear.</li><li>- Although there was some doubt about the matter, they did not question their own decisions.</li></ul> <p>In this event, the combination of the shunting movements was such that it was not possible to reset the axle-counter and as a result the first train had to be ordered to run at sight. However, with a different combination this could have led to an incident with greater impact had the safety manager declared the track section to be clear. The case of 20 February 2016 in Sihlbrugg demonstrates this possibility. If the track vacancy detection system uses track circuits, in the event of an occupied signal section the first train is required to 'run at sight'. The same is true if the track vacancy system employs axle counters and there is an occupied signal that cannot be reset. If the axle counter can be reset despite the signal section showing occupied, the first train may still run at the maximum permissible speed.</p>
<b>Safety recommendation</b>	The Federal Office of Transport (FOT) should examine whether the same procedure - ordering 'run at sight' - should always be used for the first journey after the signal is given that the track is clear, irrespective of the type of track vacancy detection system.
<b>Addressees</b>	Bundesamt für Verkehr
<b>Stage of the implementation</b>	Implemented. The Federal Office of Transport (FOT) confirms that with the entry into force of the RSR A2020 on 1 July 2020, the provisions relating to notifications of when a train can run when track

is occupied have been tightened. In accordance with the core process for incidents (RSR R 3009 clause 2), track vacancy detection equipment may only be reset after a run at sight or an additional track check.

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**Investigation report concerning  
the safety recommendation**

Schlussbericht  
Vorbericht

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