



Safety recommendation no. 74

Date of the publication	13.07.2017
Number of the final report	2014093001
Safety deficit	<p>On Wednesday, 16 July 2014 railcar no. 46 (year of construction 1968) was derailed. The cause of the derailment was a wheel disc fracture. The railcar was scrapped.</p> <p>On Tuesday, 30 September 2014, Appenzeller Bahnen trailer B 245 (year of construction 1964) was derailed in Jakobsbad station because of a wheel disc fracture.</p> <p>On the Appenzeller Bahnen route network, the speed through curves was increased in some sections from 40 km/h to 45 km/h. This leads to an increase in lateral acceleration of 20%.</p> <p>In the course of time cracks formed in the wheel discs. The fatigue strength of the wheel discs of the 1964–1968 series is no longer guaranteed. Under these circumstances, further wheel disc fractures are possible at any time.</p> <p>As a result of the increase in lateral acceleration in curves the wheel is subjected to higher loadings. Because of this, cracks may also occur on the other rolling stock.</p>
Safety recommendation	The Federal Office of Transport should ensure that a magnetic particle test is arranged for all wheel discs on the other vehicles.
Addressees	Bundesamt für Verkehr
Stage of the implementation	Implementation
Investigation report concerning the safety recommendation	<u>Schlussbericht</u>