



Safety recommendation no. 128

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Safety deficit	<p>On Tuesday 11 July 2017, a little after exiting the station at Les Brenets, the driver of train 23 noticed vibrations coming from below railcar BDe 4/4 no. 3. He immobilised the train. In conformity with service note TransN 45/2016, which was implemented following the derailment on 26 July 2016, the driver returned train 23 to the station at Les Brenets. Once the TransN technical service had begun to manoeuvre the railcar from Les Brenets station towards the depot to carry out checks, the leading axle of bogie 1 failed. Since being placed into service in 2006, this axle had travelled approximately 320,000 km. At the axle examination carried out by the STSB, it was noted that the axle had fractured between the crown wheel and the wheel body. On Thursday 27 July 2017 at 09:20, at approximately kilometer point 2.5, the driver of train 10 experienced vibrations coming from below railcar BDe 4/4 no. 5. He reduced speed to about 5 km/h. At kilometre point 3.3, he realized that the vibrations were swelling. The driver cut the power. The railcar stopped. The driver then returned his train to the station at Les Brenets, at a maximum speed of 5 km/h. In the station, the technical service found that an axle had failed. Since being placed into service in 2013, this axle had travelled approximately 140,000 km. At the axle examination carried out by the STSB, it was noted that the leading axle of bogie no. 1 had fractured, as in the previous case, between the crown wheel and the wheel body.</p> <p>In terms of safety, the axles are one of the crucial elements of the running gear. They have to ensure the operational reliability of the vehicles. In view of the number of failures that have occurred within such a short period of time on a series of identical vehicles, the potential risk of other axle failures is latent.</p>
Safety recommendation	The STSB recommends that the FOT have TransN railcars BDe 4/4 nos. 2 to 5 taken out of service until all the axles currently in service have been replaced.
Addressees	Bundesamt für Verkehr
Stage of the implementation	Implemented. In a letter dated 8 August 2017, TransN was asked to decommission railcars BDe 4/4 Nos. 2 to 5 from service.
Investigation report concerning the safety recommendation	<u>Rapport final</u>