



Safety recommendation no. 153

Date of the publication	17.03.2020
Number of the final report	2020030101
Safety deficit	<p>At 01:09 on Sunday, 1 March 2020, a passenger's hand got caught in the closing boarding door of a Eurocity passenger coach of the Intercity (IC) Bern-Interlaken Ost at Bern station. The train left a short time later. The passenger ran alongside the car and tried to free his hand. After running alongside the car for about 45 metres, he finally managed to pull his hand out of the rubber door seals. He sustained minor injuries in his efforts.</p> <p>The accident involving a person occurred because technical and construction failures led to the premature deactivation of the anti-trap system in the entrance doors as the doors closed.</p> <p>The following contributed to the accident:</p> <ul style="list-style-type: none">• The use of an anti-trap protection strip with unsuitable material properties.• The maintenance measures introduced to improve the quality of the anti-trap protection were not sufficient to prevent the latter from being deactivated too early as the doors closed.• A person reached their hand into a closing door space.• Only one person was responsible for the departure process in the given situation (train length, wagon types, place of departure, conditions on the platform). <p>The rubber profile used (2nd generation) is so hard that persons or objects coming into contact with the front edge of the door when it is closing are not reliably detected. This creates the risk of people or objects becoming trapped or of people falling.</p>
Safety recommendation	<p>The STSB recommends that the Federal Office of Transport (FOT) urge the train operators to replace the 2nd generation rubber profile used on all affected vehicle types with a rubber profile that detects any obstacles in the door area and opens the door again to prevent persons and objects from getting trapped or knocked over.</p>
Addressees	Bundesamt für Verkehr
Stage of the implementation	<p>Implemented. In a letter dated 31.03.2020, the FOT orders the SBB that the rubber profiles that are too hard must be replaced on all affected vehicle types with a rubber profile that is soft enough to detect the presence of a person or object in the doorway. The rubber profiles must be replaced by 31.07.2020 at the latest.</p>
Investigation report concerning the safety recommendation	<p>Vorbericht Schlussbericht Zwischenbericht</p>