



## Safety recommendation no. 161

<b>Date of the publication</b>	05.07.2021
<b>Number of the final report</b>	2020030101
<b>Safety deficit</b>	<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"><li>• The use of an anti-trap protection strip with unsuitable material properties.</li><li>• 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.</li><li>• A person reached their hand into a closing door space.</li><li>• Only one person was responsible for the departure process in the given situation (train length, wagon types, place of departure, conditions on the platform).</li></ul> <p>People are used to the fact that most doors that close automatically can be reopened by reaching into the closing door space. They therefore attempt to do the same with doors that may reopen less reliably. Public transport users should be alerted the fact that closing doors should only be reopened by operating the door opening button. Under no circumstances should a person reach into a closing door space. If they do, they may fall or become trapped. The anti-trap system is not intended or designed as an alternative method of opening the carriage door.</p>
<b>Safety recommendation</b>	<p>The Federal Office of Transport (FOT) should examine the extent to which informing public transport users not to reach into closing door spaces can lead to fewer people falling or becoming trapped. It should ensure appropriate measures are implemented where necessary.</p>
<b>Addressees</b>	Bundesamt für Verkehr; Bundesamt für Verkehr
<b>Stage of the implementation</b>	<p>Implemented: The FOT reports that, in order to be able to make a decision on a prevention campaign as recommended by SE 161 or on any other measures, it decided to analyse the need for action in passenger incidents in rail traffic and local traffic in greater depth. To this end, in 2022 the FOT ran the 'Passenger Incidents' project. In a first step, the statistics on incidents were analysed. It was found that incidents involving passengers are considerably more frequent on</p>

local transport services than in long-distance rail transport. On the basis of these findings, measures were drawn up with the industry in four areas with the intention of reducing the risk of accidents (primarily on local transport services) with reasonable effort:

- The FOT will inform all stakeholders of the findings and make recommendations for implementation in their areas of responsibility.
- The industry is considering launching a prevention campaign with the Association of Public Transport (VöV) as lead.
- The FOT will work with external partners to improve data on incidents in local transport.
- Research work on preventing falls and on technical aspects leading to a fall is also to be carried out under the FOT's lead.

FOT senior management approved the implementation of these measures on 16.01.2023.

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**Investigation report concerning  
the safety recommendation**

Vorbericht  
Schlussbericht  
Zwischenbericht

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