



NOTE

Date 11-12-2025
Casenr. 2024-650

English translation of summary, conclusion and recommendation

Summary

On 27-12-2024, a passenger stuck left forearm between two door leaves on an entry door that was closing.

The passenger's forearm took up less space than what the doors' pinch protection was designed to be able to detect. The boarding door therefore closed completely and was registered as closed by the train's main computer.

Due to a coincidence of several circumstances, the conductor was convinced that the passenger had taken a step back from the train and was trying to open the entry door from the push button next to the entry door. The conductor therefore gave a departure signal to the train driver, who started the train.

The investigation showed that DSB had carried out a combined risk assessment of a total of ten hazards and set up barriers for these based on this. The only remaining barrier, the conductor's visual inspection of the doors, was not effective due to human factors.

The AIB has issued one recommendation.

Conclusion

The accident occurred due to a passenger, after the departure procedure and door closing had begun, inserted one of their forearms between the closing door leaves, likely in an attempt to get the door to reopen.

To reduce the risk of passengers being injured during boarding or disembarking, including the possibility of a train starting with a passenger trapped in an entry door, DSB had established five barriers against this. Two were relevant here as mitigations for cases where passengers became trapped in the entry doors: a technical barrier (the train's traction interlock) and a barrier dependent on human performance (the conductors' visual inspection).

The construction of the entry doors rendered the technical barrier ineffective as it was not activated by objects under 85 mm.

The only remaining barrier was the conductor's visual inspection of the entry doors.

In this instance, the conductor was convinced that the passenger was standing next to the entry door and pressing the button to open it. Due to the lighting conditions and the distance between the conductor and the passenger, the conductor was unable to see that the passenger's forearm was trapped in the entrance door. The passenger's body language did not give the conductor cause to change their perception of the situation.

Recommendation

The investigation revealed that the barriers put in place to prevent accidents of this kind do not appear to be sufficient.

In its assessment of the risk of passengers being injured when boarding and exiting, DSB had made an overall assessment of a total of 10 hazards. In this assessment, DSB had not foreseen fatalities as a possible consequence of the hazards.

The overall assessment of risks in connection with boarding and deboarding, where the experience from the consequences of less serious conditions formed the basis for the risk assessment, resulted in a barrier of abroad nature that was not effective in all cases.

The accident has given rise to the following recommendation:

DK-2025 R9 of 17/12/2025

The AIB recommends that the Danish Transport Authority ensure that DSB carries out a risk assessment of the independent hazard; that trains depart with passengers trapped in an entry door, so as to ensure effective barriers and an acceptable risk.