Rail Accident and Incident Investigation Unit

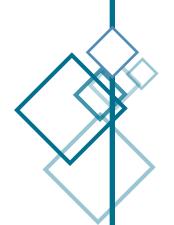
Summary Safety Investigation Report Collision with a road vehicle on a level crossing Aarschot - 20 June 2019



July 2021

REPORT VERSION TABLE

Version number	Subject of revision	<u>Date</u>
1.0	First version	02/07/2021



Any use of this report with a different aim than of accident prevention - for example in order to attribute liability - individual or collective blame in particular - would be a complete distortion of the aims of this report, the methods used to assemble it, the selection of facts collected, the nature of questions posed and the ideas organising it, to which the notion of liability is unknown. The conclusions which could be deduced from this would therefore be abusive in the literal sense of the term. In case of contradiction between certain words and terms, it is necessary to refer to the Dutch version.

1. SUMMARY

1.1. NATURE OF THE ACCIDENT

Road vehicle struck by a freight train on a level crossing.

1.2. DATE AND TIME OF THE ACCIDENT

20 June 2019 around 10:24 pm.

1.3. PLACE OF THE ACCIDENT

Line 35 - Level crossing 99 (2nd cat., Distance marker 86.958) Winterstraat in Langdorp.

1.4. TRAIN

Z49514 (25 freight wagons, 405 m, 451 tons, wagons RU Crossrail, Aachen West - BP Geel, no dangerous goods).

At the time of the accident, the train was pulled by an emergency unit of the RU Railtraxx.

1.5. VICTIMS

One occupant of the road vehicle involved died, and two other occupants were slightly injured.

1.6. FACTS

The freight train Z49514 of the railway undertaking runs towards Aarschot on track B of line 35. At about 8:41 pm, in the vicinity of Langdorp, the freight train experiences traction problems. The train driver is unable to solve the problems.

An emergency unit is sent by mutual agreement between the block post, Traffic Control, and the train driver. The emergency unit (a diesel locomotive of the railway undertaking (RU) Railtraxx) comes from Hasselt and runs via track B of line 35 in order to be coupled with the rear end of the freight train.

Once the coupling with the emergency unit is completed and the train is ready to depart, a restart permission is given by the Aarschot blockpost to the driver of the RU Railtraxx for an evacuation movement to the rear. The communication is recorded in writing using form E377.

The train departs and, as it passes over the third level crossing (level crossing 99), it hits a car.

The train driver performs an emergency braking and the train comes to a stop 300 metres in advance of the level crossing. The train driver sends a GSM-R alarm.

1.7. CONCLUSIONS

Causal factors

The collision with a car by a train on a level crossing is due to the barriers not closing in time. The direction of travel of the train was in normal track regime, but as the track section was occupied, regulations do not allow to reverse the direction of travel (blocking conditions).

Contributing factors

Contributing factor 1:

On the signalling of Aarschot, certain technical interventions on R+ and R- relays had not yet been carried out, resulting in a green aspect of the signal in all directions.

Contributing factor 2:

To restart the train, the controller did not correctly apply the safety procedure to be followed and let the train restart without order SF05 (without speed reduction and without sounding the horn).

Contributing factor 3:

Given the short announcement zone, the barriers were not yet activated at the time of the collision. The red flashing lights and the audible signal were in operation, but only 2 seconds before the collision.

Systemic factors

The measure that was taken following the accident in Pécrot in 2001 was not yet implemented on line 35 in Aarschot. There are still 30 such track sections spread across a total of 12 lines.

1.8. RECOMMENDATIONS

In view of the measures that were or are being taken, the Investigation Unit makes no recommendations following the collision with a road vehicle at a level crossing on 20 June 2019.



hail Accident and Incident Investigation Unit

18