

Summary - Safety Report

Collision of a De Lijn bus by a SNCB train
on a level crossing in Pittem - 25 november 2015

SUMMARY

OVERVIEW

On 25 November 2015 at around 13:25, a bus from the company De Lijn came to a standstill on the tracks of a level crossing in Pittem. The driver of an SNCB/NMBS passenger train noticed when exiting a bend that there was a bus blocking the level crossing and engaged the emergency brake. In spite of the emergency brake, a collision could not be avoided. The bus driver was killed in the collision.

INVESTIGATION

Article 111 (1) of the Law of 30 August 2013, Law on the Railway Code, provides that the Investigation body must open an investigation whenever a serious accident has occurred on the railway. The accident on 25 November meets the definition of a serious accident.

CAUSES

Direct cause: the presence of a stationary bus on a level crossing during the passage of the train at this crossing.

Owing to a miscalculation, the bus turned onto the open level crossing - before the arrival of the train was announced - and became stuck against the level crossing signals.

Factors directly contributing to the bus becoming stuck on the crossing:

- the configuration of the roads and level crossing, and more specifically considering the bend of 135° in combination with the width of the road
- the configuration of the bus and, amongst others, the length of the articulated vehicle

The bus met the legal requirements (turning circle), but simulations show that due to the curve of the crossing, only a very limited number of starting positions could be taken.

Indirect cause 1: the lack of communication between the driver and Dispatching.

Indirect cause 2: the failure by the bus driver to follow the arranged route.

Underlying cause - 1: insufficient awareness by the bus drivers and their employers of the risks associated with deviating from the planned route.

Underlying cause - 2: insufficient awareness by the bus drivers and their employers of the risks associated with level cross-ings

RECOMMENDATIONS

If the parties concerned had already taken measures, there would have been no recommendations for-mulated by the Investigation body, however the measures taken are listed in Chapter 12 of the report.

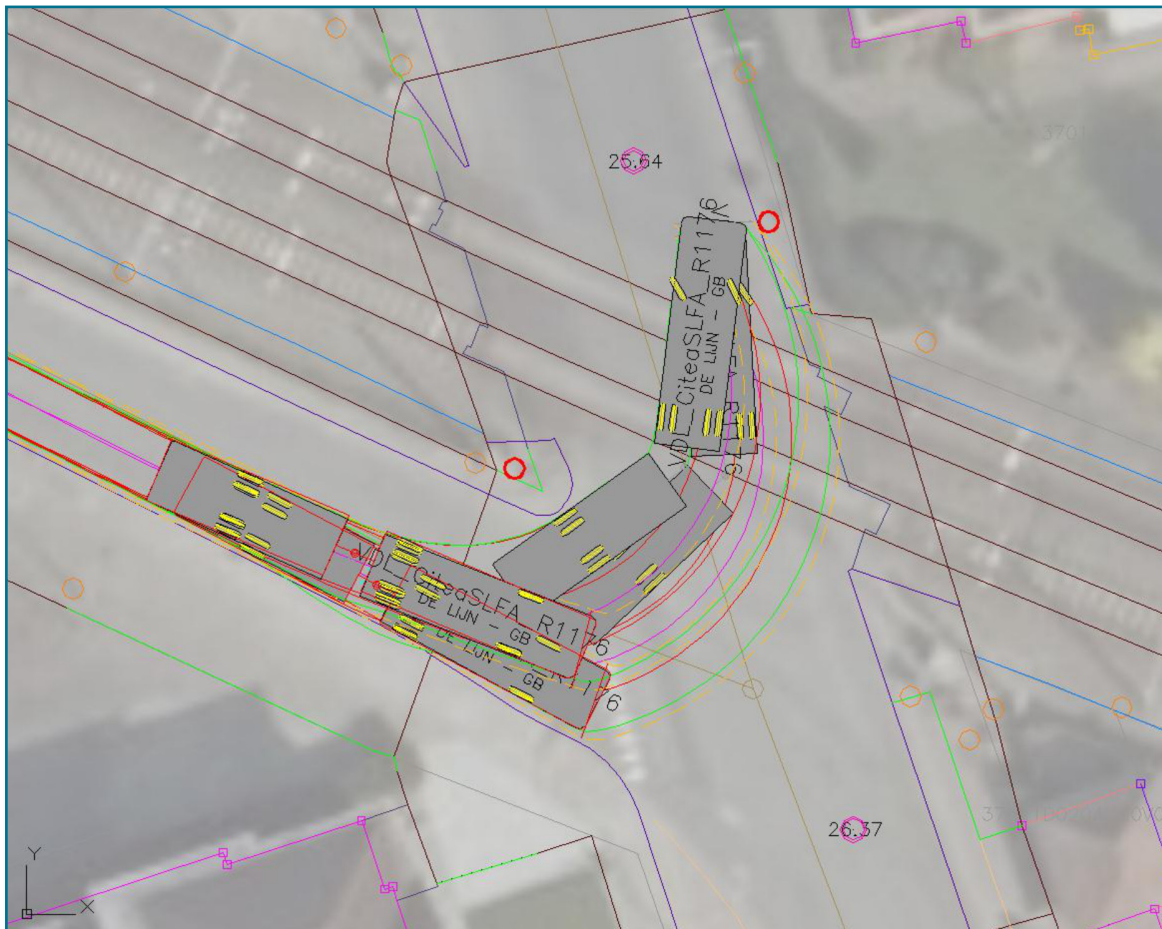


Image : simulation with AutoRun of a turn of an articulated bus

RED = outer movement of wheels

GREEN = outer passenger compartment movement

ORANGE = outside rear-mirror movement

MAGENTA = outer movement of front wheels

Investigation Body for Railway Accidents and Incidents
<http://www.mobilit.belgium.be>

