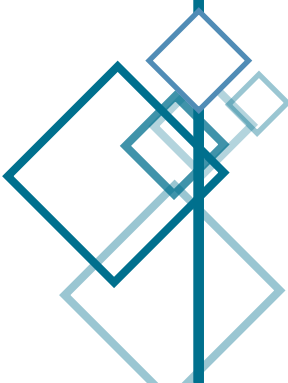


Summary Safety Investigation Report

Collision with a person on the track
by a passenger train
Ruisbroek - 27 February 2021

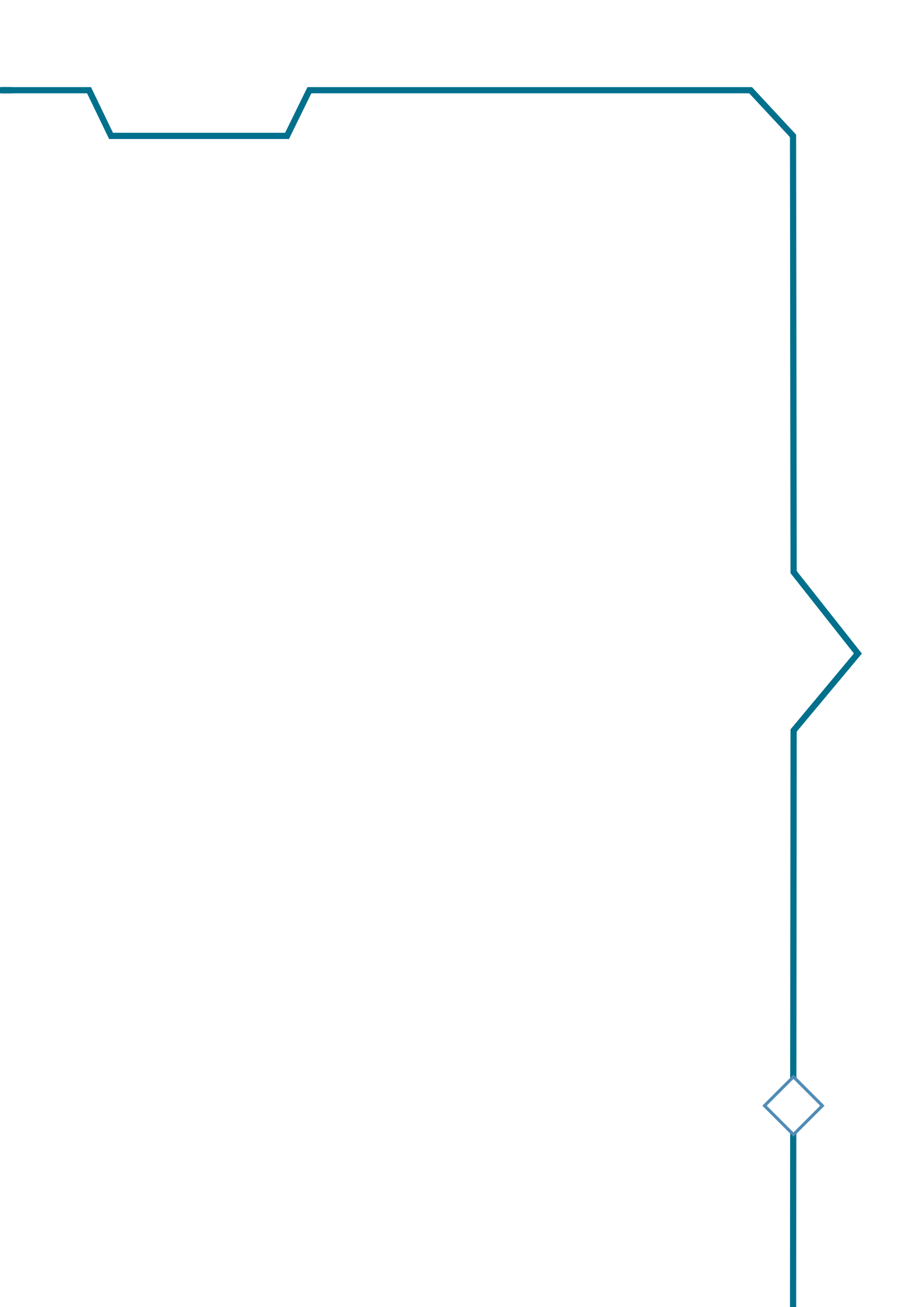
REPORT VERSION TABLE

| <u>Version number</u> | <u>Subject of revision</u> | <u>Date</u> |
|-----------------------|----------------------------|-------------|
| 1.0 | First version | 15/06/2022 |
| | | |



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.

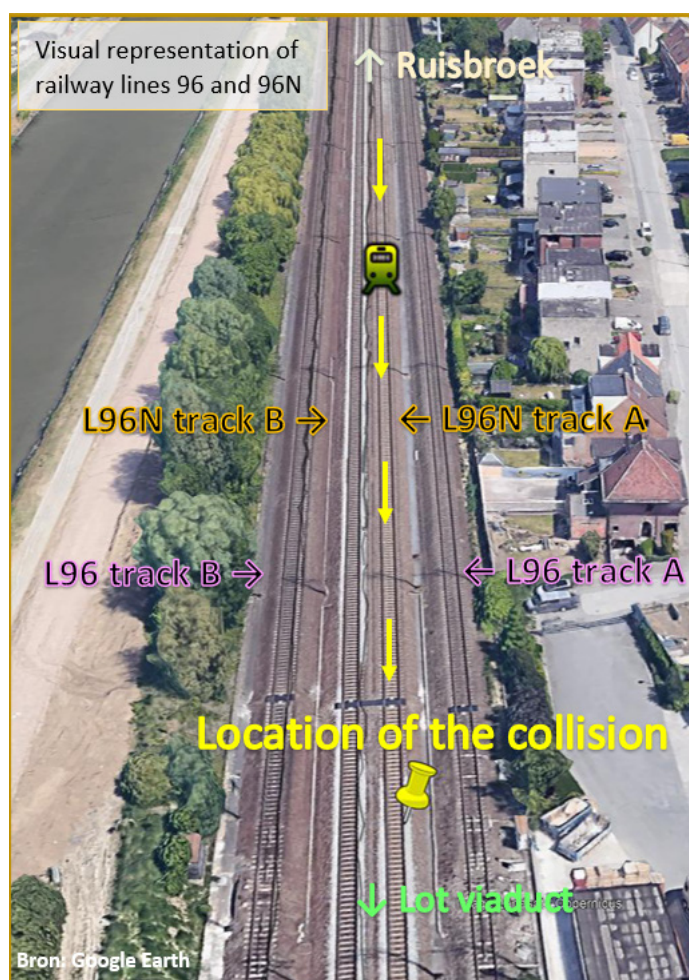
In case of contradiction between certain words and terms, it is necessary to refer to the Dutch version.




SUMMARY

During the night of 26 to 27 February 2021, signalling and cable works are carried out on L96 track A, L96 track B, and on L96E. These works fall within the framework of an assignment of the infrastructure manager Infrabel, for which TUC RAIL acts as project supervisor. The company APK Infra is the contractor that carries out the assignment after a tendering procedure.

The works start in Buizingen and continue through Lot towards Ruisbroek. Up to Lot station, L96 and L96N run parallel to each other. Beyond Lot station, both tracks of L96 continue on level ground, while both tracks of L96N go up a viaduct. Beyond the Lot viaduct, both tracks of L96N run between tracks A and B of L96.



The width of the six-foot way between track A of L96 and track A of L96N, and that between track B of L96 and track B of L96N is more than 4.50 metres. According to the regulations of the infrastructure manager and the safety and health plan of the project supervisor, no additional safety measures have to be applied in this situation. The contractor shall consider the possibility and necessity of indicating the boundary line if the distance exceeds 4.50 metres, and shall review the risk analysis related to railway activity and the general risk analysis, taking into account the circumstances of the accident.



The roadmap used by the contractor during the kick-off meeting contains an operational planning that shows that team 1 must carry out works on L96 track A, and team 2 on L96 track B. A foreman is provided for each team, and both team 1 on L96 track A and team 2 on L96 track B are each equipped with a road-rail crane. No indications were found that either team 1 or team 2 had to carry out works on a track other than the one assigned to them, nor that they had to cross the tracks of L96N while carrying out their works. No crosswalks are mentioned in the presentation of the roadmap at the kick-off meeting.

All employees have signed the safety instructions for works next to or in the vicinity of tracks. These instructions state that, without a work reason, it is absolutely prohibited to cross tracks in service.

According to our hypothesis, at around 06:00 a.m., the APK Infra employee, for an unknown reason and without using a crosswalk, moves from L96 track A in the direction of L96 track B, thus entering the danger zone of L96N. This change is neither communicated nor discussed. On 27 February 2021, at around 06:00 a.m., it is still dark, and there is a dense fog at that time.

Passenger train E3726 departs from Bruxelles-Midi/Brussel-Zuid station at 05.56 a.m., and continues its journey towards Ruisbroek on L96N track A. During the works on L96, three de-icing trains previously passed L96N.

When the APK Infra employee is on track A of L96N, he is struck by passenger train E3726.

The contractor provides an LMRA for his employees, which is used in case of change of circumstances or planning, in order to assess the risks and the situation before taking action. However, this proved insufficient to avoid the accident.

Procedures (e.g. with regard to the crossing of tracks) and instructions (e.g. with regard to conducting an LMRA) are in place. In addition, it is important to monitor that these procedures and instructions are applied by employees in the field so that the risk of non-compliance is limited.

The importance of reminding people that it is not allowed to cross tracks in service, and that in case of unforeseen circumstances they must use crosswalks cannot be emphasised enough. The contractor will organise a repeat of the training course on safe working alongside the tracks, and a refresher of the communication on working alongside the tracks.

The Investigation Unit makes no recommendation in view of the measures taken by the contractor.



Rail Accident and Incident Investigation Unit
<http://www.raiiu.be>

