



INF. 5

9 November 2016

(English only)

RID: 7th Session of the RID Committee of Experts' standing working group
(Prague, 22 to 24 November 2016)

Subject: Report on a rail accident at Tilburg on 6 March 2015

Transmitted by the Netherlands

Information

1. With reference to RID 1.8.5.2 the government of the Netherlands wishes to inform the RID Committee of Experts' standing working group of the report of the Dutch Safety Board regarding the train accident that took place in Tilburg on 6 March 2015.

Brief outline of the accident

2. On 6 March 2015 a passenger train collided with a stationary freight train carrying dangerous substances at Tilburg in the Netherlands. Eight people on the passenger train were slightly injured. The last tank-wagon of the freight train was damaged and leaked butadiene (UN 1010). Some police officers became unwell after inhaling the escaped gases.
3. In response to the accident the [Dutch Safety Board](#) (Onderzoeksraad voor Veiligheid) carried out an investigation and published the report "Risicobeheersing bij spoorvervoer" (Risk management in railway transport) in which it has made several safety recommendations to the Ministry of Infrastructure and the Environment, the railway infrastructure manager, carriers and chemical companies.

Causes

4. The freight train was coming from the Chemelot chemical park in South Limburg and was en route to Rotterdam. Due to an adjustment in the schedule, the train left three hours later than originally planned and the carrier decided to stop in Tilburg to allow for a change of driver. When requesting the stop, the carrier's report on the length of the train was inaccurate, with the result that the train service management directed the train to a

siding that was too short. As a consequence, the rear wagon was so close to a switch that the signal for the passenger train remained red. The driver of the passenger train did not notice the red signal. The passenger train ran into the freight train. The front part of the passenger train climbed during the collision, and ended up against the tank of the butadiene tank-wagon.

Analysis

5. The sidings at Tilburg are not protected against red light passage by an automatic train control system (the so-called ATB-Vv system), so the passenger train was not slowed down automatically by this system.
6. Because the passenger train was of an older type which does not have buffers, the front part of the passenger train climbed during the collision, and ended up against the tank of the butadiene tank-wagon.
7. The "climbing" of the passenger train was able to occur because the tank-wagon was not equipped with protection measures against overriding of buffers. Such protection is only mandatory for tank-wagons containing very toxic substances.
8. The freight train also contained wagons with non-dangerous substances. If one of those wagons had been placed at the rear end of the train, no dangerous substances would have leaked. However, there is no legal obligation to place a wagon with non-dangerous substances at the rear of a train.

Safety recommendations

9. The Dutch Safety Board highlighted in its report the importance of supply chain responsibility. It recommends rail companies not to make operational decisions that lead to an increase in known and managed safety risks. In addition, the Board recommends that passenger train railway undertakings should not use train types with poor collision compatibility on routes designated for the transport of dangerous goods.
10. Furthermore, the Board is of the opinion that the Minister of Infrastructure and the Environment should require that all types of tank-wagons be protected against overriding of buffers, and that the rear wagon of a freight train may not contain any dangerous goods.

Further steps

11. The Netherlands are currently exploring the possibilities for following up of the recommendations made by the Dutch Safety Board.

References

12. Overview of the recommendations (in English):
<https://www.onderzoeksraad.nl/uploads/phase-docs/1194/7d35f4d5fcc1aanbevelingen-treinbotsing-tilburg-en.pdf>
13. Full report by the Onderzoekraad voor Veiligheid (in English):
<https://www.onderzoeksraad.nl/uploads/phase-docs/1194/bf794f7757b1treinbotsing-tilburg-en-interactief.pdf>
14. Press release with summary of the report by the Onderzoekraad voor Veiligheid (in Dutch only):
https://www.onderzoeksraad.nl/uploads/fm/09032016_DEF_persbericht_Tilburg.pdf

15. Report on the incident by the Inspectie voor Leefomgeving en Milieu (The Human Environment and Transport Inspectorate) (in Dutch only):

https://www.ilent.nl/Images/Botsing%20Tilburg%20-%206%20maart%202015%20-%20definitief_tcm334-370747.pdf

The collision



The situation



The damage



Situational overview

