

6 SAFETY RECOMMENDATIONS

6.1 New recommendations

The Safety Investigation Authority recommends that the Finnish Transport Safety Agency (Trafi) ensure the implementation of the following new recommendations.

6.1.1 Supervision of shunting work

Collisions and derailments occur during shunting work every three days on average. In 2015, there were nine collisions or derailments involving dangerous goods. To improve the safety of shunting work, the Safety Investigation Authority recommends that:

The Finnish Transport Safety Agency (Trafi) and railway operators should improve the supervision of shunting work. [2017-S6]

The supervision should be performed as official supervision, as the operator's own monitoring and performed by local superiors.

6.1.2 The harmonisation of the usable lengths of railway yard tracks

The lengths of railway yard tracks vary depending on the data source and system. During shunting work, this can lead to errors of interpretation which can cause an incident or accident. The consequences of an accident can be significant in railway yards where dangerous goods are being transported. To improve the safety of railway yards, the Safety Investigation Authority recommends that:

Infrastructure managers are responsible for ensuring that the usable track length in railway yards are consistent regardless of the system. [2017-S7]

On railway yards where only shunting work is carried out, a use length should be used as the length of the tracks.

6.1.3 Compliance with the rescue plan

A rescue plan forms the basis of safety in ports and other areas where several companies are operating. The promotion of overall safety in such an area requires consistent actions from all operators. To ensure consistent actions, the Safety Investigation Authority recommends that:

Railway undertakings should comply with local emergency plans in ports and other areas where other companies are also operating. [2017-S8]

6.1.4 Replacement of buffer stops

In railway yards, old buffer stops are of little relevance in stopping wagons. In addition, the transport of dangerous goods in wagons built according to varying standards sets a wide range of requirements for buffer stops. In risk analyses, overshootings have been identified as a potential cause of accidents. Because there has been no change in shunting supervision practices, structural accident prevention should be made more effective, particularly in railway yards where dangerous

goods are being handled. To improve the safety of railway yards in which dangerous goods are being transported, the Safety Investigation Authority recommends that:

Infrastructure managers should modernise buffer stops on tracks where shunting work is done related to the transport of dangerous goods. [2017-S9]

The Finnish Transport Agency should share its knowledge with other infrastructure managers, to support their renewal of buffer stops.

6.2 Other observations and proposals

As other observations, the Safety Investigation Authority notes that because the *Government Decree on the Transport of Dangerous Goods by Rail* is reviewed every two years and VR Group Ltd's dangerous goods refresher training is arranged every five years, in the worst case scenario there could be two amendments of the Decree between refresher training. Such amendments should therefore be covered by refresher Traffic Safety Training (LITU), for example.