

6 SAFETY RECOMMENDATIONS

6.1 New recommendations

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

6.1.1 Restricting running as a train on tracks that are not under technical centralised traffic control

A safety risk is involved in the work done by switchmen to protect routes in railway yards without modern technical systems to protect the passage of trains. Route protection by the switchman is not verified in any way, which also constitutes a risk. The faulty procedure used by the switchman made it possible to protect the route of a train on an occupied track. Traffic implemented as shunting operations should be more controlled, in which case the engine driver would also have an obligation to keep a lookout. If, say, for financial reasons it is not possible to equip all railway yards with technical monitoring by centralised traffic control, the Safety Investigation Authority recommends that

The Finnish Transport Agency should restrict trains running on tracks that are not under technical centralised traffic control. [2017-S28]

When applying for capacity, the railway company take the station-specific conditions into account and apply for capacity for shunting operations accordingly.

The Finnish Transport Agency should harmonise and provide instructions on traffic control methods in order to safeguard traffic in such a manner that the operating model would be the same regardless of the traffic controller.

6.1.2 Renewing the instructions on traffic control

The instructions on traffic control are not consistent in all parts, and some of the actors do not know which instructions should be applied to which function or which instructions should be followed. Some of the instructions refer to other instructions that have already been repealed. To ensure that the instructions on traffic control are up to date and clear for all actors, the Safety Investigation Authority recommends that

The Finnish Transport Agency should harmonise and clarify the instructions on centralised traffic control. [2017-S29]

The Finnish Transport Agency be responsible for the instructions on traffic control. The instructions should pay special attention to cooperation between all parties and ensuring that no separate actor-specific sub-instructions are created. In addition to good instructions, consideration should be given to how the instructions are implemented in practice, the

related training, and how to ensure that the instructions and working methods have been mastered.

6.1.3 The obligation of an engine driver to keep a lookout in train traffic

Engine drivers do not have an obligation to keep a lookout in train traffic. However, during shunting operations, engine drivers have responsibility in all situations to drive carefully, control their speed and pay attention to the sightline in the direction of travel, so that they can stop the unit before any obstacle. Train traffic also occurs at relatively low speeds, such as in the case in question. The Safety Investigation Authority therefore recommends that

The Finnish Transport Safety Agency (Trafi) should order that engine drivers keep a lookout when in train traffic. [2017-S30

The earlier obstacles on the track are observed, the better the chances there are of preventing an accident or considerably mitigating the damage caused. In addition, this would provide the engine driver with more time to take cover, if necessary. Keeping a lookout and using an ATP device are not mutually exclusive; instead, combined they help the driver to make the right decisions at the right time. Requiring the driver to keep a lookout is not intended to change the prevailing practice of securing a safe route for the train, for which traffic control is responsible. Neither does it mean that the driver must be able to stop the train in any circumstances, upon noticing an obstacle.

6.2 Other observations and proposals

If the intention in Oulu is still to protect the route of a train instead of using shunting operations, a route allowing trains to drive through the Oulu freight yard under the control and monitoring of centralised traffic control could be built at reasonable cost. For example, the route could be built via tracks 121 and 123 to the *Nokela* track, 208. All 17 switches of the route should be replaced by electrically operated ones, and the tracks should be equipped with indicators showing their unoccupied status.