

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 Instructions on cable marking and the request form

The Finnish Transport Agency's cable marking request form does not directly address the need for protective measures during the work. The instructions on cable marking do not discuss work safety sufficiently. At the moment, there is a great variety among cable marking requests, cable marking request forms are not used, and the responsibilities for using the forms are unclear.

The Finnish Transport Agency shall renew the instructions on cable marking and adapt the cable marking request form so that the purchaser must comment on the protective measures to be used in the work. [2016-S27]

6.1.2 Requesting a trackwork permission for cable marking

Cable marking does not touch the structure of the tracks, and the work usually lasts only for a short time. In this sense, the work is comparable to clearing snow off the switches, for example. The goal of the following recommendation is to ensure that the appropriate protective measures are used in cable marking.

The Finnish Transport Agency must also find out if the instructions could be changed so that a trackwork permission could also be requested for cable marking without an advance notification (Advance information on train traffic (JETI)), if necessary. [2016-S28]

6.2 Reiteration of recommendations given in previous investigation reports

In addition, the Safety Investigation Authority repeats the following recommendations that it first made in connection with a previous trackwork accident:

S342 Developing trackwork safety training

The qualification can be acquired during a one-day training course (7 hours), after which a final examination must be passed. The training includes broad subject matters, such as trackwork environment, instructions and regulations; trackwork safety; and response to accidents and incidents. A short course with an emphasis on lectures does not encourage profound learning or changes in attitudes. However, a company operating in the railway environment may get the wrong idea that completing the course would be sufficient as induction.

In the current incident under investigation as well as in earlier incidents caused by trackwork, the root cause has been the workers' ignorance or lack of responsibility. The contents of the trackwork safety training could be developed by pruning out detailed content and emphasising the responsibility for one's own competence as well as one's own safety and that of others. For this reason, the Safety Investigation Authority recommends that the Finnish Transport Safety Agency should ensure the adoption of the following recommendation:

The Finnish Transport Agency shall determine stricter minimum requirements for trackwork safety training. [R2013-02/S342]

The training should activate and motivate the participants more.

S345 Preparations for trackwork and clarification of responsibilities

The investigation revealed that the cable marking had been ordered without sufficient preparation or a review of the responsibilities of the parties involved. Initial safety meetings are held in an attempt to ensure that the safety aspects are put right in order for the contractors to begin work. However, much more time should be devoted to such preparation, planning and clarification of responsibilities. Good planning also involves ensuring that communication between the parties is working. The Safety Investigation Authority, Finland recommends that the Finnish Transport Safety Agency (Trafi) ensure the implementation of the following recommendation:

The Finnish Transport Agency shall ensure that contracts include a separate and sufficient timeframe for planning trackwork and clarifying responsibilities before trackwork is begun. [R2013-02/S345]

S346 Trackwork field monitoring

Instructions issued by the Finnish Transport Agency define the parties' responsibilities and tasks related to the safety of railway operations. The instructions emphasise monitoring where written forms and reports are used. Site monitoring is rarely carried out in the field. The monitoring of compliance with trackwork safety regulations should be increased. Even though the contractors are responsible for the safety of trackwork for their part, the companies' self-monitoring is not enough.

An increased risk of getting caught for breaches of regulations efficiently directs the behaviour of both organisations and individuals. Along with this measure, actions that comply with safety regulations should be made financially attractive. The Safety Investigation Authority, Finland recommends that the Finnish Transport Safety Agency (Trafi) ensure the implementation of the following recommendation:

The Finnish Transport Agency shall increase the field monitoring of trackwork safety regulations by allocating appropriate resources for such work. [R2013-02/S346]

6.3 Other observations and proposals

The cable marker from Empower did not use a helmet. In this case, using a helmet might have resulted in less serious injuries. Moreover, the work that was done without a trackwork permission or a safety supervisor was not interrupted. The practice of immediately addressing the failure to use protective equipment and work practices that put safety at risk must be firmly instilled during trackwork safety training and in management.