# R2021-03 Kaskinen, SAFETY RECOMMENDATIONS

## Taking safety into account in arranging school transports

The education provider is obliged to arrange school transports. If school transports are arranged as a part of regular service, the criteria for school transport are not usually applied to the procurement. Taking safety into account remains often the sole responsibility of the transport operator in transports arranged as a part of regular service, and the education provider does not have the opportunity to set safety conditions on the transports.

The Safety Investigation Authority recommends the following:

The Finnish National Agency for Education should instruct education providers to ensure that safety issues are taken into account regardless of how school transports are arranged, and notify transport operators and education providers about the goals and existence of the instructions. [2022-S23]

The instructions can be included in the guide on school transports by the Finnish National Agency for Education, for example. Information can be provided to transport operators via the Linja-autoliitto organisation for bus operators and the Taksiliitto organisation for taxi entrepreneurs, for instance.

## Making it easier to clear areas of unobstructed visibility at level crossings with deficient conditions

A level crossing without a warning device and with deficient conditions on a track with a low traffic volume is a typical site of an accident in Finland. Deficiencies in the areas of unobstructed visibility at level crossings in particular have been in the background of several previous level crossing accident investigations.

The right of the track manager to clear out areas of unobstructed visibility at level crossings has been specified in the Railways Act. However, the right to clear areas defined by law is partially subject to interpretation. Problems occur especially in level crossings, in which there are existing buildings or vegetation in the areas of unobstructed visibility. This may sometimes make it difficult to improve the conditions at level crossings quickly.

The Safety Investigation Authority recommends the following:

The Ministry of Transport and Communications proposes that the Railway Act should be changed so that clearing the areas of unobstructed visibility to ensure their safety could also be done as smoothly as possible in level crossings, in which there are existing buildings or vegetation in the areas of unobstructed visibility. [2022-S24]

## Developing the safety of the bus transport sector through safety management

One day before the accident, a completely new driver who was not previously familiar with the route and who did not have any experience with driving the bus used on the route was transferred to the route involved in the accident. Reacting to such an exceptional situation had not been discussed in the safety management of the bus company. Partly for this reason, the orientation of the new driver remained deficient with regard to the route and the vehicle. Without instructions, safety may not be taken sufficiently well into account in exceptional situations.

There are no requirements on bus traffic concerning safety management, risk assessment, accident prevention or preparing for accidents in the same way as on other forms of transport, such as air or railway traffic. The need to develop safety management has been discussed for a long time, but no significant progress has been made with adopting procedures in practice.

For these reasons, the Safety Investigation Authority reiterates the recommendation issued in investigation report Y2015-02:

The Ministry of Transport and Communications should draw up regulations that help to implement a safety management system in the bus transport sector as a whole. [2016-S10]

Practical activities as well as safe operating models and instructions must be emphasised in safety management.

## Low-cost warning devices

A level crossing without a warning device and with deficient conditions on a track with a low traffic volume is a typical site of an accident in Finland. In this case, the bus driver did not notice the approaching work train and drove without stopping into a level crossing that had a STOP sign but was not equipped not with a warning device. Often, a STOP sign will not attract the driver's attention in the same way as an active warning device, especially if the driver has other distractions in the situation.

Low-cost warning devices have been introduced in the railway network, and the experiences related to them have been good. Their installation should nevertheless be accelerated further. Cities and municipalities could also participate in the costs of warning devices with regard to the level crossings in their area.

For these reasons, the Safety Investigation Authority reopens the recommendation issued to the predecessor of the Finnish Transport Infrastructure Agency in the investigation report R2012-S1 with the "Implemented" status:

It is recommended that the Finnish Transport Safety Agency should enable the introduction of low-cost warning devices and ensure that the Finnish Transport Infrastructure Agency will continue the investigation into the suitability for use of low-cost warning devices and start to introduce them in practice. [R2012-S1/S333]

Low-cost warning devices could also be used as a temporary solution in level crossings that have been identified as dangerous before they can be removed or equipped with actual warning devices.

## Measures that have been taken

After the accident, the Finnish Transport Infrastructure Agency has set a speed limit of 30 km/h for the track at the level crossing. Speed limit signs and balises have been placed at the site.