SUMMARY

COLLISION OF FREIGHT TRAINS IN NURMES ON 2 FEBRUARY 2011

A collision between a freight trains occurred in the direction of Lieksa, two kilometres from the Nurmes yard, on Wednesday 2 February 2011 at 11.55. Both the engine driver and traffic controller in the locomotive were injured, while both locomotives sustained major damage.

On its way from Lieksa to Nurmes, the freight train stopped at the Nurmes entry signal, which was in the *stop* position. Due to an insulation fault in the freight train's entry track, the traffic controller believed that the train was already in Nurmes. The traffic controller used emergency commands to release the train's route, reset the axle counting system and set the block between Nurmes and Lieksa to normal. Following this, the traffic controller changed the traffic direction to that running from Nurmes to Lieksa and assigned the exit route to the locomotive leaving Nurmes station. Receiving exit permission from the traffic controller, the locomotive collided with the freight train, which was standing at the entry signal on the same track. The enginer driver sustained a cut on the head and contusions in various parts of the body. The traffic controller present in the driver's cab also sustained contusions to various parts of the body. Having jumped off the locomotive into the snow, the driver of the standing freight train was uninjured.

The immediate cause of the accident was the cancellation of interlockings necessary to signal box safety, thus allowing the trains to use the same track. The insulation fault, frequency of critical commands, inadequate train location information and inadequate communication all contributed to the accident. Apparently, the traffic controller believed that train 4713 was already at the Nurmes yard. Despite having spoken to the engine driver, the controller did not realise that this train was standing at the entry signal.

In order to avoid similar accidents in the future, the Safety Investigation Authority, Finland recommends the following:

- Traffic control personnel should undergo regular training and drills, with a special focus on identifying hazards related to error situations and adopting pre-defined, safe procedures.

- Safety management should have a particular focus on punctuality and consistency of communication, as well as accuracy of train location information.

- On all axle counting sections, a prerequisite for emergency resetting should be that axles exiting the section are the final ones counted at an axle counting point.