

## **SUMMARY**

### **DERAILMENT OF LOCOMOTIVE AND TWO WAGONS AT LUUMÄKI, FINLAND, ON 20 MARCH 2006**

On Monday March 20, 2006 at 21.41 hours two wagons and the rear bogie of a locomotive derailed on a turnout in the east end of Luumäki railway yard. The incident entailed no personal injury. The derailed wagons damaged two point mechanisms of the operating switch crossing, and stretcher rods, and they caused rail fastening parts to detach.

The chain of events resulting in the derailment started from the heating fuse of the crossing with a movable frog having burnt, thus preventing an adequate heating of the crossing. When operated laterally, the crossing failed to take the detection position and the point failed to take the detection position. The incident was caused by the remote control operator and the engine driver being unable to act in an expedient manner in such an exceptional situation. Neither of them was very familiar with the high-speed turnouts with turning-point frogs at Luumäki. The remote control operator granted the train the permission to pull via a secondary track to the turnout, though the turnout had been operated to take the position toward the straight track. Having forced open the turning point frog turnout, the engine driver set out to push the wagons back.

In order to prevent such incidents in the future, the Accident Investigation Board of Finland reiterates its previously issued recommendation suggesting that the orientation training designed for dispatchers include detailed data on all stations within their respective responsibility so as to enable them to secure the safety of traffic operation.