

SUMMARY

COLLISION OF A LOCOMOTIVE AND A TURNOUT TAMPING MACHINE AT THE JYVÄSKYLÄ RAILWAY YARD, FINLAND, ON 8 JUNE 2008

On 8 June 2008 at 5.48 a.m., a turnout tamping machine was involved in an accident at the Jyväskylä railway yard, leading to the slight injury of a track foreman in the driver's cab of the tamping machine. The accident involved the collision of a unit consisting of three Dv12 locomotives with a tamping machine involved in work. The engine driver applied the emergency brakes, but the locomotives were unable to stop in time and the front corner of the foremost locomotive collided with the left corner of the tamping machine. The force of the collision caused the right rail to collapse underneath the tamping machine.

The collision damaged the tamping machine in places including the chassis, body, automated controls, bogie and wheelsets. The foremost locomotive incurred damage on the right side of the maintenance deck and hand rails. About 20 metres of track were damaged. The total damage to track and equipment amounted to € 214,000.

The direct cause of the accident was that the front of the tamping machine, which was at work on turnout V032, extended so close to turnout V024 that the locomotives were unable to safely pass the tamping machine. Since turnout V032 was reserved because it was being replaced, turnout V024 was also reserved. In order to control and reverse turnout V024, the traffic controller had to use the VHP¹ command. The traffic controller was unaware of the precise location of the tamping machine. Another factor contributing to the accident lay in the fact that the tamping machine's foreman and the traffic controller had not agreed on the precise limits of the work area.

In order to prevent the occurrence of similar accidents, the Accident Investigation Board of Finland recommends that track job notifications precisely detail the dimensions of work areas and that the traffic controller ensure that no other units are within the vicinity of the turnout before giving the relevant VHP command. In addition, the recommendation S180 of investigation report B1/2002R is reiterated: *"The initiation training programmes for train operators should be extended to include all stations and railway yards within the area of responsibility of the train operators in question."*

¹ VHP = emergence release of point locking.