## SUMMARY

## DERAILMENT OF EIGHT FREIGHT TRAIN WAGONS BETWEEN SAARIJÄRVI AND ÄÄNEKOSKI, FINLAND ON 3 JULY 2007

Eight wagons of a freight train carrying wood were derailed on 3 July 2007 at 4.01 p.m. Four of the wagons incurred heavy damage, and four minor damage. About 170 metres of track were damaged.

The accident was caused by the poor condition of the track and the train's excess speed, considering the condition of the track. The first of the freight wagons (the 16th wagon), carrying pinewood, was derailed. Researches show that pinewood is heavier than spruce. As the wagon approached what was possibly the weakest point of the track, the outer rail of the track, which was on a curve, was dislocated. The distance between the rails grew to such an extent that the wagon's wheels fell between the rails. Track support work had been completed at the point of the derailing. This track work, and the small repositioning and sideways movement of the rails that this involved, reduced the stability of the track.

To prevent the occurrence of similar accidents, the Accident Investigation Board recommends that segments of the track that are in poor condition be investigated, and that a speed limit of 20 km/h be set for segments that are in poor condition for trains with an axis weight of 16-20 tons, until the necessary repairs have been completed. In addition, the Accident Investigation Board repeats recommendation \$181, which it issued after the occurrence of a similar accident in Huutokoski on 31 May 2002: The track should immediately be repaired and the defective old sleepers be replaced by new ones. Replacement of spike fastening by screw fastening, replacement of the rails by heavier ones, and replacement of the gravel in the railway bed by ballast should be discussed and considered.