

## DERAILMENT OF LOCOMOTIVE BOGIE WHEELSET IN KOLPPI, FINLAND, ON 24 FEBRUARY 2011

An accident occurred at 4.55 am in Kolppi, Pedersöre on Thursday 24 February 2011, due to the derailment of the front bogie wheelset on the second locomotive of a freight train travelling from Kokkola to Pietarsaari. The locomotive, one turnout, and 163 sleepers were damaged, with total repair and clearance costs amounting to 132,000 euros. The accident prevented all traffic on the section of line for nine hours.

The bogie wheelset was derailed by an SA3 automatic coupler on the track. This coupler had been dragged there by another freight train, as a result of incorrect procedures in reaction to the train's decoupling into two parts. The engine driver had believed that the uncoupling lever chain would break when the train set off and that the automatic coupler would remain in place. Trusting the engine driver's assessment, the traffic controller gave the train permission to drive. The automatic coupler separated from the car after the detachment of the bolted key holding the coupler in place, due to a missing screw and the remaining hex screw being too short and without a hex nut. With the poorly secured key installation going unnoticed, wagon maintenance was not performed in line with the related instructions.

Taking all factors into account, accidents of this type are statistically rare. Nevertheless, to prevent similar accidents the Safety Investigation Authority recommends that all SA3 automatic coupler draft clips without screw holders be replaced with clips with screw holders. The Authority further recommends that traffic controllers be issued with clear instructions on how to obtain immediate advice in exceptional situations, in order to solve problems safely.