

## **SUMMARY**

A freight train loaded with cars derailed on 11 February 2021 between Kummelby and Häggvik in Stockholm County. The train consisted of a locomotive and 19 wagons. After continuing 2,6 kilometres with four wagons derailed the train stopped at Häggvik station. No personal injuries occurred. However, the railway vehicles and the railway infrastructure were extensively damaged.

The derailment was caused by rail fatigue which, following a long loading period, propagated into a vertical crack and caused a broken rail. The crack formation had not been identified or dealt with as part of the infrastructure manager's system for preventive maintenance.

## **Safety recommendations**

### **The Swedish Transport Administration is recommended to:**

- Continue the development work it is doing to enable crack formation in rail to be identified at an earlier stage (See section 4). (*RJ 2022:02 R1*)
- From a comprehensive perspective, review how current systems for preventing surface fatigue leading to broken rails can be improved. This review should include evaluating the intervals applied for non-destructive testing, follow-up of how defects are located, reported and marked out in practice and an analysis of the potential consequences of departing from the set interval for preventive machining (See section 4). (*RJ 2022:02 R2*)

### **The Swedish Transport Agency is recommended to:**

- Within the scope of its supervision, follow up the action taken by the Swedish Transport Administration as a result of recommendation RJ 2022:02 R1 and RJ 2022:02 R2 (See section 4). (*RJ 2022:02 R3*)