## Extract from the investigation report RJ 2009:05 on a near-collision occurred on 09/06/2008

## **Summary**

On Monday, 9 June 2008 a near-collision occurred between passenger train 7343 and freight train 9450 on the line section Hillared – Limmared.

The line section was controlled by a long-distance train dispatcher at the track management centre in Gothenburg. The long-distance train dispatcher encountered many disruptions and had a great deal to do during the working shift. The long-distance train dispatcher was concentrating on trying to get trains through Lekarekulle where there was a points malfunction. Freight train 9450 left Värnamo for Borås 29 minutes before the scheduled time and entered the long-distance train dispatcher's supervision area, a development which remained unnoticed by the long-distance train dispatcher. Freight train 9450 was allowed to "go" the whole line section up to Hillared since "automatic operation" was switched on at the stations in between. Since automatic operation was switched on, the long-distance train dispatcher did not need to take any action to get the train through.

Passenger train 7343, travelling in the opposite direction to freight train 9450, was not allowed to "go" from Hillared to Limmared and contacted the long-distance train dispatcher to clarify the matter. The long-distance train dispatcher checked the line section but did not perceive any obstacle, whereupon he gave permission to passenger train 7343 to pass the departure blocking signal in Hillared towards Limmared, which was at "stop". After that, the long-distance train dispatcher once again directed his attention to the work regarding the shunting malfunction at Lekarekulle.

At the same time as passenger train 7343 passed the departure blocking signal, freight train 9450 was approaching the access signal at Hillared. When the two trains emerged from a bend, the drivers caught sight of each others' trains and stopped about 238 metres from one another. One of the drivers contacted the long-distance train dispatcher, who thus became aware of the near-collision for the first time.

## Causes

The direct cause of the near-accident was that insufficient checks were carried out in order to ensure that the line section between Hillared and Limmared was free of trains before 7343 was permitted to drive out onto the line.

An underlying reason was that the long-distance train dispatcher found the situation at the track management centre to be stressful, and used the technical systems in place at the track management centre for checks and decisions that were of importance to traffic safety, even though they were not intended for this.

Further underlying reasons were that the system for follow-up failed to spot shortcomings and weaknesses in a sufficiently comprehensive way. No documented risk analyses had been conducted from a traffic safety viewpoint of what consequences may result from the introduction of new technical systems or facilities at the track management centre.

## Recommendations

The Swedish Transport Agency is recommended to take steps to ensure that:

- the Swedish Rail Administration reviews how large a supervision area a long-distance train dispatcher should have, from the traffic safety viewpoint, so as to be able to control the area even in the event of disruptions (RJ 2009:05 R1);
- the Swedish Rail Administration reviews the systems which are available to a train dispatcher and which affect the train dispatcher's ability to take decisions that are of importance for traffic safety (RJ 2009:05 R2);
- the Swedish Rail Administration takes measures to improve staff capacity to maintain attentiveness while engaged in supervisory work (RJ 2009:05 R3);
- the Swedish Rail Administration creates a monitoring system where shortcomings and weaknesses among train dispatchers can be better detected, for example by being able to simulate and provide training for various scenarios (RJ 2009:05 R4);
- BV-FS 2000:4 is updated so that both physical and mental capacities are assessed before people are reinstated in safety duties (RJ 2009:05 R5);
- The infrastructure manager review and improve applications and provisions to meet the requirements in BV-FS 2000:4, and to ensure that their own rules and routines are followed (RJ 2009:05 R6);
- rules for passing a signal which does not show "proceed" are reviewed, with the object of introducing safer barriers (RJ 2009:05 R7).