Extract from the investigation report RJ 2008:03 on an incident occurred at level crossing on 13/12/2007

Summary

At 08:00 on 13 December 2007 there was an incident at a level crossing at Esplanaden in Sundbyberg between a lorry and passenger train 2513, which was owned by AB Storstockholms Lokaltrafik.

The lorry was loaded with pump material and was on its way to a nearby construction site to make a delivery.

The lorry driver was using the taxi map to find his way, and at the Järnvägsgatan/ Esplanaden crossing he turned right, over the level crossing against the direction of traffic.

He noticed neither the light nor the sound signals which were installed at the level crossing, and did not have time to react to the sign for one-lane traffic and stop the vehicle in time. The gates came down and shut in the lorry at the level crossing.

At the same time the driver in commuter train 2513, which was on its way to Sundbyberg from Spånga for an exchange of passengers, received the signal instruction to drive in to Sundbyberg.

After a bend, the engine-driver saw something on the track between the gates, and applied the brakes and stopped just before the lorry.

The signal safety device had functioned as intended. The barrier structure was planned in the correct way, and subsequently redesigned to meet the requirements of the various alterations... The reconstruction of the crossing in 1985 has led to a traffic environment that can be perceived as confusing, with a relatively high amount of pedestrian and cycle traffic crossing Järnvägsgatan to the west of the crossing and a large number of traffic signs and poles which often obscure one another.

The early dawn light and cloudy weather may have meant that the driver of the lorry failed to see signs and signals which announced that it was prohibited to drive over the level crossing.

Traders in the direct vicinity of the level crossing have stated that the signals that a train is approaching are not taken seriously, and that pedestrians fail to use the pedestrian tunnels that are in place. A public campaign to close the railway crossing at Esplanaden and to smarten up the pedestrian tunnel has failed to gain a hearing in the municipality. The Swedish Rail Administration has volunteered to improve the existing tunnel for pedestrian and cycle traffic under the railway provided that the municipality agrees to a closure. There has been no sign of any major interest in this.

Causes

The lorry was blocked in and remained immobile at the railway crossing between the gates. This was predominantly due to the following factors.

- The one-way traffic system went unnoticed, partly because of a blocked view.
- The sound and light signals went unnoticed, partly because of a blocked view.
- The driver did not drive through the closed gates.

Recommendations

The Swedish Transport Agency is recommended to:

• take steps towards an increased use of obstacle detection systems at level crossings (*RJ* 2008:03 *R*1).

The Swedish Road Administration and the Swedish Rail Administration are recommended to:

• take joint steps to ensure that common standards and working methods are developed by infrastructure managers and road maintenance authorities, and that the cooperation between the municipality and other interested parties is enhanced so that the traffic environment at level crossings is evaluated on an ongoing basis as well as at the actual time of alterations (*RJ 2008:03 R2.);*

• take further steps to increase and maintain road users' awareness of risks at level crossings and of how to act in the event of being trapped between the gates (*RJ 2008:03 R3*).