

SUMMARY

COLLISION OF TRAMS ON MÄKELÄNKATU IN HELSINKI, FINLAND, ON 13 JUNE 2008

On Friday, 13 June 2008, at 1:50pm, a line-1 tram collided with the rear of a line-7B tram on the Mäkelänrinne stop, on Mäkelänkatu, in Helsinki. Two passengers were severely injured. A tram driver and 22 passengers were slightly injured. Several others received lesser injuries such as bruises and neck and shoulder pain and headaches caused by whip flash. The rails were not damaged and the trams remained on the rails. The rear of the line-7B tram was substantially damaged. For example, the chassis of the rearmost car was bent out of shape. The front of the line-1 tram was somewhat damaged, but after minor repairs it was temporarily operative. The damage to the trams resulted in a total cost of EUR 60,000.

The cause of the accident was that the driver of the tram approaching from behind was not able to stop the tram in time. The driver apparently tried to stop the tram via incorrect braking methods in the belief that the brakes were not working properly. The background factors were the driver's inexperience, the possibility that the driver anticipated that the tram ahead would leave the stop earlier, and the driver's suspicion that the brakes were not working properly and therefore the use of the incorrect braking method.

In order to prevent the occurrence of similar accidents, the investigation commission recommends that tram drivers be taught to brake in the proper way. In order to specify just one correct way to brake in different kinds of situations, Helsinki City Transport should determine the most efficient way to brake for each type of situation. In addition, tram drivers should be provided with a personalised and progressive training programme in which performance is documented and thus skills are proved to be properly learned.

In order to ensure that floor hatches do not release during collision or other situations and thereby cause injury to passengers, the investigation commission recommends that methods be sought to ensure that tram floor hatches remain fastened in all conditions. In order to improve first-aid availability on trams, the commission recommends that trams be equipped with a first-aid kit.