

SUMMARY IN ENGLISH

On the 4 of December 2014 a bus went off the national highway 27 between Tranemo and Gislaved in the county of Västra Götaland. The bus turned over and fell against the outer slope of the road where it slid on its left side about 60 meters. There were 57 seated passengers in the bus. The driver and one of the passengers were killed. Many of the passengers were injured, several seriously. It has been established that the bus driver, just before the accident, suffered a sudden cerebral hemorrhage and lost control of the vehicle.

The passengers who were injured most seriously were those who sat on the bus' left side. When the bus slid on the side against the road's outer slope, the windows shattered, whereupon rocks and earth came into the bus and caused severe injuries. The upper attachments of the seat belts in the bus were positioned between the seats. This meant that the passengers who sat in the left window row could fall out of the belt with their upper body and down towards the ground. Two people got their arms trapped between the bus and the ground. The majority of the people in the bus used the seat belts, which among other things meant that none of those who sat on the right side of the bus suffered serious injuries.

The road was nine meters wide and had a speed limit of 90 km/h. It had two lanes with opposing traffic. According to the assessment of SHK, the road had traffic safety deficiencies due to the fact that the inner slope was too steep, that there were unyielding objects within the road's safety zone, and that the speed limit was not adapted to these conditions.

The rescue and medical response was extensive but was essentially carried out in an efficient manner. About 90 minutes after the accident everybody had been evacuated from the bus. SHK has acknowledged that some confusion arose at the receiving health care facilities due to the fact that different systems for prioritizing injured persons were used during different phases of the operation, without this being made clear.

Safety recommendations

The Swedish Transport Agency is recommended to:

- within the frame of its international work, act for a development of the requirements for seat belt attachments in buses in order to reduce the risk to passengers sitting next to the windows falling out of the upper part of the belt and out of the bus if it tips or role over. *(RO2015:02 R1)*
- within the framework of its international work, act for a development of the test procedure for lateral stability for buses, so that various load conditions will be considered in order to make the testing process more realistic. *(RO2015:02 R2)*

The Swedish Transport Administration is recommended to:

- consider whether the systematic approach laid down in the road safety legislation to a greater extent can be used even in the road safety work concerning other state roads than the TEN-T network, particularly for roads with a speed limit of 90 km/h and vehicle volumes of 4000 vehicles per day or more. *(RO2015:02 R3)*

The National Board of Health and Welfare is recommended to, in consultation with the Swedish Association of Local Authorities and Regions:

- take initiative for the use of a unified national standard methodology for prioritizing among injured at an accident scene (triage).
(RO2015:02 R4)