

Safety light on buses and coaches

Transmitted by the expert from Sweden

This informal document is a revision of the document “Lighting to assist boarding and alighting” TRANS/WP.29/GRSG/2005/2.

Lighting at a service door of a bus or coach has to main functions; 1) to assist people to board and alight in safety and 2) to assist the driver to see if a passenger has fallen whilst boarding or alighting. The function to assist people to board and alight in safety is dealt with in the informal document GRSG-88-13. This document deals with the function to assist the driver to see if a passenger has fallen whilst boarding or alighting.

In Sweden, several accidents have happened where a passenger has fallen whilst alighting. When falling, he or she has glided in under the bus and been run over by the rear wheel of the bus when the bus drove away from the bus stop. The accidents happened during wintertime when it was dark outside and slippery on the ground. The passenger has fallen due to the slippery ground and he or she was run over by the bus because the driver could not see that someone has fallen outside the bus. Some of these accidents were fatal.

Adequate lighting that illuminates the area outside the service doors of a bus is an important safety feature that assists the driver to see if a passenger has fallen whilst boarding or alighting. It is important that the lighting is on long enough to lights up the area after the door is closed and until the bus starts to move. The Swedish bus manufacturers deliver new buses with lighting installed on the outside of the bus body near the middle service door and many bus operators have installed such lighting on older buses. The lighting gives a very good illumination of the area at the service door and is appreciated by the bus drivers. They have been able to avoid accidents and they feel more comfortable and secure because they have better control of the passenger’s boarding and alighting.

The Swedish national regulations allow Service-door-lighting to be installed at a service door of a bus or coach and state the following requirements:

- Service-door-lighting may only be installed adjacent to a service door.
- The lighting device shall be placed not less than 2000 mm above the ground.
- The lighting device shall not protrude more than 50 mm outside the side of the vehicle.
- The lighting device shall be installed and adjusted so that the light cannot dazzle other road-users within a radius of 10 m from the device.
- The lighting device shall be installed so that the light can only be turned on when a service door is operated and is turned off before the vehicle has reached a speed of 5 km/h.

Photographs of buses with lighting installed on the outside of the bus body near the middle service door are shown below.

