MOISTURE TEST FOR THE LIGHT-SIGNALLING DEVICES

Transmitted by the secretariat

The Road Safety and Transport Agency of Denmark expressed the concern about a safety risk caused by humidity accumulating under the lenses of certain rear-end lamps of motor vehicles in their country. Letters concerning this subject were received by the UNECE secretariat on 10 October 2002 and 15 January 2003, addressed to the Chairman of GRE.

Although the subject concerned a particular product, the Road Safety and Transport Agency of Denmark considered that this could be a general problem.

It was observed in Denmark that the light emitted from the lamps can be severely reduced because of mist building up inside the lamps, probably due to a construction or design failure. Concerning the given rear-end lamp, the mist never vanished from the lamps, when driving in cold and rainy weather. Under these circumstances the reduced light emitted from the lamps can result in dangerous situations, particularly in motorways. For a driver, overtaking a vehicle it might be difficult to see that the lane was already occupied by a slower driving motor vehicle with the rear-end lamps having light intensity reduced by misting.

The Danish Road Safety and Transport Agency contacted the Authority of the country, which had issued the ECE type approval of the lamp, and was informed that the lamp was type approved pursuant to ECE Regulation No. 7 that does not require any humidity test.

To enhance traffic safety and to avoid dangerous traffic situations caused by reduced performance of light-signalling devices, the Road Safety and Transport Agency of Denmark therefore proposes that a realistic humidity test should become a part of ECE Regulation No. 7 at the earliest convenience.

It is brought to the attention of GRE that such humidity test may also be desirable for a number of other ECE Regulations dealing with lighting and light-signalling devices that are exposed to humid and cold climate.