**SLR-39-08-Rev.1**

**Proposal to correct UN Regulation No. 150 (Retro-Reflective Devices)**

I. Proposal

*Insert a new paragraph 3.3.4.2.2., to read:*

**"3.3.4.2.2. In case of Class C, D, E or F, an orientation mark "TOP" which must be inscribed on any marking material whose retro-reflective system is not omnirotational at least:**

**(a) on strips in a 0.5 m distance,**

**(b) on areas within 100 x 100 mm2."**

*Insert a new paragraph 3.3.4.2.3., to read:*

**"3.3.4.2.3. In case of Class 1, 2, 3, 4 or 5, on the plates whose retro-reflective system is not omni-rotational, the word "TOP" is inscribed horizontally on the part of the plates which is intended to be the highest part of the plate when mounted on the vehicle."**

*Insert a new paragraph 3.3.4.4.1., to read:*

**"3.3.4.4.1.** **In case of Class C, D, E or F, the approval mark shall be visible and clearly legible on the outside of the marking material and shall be indelible and positioned at least once**

**(a) at 0.5 m intervals on strips,**

**(b) on areas within 100 x 100 mm2.”**

*Insert a new paragraph 3. in Annex 13, to read:*

"3. Resistance to weathering in the case of retro-reflective marking plates

3.1. Procedure - For each test, two specimens of a sample unit (see paragraph 2.1.2. of this Regulation) are taken. One specimen shall be stored in a dark and dry container for subsequent use as "reference unexposed specimen.

The second specimen shall be subjected to a source of illumination in accordance with ISO Standard 105 - B02 - 1978, Section 4.3.1; the retro-reflective material shall be exposed until blue standard No. 7 has faded to No. 4 on the grey scale and the fluorescent material until blue standard No. 5 has faded to No. 4 on the grey scale. After the test, the specimen shall be washed in a dilute neutral detergent solution, dried and examined for conformity with the requirements specified in paragraphs 1.2. to 1.4.

3.2. Visual appearance - No area of the exposed specimen shall show any evidence of cracking, scaling, pitting, blistering, delamination, distortion, chalking, staining or corrosion.

There shall be no shrinkage in excess of 0.5 per cent in any linear direction and no evidence of adhesion failure such as edge lifting from the substrate.

3.3. Colour fastness - The colours of the exposed specimen shall still meet the requirements specified in Annex 6.

3.4. Effect on the coefficient of retro-reflection of the retro-reflective material:

3.4.1. For this check, measurement shall be made only at an observation angle of 20' and an entrance angle of 5 degrees by the method given in Annex 7.

3.4.2. The coefficient of retro-reflection of the exposed specimen when dry shall be not less than 80 per cent of the value in Annex 7, table 1.

3.4.3. The specimen shall then be subjected to simulated rainfall as described in paragraph 7.7. of EN 13422(2004) (Vertical road signs. Portable deformable warning devices and delineators. Portable road traffic signs. Cones and cylinders) and its coefficient of retroreflection under this condition shall be not less than 90 per cent of the value obtained when measured in dry condition, as explained in paragraph 1.4.2. above.

It is possible to use nozzles other than those described in paragraph 7.7. of EN 13422(2004) provided that the same performance (e.g. water distribution on the surface of the test sample) of the simulated rainfall is achieved.”

II. Justification

1. The provisions inserted in the new paragraph 3.3.4.2.2. is contained in UN Regulation No. 104, paragraph 4.1.2., but unintentionally were not included in the text of the existing UN Regulation No. 150.
2. The provisions inserted in the new paragraph 3.3.4.2.3. is contained in UN Regulation No. 70, paragraph 4.1.2., but unintentionally were not included in the text of the existing UN Regulation No. 150.
3. The provisions inserted in the new paragraph 3.3.4.4.1. is contained in UN Regulation No. 104, paragraph 5.5., but unintentionally were not included in the text of the existing UN Regulation No. 150.
4. The provisions inserted in the new Annex 13.3. is contained in UN Regulation No. 70, Annex 8.1., but unintentionally were not included in the text of the existing UN Regulation No. 150.