

Proposal to amend UN Regulation No. 158 - devices and motor vehicles with regard to the driver's awareness of vulnerable road users behind vehicles when reversing

I. Proposal

Annex 10 paragraphs 1. , 1.3.2 and 1.4.2 amend to read:

1. Rear horizontal area detection
~~Audible/Aeoustic warning Detection~~ systems shall fulfil the test as specified in Paragraph 1.3.1. in this Annex. However, if ~~audible/aeoustic warning detection~~ systems fulfil the test as specified in Paragraph 1.4. in this Annex, the test as specified in Paragraph 1.3.1. in this Annex shall be considered to be satisfied.

- 1.3.2 Minimum detection rate:
The minimum detection rate required for the rear horizontal area shall be as follows:
 - (a) 90 percent for A1 as defined in paragraph 5.4.3. of ISO 17386:2010;
 - (b) 87 percent for the rear-2 range in A2 as defined in paragraph 5.4.3. of ISO 17386:2010.There shall be no undetected hole larger than a square consisting of two-by-two grids. Here, the rear horizontal area test procedures shall be as per paragraph 7.3. of ISO 17386:2010.
When an ~~information signal the warning~~ is provided for more than 5 seconds continuously, it is judged that the test object is detected. The detection test shall be performed 1 time for each test object. However, if necessary, according to the agreement of the Technical Service and manufacturer, it can be judged that the test object is detected in case ~~an information signal warnings are-is~~ provided in 4 out of 5 tests

- 1.4.2 Minimum detection rate:
The minimum detection rate required for the area of ten points shall be 100%. When ~~an information signal the warning~~ is provided for more than five seconds continuously, it is judged that the test object is detected. The detection test shall be performed one time for each test object. However, if necessary, according to the agreement of the Technical Service and manufacturer, it can be judged that the test object is detected in case ~~an information signal is warnings are~~ provided in four out of five tests.

II. Justification

Paragraph 1 of annex 10:

The type of signal is not limited to acoustic, but the test procedure/Annex is referring generally to the “detection system”.

Paragraph 1.3.2 and 1.4.2 of annex 10:

The text of 1.3.2 and 1.4.2 of annex 10 is not in line with the requirements of chapter 17 – requirements for detection systems.

According to 17.2.3. – duration of signaling – it is allowed to suspend the acoustic signal of a detection system after a certain time set by the manufacturer, whereas for the test of annex 10 it is needed to provide a warning for more than 5 seconds, but it’s not specified if acoustic, optical or haptical. There is no “warning” defined in the whole 158 regulation, it should be replaced by “information signal” to be harmonized with the regulation requirements text.