

## UN ECE GRRF AEBS and LDWS Informal Working Group

### CLEPA proposed amendments to LDWS “skeleton” document AEBS-LDWS-TF02-04 as requested at Task Force Meeting 02 (5<sup>th</sup> November 2009) in London

#### DRAFT 19-11-2009

Proposed amendments shown in blue

- 5.2.1. ~~When tested in the conditions of paragraphs 6.1. to 6.4 6.3., the LDWS shall:~~  
Whenever the system is on, the LDWS shall provide the driver with a warning signal if the vehicle departs from its normal running lane, **where this is marked with a clearly visible lane boundary marking<sup>1</sup>**, when there has been no purposeful steering demand to do so. Specifically, ~~when tested as in paragraph 6.5:~~ it shall:
- 5.2.1.1. **provide the driver with the warning specified in paragraph 5.4.1. when tested in accordance with the provisions of paragraph 6.5.<sup>2</sup> (departure warning test) using a straight lane and a curved lane<sup>3</sup>, and**
- 5.2.1.2. **provide the driver with the warning specified in paragraph 5.4.2. when tested in accordance with the provisions of paragraph 6.6. (~~malfunction~~ failure detection test).**

<sup>1</sup> The LDWS shall be able to provide a driver warning signal for global lane markings, as identified in ISO 17361:2007 Annex A.

<sup>2</sup> The visible lane marking used in the tests shall be one of those identified in ISO 17361:2007 Annex A, with the actual markings being in good condition and of a material conforming to the National standard for visible road surface markings of the country in which the testing is being carried-out. The actual visible lane marking layout used for the testing shall be recorded.

<sup>3</sup> The radius of curvature of the lane inner marking shall be [between 50m and 2000m] as agreed between the vehicle manufacturer and the Technical Service depending upon the vehicle, vehicle loading condition and test area suitability. The actual curvature used in the tests and the angle of banking, if applicable, shall be recorded.

6.1.1. The test shall be performed on a ~~flat~~, dry asphalt or concrete surface which is flat for the straight lane test and may be banked for the curved lane test.

~~6.1.3. Visible lane markings~~

~~6.1.3.1. The markings of the test location shall be in a good condition.~~

~~6.1.3.2. The left edge road marking pattern shall be a continuous line parallel to the axis of the road.~~

~~6.1.3.3. The left edge road marking width shall be at least 0,2 m.~~

~~6.1.3.4. The centre line road marking pattern shall be 2,5 m segments separated by 10 m voids.~~

~~6.1.3.5. The centre line road marking width shall be at least 0,15 m.~~

~~6.1.3.6. The right edge road marking pattern shall be a continuous line parallel to the axis of the road.~~

~~6.1.3.7. The right edge road marking width shall be at least 0,2 m.~~

6.6. ~~Malfunction~~ Failure detection

6.6.1. Simulate a LDWS ~~malfunction~~ failure, for example by disconnecting the power source to any LDWS component or disconnecting any electrical connection between LDWS components. When simulating a LDWS ~~malfunction~~ failure, the electrical connections for the ~~telltale lamps~~ driver warning signal or the disabling switch, if fitted, shall not be disconnected.

~~6.6.2. With the vehicle stationary and the ignition locking system in the "Lock" or "Off" position, activate the ignition locking system to the "On" or "Run" position. The LDWS shall perform a check of lamp function as specified in paragraph 5.4.3. of this Regulation.~~

The LDWS warning signal shall be activated without delay and remain activated while the ignition is "on". A subsequent "off" "on" ignition cycle shall result in the warning signal being reactivated.

~~6.6.3. Drive the vehicle for up to 60 minutes along any portion of the test course.~~

~~6.6.4. The sum of the total cumulative drive time under paragraph 6.6.3. shall be the lesser of 60 minutes or the time at which the LDWS malfunction telltale illuminates in accordance with paragraph 5.4.2.~~

~~6.6.5. If the LDWS malfunction indicator did not illuminate in accordance with paragraph 5.4.2. as required, discontinue the test.~~

Drafting notes:

Note 3: The radius of curvature values shown in [square brackets] are open to discussion, or the complete [square bracket] content can be deleted.