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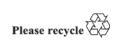
Geneva, 26-30 September 2022 Item 4(d) of the provisional agenda Automated/autonomous and connected vehicles: UN Regulation No. 157

Proposal for amendments to UN Regulation No. 157 (Automated Lane Keeping System)

Submitted by the Informal Working Group on Event Data Recorder and Data Storage System for Automated Driving*

The text reproduced below reflects the discussion state of play of the Informal Working Group (IWG) on Event Data Recorder (EDR) and Data Storage System for Automated Driving to address remaining issues concerning the DSSAD provisions on UN Regulation No. 157 (Automated Lane Keeping System) as revised in ECE/TRANS/WP.29/2022/59/Rev.1. Modifications to the text are marked in bold for new or strikethrough for deleted characters.

^{*} In accordance with the programme of work of the Inland Transport Committee for 2022 as outlined in proposed programme budget for 2022 (A/76/6 (Sect.20), para 20.76), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.





I. Proposal

Paragraph 2.27., amend to read:

"2.27. An "aborted lane change manoeuvre" is an LCPM which is not completed and results in the vehicle returning to its original lane of travel."

Paragraph 8.2.1., amend to read:

"…

- (k) Severe vehicle failure;
- (1) Start of Lane Change Procedure;
- (m) End of Lane Change Procedure;
- (n) Abortion of Lane Change Procedure Manoeuvre;
- (o) Start of intentional lane crossing (5.2.1.1. (d));
- (p) End of intentional lane crossing (5.2.1.1. (d))."

Paragraph 8.2.2., amend to read:

- "8.2.2. Occurrences flags for paragraph **8.2.1** (l), (m), and (o), and (p) are only required to be stored if they happen within 30 seconds before the following occurrences:
 - (a) Start of Emergency Manoeuvre;
 - (b) Involved in a detected collision;
 - (c) Abortion of Aborted Lane Change Procedure Manoeuvre; or
 - (d) EDR trigger input.,

or within 5 seconds before a system override."

Paragraph 8.2.3., amend to read:

- "8.2.3. Occurrences flags for paragraph **8.2.1.** (1) (m) and (p) are only required to be stored if they happen either within 5 30 seconds before the following occurrences: a system override.
 - (a) Start of Emergency Manoeuvre;
 - (b) Involved in a detected collision; or
 - (c) EDR trigger input."

II. Justification

- 1. This proposal aims at clarifying that the occurrence flag to be stored according to paragraph 8.2.1. (n) are linked to the abortion of the lane change manoeuvre rather than to the procedure. An abortion of a lane change procedure before the lane marking is crossed (i.e. start of the manoeuvre) is seen as regular operation of the system which does not need to be recorded in the DSSAD.
- 2. The changes to paragraphs 8.2.2. and 8.2.3. aim to resolve a contradiction in the provisions and add additional clarification.

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