

Proposal for amendments to amend UN Regulation No. 157

These are the proposals to clarify certain provisions within the regulation

Modifications to the existing text of UN-Regulation No. 157 are **bold** for new or ~~struckthrough~~ for deleted characters as proposed by the UK.

RED additional input by OICA/CLEPA for UNR157 SIG-08

I. Proposal

Paragraph 5.1.1., amended to read:

“5.1.1. The activated system shall perform the DDT shall manage all situations including failures, and shall be free of unreasonable risks for the vehicle occupants or any other road users.

The activated system shall not cause any collisions that are reasonably foreseeable and preventable. If a collision can be safely avoided without causing another one, it shall be avoided. ~~When the vehicle is involved in a detectable collision the vehicle shall be brought to a standstill.~~

Insert a new paragraphs 5.1.1.1. and 5.1.1.2., to read:

5.1.1.1. — When the vehicle is involved in a collision while the ALKS is active that causes damage to any part of the system or impairs its operation, the control strategy shall be to bring the vehicle to a standstill. The driver shall be informed of the system status.

5.1.1.2. The ALKS shall be capable, whilst active, of responding to detecting (or inferring) any reasonably foreseeable collision which requires a response according to national traffic rules (e.g. bringing the vehicle to standstill) and which could be expected to be recognized by the competent and careful human driver. In the case of such a collision, without prejudice to paragraph 5.1.1.1., a transition demand shall be initiated immediately and the driver shall be informed of the circumstance for the transition demand.

”

Annex 5, Paragraph 5.2 (table), amended to read:

“ ...

*Reference in
main text*

Test/Check

...

...

5.1.1.1. System reaction in case of a ~~detectable~~ collision **that affect the operation of the system**

5.1.1.2. System reaction in the event of collision (or inferred collision) which **initiates a transition demand**

...

...”

II. Justification

1. There have been some concerns and questions raised with the interpretation of some of the provisions within UN Regulation 157, namely the response to

Commented [KT(1): (a) That a failure affecting the operation of the system shall lead to a transition demand is already established in par. 5.4.2.3.

(b) In order to differentiate between initiating a transition demand and braking the vehicle to standstill it would be required to always be sure about the cause of the failure. This is not always possible and could lead to braking the vehicle to standstill unreasonably.

(c) Braking the vehicle to standstill would mean initiating an MRM right away, but we haven't listed "collision" as trigger for an immediate MRM

Commented [KT(2): A transition demand could have already been given before and then "immediately" would be no longer applicable.

Commented [KT(3): As the driver will likely have recognized the impact and there is usually a second party involved, there seems no need to inform the driver of the specific circumstance. How to best communicate this should be left up to the manufacturers HMI strategy.

emergency vehicles and the term 'detectable collision' which were raised by the expert from the UK (GRVA-09-33). GRVA decided that these issues were to be addressed by the Special Interest Group (SIG) on UNR157.

2. .

