

Proposal for amendments to amend UN Regulation No. 157

These are the proposals to clarify certain provisions within the regulation and are the result of discussions in the Special Interest Group (SIG) on UN Regulation No. 157.

Modifications to the existing text of UN Regulation No. 157 (UN R157) are underline for new or ~~strike through~~ for deleted characters.

I. Proposal

Paragraph 2.5, amended to read:

“2.5. “Unplanned event” is a situation which is unknown in advance, but assumed as very likely in happening, ~~e.g. road construction, inclement weather, approaching emergency vehicle, missing lane marking, load falling from truck (collision)~~ and which requires a transition demand. This may include: road construction, inclement weather, approaching emergency vehicles/enforcement vehicles, missing lane markings, load falling from truck.”

Paragraph 5.1.1 and 5.1.2, 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~~ significant collision ~~with another road user while ALKS is active~~, the ~~vehicle control strategy shall be brought to bring the vehicle to~~ a standstill.

5.1.2. The activated system shall comply with traffic rules relating to the DDT in the country of operation, including responding to emergency/enforcement vehicles.”

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

“... ”

<i>Reference in main text</i>	<i>Test/Check</i>
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... ..

5.1.1. System reaction in case of a ~~detectable~~ significant collision

... ..”

II. Justification

1. There have been some concerns and questions raised with the interpretation of some of the provisions within UN R157, namely the response to emergency vehicles and the term ‘detectable collision’ which were raised by the experts from France (GRVA-07-39) and the UK (GRVA-09-33) respectively. GRVA

decided that these issues were to be addressed by the Special Interest Group (SIG) on UNR157.

2. It was agreed in the SIG that the Automatic Lane Keeping System (ALKS) should be able to detect and respond to emergency vehicles as well as enforcement vehicles that had certain empowerments but were not linked to the traditional emergency services (i.e. police, fire, or ambulance). It was also agreed that the ALKS could either respond by issuing a transition demand for the driver to respond to the situation or manoeuvring as required by national traffic rules. To make that clear the wording in paragraph 2.5. is revised and the responding to emergency or enforcement vehicles is linked to the compliance with traffic rules in the country of operation in paragraph 5.1.2..
 3. The SIG noted that the provisions around 'detectable collision' was to enforce the strategy to bring the vehicle to a stop if it was involved in a collision that could render the ALKS in a state that it may not be able to continue and therefore the vehicle should be brought to a stop. As such the text in paragraph 5.1.1. is revised to refer to the significance on the collision to determine if the vehicle should be brought to a stop rather than the detectability of it. Additional clarity is provided by adding a reference to the control strategy and that this is only applicable whilst the ALKS is active. The table paragraph 5.2. in Annex 5 is amended to reflect this change.
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