

Change proposal for R158 chapter “16.1.1.3. Deactivation”

Update proposal on the statement below to make it more relevant for reversing safety:

“...
Modifying the view means to switch to any other camera views.
...”

Hirao-san and Bernd took on to make a proposal for the next IWG meeting.

Proposal 4 (final for IWG review):

“...
16.1.1.3. Deactivation
The rear-view image shall remain visible during the backing event until either, the driver modifies the view, or the vehicle direction selector is no longer in the reverse position.
Modifying the view means to switch to any other camera views **which supports awareness for manoeuvring**.
...”

[Alternative:]
[which show vehicle surroundings for manoeuvring]

The view can be manually switched off when the vehicle is not moving rearward.
The system may be switched off when the vehicle detects a coupling by means of a coupling device.
...”

Justification:
Current wording would allow to switch to any camera or view which is not related to the safe reversing of a vehicle and comply with this regulation and is not in support for the safe reversing of a vehicle.
There are application cases and usage scenarios which benefit, need a change of the camera or the view of a rear-view camera system and can enhance the safe manoeuvring of a vehicle.

Notes

Review and updated proposal at the end of the online meeting organised by Lisa Schaber, titled “VRU Proxi VW group UN-R 158 - text suggestion, 17.1” on 01/07/2022 with approx. 10 members of OICA or CLEPA present.

What is the best for R158?

- Reversing view always to be maintained.
- Allowed not showing a reversing view when reversing under certain conditions to allow this?

Comments

- The proposal is a compromise on safety, follow previous discussions and agreements in the IWG and an overall compromise for a safe manoeuvring of a vehicle.
- There is currently a “not allowed to de-active” in R158 however another view as in the proposal can lead to no rear view.
- This topic is similar to Reg. 46 for mirror replacement on class V (passenger side downward area) and class VI (front downward area) which does not allow any other view or switch off.

- This matter is unclear since the 12th meeting, see reference to VRU-12 meeting minutes of this paragraph:
“ ...
6. Part II: Requirements for devices for indirect vision other than mirrors
- Proposed changes to 16.1.1.1 and 16.1.1.3 (including additional OICA proposal) were accepted by the IWG.
- 16.1.1.4: J is not in favour of allowing the driver to change/modify the view. FR and UK agree with J. OICA explained that a long discussion took place and in the end it was proposed to take the FMVSS definition. After discussion the group agreed with the OICA proposal but last part to be changed that driver is only allowed to de-activate the view when the vehicle is not moving rearward.
...”

Proposal 1:

“ ...

16.1.1.3. Deactivation

The rear-view image shall remain visible during the backing event until either, the driver modifies the view, or the vehicle direction selector is no longer in the reverse position.

~~Modifying the view means to switch to any other camera views.~~

The rear-view image can be switch to any other camera or views which should comply with the requirements defined in this regulation.

The view can be manually switched off when the vehicle is not moving rearward.

The system may be switched off when the vehicle detects a coupling by means of a coupling device.

...”

Justification:

Current wording would allow to switch to any camera or view which is not related to the safe reversing of a vehicle and comply with this regulation and is not in support for the safe reversing of a vehicle.

There are application cases and usage scenarios which benefit or need a change of the camera or the view of a rear-view camera system.

Proposal 2:

“ ...

16.1.1.3. Deactivation

The rear-view image shall remain visible during the backing event until either, **a modified view is selected** ~~the driver modifies the view~~, or the vehicle direction selector is no longer in the reverse position.

Modifying the view means to switch to any other ~~camera views~~ **field of view which matches at least as defined in paragraph 15.2.**

The view can be manually switched off when the vehicle is not moving rearward.

The system may be switched off when the vehicle detects a coupling by means of a coupling device.

...”

Justification:

Current wording would allow to switch to any camera or view which is not related to the safe reversing of a vehicle and comply with this regulation and is not in support for the safe reversing of a vehicle.

There are application cases and usage scenarios which benefit or need a change of the camera or the view of a rear-view camera system.

Proposal 3:

“... ”

16.1.1.3. Deactivation

The rear-view image shall remain visible during the backing event until either, the driver modifies the view, or the vehicle direction selector is no longer in the reverse position.

Modifying the view means to switch to any other camera views **which show vehicle surroundings**.

The view can be manually switched off when the vehicle is not moving rearward.

The system may be switched off when the vehicle detects a coupling by means of a coupling device.

...”

Justification:

Current wording would allow to switch to any camera or view which is not related to the safe reversing of a vehicle and comply with this regulation and is not in support for the safe reversing of a vehicle.

There are application cases and usage scenarios which benefit, need a change of the camera or the view of a rear-view camera system and can enhance the safe manoeuvring of a vehicle.
