Status Report to GRB #68

Task Force on Reverse Warning issues

Meeting

2nd Meeting : June 13 – 14, 2018 – Brussels

3rd Meeting : September 10 − 11, 2018 − Geneva

4th Meeting: January 21-22, 2019 – Geneva (TBC)

2nd meeting participants

Contracting parties: Japan, Germany, Netherlands, EC

NGOs: OICA, CLEPA

3rd meeting participants

Contracting parties : Japan, Germany, Netherlands , China,

Korea, Russia, EC

NGOs: OICA, CLEPA

Results of discussion

At 2nd and 3rd task force meeting, we discussed about the results of questionnaire research.

Thank you very much for your cooperation to the questionnaire research!

As results of questionnaire research, current status and future positions of each country are clarified.

Some opinions are inconsistent to each other. As a basic policy of the TF, we will proceed discussion based on technical data.

Points of discussion and its progress are shown in the following slides.

Some categories are already clarified in the TOR, but the others are not yet clarified.

Already clarified in the TOR : M3, N3,

TO BE clarified : [M2] and [N2]

Newcomers from the result of questionnaire : O4, school bus

School bus is not defined in R.E.3.

School bus should be treated as M category.

O4 shall be excluded. It will be discussed and will depend on demand.

Results of discussion: Sound Level

- As a result of questionnaire, the majority of opinions of CPs to SPL (Aweighted Sound Pressure Level) is about 50 80 dB at 7m distance, but Spain has another opinion (higher SPL).
 Appropriate sound level is under discussion based on the results of Japanese research.
- 2. How should be the test method of the SPL in the regulation? Mounted to the vehicle or stand alone component? Same as UN R28, sound volume is tested in both conditions.
- 3. How do we measure low limit value at proving ground? Present lower limit is 45 dB(A) (GRB-65-07-Rev.1). It would be difficult to measure 45 dB(A) sound at proving ground. It could be possible to slide measurement point to nearby the vehicle, to use semi-anechoic chamber, to use background correction, etc.

Results of discussion: Pause switch and re-operation

1. No CP has a position to allow Pause Switch.

Since **R**everse **W**arning **S**ound (RWS) would be only a Safety function for reverse moving, there is no evidence which justify allowing Pause switch

When vehicle equipped with other safety device, it is not necessary to use or apply RWS generator or pause switch should be allowed.

2. After the vehicle user has selected "Low mode" or "Pause switch", it should be return to "Normal mode" automatically and inform the driver.

Results of discussion: Sound quality

Do we have good evidence which gives good rationality to regulate sound quality (sound frequency)?

<for example>

- Tonal sound
- Broad band sound
- 1/3 octave band broad band sound

We think it is important to keep room for freedom of design (technologically neutral).

We do not intend to exclude warning sound by sound quality.

Modification of ToR

It was foreseen by Japan, Germany and Turkey to create an Informal Working Group (IWG) with Terms of Reference (ToR). But 66th GRB decided that the task can be solved by a Task Force (TF). According to the Rules, no ToR are foreseen for a TF. This was the reason way the proposed ToR were not updated.

TF thinks it is important to have some kind of rules for operating the TF group and share these rules among GRB experts.

As a result of 3rd TF meeting, we modified following points:

1. Name of the document

From "ToR" to "Guidelines"

Because TF isn't required to submit TOR.

2. Name of TF group

From "Task force on Reversing Alarm issues" to "Task force on Reverse Warning issues"

AS a response to the comment by Switzerland made at GRB #67.

Modification of ToR - Con't

3. <u>Timeline (submission of working document to GRB)</u>
From "The 69th GRB (beginning of 2019)" to "the 71st GRB (beginning of 2020)"

This change has been made to be able to finalize the Draft on Reverse Warning Issues and take into consideration activities of VRU-Proxi.

Thank you for your kind attention!