Informal Document **GRB-69-20** 69<sup>th</sup> GRB, January 22-25, 2019 Agenda item 8

# Status Report to GRB #69

### Task Force on Reverse Warning issues

Meeting

4th Meeting : December 11-12, 2018 – Brussels
Small group drafting meeting
5th Meeting : January 21-22, 2019 – Geneva
Task force meeting

4th meeting participants Contracting parties : Japan, Germany, EC NGOs, etc : OICA, GREWUS (Guest)

5th meeting participants Contracting parties : Japan, Germany, Turkey, Netherlands China, Korea, Russia, France, EC NGOs, etc : OICA, CLEPA, GREWUS (Guest)

### The new regulation is discussed based on R28.

### Scope

- Scope of new regulation is M3, N3 and N2.
- Japan proposed M2 should be limited to above 3.5 t vehicle, because vehicle type is different between under 3.5 t and above 3.5 t.
- The Contracting Parties present at the meeting could not reach a common agreement on this subject. Therefore, the discussion about this matter will be continued based on documents. M2 (under 3.5t) is still in square brackets

### Definition of vehicle type

 Definition of vehicle type was corrected in line with reverse warning sound. The discussion about this matter has to be continued.

#### Limit values of the reverse warning sound

- We have to define the frame of limit values (Composition of limit values table).
- Japan presented technical data regarding limit values (TFRA-03-04).
- All limit values are still in square brackets. The discussion about this matter should be continued.

### Test method

- Basically, the current test method proposed in new regulation is based on R28.
- We are considering test method of small volume warning sound, because it is difficult to keep enough difference between target sound and BGN.
- In addition, new test method to be considered for automatic volume adjustable system.

### Sound emitting count per minutes

 Continuous sound like horn should be excluded. The reverse warning sound device which emits sound rarely (i.e. 1 count/min) should be excluded because it is used as alternative method of "Pause switch".

### Pause switch

- Wording about "pause switch" was proposed by Japan based on R-138.
- "Pause switch" should be permitted when another safety device (i.e. rear camera) is active.
- We are considering relationship between reverse warning sound device and other safety devices.

#### **Requirements of acoustic chamber**

- As a results of the small group meeting, the requirements for an acoustic chamber were same as in R28 (horn).
- After the small drafting meeting, it was clarified that Japanese type approval authority does not have an acoustic chamber. It is necessary to know other countries' situation.

### **Duration test**

 Japan proposed duration test is not required in this regulation. Germany and OICA didn't agree with it. The discussion about this matter has to be continued.

## Required data to the new regulation

### TF group confirmed following data and ideas are required. Frame of limit value

- If limit value depends on sound type,
  - Definition of each sound type
  - Test data for tonal sound
  - Test data for broad band sound
  - Test data for 1/3 oct. band sound
- Test method for low sound level warning sound
  - The Background Noise (BGN) should be more than 3-10 dBA below the target sound
- Test method for automatic adjustable device has to be defined All of the test methods should be realistic.

### Schedule

#### May 31, 2019

Technical data submission deadline

#### June 26-28, 2019

6th meeting : Small group drafting and data analyzing meeting @ Brussels (TBC)

#### July 1-2, 2019

7th meeting : Task Force meeting @ Paris

#### September, 2019

GRBP : Explain point of new regulation (Informal document)

#### October, 2019

Submit working document to GRBP

#### January, 2020

**GRBP** : Discussion working document at GRBP

## Thank you for your kind attention!