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| Submitted by the expert from SAE | Informal document **GRE-80-17**(80th GRE, 23-26 October 2018agenda item 6 (b)) |

 Amendment to: ECE/TRANS/WP.29/GRE/2018/44
“Proposal for a new 07 series of amendments to UN Regulation No. 48”

The document proposes an addition to ECE/TRANS/WP.29/GRE/2018/44. Proposed amendments are marked in bold and strikethrough text.

1. Proposal

*Paragraph 5.15*., amend to read:

 “5.15. The colours of the light emitted by the lamps are the following:

...

Side retro‑reflector, non‑ triangular: Amber; however, the rearmost side retro-reflector ~~can~~ **shall** be red ~~if it is grouped or has part of the light emitting surface in common with the rear position lamp, the rear end outline marker lamp, the rear fog lamp, the stop-lamp, the red rearmost side-marker lamp or the rear retro-reflector, non- triangular~~.

…”

*Paragraph 6.17*., amend to read:

 “6.17. Side retro‑reflector, non‑triangular **(**Regulation No. 3)

6.17.1. Presence

 Mandatory~~: On all motor vehicles the length of which exceeds 6 m.~~

~~On all trailers.~~

~~Optional: On motor vehicles the length of which does not exceed 6 m.~~

…

6.17.4.3. In length: at least one side retro-reflector shall be fitted to the ~~middle~~ **front** third of the vehicle **and one to the last third of the vehicle length**, the foremost side retro‑reflector being not further than 3 m from the front **and the distance between the rearmost side retro-reflector and the rear of the vehicle shall not exceed 1 m**;

The distance between two adjacent side retro‑reflectors shall not exceed 3 m. This does not, however, apply to M1 and N1 category vehicles.

If the structure, design or the operational use of the vehicle makes it impossible to comply with such a requirement, this distance may be increased to 4 m.

~~The distance between the rearmost side retro-reflector and the rear of the vehicle shall not exceed 1 m. However, for motor vehicles the length of which does not exceed 6 m, it is sufficient to have one side retro-reflector fitted within the first third and/or one within the last third of the vehicle length.~~

~~However, for motor vehicles the length of which does not exceed 6 m, it is sufficient to have one side retro-reflector fitted within the first third and/or one within the last third of the vehicle length. For M~~~~1~~ ~~vehicles the length of which exceeds 6 m but does not exceed 7 m it is sufficient to have one side retro-reflector fitted not further than 3 m from the front and one within the last third of the vehicle length.~~

… “

II. Justification

Under dark ambient conditions it is imperative that the side of a vehicle is visible to other drivers. For some unfathomable reason, vehicles shorter than 6m are not require to be equipped with at least side retro reflectors and therefore are exposed to safety risk while parked or disabled with their side exposed to an oncoming traffic.

While a vehicle is operating at night its lights are switched ON – because of late amendments to UN Reg. 48 this night-time illumination is required to be automatic, this is now assured and no redundancy provided by retro-reflectors is needed. When the position lamps are switched ON, because of their wide angles of geometric visibility and because of light projected to the road by front and rear lamps, the front and rear of a vehicle in traffic are relatively well marked. However, when a vehicle engine is switched OFF, with the exception of parking lights, that may or may not be switched ON, there is no marking devices requirement to identify the parked or disabled vehicle position.

Installation of retro-reflectors or retro-reflecting material may be relatively inexpensive way to prevent collisions with side-facing, parked or disabled vehicles and resulting personal injuries to the drivers, property damage or both.

The amendment in para. 5.15 would clarify that the rear retro reflector should be only red. At present time this retro reflector is allowed to be yellow or red – red being allowed if rear retro reflector is combined with rear combination lamp. So, to remove any ambiguity in marking scheme it should be decided which colour is to identify rear side of a vehicle. As red may be necessary to stay as the rear and side light functions are often combined into one wrap-around lamp body, red colour should be the one identifying rear end of a vehicle.

If this philosophy is adopted, similar amendment should be also done to para. 5.15 regarding rear side marker lamp.