

Transmitted by the expert from FRANCE

Informal document **GRB-65-10**  
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agenda item 4 (a))

## **Proposal for correction to 03 series of amendments to Regulation No. 51**

The text reproduced below was prepared by the expert from FRANCE to update and revise the 03 series of amendments to UN Regulation No. 51.03. The modifications to the current text are marked in bold for new or strikethrough for deleted characters.

## I. Proposal

*Annex 3, paragraph 3.1.2.1.2., amend to read:*

“3.1.2.1.2. ...

At the choice of the vehicle manufacturer, front engine vehicles may use  $l = 5$  m, and mid-engine vehicles may use  $l = 2.5$  m. **In that case, the accelerator shall be kept in the depressed condition until the reference point reaches BB' + 5 m for front engine, and BB' + 2.5 m for mid-engine”**

*Annex 3, paragraph 3.1.2.1.4.1., amend to read:*

“3.1.2.1.4.1 ...

(c) If the acceleration value of gear ratio  $i$  exceeds  $2.0$  m/s<sup>2</sup>, the first gear ratio shall be used that gives an acceleration below  $2.0$  m/s<sup>2</sup> unless gear ratio  $i+1$  (or  $i+2$  or  $i+3$  or ...) provides acceleration less than  $a_{\text{urban}}$ . In this case, two gears,  $i$  and  $i+1$  (or  $i+2$  or  $i+3$  or ...) shall be used, including the gear  $i$  with acceleration exceeding  $2.0$  m/s<sup>2</sup>. In other cases, no other gear shall be used. The achieved acceleration  $a_{\text{wot}}$  test during the test shall be used for the calculation of the part power factor  $k_p$  instead of  $a_{\text{wot ref}}$ .

*Annex 3, paragraph 3.1.2.2.1.3., amend to read:*

“3.1.2.2.1.3. ...

**(d) If no rotational engine speed is available and the target vehicle speed  $v_{\text{target BB'}}$ ,  $v_{\text{BB'1}}$  and  $v_{\text{BB'2}}$  defined as**

$$25 \text{ km/h} \leq v_{\text{BB'1}} \leq 35 \text{ km/h}$$

$$35 \text{ km/h} \leq v_{\text{BB'2}} \leq 45 \text{ km/h}$$

**cannot be fulfilled, it is necessary to conduct, only one test with  $v_{\text{BB'3}}$  where  $v_{\text{BB'3}}$  is defined as the maximum speed of the vehicle. The test condition for  $v_{\text{BB'3}}$  is taken for further calculation of  $L_{\text{urban}}$ .**

*Annex 3, paragraph 3.1.3, amend to read:*

“3.1.3. ...

The results of each side shall be ~~averaged~~ **calculated** separately **as specify in paragraph 3.1.3.1. and 3.1.3.2.**

*Annex 3, paragraph 3.1.3.1., amend to read:*

“3.1.3.1. ...

**In the case of vehicles with a PMR not exceeding 25, the final result is calculated only with  $L_{\text{wot rep}}$  :**  
 **$L_{\text{urban}} = L_{\text{wot rep}}$**

”

## II. Justification

*Annex 3, paragraph 3.1.2.1.2., amend to read:*

Clarification for depressed condition when  $l$  is fix at 5 m for calculation of  $a_{wot}$

*Annex 3, paragraph 3.1.2.1.4.1., amend to read:*

If the acceleration value of gear ratio  $i$  exceeds 2.0 m/s<sup>2</sup>, the first gear ratio shall be used that gives an acceleration below 2.0 m/s<sup>2</sup> could be  $i+1$  or  $i+2$  or  $i+3$ , ...

In case of gear ratio  $i+1$  or  $i+2$  or  $i+3$ , ... provides acceleration less than  $a_{urban}$ . In this case, two gears,  $i$  and  $i+1$  or  $i+2$  or  $i+3$ , ... shall be used, including the gear  $i$  with acceleration exceeding 2.0 m/s<sup>2</sup>.

*Annex 3, paragraph 3.1.2.2.1.3, amend to read:*

For vehicle with no rotational engine speed is available and with maximum speed below 25 km/h, target vehicle speed from a, b, c and d are not applicable.

*Annex 3, paragraph 3.1.3, amend to read:*

Clarification to avoid confusion with average interpretation.

*Annex 3, paragraph 3.1.3.1., amend to read:*

As the constant speed test is not required for vehicles with a PMR < 25 the final result is calculated only with  $L_{wot}$  rep.

*Example from UN41R04 §1.4.6.1. (Vehicles with PMR < 25) :*

*Vehicles with a PMR not exceeding 25 are tested in a single gear or gear selector position only under full throttle. The final test result is the sound pressure level  $L_{wot,(i)}$  mathematically rounded to the nearest first decimal place (e.g. XX.X).*

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