Svensson Bolennarth

Från: jstokreef@rdw.nl

Skickat: den 13 oktober 2014 11:10

Till: Svensson Bolennarth

Kopia: Juergen.Westphaeling@tuev-sued.de

Ämne: FW: R55 7th meeting 3 and 4 June item 26 fixing points

Dear Bolennarth,

With regard item 26 (specification fixing points towbar) we got comments from OICA after our meeting in Poznan where the proposal R55-07-17 was adopted. How shall we deal with these comments? In my opinion some comments are useful. How should we inform the working group? May be we could discuss the comments Thursday under agenda item 6, any other business. If you agree, may be you could transform the email exchange between Pierre Teyssier and myself into a document for the meeting?

Thank you in advance for your advise and your help.

Best regards,

Jan

Jan Stokreef

Senior engineer



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Verzonden: vrijdag 10 oktober 2014 17:46

Aan: 'Teyssier Pierre'; bolennarth.svensson@vbggroup.com

CC: 'Olivier FONTAINE'; DUCHE Frederic (frederic.duche@renault.com) **Onderwerp:** RE: R55 7th meeting 3 and 4 June item 26 fixing points

Dear Pierre,

Thank you for your comments with regard to document R55-07-17. Due to holidays, lot of work, GRRF, etc, etc. I could not find the time to answer you earlier. Please accept my apologies. I put my reactions between your text in *red italics*. I hope you can agree with these answers.

Bets regards,

Jan

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Verzonden: vrijdag 4 juli 2014 11:12

Aan: Stokreef, Jan; bolennarth.svensson@vbggroup.com

CC: 'Olivier FONTAINE'; DUCHE Frederic (frederic.duche@renault.com)
Onderwerp: FW: R55 7th meeting 3 and 4 June item 26 fixing points

Dear Jan, Dear Bolennarth,

I hope you had a good trip back yesterday. The meeting MVC was really interesting and I think we have some more work in front of us!

To come back to Jan's proposal on item 26 "information about fixing points", I can give some feedback from our OICA GERF discussions in June, as well as some input received from some manufacturers. Our discussions were based on the documents in the mail below (attached), which has probably been modified during the meeting in Pozdan (but I had no time to review the meeting outcome...):

OICA:

• OK on principle to add an appendix, same way as in UN R13 and R13H for UN R90 approval; we should just make sure the information is strictly limited to what is required for an approval (no "nice to have" data)

I agree with these comments and the proposal is intended to be such that it requires not more than necessary. However sometimes it needs some more words to be clear. More words don't mean more information, only more clear information.

- Par. 3. looks a bit over-specified, any simplification welcome (see more comments from Renault S.A. below)
- The footnote is NOK: * At the request of (an) applicant(s) for a mechanical coupling device or component designed for a specific vehicle type, the information shall be provided by the vehicle manufacturer or by the type approval authority as contained in Appendix 1 to this annex. However, this information shall not be provided for purposes other than Regulation No. 55 approvals.

It should be the same as in R13H: At the request of (an) applicant(s) for Regulation No. 90 approval, the information shall be provided by the Type Approval Authority as contained in Appendix 1 to this annex. However, this information shall not be provided for purposes other than Regulation No. 90 approvals.

VM should provide this information once. Then type approval authorities should provide to coupling manufacturers when requested.

It is current practice that the information with regard the fixing points are provided by the vehicle manufacturers to the coupling manufacturers. Above that the vehicle manufacturer are always aware of the latest situation with regard to the fixing points. Also there are many references in the regulation to the manufacturer as the one who provides the necessary information. In my opinion there is no reason to exclude the manufacturer as the source of the necessary information.

Renault S.A. (Frédéric Duché):

➤ 1- Is it worth requesting line 2.2 in relation to item 2.3. Indeed, if we give' the maximum permissible axle masses (par. 2.3), we have indirectly the distribution of the maximum permissible mass on each axle (par 2.2).

Looks indeed a little bit over specified, for the calculation of the D-value only the total-masses are needed. I will propose an amendment to the document.

> 2- Is it the maximum permissible load on the rear axle or on the tow ball? The wording 'rear' is not clear. I suggest: 'the maximum permissible vertical loading to be imposed on the rear the coupling ball/hook of the towing vehicle,'

Proposed text is indeed more clear. I will propose an amendment to the document.

> 3- Chap 3.2: "..and the height of the coupling point in relation to the fixing points of the coupling," I would like a 'Justification' for this specific point. Indeed, from my manufacturer cars point of view using coupling with Class A, the fixings points are already designed in the Annex 5...

The position of the coupling ball, where the forces are applied, is very relevant for the forces applied to the fixing points on the body of the car. Therefor it is necessary that the car manufacturer specifies the position of the coupling ball in relation to the fixing points.

Volvo Group:

- Volvo is using such couplings on M3 coaches. I got the feedback from Volvo Bus colleagues that it would be difficult to provide the height of the coupling point above the road surface, due to the big variety of vehicles.
- On the other hand, I can see that Annex 7 paragraph 1.1.1 request the height only for M1 M2 and N1. What is the background for limiting the requirement to M1 M2 and N1:
 - o Is M3 category just "forgotten" in Annex 7 paragraph 1.1.1, and thus should be added? In this case we would have a problem because our coupling height are above what is defined in figure 25 (height required to be between 350 and 420, if I understand it correctly)
 - o Or is there a good technical reason not to apply this figure 25 to M3?
 - We have today a height around 440mm 500mm and it works good. So it means either that the requirements in figure 25 are not relevant for M3 (and maybe for M1 M2...?) or that we are using some specific trailers where the drawbar is a bit higher than the standard drawbar height of trailers used on M1 and M2... This I cannot say, I try to get input from our AM engineers here...
 - o I am concerned we could end up with a requirement for coupling height on M3 not compatible with our installations, which are working good and type approved...

I don't think M3 is forgotten. Heavy commercial vehicles (including M3) are very different from light vehicles (M1/M2 and N1) with regard to the height of the chassis. Above that a ball coupling is because of the limited D-values is not the most likely coupling on a heavy vehicle. If used on such a vehicle most they use trailers with an adjustable drawbar. Otherwise it will not work because the O1/O2 trailers have a coupling height (according R55 Annex 7 par. 1.2.1) of 430 +/- 35 mm. I think we should not add specific requirements with regard to the installation of ball couplings on heavy vehicles since in practice there are no problems. At least not that I know of.

Best regards,

Pierre

Extract from Annex 7:

1.1.1. Coupling balls and towing brackets shall be attached to vehicles of categories M₁, M₂ (below 3.5 t maximum permissible mass)

and N_1 1/ in a manner which conforms to the clearance and height dimensions given in Figure 25. The height shall be measured at the vehicle loading conditions given in appendix 1 to this annex. The height requirement shall not apply in the case of category G off-road vehicles as defined in annex 7 of the Consolidated Resolution on the Construction of Vehicles (R.E.3) (document TRANS/WP.29/78/Rev.1/Amend.2).

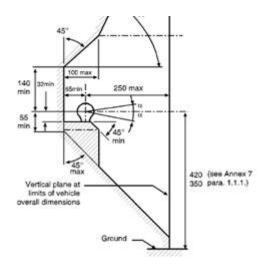


Figure 25 (a)

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