

Meeting Report (8th meeting)

Report on the eighth meeting of the GRRF Informal Working Group on Alternative Method Electronic Vehicle Stability Control (AMEVSC) held 10th / 11th May 2012.

Venue: CLEPA Offices, 87 Boulevard Brand Whitlock; BE- 1200 Brussels, Belgium

Chairman: Dr. Michel LOCCUFIER (Belgium Ministry of Transport)

Secretariat: Mr. Paul JENNISON (CLEPA/Knorr-Bremse)

Participants: See document AMEVSC-08-08e

1. Chairman welcomed everyone to the meeting and noted the apologies for non-attendance from Mr. Hahn. He also expressed his thanks to Japanese delegation for participating in the morning sessions by telephone.
2. The draft agenda (document AMEVSC-08-07e) was adopted with 2 new documents being identified for consideration under point 4.
 - New sub-paragraph 2.5.1. to appendix 2 of Annex 21 proposal from Daimler (Mr. Guichard) – document AMEVSC-08-09e
 - Discussion paper on the “parameters” in appendix 2 of Annex 21 from OICA - document AMEVSC-08-10e
3. The report of the seventh meeting (document AMEVSC-07-11e) was adopted without change. The Chairman’s report to the 72nd GRRF was passed-over as it had been overtaken by the objectives of this meeting of the informal group as set-out in the report of the 72nd GRRF and due to the shortage of time.
4. Using AMEVSC-08-05e as a basis and taking into account the comments in AMEVSC-08-10e, the proposal tabled at the 72nd GRRF (GRRF/2012/2 (AMEVSC-07-10e)) was review paragraph-by-paragraph and point-by-point.

The results of this review are given in document AMEVSC-08-11e with the major amendments being:

- Appendix 1 paragraph 1.3.
 - Clarified that the simulation tool can only be used in a braking system type-approval when the vehicle parameters of the vehicle to be type-approved are included in the simulation tool and when the value of each parameter is within the validated range of the simulation tool.
 - Clarified that a vehicle manufacturer using an externally sourced simulation tool must carry-out at least one confirmation test and that any subsequent confirmation tests resulting from a simulation tool

Meeting Report (8th meeting)

modification are subject to a discussion between the vehicle manufacturer, the Technical Service and the Type-approval Authority.

- Appendix 2 paragraph 1.1. – all listed parameters divided into 2 types and placed in 2 new sub-paragraphs 1.1.1. and 1.1.2.
 - Parameters that **do not** have a numerical value within the simulation model, but are important in understanding the capability of the simulation tool in paragraph 1.1.1.
 - Parameters that **do** have a numerical value within the simulation model in paragraph 1.1.2.
 - Footnote clarifies that the simulation tool must not include all the parameters listed in paragraphs 1.1.1. and 1.1.2., but any parameter that is not specifically accounted for shall be a limitation on the use of the tool.
 - Changes within the parameter:
 - Gearbox
 - In addition to moving gearbox type with examples to paragraph 1.1.1., gearbox characteristics are added to paragraph 1.1.2.. This allows both the suitability of the tool to be established with regard to the different gearbox types, and the way in which they are taken into account within the tool to be identified.
 - Brake
 - In addition to moving brake type with examples to paragraph 1.1.1., brake characteristics are added to paragraph 1.1.2.. This allows both the suitability of the tool to be established with regard to the different brake types, and the way in which they are taken into account within the tool to be identified.
 - Additional steering axles
 - The word “additional” and the examples deleted. This removes the any confusion with regard to the word “additional” as the item now clearly applies to all steered axles. The wording “working principle” in brackets indicates that the influence of the steering axle(s) on the vehicle stability function has to be considered in the simulation tool.
 - Drive train option
 - Additional examples added for clarification
 - Additional parameters
 - While the listing of parameters in paragraphs 1.1.1. and 1.1.2. are considered to represent a minimum check list, it was recognised that a simulation tool manufacturer might wish to included additional parameters, e.g. tyre characteristic value, suspension characteristic value. Therefore, the introducing sentence to paragraph 1.1.2. includes the wording “at least” to clarify (ensure) that additional parameters – as considered

Meeting Report (8th meeting)

desirable by the simulation tool manufacturer – can be added to the simulation tool.

- Appendix 2 paragraph 1.4.2.
 - Paragraph structure revised to clarify that the requirement is a minimum specification for the simulation tool.
 - Appendix 3
 - Appendix 3 brought inline with the amendments made to Appendix 2.
5. The proposed new paragraph 2.5.1. to Appendix 2 – document AMEVSC-08-09e – was discussed, with the result being shown in document AMEVSC-08-12e and the clean text taken into AMEVSC-08-11e.
- Similar idea to Annex 11 Appendix 2 paragraph 1.2.1.
 - Part of the appendix and not a transitional provision with specific dates, as it will be a supplement
 - The change does not justify a series of amendments status
 - It was considered that very few simulation tools have been validated.
 - Any modification to the simulation tool that affects its scope of application will necessitate a re-validation of the tool.
6. Paragraph 3.3. and the use of test reports

There was insufficient time to discuss the various documents and, as a result, come to a conclusion. However, it was clear that there are still widely differing views on the responsibilities and implications in the use of test reports within a type-approval.

While it was agreed that only the vehicle manufacturer can obtain a braking system type-approval and in the case of a problem related to the type-approval it is the vehicle manufacturer who is responsible for the consequences, there was disagreement as to whether this was clearly the case in the actual use of a test report.

- Paragraph 3.3. specifies that “a vehicle, representative of the vehicle type to be approved, shall be submitted to the Technical Service conducting the approval tests.”
 - Does this mean, for example, that:
 - a) the vehicle referred to in paragraph 3.3. and a vehicle in the test report shall be the same with regard to type, i.e. the same type from the same manufacturer, or
 - b) the vehicle referred to in paragraph 3.3. shall contain the same item that is the subject of the test report and the “approval tests” referred to in paragraph 3.3. are the tests to be carried-out at the time of type-approval for which there are no test reports.

Meeting Report (8th meeting)

- Regarding paragraph 3.4. is the need for the vehicle manufacturer to show conformity of production sufficient for the vehicle manufacturer to be aware of their responsibilities when using test reports.

As a means to resolve the issues surrounding the use of test reports, OICA suggested the replacement of the test report with a component or system type-approval and indicated that this was under investigation by a Germany Industry (VDA) special working group.

7. **Next meeting:**

Date: 12th July 2012 – starting 09.00 hrs and finishing 16.00 hrs.

Venue: CLEPA Offices, 87 Boulevard Brand Whitlock; BE- 1200 Brussels, Belgium

Input: Any comments or documents relating to this meeting should be sent to the CLEPA Secretariat (Techsec@clepa.be) with a copy to paul.jennison@knorr-bremse.com in e-format as early as possible prior to the meeting.
