

MEETING NOTES Meeting of EGEA Working Group 6

Wednesday, 7th of July 2010 (10h30-17h00) Mercure Hotel Frankfurt Airport - Frankfurt

PARTICIPANTS

ABL	Arild Hansen		
AFIBA/ Vteq	Jaume Berenguer		
AFIBA/ Vteq	Jordi Brunet		
ASA/Beissbarth	Stefan Velkoski		
ASA/ Snap-on Tools	Frank Beaujean		
GIEG/ Actia Muller	Olivier Sauzay		
STM	Lucjan Grzymala		
STM	Marcin Radowski		
EGEA	van Haute, Eléonore		

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1. Opening and welcome by the Chairman

Olivier Sauzay welcomed all participants.

2. <u>Approval of the minutes of the last Working Group 6 meeting held on 17th March 2010 in</u> <u>Brussels</u>

With no remarks, the minutes of the 17th March 2010 were approved.

3. Report on meeting with DG MOVE on the 2nd of June 2010

(F. Beaujean/ J. Berenguer/ E. van Haute)

Presentation by Eléonore van Haute (EVH) (political items) and Frank Beaujean (FB) (technical items) (please see attachment).

EVH explained that Mr. Walter Nissler (WN) gave some updates on the state of affairs of the decisionmaking process of the technical annexes of the Directive 2009/40/EC on roadworthiness testing and its future revision.

FB reported that the EGEA proposals regarding the inspection of safety relevant electronic system components were presented to WN. During the meeting with WN, FB pointed out that WN agreed basically on the EGEA proposals. WN recommended to go further on in the testing of these items and asked for test procedures and limit values.

FB presented to WG 6 members some suggestions made by WN for the efficiency testing of electronic components.

Discussions

• EGEA solution will be a combination of dynamics and diagnostics to test ABS and ESC.

- Discussion on whether or not an efficiency test would be feasible, activating via OBD the ABS actuators and checking the actuator effects directly on the brake tester.
- Questions raised on whether diagnostic tool producers would be able to first make an efficiency test and then go further on by making a plausibility check of the ESC system (e.g. by simulation of gravity sensor values via OBD)?
- Following a brief presentation on the actual situation with FSD in Germany, FB explained that in the future, the main threat is that inspection tests for electronic components would be done only by using scan tools.

4. Action plan and start of work: key points for discussion

4.1. Test of electronic components (ABS, ESC)

4.1.1. Proposal from Working Group 6 (finding common technical basis for testing: ABS and ESC: method and limit values)

WG 6 proposal on ABS:

- AVAILABILITY CHECK
- Identification of the system components and its variants
- SELF DIAGNOSIS STATUS CHECK Polling the status of system lamp of the system control unit
- FUNCTIONALITY TEST BY ACTIVATING THE ACTUATORS
 Pressure build-up in the brake circuits
- EFFICIENCY TESTS THROUGH PLAUSABILITY OF ACTUAL SIGNALS Sensors driving dynamics (in discussion) Sensors capture of actual state brake system Sensors capture of driver activities Buttons/switches

WG 6 proposal on ESC:

- AVAILABILITY CHECK Identification of the system components and its variants
 SELF DIAGNOSIS STATUS CHECK
- SELF DIAGNOSIS STATUS CHECK
 Polling the status of system lamp of the system control unit
 FUNCTIONALITY TEST BY ACTIVATING THE ACTUATORS
- FUNCTIONALITY TEST BY ACTIVATING THE ACTUATORS Pressure build-up in the brake circuits
- EFFICIENCY TESTS THROUGH PLAUSABILITY OF ACTUAL SIGNALS
 Sensors driving dynamics (in discussion)
 Signal driving dynamic
 Sensors capture of actual state brake system
 Sensors capture of tyre pressure
 Sensors capture of driver activities
 Buttons/switches

4.1.2. Preparation of meeting with Working Group 2 on 8th July 2010: preparation of points for discussion and of work items

Discussions

- Two steps to be defined before presenting the WG 6 proposal to WG 2:
 - Vehicles should be tested in normal conditions (road conditions but in a PTI station)

In the vehicle there must be a possibility to set up conditions: normal conditions and speed between 2 and 6km/h.

- > What are the challenges we have to face with for testing brakes for all cars?
 - A lot of cars do not come on the benches so we need to ensure that all cars have to be tested.

- 4 wheels drive vehicles with certain power trains create problems to identify defective brake systems.
- Electrical parking brakes of some car manufacturers can not be activated correctly during a brake test.
- Discussion on different solutions to test electronic components and in particular ABS and ESC.
- OS reminded that in some countries no modification of the car could be done during the inspection
- WG 6 members concluded saying that, in the future, vehicles will be more and more equipped with intelligent components. Therefore, the testing of these intelligent components will be more difficult. WG 6 members totally agreed to test these new components but firstly they would need to be able to test the basic ones.

Open points for discussion with WG 2

- Which kind of data/ information can we access to for ABS and ESC?
- How can we make the test if the limit in the sensor cannot be modified?
- If the ABS is not active, we cannot proceed to test. Can we send information to the calculators? Or we should modify the benches (40km/h)?
- Can we measure the ABS without or with scan tools?
- How to be sure to be able to control all the cars today?
- How can we take hand on ABS sensors?
- Need a confirmation that diagnostic tool producers should be able to read the sensors and then to check if that information is correctly used.

4.2. Suspension Testing

4.2.1. Results and report on suspension testing activities at CERAM (Mortefontaine)

Discussions

• OS reported that suspension testing activities were held on 29th and 30th June 2010 during two days at CERAM. 48 samples of cars were made with various models of cars.

OS presented to WG 6 members the results of the tests. He explained that although there were 3 different benches, results are good and are nearby equivalents. All the worn shock absorbers were showed by the results of the tests.

OS pointed out that even if the results are quite equivalent, more tests will be required for the accuracy and the completeness of the graphics to find a correlation. As practically most of the cars which were tested were quite new, next steps will be to find worn well-known absorbers to improve the accuracy of future tests.

- CITA: FB reported that sometimes ago, CITA published a report on suspension testing stating that there was no correlation between the results obtained with different benches. Following the EGEA suspension testing activities on the 29th and 30th June 2010 and the relevant results, WG 6 members suggested to approach CITA and to ask to restart the WG ad hoc 1 on suspension to work on a new recommendation.
- GOCA: GOCA is currently using Eusama principle as mandatory measurement principle for PTI in Belgium. A lot of users are interested in their results and looking to work with them. The current situation is that GOCA has a Belgian standard but they have no solution at present.
 - Question whether EGEA should approach GOCA and introduce them into the discussion presenting them our results.
 - Question whether EGEA should approach shock absorbers manufacturers despite the fact that they are not interested in our EGEA study since Belgium

(GOCA) is refusing our methods for suspension testing. Jaume Berenguer (JB) stated that as they have good contacts in Spain with shock absorbers manufacturers, AFIBA will contact GESAFA (Spanish association of shock absorbers manufacturers).

- Braking distance: FB explained that during the meeting with WN, WN asked EGEA to define as well the braking distance. OS answered that the braking distance could be comprised between 14000 km and 19000km. OS added that it is difficult to measure the distance of braking but some information and videos on this issue can be found on the website of la collective des amortisseurs (<u>www.amortisseurs.eu</u>) and on the website of GESAFA (www.losamortiguadoressalvanvidas.com).
- OS asked WG 6 Members feedback on the organisation of the suspension testing activities by Nicolas Pillet at CERAM. Everybody thanked the CERAM for the excellent organisation of the activities and agreed unanimously to send a thank you letter to the CERAM.

Actions

- To contact CITA to ask to restart the WG ad hoc 1 on suspension to work on a new recommendation.
- CERAM: the Secretariat on behalf of EGEA WG 6 Members to send a thank you letter to CERAM and to thank particularly Nicolas Pillet.
- JB to contact GESAFA

4.2.2. Next steps

- To inform WN about the results of the suspension testing activities: with different principles, results are quite equivalent (same ratio), next steps will be to define limit values or a range of values (every country would be able to pick a limit between a range of values).
- To suggest to WN to make the suspension testing mandatory in the European Union
- To suggest to WN to amend the point 5.3.2.1. of the new Directive 2010/48/EU on efficiency testing of damping as follow:

	Method		Reasons for failure	
5.3.2.1. efficiency testing	Use special equipment and compare	a)	significant	
of damping ratio according	left/right differences and/or absolute		difference between	
to Lehr	values given by manufactures		left and right	
		b)	given minimum	
			values not reached	

• Following the discussions on the results of the suspension testing activities (cf. above point 4.2.1), WG 6 members agreed to go further into the tests and to organise next suspension testing activities with more worn well-known absorbers to improve the accuracy of the tests after Automechanika (October 2010)

Actions

• The EGEA secretariat to liaise with AFIBA to organise next suspension testing activities after Automechanika (October 2010) either at the CERAM or at IDEADA (in Spain)

c) <u>Exchange of information on disparate tests requirements based on national legislations in</u> various Member States deviating from Directive 2009/40/EC and leading to different standards for brake testers (e.g. HDV)

Discussions

• Presentation on the Nordic harmonization regarding calculating formulas for brake performance and control methods for brake inspections by Arild Hansen (AH) from ABL.

AH reported that they have some concerns in Norway regarding the standards used for brake testers for Heavy Duty Vehicles (HDV). He pointed out that the standard for the use of the roller-tester is the same in Europe but the procedures for the test/ calculation vary from one country to another one, even within the European Union. Therefore, AH suggested to standardise the procedures of testing within the PTI Directive.

 'Tour de table' among WG 6 members looking for differences of tests requirements based on national legislations in Member States deviating from Directive 2009/40/EC and leading to different standards for brake testers. Following the 'tour de table', WG 6 members agreed to complete and update the WG 6 paper on "homologation requirements for brake tester in Europe" and in particular the WG 6 paper on "homologation requirements for trucks brake tester in Europe" in order to share information with Norway.

Actions

- The EGEA Secretariat to circulate the document on "homologation requirements for trucks brake tester in Europe" realised by the WG 6 to Poland and Norway (Denmark, Sweden, Finland) for feedback. and to transform it in excel
- To ask EGEA members about their respective homologation legislation, in particular for brake testers.

d) <u>Revision of Measuring Instruments Directive (MID) 2004/22/EC: reflection of the</u> <u>Commission to include new measurement instruments: should EGEA suggest the</u> <u>inclusion of brake testers?</u>

Discussions

- Brief presentation on the state of affairs of the revision of the Measuring Instruments Directive (MID) 2004/22/EC. FB underlined that the MID regards only metrological instruments and do not describe the procedure for the use of the instruments.
- Discussion on whether or not the brake tester should be include as a new instrument into the MID. OS indicated that as there is no common specifications at the European level for homologation of the brake tester, products are thus not the same. Therefore, he advised not to include this instrument into the MID.
- FB suggested to add the gearbox and the sensors into the MID but following the discussions, it was decided not to include it. OS informed that he will contact LNE (Laboratoire National de métrologie et d'Essais) to have more clarifications on weighting instruments.

Actions

• OS to contact Mr. Luderque at LNE to have more clarifications on weighting instruments.

e) Next meetings, frequency and location.

- The next meeting with Mr. Walter Nissler could take place end of July 2010.
 Actions: the ECEA approximate to organize a meeting with Mr. Nissler
 - > <u>Actions</u>: the EGEA secretariat to organise a meeting with Mr. Nissler
- The next regular Working Group 6 meeting will be held during Automechanika in Frankfurt but need to define a final date.

Brussels, 12th July 2010.

Eléonore van Haute Policy Officer