Report of the ad-hoc GRRF meeting on EVSC Munich 27 January 2006.

Chairman: Mr. Laszlo PALKOVICS

Secretary Mr. Peter Koleszar

Participants: see list of participants **EVSC06-07**.

Associated documents: EVSC05-38 Rev1(6th meeting document)

EVSC05-39 Rev1 (Mandating proposal) EVSC05-44 Protocol of 6th (Paris) meeting

EVSC05-45 Japanese comments EVSC05-46 OICA comments EVSC05-47 OICA comments

EVSC05-48 Agenda for 7th (Munich) meeting

EVSC05-49 Comments Colin Ross EVSC06-01 Russian proposal Rev1

EVSC06-02 Russian comments to EVSC05-38 EVSC06-03 Japanese comments to EVSC05-38 EVSC06-04 (EVSC05-38 Rev1 + comments)

EVSC06-05 ACEA synthesis Rev3

Meeting start: 10:00, 27 January 2006

Roll call of delegates has been done.

The chairman opened the discussion, reviewed the agenda to come to a more consistent program.

The chairman held a welcome speech: Mr. Palkovics welcomed the new members; told that the consolidated text of the proposal will not be ready for the February GRRF meeting; so the group should focus on having it ready by the next GRRF meeting. The chairman also asked the group to nail down the cornerstones that are not to be changed. He asked the members if they agree to state: no performance criteria should be defined. Agreement met, ACEA members and other group members agreed not to define performance criteria, only to have a demonstration to prove the system functionality. Mr. Fontaine noted that transitional provisions are very important and have to be discussed - not on this meeting, but soon in the future.

Mr. Jennison presented the document EVSC06-04 that contains the document EVSC05-38 Rev1 (the result of the Paris meeting) with the subsequent comments and proposals,

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EVSC05-45, -46, & -47, EVSC06-01, -02, -03, and the error correction in EVSC05-38 Rev 1 from Mr. Gaupp. With the help of this document (paper copy distributed at meeting), together with documents EVSC05-49 and EVSC06-05 each of the modifications were discussed. (Note: EVSC05-49 from Mr. Ross had not been circulated due to an e-mail problem and EVSC06-05 was distributed as a paper copy at the meeting.)

Note from OICA: the comments and proposals from ACEA might change in the future since not all OICA members participated at the ACEA meeting.

EVSC definition for power-driven vehicles: there are some vehicle categories (like M1) where both directional and roll-over control may be necessary for the EVSC. *Proposals from group members to further define what a vehicle stability function is, for M1 vehicles, are welcome.*

The word "performance" is not welcome in the text when describing the demonstrative test. Instead the "dynamic characteristics" should be used.

The EVSC should be able to control the speed of individual wheels on an axle or axle group basis.

Comment on Yaw-rate accuracy from Mr. Fach: There has to be a definition for "appropriate correlation between the real and estimated Yaw-rate".

Comment from Mr. Teyssier: first task is to define the accuracy of the sensor – if one can not define the accuracy for the sensor itself, how can the accuracy of the whole EVSC system defined?

OICA comment: the sensor itself has to be simulated during the simulation. *Proposals for sensors and sensor tests are welcome from the members of the working group!*

Comment from Mr. Fenaux, has to be discussed in the future: For simulation only Hardware-In-the-Loop should be accepted, because there are no means to guarantee that the Electronic Control Unit has the same software on the vehicle as the simulator environment in the Software-In-the-Loop test.

Mr Hirano presented the measurement results of a circular test with EVSC turned on and off. Also he insisted to have "recommended" tests for the EVSC demonstration in the proposal.

Members of the working group questioned the meaning of including recommended dynamic tests in the text while they are not mandatory, and others can also be executed. Still the so called J-turn and Sine with dwell tests have been added to the list of proposed tests.

Members of the working group should collect other proposals for tests – if exist – for the next meeting!

There has been a discussion about warning/activation light. Compliance with Regulation 121 has to be checked, will be done by Mr. Teyssier by the next working group meeting.

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Discussion about the dynamic simulation:

OICA comment: only the list of the recommended parameters should be included – the wording has been changed from shall to may.

Sensitivity analysis to be done on subsystem level (engine, suspension, vehicle body, etc.) – task is still open, to be discussed on future meetings.

Validation of the simulation tool: a subgroup meeting will be held organized by Mr. de Haes and Mr. Ruijs, topic will be simulation parameters and sensitivity analysis, task is to find a common solution for the Appendix of dynamic stability simulation.

The meeting will be held in Delft, Netherlands on 2. March 2006. The preceding day is open for a meeting of the industry members.

Some other minor changes and wording proposals have been discussed, some accepted, some rejected.

The chairman then closed the meeting thanking all participants for the contributions and their positive attitude.

The next working group meeting will be in Paris (OICA) from 29.03.2006 13:00 till 31.03.2006 12:00.

Enclosed documents and presentations:

EVSC05-38 Rev2 Proposed amendments to ECE Reg 13
EVSC05-48 Rev1 Final agenda Munich
EVSC05-49 Comments Colin Ross
EVSC06-04 (EVSC05-38 Rev1 + comments)
EVSC06-05 ACEA synthesis Rev3
EVSC06-07 List of participants

Peter Koleszar Secretary EVSC ad hoc working group