

## **Draft Minutes 16<sup>th</sup> WebEX Meeting of the BioRID TEG**

Date & Timing: Wednesday 29<sup>th</sup> January 2014, 12:00-14:00 (CET), 6:00 a.m. (EDT)

Hosted by: Humanetics

Minutes drafted by: Bernd Lorenz (BAST)

Participants: see appendix

### 1. Welcome (Chair)

Bernd Lorenz (BAST) welcomed the delegates around the world.

### 2. Approval of Agenda (All)

Agenda (TEGID-16-01) agreed

### 3. Information/Discussion

Bernie Frost explained to the group the further procedure and what he expected the group to deliver. He explained that the text of the draft GTR and the BioRID certification procedures are the main topics for the face to face meeting on 5<sup>th</sup> and 6<sup>th</sup> of February 2014 in Brussels. The Working Document presented to 54<sup>th</sup> GRSP will be the basis for discussion (ECE/TRANS/WP.29/GRSP/2013/24). Comments within the dual pane document shall be removed/resolved. Members shall be well prepared to do so. A further meeting before the GRSP May session shall be held in April. New information on injury criteria research is expected for the April meeting. Bernie Frost pointed out that all open questions shall be solved by September 2014 to be able to send a final document to GRSP for approval.

- Status of current activities (All)

- Update on (new) Certification procedure (Humanetics)

Paul Depinet/Humanetics introduced TEGID-16-02 and TEGID-16-03 on the status of the work related to the certification procedures.

TEGID-16-03 describes the draft BioRID certification procedure in detail. This document shall form the basis for inclusion into the Mutual Resolution No. 1. Feedback is needed as soon as possible as this document shall be sent to the UN secretariat with regard to format and formal questions, too.

The drawings (also CAD) are now in the Humanetics system. An update of the group on this issue is planned for the next face to face meeting.

Paul Depinet reported (TEGID-16-02) that a larger team is now working at Humanetics on this issue. The chair of the GTR No. 7 group and the chair of the BioRID TEG expressed their thanks to Humanetics for this support.

Good progress has been made during the last weeks. However, there is still some work to be done.

New tighter corridors are proposed for many criteria.

It was mentioned that the current procedure for the measurement of head rotation using the pots might have some potential for errors and the use of a video system was discussed. Johan Davidsson (Chalmers) said that based on his experience video analysis could be used. However, the current wording of the certification procedure does not include a procedure and requirements for using video systems. Jack Jenson (GM) had the view that a uniform procedure should be used in regulation and that there is not much experience with video analysis of BioRID head rotation during certification. Consequently, further discussion on this issue should be considered in the future.

Koshiro Ono (JARI) raised concerns about the biofidelity of the BioRID. Looking at all the changes of the BioRID and the certification procedure he has pointed out that the biofidelity should be ensured. Johan Davidsson referred to the EEVC WG 12 work on the BioRID. Bernd Lorenz explained that all the work that has been done in the last years had the aim to improve R&R of the BioRID. All dummies used for this work (and the EEVC studies) had passed the old certification procedure which was meant to ensure biofidelity. So, biofidelity of the BioRID should not be worsened.

Humanetics reported that stiffness measurement of the bumpers using a durometer has a bad R&R. The use of a universal test machine could give some improvement.

One drawback could be a material change used for the bumpers. It seems that the supplier of the bumpers has changed the recipe (softeners) as from 2013 onwards.

This is leading to an unexpected accelerated aging of the material (increasing stiffness). Humanetics is asking group members (and their experts on plastics) for advice.

- Status of injury criteria research – if available (NHTSA/Japan)

NHTSA/VRTC are waiting for the delivery of their two BioRID. The NHTSA-dummies shall be certified using the latest status of certification procedures.

- Preparation for Brussels meeting (All)

Group members are asked to read/check the documents (TEGID-16-02, TEGID-16-03) carefully and to provide feedback for the face to face meeting in Brussels. All members

are asked to help Humanetics with expert advice regarding plastics esp. softeners under the new environmental/health protection requirements.

#### 4. Next Meeting(s)

5<sup>th</sup>/6<sup>th</sup> February, face to face GTR no. 7 group, Brussels

April, face to face GTR no. 7 group, tbd

#### Appendix

Participants of the 16<sup>th</sup> BioRID TEG WebEx on 29<sup>th</sup> January 2014

- Paul Depinet (Humanectis)
- Bernie Frost (UK/DfT)
- Koshiro Ono (JARI)
- Alexandra Scholz (Opel/GM)
- Jan Basilautskis (Faurecia)
- Johan Davidsson (Chalmers)
- Philippe Petit (LAB)
- Ewan Lecuyer (LAB)
- Gerry Locke (LEAR)
- Kevin Moorhouse (NHTSA)
- Jack Jensen (GM)
- Zine Aoun (Chrysler)