

<u>Draft Minutes</u>	
<u>2nd meeting</u>	
<u>Task Force regarding Review and Update Certification Corridor (TF-RUCC) under the IG GTR9-PH2</u>	
Venue	Web meeting
Date	23 Mar. 2012, Start 13.00 (Japan Time)
Status: Draft	

Present: Atsuhiko Konosu, JARI (Japan) Chairman
Mark Burleigh, Humanetics (UK) Secretary
Yukou Takahasi, Honda R&D (Japan)
Iwao Imaizumi, Honda (Japan)
Yoshihisa Tsuburai, JASIC (Japan)
Sukhbir Bilku, Chrysler (USA)
Thomas Kinsky, GM Europe/Opel (Germany)
Jan-Christopher Kolb, Bertrandt (Germany)
Oliver Zander, BAST (Germany)
Dirk-Uwe Gehring, BGS (Germany)
Michelle Chaka, Ford (USA)
Mike Beebe, Humanetics (USA)
Kurt Bambach, Humanetics (USA)
Abayomi Otubushin, ACEA BMW (Germany)

- 1. Welcome**
- 2. Self introductions**
- 3. Adoption of the Agenda (TF-RUCC-2-01-Draft) and Confirmation of Objectives of 2nd TF-RUCC meeting**

BAST presentation was moved to agenda point 6 and BGS point 8 as it was hoped they would be able to speak later in the meeting.

- 4. Adoption of the Draft Minutes for the 1st TF-RUCC meeting (TF-RUCC-1-02-Draft)**

The draft minutes were adopted with additions made by BAST. There was a problem that some participants could not speak due to a limit on webex voice.

Atsuhiro Konosu mentioned those giving presentations that could not speak could present in the IG meeting next week.

5. ACEA Presentation (TF-RUCC-2-04)

Thomas Kinsky presented a report on a repaired leg inverse tested by Humanetics and tested directly after by BAST. The BAST results passed tibia moments and the Humanetics results failed tibia moments. Two potentiometers had been wired the wrong way which had to be corrected. Pendulum test was not carried out. Inverse test is considered the most important certification test by ACEA. It was confirmed that BAST should be the golden lab for inverse. JARI normally have similar results. Discussion is more of a lab to lab variability than a problem with the leg. It is likely test equipment needs to be better specified for repeatable lab to lab results.

6. BAST Presentations (TF-RUCC-2-03)

As Oliver Zander could not speak Thomas Kinsky kindly presented the BAST presentation. This showed the same results as ACEA presentation with the addition of the femur result traces of the inverse test comparison with Humanetics. The femur results were considered important as it helped show energy differences between the two setups. Energy could also be going into the Humanetics frame, BAST setup has leg independent to impactor. Test procedure should be clear, for example impactor contact time with leg. It is possible Humanetics rig is not measuring correct speed due to speed measurement system being fixed to frame which is moving. K Bambach mentioned Humanetics had checked speed with accelerometer mounted to impactor and it was OK.

7. Humanetics Presentation (TF-RUCC-2-05)

Mark Burleigh presented comparison of long and short rubber in the inverse test with results from one leg. These results were higher than previously presented to show a better comparison at the corridor level. Also results from decoupling a leg in inverse and showing parts refurbished and calibrated for the three RR leg builds.

Humanetics have been having problems with their inverse rig and are still investigating. Need to check on release, speed and rig movement. A new rig is on order and should be ready by end of April.

Original corridors were set with shorter rubber flesh and Humanetics believe this has an influence on the results particularly T3 and T4. The GTR inverse corridors therefore should be reviewed in the round robin.

Humanetics would like to witness BAsT inverse testing and if possible put accelerometer on impactor to see force time history.

8. BGS Presentation (TF-RUCC-2-06)

Due to Dirk-Uwe Gehring not being able to present Thomas Kinsky kindly presented for BGS. Recommendation was to tilt the leg hanging bracket to allow the leg to hang more vertical as this is the intended orientation of the leg. This should help to slightly improve scatter, this is not expected to make a difference to results. Questions could not be asked as Dirk-Uwe Gehring could not speak so these could be asked in the IG meeting next week.

9. Japan Presentation (TF-RUCC-2-07)

Due to testing this week JARI were not able to share presentation before the meeting. Atsuhiko Konosu presented. JARI as the master lab for static and pendulum calibration tested the RR bones and static calibration setups step by step to ensure bones conform to the middle of the corridors as much as possible and that all the bone assemblies and knee stiffness's are similar and conform to the GTR. Bones were tested to 380 Nm, there was a small spring adjustment to knee and any twist was removed before loading the knee. There was a small correction in text, SN02 should be SN03. Mark Burleigh asked if there was a variation of bone batches in the selection, 2x B3 (Batch 3) and 1x B5 in tibia and all B2 in femur.

10. Discussions

Because of the time limitation, discussions were postponed to the 2n IG GTR9-PH2 meeting on 28-29 March 2012 in Osaka.

11. Future Action Plans

JARI will complete static calibration and move on to pendulum and inverse before sending RR legs to BAST as next RR lab.

12. Next meetings

No meeting dates were confirmed.

13. A. O. B.