#### **Minutes**

#### **Kick off meeting**

# <u>Task Force regarding Review and Update Certification Corridor (TF-RUCC) under the IG GTR9-PH2</u>

Venue         Web meeting           Date         28 Nov. 2011, 1.00 pm – 3.00 pm CET	Status: Final		
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#### 1. Welcome

# 2. Present:

Atsuhiro Konosu (JARI) Chairperson

Oskar Ries (Volkswagen)

Carsten Hohmann (Volkswagen)

Jan-Christpher Kolb (Bertrandt)

Jan Wilsmann (Bertrandt)

Alexander Besch (VW)

Dirk-Uwe Gehring (BGS)

Peter Lessmann (BGS)

Oliver Zander (BASt)

Steve Pingston (GM)

Tsuburai (Jasic)

Michelle Chaka (Ford)

Arnaud Freyburger (Audi)

Bernard Been (Humanetics) Secretariat

Mark Burleigh (Humanectics) Secretariat

#### 3. Adoption of the Agenda (TR-RUCC-K-01-Draft)

• Agenda was agreed without any change. (TR-RUCC-K-01-Finalized)

#### 4. Consideration of terms of reference (TR-RUCC-K-03)

- The intention of this meeting is to provide an understanding to TF members of the calibration procedures. Technical discussions will start in January.
- This TF group is dedicated to certification corridors only. If different technical problems occur, IG GTR9-PH2 decides whether new TFs will be formed or not.
- Chairperson (Atsuhiro Konosu) presented terms of reference for TF-RUCC-K-03. All

- GTR certification procedures are to be reviewed and to be updated if needed.
- Bernard Been: In the current schedule there is no activity of Round Robin testing.
   We do not want to make the same mistake (rush to make certification corridor with limited data) and must carry out Round Robin, test 10 legs with current material batches from at least 5 labs.
- Oskar Ries supported this statement.
- It was asked when 10 legs could be made available. This would depend on customer co operation when they can they spare legs for testing.
- Bernard Been: it is possible to complete round robin in 21 weeks if well managed allowing for transportation and efficient testing, e.g 4 legs at a time.
- Carsten Hohmann: how many legs have been made? Mark Burleigh answered 23 customer legs have been built, and 5 prototypes (3 JARI, 2 Humanetics).
- Round robin legs should be certified (component and assembly level) at Humanetics before Round Robin testing to ensure consistent spec is present in all legs.
- Oliver Zander: can we look at old data and not carry out expensive testing?
- Steve Pingston: do we have agreement to shift corridors?
- Chairperson: technical details to be discussed later, component level corridors need to be reviewed first.
- What are we to achieve by end of March finalization or draft corridors?
- Steve Pingston: what is the goal of this task force?
- Dr Konosu: The goal of the RUCC is to make desirable corridors and go step by step with confident data, first focus on component level (tibia, femur, knee), then full assembly by end of March if possible.

#### 5. Historical Review on Certification Corridors (TR-RUCC-K-04)

- Chairperson presented TR-RUCC-K-04
- Chairperson: we should check current GTR leg components if they pass the original GT corridors.
- Bernard Been, all current legs were developed to pass the agreed TEG GTR
  component corridors. The GT tests and corridors are no longer relevant. If the
  GTR does not pass the GT corridors, could it mean that all 23 legs need bone
  replacement? What is the purpose of repeating GT tests? The group should focus
  on dynamic test corridors.
- Chairperson: we expect only a small influence of tests condition change for component level certification tests, but we have not checked this. It is important

- to review all steps of the certification procedure. For component check (PE sheet to roller carriage comparison) 3 bones would be sufficient.
- Bernard Been: bone material is missing in the slides as a variable. Would be good to show in the slides.
- Mark Burleigh: we did not see major problems with first Vinyl ester bone batch, problems only showed up with subsequent batches.
- Oliver Zander: would be good to show number of tests used to set corridors and number of legs.
- Mark Burleigh: asked for further testing to be added to future action plan we should retest due to different bone material, different bone batches and longer rubber flesh. The component review would be needed first.
- Oskar Ries: If legs go into regulation we must have reliable corridors that can be
  met in the future. The group must be confident that the legs are build
  consistently and reproducible, before it can commit to spending a big effort on a
  large test matrix. As starting point, we must first establish that the legs going
  into the round robin meet the current GTR component tests consistently.
- Chair person: Based on our discussion at this meeting, TR-RUCC-K-03 and TR-RUCC-K-04 will be modified (TR-RUCC-K-03-Rev.1 and TR-RUCC-K-04-Rev.1). As for the activity schedule after Jan. 2012, we will discuss again at the 1<sup>st</sup> TF-RUCC meeting in Jan. 2012.

### 6. Future Action Plans

- Humanetics to run femur, tibia and knee component testing with PE sheet before
  Jan meeting. 3 legs would be an acceptable sample size. JARI is willing to
  support this.
- At next meeting (Jan 2012) Humanetics to show historic certification data of production legs at component and assembly level.

### 7. Report to the 1<sup>st</sup> IG GTR9-PH2 (01 – 02 Dec. 2011)

Chairperson will make report to informal group

#### 8. Next meetings (Jan. 2012)

Date to be confirmed

## 9. **A. O. B.**

None

# **Document Lists**

Document number	Submitted by	Document name
TF-RUCC-K-01-Draft	Chair	Draft_Agenda_111128.doc
TF-RUCC-K-01-Finalized	Chair	Finalized_Agenda_111128.doc
TF-RUCC-K-02-Draft	Chair/Secretariat	Draft_minutes_111228.pdf
TF-RUCC-K-03	Chair	Task_Force_ToR_111128.pdf
TF-RUCC-K-03-Rev.1	Chair	Task_Force_ToR_111129.pdf
TF-RUCC-K-04	Chair	Historical_Review_111128.pdf
TF-RUCC-K-04-Rev.1	Chair	Historical_Review_111129.pdf
TF-RUCC-K-05-Draft	Chair	Draft_Activity_Report_111130.pdf