Minutes of the Constitutional Meeting of the Informal Group on Global Technical Regulation
No. 9 – Phase 2 (IG GTR9-PH2)

Venue | Federal Ministry of Transport, Building and Urban Development (BMVBS)
| Robert-Schuman-Platz 1, 53175 Bonn (Germany), Room 0.133

Date | 3 November 2011, 10 a.m. – 4:30 p.m.

Status: Draft

A) List of Attendees

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Email</th>
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<tbody>
<tr>
<td>Bilkhu</td>
<td>Subhran</td>
<td>Mr. Chrysler (U.S.A.)</td>
</tr>
<tr>
<td>Burleigh</td>
<td>Mark</td>
<td>Mr. Humanetics (United Kingdom)</td>
</tr>
<tr>
<td>Chako</td>
<td>Michelle</td>
<td>Ms. Ford (U.S.A.)</td>
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<tr>
<td>Damm</td>
<td>Richard</td>
<td>Mr. Federal Ministry of Transport, Building and Urban Development (BMVBS) (Germany)</td>
</tr>
<tr>
<td>Dausse</td>
<td>Irina</td>
<td>Ms. Renault (France)</td>
</tr>
<tr>
<td>Edwards</td>
<td>Randy</td>
<td>Mr. Auto Alliance (U.S.A.)</td>
</tr>
<tr>
<td>Freyburger</td>
<td>Arnaud</td>
<td>Mr. Audi (Germany)</td>
</tr>
<tr>
<td>Frost</td>
<td>Bernie</td>
<td>Mr. DFT (U.K.)</td>
</tr>
<tr>
<td>Gottesieg</td>
<td>Bernd</td>
<td>Or. Ford of Europe (Germany)</td>
</tr>
<tr>
<td>Hohmann</td>
<td>Corsten</td>
<td>Mr. Volkswagen (Germany)</td>
</tr>
<tr>
<td>Ishida</td>
<td>Katsutoshi</td>
<td>Mr. Japan Automobile Standards Internationalization Center (JASIC) / (Japan)</td>
</tr>
<tr>
<td>Kinsky</td>
<td>Thomas</td>
<td>Mr. General Motors Europe/Opel (Germany)</td>
</tr>
<tr>
<td>Kolb</td>
<td>Jan-Christopher</td>
<td>Mr. Bertrandt (Germany)</td>
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<tr>
<td>Konosu</td>
<td>Atsunori</td>
<td>Or. Japan Automobile Research Institute (JARI) (Japan)</td>
</tr>
<tr>
<td>Leßmann</td>
<td>Peter</td>
<td>Mr. BGS Bohne &amp; Gehring GmbH (BAST’s test lab) (Germany)</td>
</tr>
<tr>
<td>Martin</td>
<td>Dave</td>
<td>Mr. OTS</td>
</tr>
<tr>
<td>Otubushin</td>
<td>Abayomi</td>
<td>Or. BMW (Germany)</td>
</tr>
<tr>
<td>Pfeifer</td>
<td>Sascha</td>
<td>Or. Association of the Automotive Industry (VDA) (Germany)</td>
</tr>
<tr>
<td>Ries</td>
<td>Oskar</td>
<td>Or. Volkswagen (Germany)</td>
</tr>
<tr>
<td>Sakai</td>
<td>Masahiko</td>
<td>Mr. Japan Automobile Standards Internationalization Center (JASIC / Geneva)</td>
</tr>
<tr>
<td>Sugisaki</td>
<td>Tomonobu</td>
<td>Mr. Embassy of Japan in Germany (Japan)</td>
</tr>
<tr>
<td>Takahashi</td>
<td>Yukou</td>
<td>Mr. Japan Automobile Standards Internationalization Center (JASIC) (Japan)</td>
</tr>
<tr>
<td>Tedesco</td>
<td>Ronald</td>
<td>Mr. General Motors (U.S.A.)</td>
</tr>
<tr>
<td>van der Steaten</td>
<td>Yves</td>
<td>Mr. International Organization of Motor Vehicle Manufacturers (OICA) (France)</td>
</tr>
<tr>
<td>Wondimneh</td>
<td>Ezana</td>
<td>Mr. National Highway Traffic Safety Administration (U.S.A.)</td>
</tr>
<tr>
<td>Yamakawa</td>
<td>Takahisa</td>
<td>Mr. JAMA Europe (Belgium)</td>
</tr>
<tr>
<td>Zander</td>
<td>Oliver</td>
<td>Mr. Federal Highway Research Institute (BASI) (Germany)</td>
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</tbody>
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(Attendance in person or via audio conference; see also agenda item 2 of the meeting.)
B) List of Actions

<table>
<thead>
<tr>
<th>Action Items</th>
<th>Responsibility</th>
<th>Due</th>
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<tbody>
<tr>
<td>Documents GTR9-C-04 and GTR9–C-05 to be re-discussed at the first meeting of the informal group</td>
<td>Secretary (Th. Kinsky)</td>
<td>1st meeting</td>
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<tr>
<td>Establish task force solving the certification corridor issues and invite participants of the informal group</td>
<td>Japan (Dr. A. Konosu)</td>
<td>1st meeting</td>
</tr>
<tr>
<td>Contact Humanetics requesting to preferably provide the status of the FlexPLI development and to share the information on how many impactors were already delivered to customers as well as asking whether these or new impactors would be available for testing</td>
<td>Chair (R. Damm)</td>
<td>1st meeting</td>
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C) List of Meeting Documents

ECE/TRANS/WP.29/GRSP/2011/13
(Japan) Proposal for Amendment 2 to global technical regulation No. 9 (Pedestrian safety)

GRSP-49-38 (Japan and Germany) Draft terms of reference for the informal group on pedestrian safety phase 2 (IG PS2)

ECE/TRANS/WP.29/1091
Reports of the World Forum for Harmonization of Vehicle Regulations on its 154th session, Administrative Committee of the 1958 Agreement on its forty-eighth session, Executive Committee of the 1998 Agreement on its thirtysecond, session, Administrative Committee of the 1997 Agreement on its eighth session

GTR9-C-01 (Chair) Agenda for the constitutional meeting of the Informal Group on Pedestrian Safety Phase 2 (IG PS2)

GTR9-C-01r1 Final agenda of the Constitutional Meeting of the Informal Group on GTR No 9 - Phase 2 (IG GTR9-PH2)

GTR9-C-02 (Reserved for the minutes/this document)

GTR9-C-03 (Japan/Germany) Informal document **GRSP-49-38**: Draft Terms of Reference for the Informal Group on Pedestrian Safety Phase 2 (IG PS2)

GTR9-C-04 (Japan) History of Development of the FlexPLI

GTR9-C-05 (Japan) Review of the FlexPLI TEG Activities


GTR9-C-07 (Chair) Revised Operating Principles and Terms of Reference for the IG GTR9-PH2

GTR9-C-07r1 Final Operating Principles and Terms of Reference for the IG GTR9-PH2

GTR9-C-08 (Secretary) TEG document matrix
D) Summary of Meeting

1. Welcome

R. Damm (Germany) welcomed all attendees on behalf of the German Federal Ministry of Transport in Bonn.

2. Roll call

See attendance list above.

B. Frost (United Kingdom), the representatives of the Alliance (R. Edwards (Alliance), S. Bilkhu (Chrysler), M. Chaka (Ford) and R. Tedesco (General Motors)) as well as D. Martin (DTS) followed the discussion via audio conference.

3. Adoption of the Agenda

Some amendments had been proposed in advance. The modified agenda had been shared as informal document GTR9-C-01r1 to take into account the papers submitted. The revised agenda was adopted without additional changes.

R. Damm explained that the papers submitted have been sent to the UNECE secretariat to be uploaded onto the UNECE website some days before the meeting. However, due to overload of the UNECE secretariat it was not possible to upload the documents in time. The Secretary and Chairman of this informal group will try in future to get documents uploaded onto the website before the meetings.

4. Consideration of terms of reference, objective and procedures

4.1. Presentation of proposed ToR, GRSP and WP.29 reports

R. Damm presented the informal document GTR9-C-07 (based on GTR9-C-03 and the reports of GRSP and WP.29) that summarizes the rational for establishing this group:

During the May 2011 session of GRSP in Geneva the expert of the US had presented some concerns with the documents proposing the FlexPLI for amending gtr9. As a result of this and some following discussion where the US were supported by other contracting parties it was agreed to request the establishing of an informal group that should work on amending gtr 9 by implementing the FlexPLI.

In June 2011, WP.29 and AC.3 gave consent to mandate the Informal Group, subject to the submission of appropriate Terms of Reference (ToR). At WP.29 it had been noted that
Germany and Japan will co-chair the informal group and OICA will provide the Secretary.

Japan and Germany will inform WP.29 and AC.3 that this will be changed and aligned to the
proposal of Terms of Reference presented to GRSP (informal document GRSP-49-38).
According to this proposal, Germany will chair the group and Japan will act as Vice-chair.

R. Damm informed the attendees that it is proposed that he would act as the Chairman;
Dr. A. Konosu (JARI) would act as Vice-chairman and Th. Kinsky (General Motors Europe)
would act as Secretary of this informal group. There were no objections.

The Chairman presented the proposed Operating Principles as well as the draft ToR (see also
informal document GTR9-C-07). It was mentioned that, on request of the GRSP secretariat,
the name of the group had already been changed before the group started working to be
consistent with the naming of other informal groups under GRSP supervision. The official
name is “Informal Group on Global Technical Regulation No. 9 - Phase 2” (IG GTR9-PH2).

Y. van der Straaten (OICA) asked whether this change indeed is necessary since the originally
planned name would perfectly reflect the intentions of this group. However, it was agreed
that the new name also fits the needs of the group and that the ToR should clearly reflect
the work to be done.

On request of B. Frost (UK) it was clarified that Japan and Germany will not just sponsor the
IG but also the gtr9 and the (draft) UN Regulation (formerly referred to as ECE Regulation)
amendments. E. Wondimneh (US) pointed out that the group in fact only has the mandate
for the gtr9 amendments according to the AC.3 decision but accepted that the UN
Regulation amendments are done in parallel. Y. van der Straaten made reference to the
WP.29 and AC.3 decisions and pointed out that the UN Regulation is as important as the gtr
and that OICA clearly would like to have the UN Regulation amended at the same time. The
Chairman explained that of course the gtr9 amendments need to be agreed first but that the
group should also prepare the UN Regulation amendments. However, Dr. A. Otubushin
(BMW) pointed also out that both documents should be amended in parallel.

After some discussion it was agreed that a wording should be found underlining that the gtr9
amendment is the main focus of the group but that the UN Regulation will also be amended.
Finally, it was agreed that the respective sentence in the introduction of the ToR will be
deleted and under the section objectives it will state that (new wording in bold) “The main
objective of the Informal Group... is... in order to enhance the safety level of lower leg
pedestrian protection. The work of the informal group shall not be limited to the proposals
to amend GTR No 9, but shall cover the development of a complementary proposal to
amend the draft UN Regulation on pedestrian safety. The IG GTR9-PH2 shall work...”

O. Zander (BASt) and Y. van der Straaten asked whether the work of the IG GTR9-PH2 should
be limited to the FlexPLI only or whether other items may be covered. R. Damm pointed out
to not see any issue with covering other details of the test procedures related to the legform
testing but this is of course also depending of the capacities and time available.
Dr. B. Gottselig (Ford) and Y. van der Straaten proposed to add the following wording to the objectives: The IG may also review further draft proposals to improve and / or clarify aspects of the legform test procedure.

Comments made are reflected in document GTR9-C-07r1.

4.2. OICA presentation

The comments of OICA (doc. GTR9-C-06) had been mentioned during the discussion before and were considered accordingly. Further comments related to agenda item 7 were discussed at this agenda item.

5. Presentation of FlexPLI

5.1. History of FlexPLI

Dr. A. Konosu presented informal document GTR9-C-04 that provides a short overview on the history of the FlexPLI: Accident statistics had shown a need for the protection of pedestrians specifically from suffering injuries to the head and the legs. Consequently, pedestrian protection requirements had been developed.

However, Japan could not accept the test tool representing the leg that was developed by the European Enhanced Vehicle-safety Committee (EEVC) and that was used in their test procedures proposed for legislation and consumer testing. The main reason for this was the limited ability to also assess injuries to the bones. The Japan Automobile Research Institute (JARI) and the Japan Automobile Manufacturers’ Association (JAMA) therefore had started at around 2001 to develop the Flexible Pedestrian Legform Impactor (FlexPLI).

Since then, several built levels of the new tool had been presented and later the work was shared within a Technical Evaluation Group (TEG) under the supervision of GRSP. The result of these activities is the impactor that will be subject of discussion in this Informal Group, the FlexPLI version GTR (also referred to as Flex-GTR).

5.2. Review of past activities of the Flex-TEG

Dr. A. Konosu also presented an overview of all TEG activities (informal document GTR9-C-05). He underlined that the TEG had done a lot of work and that several items that may appear to be open were already covered. The presentation Dr. Konosu gave relates to the items investigated during the work of the TEG and links the work to the document numbers.

The Chairman apologized that this document could not be shared in advance due to the file
size. However, the document will be uploaded onto the UNECE website. All attendees are kindly requested to review the content in detail and to provide comments by the next meeting.

6. Presentation of TEG document matrix

Th. Kinsky (General Motors Europe) presented the document matrix (informal document GTR9-C-08) summarizing the work done by the TEG. It was pointed out that the intention is to provide an easier overview of the discussion already done and that the document should supplement document GTR9-C-05. It was highlighted that an easy overview on the respective impactor versions should also help to concentrate on the information necessary for the discussion in the IG GTR9-PH2.

Attendees are requested to provide comments for the next meeting.

7. Consideration of activity list, work plan and identification of open issues

Dr. O. Ries (Volkswagen) introduced the OICA comments regarding the activity list in document GTR9-C-07. He pointed out that in some cases a more detailed description seems necessary to assure that nothing will be overseen and to also make clear that the existing EEVC legform impactor is the “reference”.

B. Frost proposed to split some of the additions (test procedure and certification tests) into separate tasks.

R. Damm added that it is clear that several technical details need to be covered and that there even may be a need to have some task forces established that could cover only certain subjects.

Dr. O. Ries asked whether this means a “reactivation” of the Technical Evaluation Group and it was clarified that the intention is just to assure that the experts are closely working together at items that may not need to full attention of the whole IG. However, results of the work will be discussed in the IG and all information will be shared with all attendees.

Finally, it was agreed that dealing with very technical subjects via task forces should be a sufficient way. R. Damm proposed that a first subject to be solved in such a task force could be the issue of the certification corridors that was mentioned in advance of the meeting to be of great concern for several attendees. Dr. A. Konosu agreed to establish the TF and he will invite interested IG members.

Discussion came up on the possible benefits of the FlexPLI compared to the EEVC LFI.
O. Zander (BAS) wondered whether it would be sufficient to just concentrate on the improved biofidelity. Dr. A. Otubushin (BMW) replied that the biofidelity is just one aspect. B. Frost (UK) added that costs are also a very important item since it often seems possible to achieve better test results with a superior test tool but that costs cannot be soundly justified.

An additional question was brought up by E. Wondimneh (US) regarding the transitional provisions: What would this mean for the work of the informal group? Y. van der Straaten (OICA) responded that the group should be able after finishing their work to assess how quick the test tool may replace the existing test tool.

Finally, the activity list had been reviewed line by line and modified according to the agreement of the attendees.

Informal document GTR9-C-07 was finally amended in parallel at the screen reflecting the discussion under agenda items 4.1, 4.2 and 7. The modified document was shared including all modifications and reviewed again. It was agreed that the modified document will be published as document GTR9-C-07r1.

8. Consideration of schedule

The current schedule as proposed in informal document GTR9-C-07 was introduced by the Chairman. No ad-hoc comments were received and it was kept in document GTR9-C-07r1 for publication.

9. Consideration of first meeting of the IG PS2 (01 – 02 Dec. 2011)

The next meeting will be on 1 December from 1:00 p.m. – 5:30 p.m. and on 2 December from 9:30 a.m. – 5:30 p.m. in Geneva at UN facilities (room IV). Attendees are reminded that a pre-registration is necessary (around two weeks in advance the latest!) and needs to be done via the contracting parties or associations. Members of the IG GTR9-PH2 who are not familiar with the procedure should contact the Secretary, Th. Kinsky.

On request of the Alliance it was pointed out that unfortunately UN facilities in Geneva are not prepared to offer audio conference access. The Chair asked to accept his apologies for this. Also, it is unclear whether WebEx access will be possible but the Chair promised to do his utmost to get this set up.

R. Damm also explained that for the next meeting it is planned to enter into a more technical discussion. He will request the company producing the final version of the FlexPLI, Humanetics, to preferably provide the status of the FlexPLI development and to share the information on how many impactors were already delivered to customers as well as asking
whether these or new impactors would be available for testing.

R. Damm finally requested participants to submit in advance all documents that should be presented during the next meeting to the Secretary of the group (see also ToR, document GTR9-C-07r1).

10. Next meetings

R. Damm explained that during the schedule of this informal group it is planned to have at least one meeting in the US and one in Japan.

In case other attendees wish to host a meeting of the informal group they should contact Th. Kinsky.

11. A. O. B.

None.

Finally the Chairman thanked all participants for their valuable contributions.