

Transmitted by the chairman of the informal  
group GTR9-PH2

Informal document **GRSP-52-32**  
(52nd GRSP, 11 – 14 December 2012,  
agenda item 4(a))

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**GRSP Informal Group**  
**UN Global Technical Regulation No. 9**  
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**Phase 2**

**WP.29 and GRSP Decisions**  
**Draft Operating Principles**  
**Draft Terms of Reference**  
**updated version at 5<sup>th</sup> IG meeting**

# WP.29 and GRSP Decisions

ECE/TRANS/WP.29/1091  
12 July 2011

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**EXECUTIVE COMMITTEE OF THE 1998 AGREEMENT ON ITS THIRTY-  
SECOND SESSION  
REPORT OF THE WORLD FORUM FOR HARMONIZATION OF VEHICLE  
REGULATIONS ON ITS 154TH SESSION  
21 – 24 June 2011**

**Gtr No. 9 (Pedestrian safety) (agenda item 16.4)**

para. 100.

The representative of the United States of America informed AC.3 that, as an outcome of a research study conducted in her country, concerns were expressed by her delegation at the May 2011 session of GRSP on the readiness of the Flex-PLI as a test tool. She added that GRSP had agreed that pending issues should be addressed by a reconstituted informal group. The representative of Germany clarified that the informal group would be co-chaired and co-sponsored by Germany and Japan with the secretariat tasks assigned to OICA. AC.3 gave consent to mandate the informal group subject to the submission to AC.3 of appropriate terms of references (see para. 36).

**Working Party on Passive Safety (GRSP) (Forty-ninth session, 16-20 May 2011)  
(agenda item 3.5.4)**

para. 36.

Concerning the 1998 and 1958 Agreements she reported that GRSP agreed to seek the consent of WP.29 and AC.3 to mandate a new informal group to solve the pending issues for the incorporation of the Flex-PLI in Phase 2 of the UN GTR No. 9 and in the draft UN Regulation on pedestrian safety in the same time. The World Forum agreed to set up this informal group, subject to the submission to WP.29 of the appropriate terms of references.

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**REPORT OF THE WORKING PARTY ON PASSIVE SAFETY ON ITS FORTY-NINTH SESSION  
16–20 May 2011**

**Global technical regulation No. 9 (Pedestrian safety) (agenda item 4)  
Phase 2 of the global technical regulation**

Documentation: ECE/TRANS/WP.29/GRSP/2011/13

Informal documents GRSP-49-15, GRSP-49-23, GRSP-49-24 and GRSP-49-38

para. 7.

GRSP considered ECE/TRANS/WP.29/GRSP/2011/13 and GRSP-49-15 concerning the introduction of the flexible pedestrian legform (Flex-PLI) into the gtr. The expert from the United States of America made a presentation (GRSP-49-23) showing the outcome of a comparison research study conducted in his country between the Flex-PLI and the current lower legform. He concluded that additional research, testing and additional world fleet data is needed to address the injury criteria concerns and to justify the introduction of the Flex-PLI. The expert from Japan gave a presentation (GRSP-49-24), showing that the Flex-PLI and the current legform have a totally different structure and injury criteria. Therefore, he concluded that direct comparison between the two legforms would take misleading results. GRSP agreed that pending issues should be addressed by an informal group, co-chaired by Germany and Japan and aimed at finalizing proposals for the introduction of the Flex-PLI into the gtr and in the draft Regulation on pedestrian safety in the same time.

para. 8.

GRSP agreed to seek consent from WP.29 and the administrative Committee of the 1998 Agreement (AC.3) at its June 2011 session to mandate an informal group on the Flex-PLI. GRSP also noted the draft terms of reference of the informal group (GRSP-49-38) and agreed to refer to this group for finalization. Finally, it was agreed to resume consideration on this agenda item on the basis of a revised proposal (including ECE/TRANS/WP.29/GRSP/2011/13, GRSP-49-15 and possible amendments proposed by the informal group), if any.

**Draft Regulation on pedestrian safety (agenda item 19)**

Documentation: ECE/TRANS/WP.29/GRSP/2011/14

Informal documents GRSP-49-12, GRSP-49-14, GRSP-49-16, GRSP-49-19, GRSP-49-26 and GRSP-49-38

para. 37.

With reference to the discussion held under agenda item 4 (see paras. 7–8), concerning the

proposal to introduce the Flex-PLI into the draft Regulation (ECE/TRANS/WP.29/GRSP/2011/14), GRSP agreed to resume discussion at its December 2011 session on the basis of the outcome of the informal group. GRSP also agreed that the Regulation would not provide any monitoring period for the introduction of the Flex-PLI, to prevent that legal texts would be used as research instruments.

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# Operating Principles

1. The informal group GTR9 - Phase 2 is a sub-group of GRSP and is open to all participants of GRSP including Contracting Parties and Non Governmental Organisations to the 1958 and 1998 Agreements.
  2. The GTR9 amendment will be sponsored by Japan and Germany. A Chairman (Germany), a Vice-Chairman (Japan) and a Secretary (OICA) will manage the informal group.
  3. The official language of the informal group will be English.
  4. All documents must be submitted to the Secretary of the group in a suitable electronic format and will be submitted by the Secretary of the group to the UNECE secretariat and posted on the website [http://www.unece.org/trans/main/wp29/wp29wgs/wp29grsp/gtr9phase2\\_01.html](http://www.unece.org/trans/main/wp29/wp29wgs/wp29grsp/gtr9phase2_01.html) in advance of the meetings. The group may postpone discussing any item or proposal which has not been circulated 5 working days in advance of the scheduled meeting.
  5. The Secretary of the group will aim to distribute the meeting minutes to the informal group members within 15 working days after the meeting of the group.
  6. Decisions and proposals of the group shall be reached by consensus. When consensus cannot be reached, the Chairman of the group shall present the different points of view to GRSP. The Chairman may seek guidance from GRSP as appropriate.
  7. Sessions shall be held in agreement with the majority of the participants after the group has been established in a constitutional meeting. Sessions may be in person or virtual using web-based technology.
  8. A provisional agenda shall be drawn up by the secretariat in accordance with the participants of the group. The first item upon the provisional agenda for each session shall be the adoption of the agenda.
  9. The third item on the provisional agenda will be the discussion, matters arising and adoption of the minutes of the previous session.
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# Draft Terms of Reference

## INTRODUCTION

GRSP agreed to set up an informal group on pedestrian safety Phase 2 in order to further develop proposals to amend UN GTR No.9 on introducing the Flexible Pedestrian Legform Impactor (Flex-PLI) (ECE/TRANS/WP.29/AC.3/24, ECE/TRANS/WP.29/1079, para. 101).

The Flex-PLI Technical Evaluation Group (Flex-TEG) has conducted technical evaluation activities on the Flex-PLI since September 2005. As result of the Flex-TEG activity Japan has submitted proposals for amendments on UN GTR No.9 - Phase 2 as well as on the draft UN-Regulation on Pedestrian Safety (Phase 2). At the 49th session of GRSP some delegations have expressed outstanding reservations with regard to the introduction of the Flex-PLI and requested to set up an informal group to discuss related issues and to develop proposals to amend UN GTR No. 9.

GRSP agreed to seek the consent of WP.29 and AC.3 to mandate a new informal group to solve the pending issues for the incorporation of the Flex-PLI in Phase 2 of the UN GTR No. 9 and in the draft UN Regulation on pedestrian safety in the same time. The World Forum agreed to set up this informal group, subject to the submission to WP.29 of the appropriate terms of references (ECE/TRANS/WP.29/1091, para. 36 and 100).

## OBJECTIVE OF THE INFORMAL GROUP

The main objective of the Informal Group UN GTR No. 9 – Phase 2 is to develop a draft proposal to amend the UN global technical regulation No.9 - Phase 2 on pedestrian safety by introducing the Flex-PLI as a single harmonized test tool in order to enhance the safety level of lower leg pedestrian protection.

The work of the informal group shall not be limited to draft proposals to amend GTR No. 9, but shall cover the development of a complementary draft proposal to amend the draft UN-Regulation on pedestrian safety.

The informal group may also review further draft proposals to improve and / or clarify aspects of the legform test procedure.

The IG GTR9-PH2 shall work on the items listed in Annex I to this document.

## WORK PLAN AND TIME SCHEDULE

May 2011	Proposal of Draft ToR to GRSP (informal document)
June 2011	GRSP to seek consent of WP.29 and AC.3 to mandate new informal group on pedestrian protection

03 November 2011 (Bonn, GER)	Constitutional meeting of the IG GTR9-PH2
November 2011	Report to WP.29 on activities of IG
01/02 December 2011 (Geneva, CH)	First meeting of the IG GTR9-PH2
December 2011	Progress-Report to GRSP, submission of Draft ToR to WP.29
March 2012	Progress-Report to WP.29 and adoption of ToR by WP.29 / AC.3
March 2012	Second meeting of the IG GTR9-PH2
May 2012	Third meeting of the IG GTR9-PH2
May 2012	Progress-Report to GRSP
September 2012	Fourth meeting of the IG GTR9-PH2
November 2012	<u>Draft</u> Progress-Report to WP.29
December 2012	Fifth meeting of the IG GTR9-PH2
December 2012	Progress report and submission of informal <del>draft</del> documents to GRSP
<u>March 2013</u>	<u>Progress-Report to WP.29</u>
March 2013	Sixth meeting of the IG GTR9-PH2
May 2013	<u>Progress Report and submission of <del>Submit formal-informal</del> proposal for discussion to GRSP, <del>adoption by GRSP, submit formal proposal to WP.29</del></u>
<u>June 2013</u>	<u>Progress-Report to WP.29</u>
<u>September 2013</u>	<u>Seventh meeting of the IG GTR9-PH2</u>
<u>November 2013</u>	<u>Draft Progress-Report to WP.29</u>
<u>December 2013</u>	<u>Progress Report and submission of formal proposal to GRSP, agreement by GRSP</u>
<u>November 2013 June 2014</u>	Adoption by WP.29

※Additional meetings (including virtual meetings) could be held according to the progress of discussions and the decision of the informal group.

## Overall Schedule

Year	2011		2012												2013												2014								
	10	1	2	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6		
WP29		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
GRSP		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
IG-GTR9-PH2		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

## ANNEX 1

### Activity List

The major tasks that will be performed by the IG GTR9-PH2 include:

1. Review and consideration of remaining items
  - a) Review of Flex-TEG activities → to reach common understanding
  - b) Assessment of biofidelity (comparison of FlexPLI and EEVC lower legform impactor)
  - c) Assessment of benefit and costs (injury reduction, additional benefit compared to EEVC lower legform impactor)
  - d) Technical specifications (drawings) and PADI (user manual)
  - e) Evaluation of durability
  - f) Test procedure (rebound phase, best practice, velocity measurement etc.)
  - g) Certification tests
  - h) Review and exchange of test results
  - i) Evaluation of reproducibility and repeatability
  - j) Evaluate and decide on performance / injury criteria and threshold values
  - k) Evaluation of vehicle countermeasures (assessment of technical feasibility)
2. Develop a draft proposal to amend UN GTR No. 9 - Phase 2
3. Develop a complementary draft proposal to amend draft UN Regulation on Pedestrian Safety (including a recommendation for transitional provisions based on item 1).