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World Forum for Harmonization of Vehicle Regulations (WP.29)

Working Party on Lighting and Light-Signalling (GRE)

**REPORT OF THE WORKING PARTY ON LIGHTING AND LIGHT-SIGNALLING (GRE)
ON ITS FIFTY-SIXTH SESSION**

(4 to 7 April 2006)

ATTENDANCE

1. GRE held its fifty-sixth session from 4 (afternoon) to 7 (morning only) April 2006 in Geneva, under the chairmanship of Mr. M. Gorzkowski (Canada). Experts from the following countries participated in the work following Rule 1(a) of the Rules of Procedure of WP.29 (TRANS/WP.29/690): Canada; Czech Republic; Finland; France; Germany; Hungary; India; Italy; Japan; Netherlands; Norway; Poland; Republic of Korea; Russian Federation; Spain; Sweden; Turkey; United Kingdom; United States of America. Representatives of the European Commission (EC) also participated. Experts from the following non-governmental organizations also participated: International Organization for Standardization (ISO); International Organization of Motor Vehicle Manufacturers (OICA); International Motorcycle Manufacturers Association (IMMA); European Association of Automobile Suppliers (CLEPA); Working Party "Brussels 1952" (GTB); International Electrotechnical Commission (IEC); International Road Transport Union (IRU). Upon the special invitation of the Chairman, an expert from the Comité de Liaison des Constructeurs de Carosseries et Remorques (CLCCR) participated.

2. The informal documents distributed during the session are listed in Annex 1 to this report.

1998 AGREEMENT – Global technical regulation (gtr)

1. DEVELOPMENT OF NEW GTRS

1.1. gtr No. x (Installation of lighting and light-signalling devices)

Documentation: TRANS/WP.29/GRE/2001/6/Rev.5; ECE/TRANS/WP.29/GRE/2006/29; informal documents Nos. GRE-56-13 and GRE-56-31 of Annex 1 to this report.

3. The GRE Chairman, also chairing the informal working group, informed GRE that the group held its ninth meeting in Geneva on 3 (afternoon only) and 4 (morning only) April 2006, prior to the GRE session proper. GRE noted ECE/TRANS/WP.29/GRE/2006/29 reflecting the main areas of the gtr where agreement had been achieved. Mr. Gorzkowski added that the informal group agreed on GRE-56-31 superseding OICA's proposal GRE-56-13 on a new global technical regulation (gtr). He invited all experts to send him their comments by the end of May 2006 (gorzkom@tc.gc.ca). Regarding the further development of this document, he announced his intention to settle any received comments by exchange of e-mails, by teleconferences or, if necessary, during the tenth meeting of the informal group intended to be held in June 2006 (Ottawa). The secretariat was requested to prepare a revised document (ECE/TRANS/WP.29/GRE/2001/6/Rev.6) for consideration at the next GRE session in October 2006 on the basis of GRE-56-31 and comments received and resolved by the Chairman of the informal group.

1.2. Development of further gtrs on harmonized beam pattern (Headlamps and front fog lamps)

4. GRE noted no new gtr proposals at this time.

1958 AGREEMENT

GENERAL REGULATIONS

2. REGULATION No. 10 (Electromagnetic compatibility)

Documentation: Informal documents Nos. GRE-56-6 and GRE-56-12 of Annex 1 to this report.

5. The EC expert introduced GRE-56-6 proposing to align the current text of the Regulation with the recent editions of International Special Committee on Radio Interference (CISPR) and International Organization for Standardization (ISO) standards that had been incorporated in the European Union Directive 2004/104/EC. The expert from Japan commented the EC proposal by presenting GRE-56-12. The expert from the EC invited all experts to send him (wolfgang.schneider@cec.eu.int) further comments not later than mid of June 2006. A revised document would be submitted for consideration at the next GRE session.

3. REGULATION No. 37 (Filament lamps)

3.1. Editorial corrections

Documentation: ECE/TRANS/WP.29/GRE/2006/7.

6. GRE adopted ECE/TRANS/WP.29/GRE/2006/7, not amended, and requested the secretariat to submit the document to WP.29 and AC.1, for consideration at their November 2006 sessions, as draft Corrigendum 1 to Revision 4 of Regulation No. 37.

3.2. Editorial corrections

Documentation: ECE/TRANS/WP.29/GRE/2006/17; informal document No. GRE-56-9 of Annex 1 to this report.

7. GRE adopted ECE/TRANS/WP.29/GRE/2006/17, not amended, and GRE-56-9, as reproduced below. The secretariat was requested to submit both proposals to WP.29 and AC.1, for consideration at their November 2006 sessions, as a part of (see para. 6) draft Corrigendum 1 to Revision 4 of Regulation No. 37.

Annex 1,

Page 79, CATEGORIES HB4 AND HB4A - Sheet HB4/3 (French text only), correct the table to read: "Flux lumineux 1095 ± 15 %".

Page 108, CATEGORY P21/5W - Sheet P21/5W/1 (French text only), correct the table to read: "Flux lumineux de référence : 440 et 35 lm à 13,5 V environ".

Page 124, CATEGORY PY27/7W - Sheet PY27/7W/1, footnote 3/ (French text only), correct to read: "3/ A vérifier au moyen d'un "box-system" (feuilles P27/7W/2 et 3)."

Page 145, CATEGORIES WP21W AND WPY21W - Sheet WP21W/2) (French text only), correct the table to read: "Dimension : h = 9,0".

Pages 43, 47, 54, 85, 97, 100, 103, 112, 119, 120, 122, and 146, various footnotes (French text only), correct "gabarit de positionnement" to read "Box System".

3.3. Lamps of categories R2, S1 and C21W

Documentation: ECE/TRANS/WP.29/GRE/2006/11.

8. The expert from GTB introduced ECE/TRANS/WP.29/GRE/2006/11 proposing to approve lamps of categories R2, S1 and C21W for replacement purposes only. GRE adopted the proposal, with the following amendment to paragraph 8.4.:

"8.4. However, Contracting Parties applying this Regulation may continue to grant "

9. The secretariat was requested to submit the document to WP.29 and AC.1, for consideration at their November 2006 sessions, as draft Supplement 28 to the 03 series of amendments to Regulation No. 37.

4. REGULATION No. 48 (Installation of lighting and light-signalling devices)

4.1. Emergency stop signal (ESS)

Documentation: ECE/TRANS/WP.29/GRE/2006/31; informal documents Nos. GRE-56-4, GRE-56-5, GRE-56-11, GRE-56-18, GRE-56-23 and GRE-56-29 of Annex 1 to this report.

10. The Chairman of the GRE expert group on ESS, Mr. N. Bowerman (United Kingdom), introduced the final proposal agreed by that group (ECE/TRANS/WP.29/GRE/2006/31). With regard to the ESS appearance, he stated that the group could not agree on a single signal. The expert from the EC supported that proposal and added that there was no clear advantage of a signal by either flashing stop lamps or direction indicator lamps.

11. The expert from the Netherlands presented GRE-56-18 and reiterated his position that two different signals, indicating the same event, were unacceptable. The expert from the United Kingdom also preferred to have one single signal. The expert from Germany offered to give a presentation on the third ESS system. Due to lack of time and the strong opposition to numerous signal systems indicating the same event, the Chairman did not allow the presentation. The expert from Germany opposed this decision as well as the adoption of the document.

12. GRE proceeded with a detailed consideration of ECE/TRANS/WP.29/GRE/2006/31 taking into account GRE-56-4, GRE-56-5, GRE-56-11 and GRE-56-23. The experts from Germany and the Netherlands preferred to delete the following text from paragraph 6.22.7.1.1.: "... to the rear of the vehicle ...". GRE adopted ECE/TRANS/WP.29/GRE/2006/31, as amended by Annex 2 to this report. The secretariat was requested to submit the amended proposal to WP.29 and AC.1, for consideration at their November 2006 sessions, as draft Supplement 3 to the 03 series of amendments to Regulation No. 48.

13. GRE noted the request of WP.1 for justification concerning the road safety benefits due to the activation of ESS (GRE-56-29) and agreed to consider it under agenda item 19. (see para. 62).

4.2. Automatic activation of the hazard warning signal

Documentation: ECE/TRANS/WP.29/GRE/2006/23; ECE/TRANS/WP.29/GRE/2006/30; informal document No. GRE-56-14 of Annex 1 to this report.

14. GRE had an exchange of views on ECE/TRANS/WP.29/GRE/2006/23, but the proposal did not reach an agreement. The expert from Japan volunteered to prepare a new proposal for consideration at the next GRE session.

15. The expert from OICA introduced ECE/TRANS/WP.29/GRE/2006/30 on conditions for automatic activation of hazard warning signal (HWS) as well as GRE-56-14, proposing

additional conditions for HWS automatic activation. As a large number of delegations could not support GRE-56-14, GRE agreed to remove the document from its agenda. Following the discussion, GRE adopted ECE/TRANS/WP.29/GRE/2006/30, as amended by Annex 2 to this report. The secretariat was requested to submit the amended document to WP.29 and AC.1, for consideration at their November 2006 sessions, as a part of (see para. 12) draft Supplement 3 to the 03 series of amendments to Regulation No. 48.

4.3. Operating voltage for lighting and light-signalling devices

Documentation: TRANS/WP.29/GRE/2003/20/Rev.2; informal document No. GRE-56-20 of Annex 1 to this report.

16. Recalling the discussion on this subject at the previous GRE sessions, the expert from Germany introduced GRE-56-20, superseding TRANS/WP.29/GRE/2003/20/Rev.2, on electrical supply conditions during the type approval tests and in vehicles in service. Following the discussion, the expert from Germany volunteered to prepare a new proposal for consideration at the next GRE session. For that purpose, all experts were invited to send him (christian.theis@bmvbs.bund.de) their comments in due time. GRE agreed to keep TRANS/WP.29/GRE/2003/20/Rev.2 and GRE-56-20 on its agenda as reference documents.

17. GRE also agreed on the need to establish an informal group on operating voltage issues for lighting and light-signalling devices and invited the expert from Germany to prepare a proposal regarding the terms of reference and the rules of procedure for the new informal group. The Chairman announced his intention to seek, at the June 2006 session, WP.29's consent to establish the above-mentioned informal group. GRE agreed to resume consideration of this subject at its next session.

4.4. Activation of a tell-tale for direction indicators equipped with multiple light sources

Documentation: ECE/TRANS/WP.29/GRE/2006/27; informal documents Nos. GRE-56-17 and GRE-56-30 of Annex 1 to this report.

18. GRE followed with interest a presentation by GTB (GRE-56-30) on failure indication aspects of direction indicators with multiple light-emitting diode (LED) sources, complementing ECE/TRANS/WP.29/GRE/2006/27 on tell-tale activation conditions. The expert from the Netherlands presented GRE-56-17 and objected the proposed minimum performance criteria for direction indicators. As the experts from Germany, Japan and the United Kingdom shared the same concerns, the expert from GTB volunteered to prepare a revised proposal, with transitional provisions, for consideration at the next GRE session.

4.5. Activation of the stop lamps by retarder

Documentation: Informal document No. GRE-56-15 of Annex 1 to this report.

19. GRE deferred consideration of the document to its next session.

4.6. Conditions for activation of optional, side-mounted reversing lamps

Documentation: ECE/TRANS/WP.29/GRE/2006/5.

20. Following the request of WP.29 to clarify the regulatory text (see TRANS/WP.29/1047, para. 58), GRE adopted ECE/TRANS/WP.29/GRE/2006/5, not amended, and requested the secretariat to submit the document to WP.29 and AC.1, for consideration at their November 2006 sessions, as draft Corrigendum 1 to Supplement 13 to the 02 series of amendments to Regulation No. 48.

4.7. Correlation of requirements for approved lighting devices and their installation

Documentation: ECE/TRANS/WP.29/GRE/2006/6.

21. The expert from GTB introduced ECE/TRANS/WP.29/GRE/2006/6, clearly linking the devices approved according to UNECE Regulations with their installation requirements. Although, some delegations preferred to link, on a mandatory basis, the installation requirements with type approved devices. GRE recognized that such a decision was not acceptable for those Contracting Parties, which were not applying all Regulations concerned. GRE adopted ECE/TRANS/WP.29/GRE/2006/6, as amended by Annex 2 to this report. The secretariat was requested to submit the document to WP.29 and AC.1, for consideration at their November 2006 sessions, as draft Corrigendum 2 to Revision 3 of Regulation No. 48.

4.8. Requirements for the position of side direction indicators

Documentation: ECE/TRANS/WP.29/GRE/2006/8.

22. GRE deferred consideration of the document to its next session.

4.9. Inclusion of revised requirements for front fog lamps of categories B and F3

Documentation: ECE/TRANS/WP.29/GRE/2006/18.

23. GRE deferred consideration of the document to its next session..

4.10. Clarification of number and arrangement of end-outline marker lamps

Documentation: ECE/TRANS/WP.29/GRE/2006/20.

24. GRE deferred consideration of the document to its next session.

4.11. Additional (optional) end-outline marker lamps

Documentation: ECE/TRANS/WP.29/GRE/2006/22.

25. GRE deferred consideration of the document to its next session.

4.12. Extreme outer edge definition

Documentation: Informal document No. GRE-56-16 of Annex 1 to this report.

26. GRE deferred consideration of the document to its next session. The secretariat was requested to distribute GRE-56-16 with an official symbol.

4.13. Interpretation of paragraph 6.12.9. of Regulation No. 48

Documentation: Informal document No. GRE-56-21 of Annex 1 to this report.

27. GRE noted GRE-56-21 (tabled by Japan) proposing to clarify the requirements for front and rear position lamps, when being used as parking lamps. GRE adopted the proposal as reproduced in Annex 2 to this report. The secretariat was requested to submit the proposed amendments to WP.29 and AC.1, for consideration at their November 2006 sessions, as a part of (see para. 21) draft Corrigendum 2 to Revision 3 of Regulation No. 48.

4.14. Japanese comments on paragraph 5.7. of Regulation No. 48

Documentation: Informal document No. GRE-56-22 of Annex 1 to this report.

28. GRE deferred consideration of the document to its next session.

4.15. Tell-tale activation for bend lighting

Documentation: ECE/TRANS/WP.29/GRE/2006/32.

29. Regarding tell-tale activation for bend lighting and adaptive front-lighting system (AFS), GRE considered and adopted ECE/TRANS/WP.29/GRE/2006/32, as amended by Annex 2 to this report. The secretariat was requested to submit the document to WP.29 and AC.1, for consideration at their November 2006 sessions, as draft Supplement 2 to the 03 series of amendments to Regulation No. 48.

5. COLLECTIVE AMENDMENTS

5.1. Simplification of the approval markings

Documentation: TRANS/WP.29/GRE/2004/24.

30. GRE deferred consideration of the document to its next session.

5.2. Clarification of the scope of Regulations on lighting and light-signalling

Documentation: ECE/TRANS/WP.29/GRE/2005/27/Rev.1; informal documents Nos. GRE-56-1 and GRE-56-28 of Annex 1 to this report.

31. GRE noted that, at its March 2006 session, WP.29 approved the report of the previous GRE session (TRANS/WP.29/GRE/55) with modifications to paragraph 24. (see report ECE/TRANS/WP.29/1050, para. 23).

32. GRE also noted GRE-56-28, tabled by India. Recalling the purpose of ECE/TRANS/WP.29/GRE/2005/27/Rev.1, the expert from IMMA introduced GRE-56-1 clarifying the scope of Regulations Nos. 19, 38, 69, 88 and 98. GRE adopted the proposals to Regulations Nos. 38, 19, 98, 69 and 88 with the following amendments:

Part II, proposal A.6., amend to read: " rear fog lamps for vehicles of categories L₃, L₄, L₅, L₇, M, N, O and T."

Part III, proposal A.2., amend to read: " front fog lamps for vehicles of categories L₃, L₄, L₅, L₇, M, N, and T."

Part III, proposal A.4., amend to read: " gas-discharge light sources, for vehicles of categories M and N."

Part IV, proposal A.2., delete category "L" from paragraph 1. and delete paragraph 2.1.1.

Part IV, proposal A.4., delete category "L₂" from paragraph. 1. and correct paragraph 2.1.3. to read: " easy recognition of two-wheeled vehicles."

33. The secretariat was requested to submit the proposals to WP.29 and AC.1, for consideration at their November 2006 sessions, as draft Supplement 12 to the 02 series of amendments to Regulation No. 19; as draft Supplement 12 to Regulation No. 38, as draft Supplement 3 to the 01 series of amendments to Regulation No. 69, as draft Supplement 1 to Regulation No. 88 and as draft Supplement 8 to Regulation No. 98.

5.3. Collective amendments on colour specifications

Documentation: ECE/TRANS/WP.29/GRE/2006/25.

34. GRE deferred consideration of the document to its next session.

5.4. Phantom light and colour washout phenomena in signalling and marking devices

35. GRE deferred consideration of the document to its next session.

SIGNALLING AND MARKING DEVICE REGULATIONS

6. REGULATION No. 4 (Illumination of rear registration plates)

36. GRE deferred consideration of the document to its next session.

7. REGULATION No. 6 (Direction indicators)

Documentation: ECE/TRANS/WP.29/GRE/2006/26; informal documents Nos. GRE-56-17 and GRE-56-30 of Annex 1 to this report.

37. GRE considered all three documents and agreed to resume consideration of ECE/TRANS/WP.29/GRE/2006/26 as soon as an agreement would be reached on the revised proposal by GTB under agenda item 4.4. (see para. 18 above).

8. REGULATION No. 87 (Daytime running lamps)

Documentation: ECE/TRANS/WP.29/GRE/2004/5/Rev.2; TRANS/WP.29/GRE/2005/13; ECE/TRANS/WP.29/GRE/2006/28.

38. As a large number of delegations could not support TRANS/WP.29/GRE/2005/13 proposing allowance for daytime running lamps to be amber, GRE agreed to remove the document from the agenda until completion of the ongoing study by Germany.

39. The expert from the Netherlands introduced ECE/TRANS/WP.29/GRE/2006/28 proposing the insertion of new provisions on the mandatory installation and automatic activation of daytime-running lamps (DRL) into Regulation No. 48 in combination with an automatic operation of the dipped-beam lamps. The experts from the EC, France, Italy and CLEPA supported the proposal. However, the experts from Japan, the Russian Federation and the United Kingdom objected the proposal on automatic operation of DRL. The EC expert stated that an EU study had shown no negative impact of DRL on the conspicuity of motorcycles (see http://europa.eu.int/comm/transport/road/roadsafety/equipment/daytimerunninglights/index_en.htm).

40. As no agreement could be found on the deletion of footnote 8/ in paragraph 6.19., GRE agreed to mark the footnote as strikethrough, and to leave the final decision to WP.29/AC.1. With regard to the transitional provisions, the expert from Germany objected the extension from 24 to 30 months for M₁ and N₁ category vehicles while the expert from OICA requested a 36 month transitional period for the same vehicle categories. GRE adopted ECE/TRANS/WP.29/GRE/2006/28, as amended by Annex 2 to this report. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration at their November 2006 sessions, as draft 04 series of amendments to Regulation No. 48.

41. With regard to ECE/TRANS/WP.29/GRE/2004/5/Rev.2, GRE considered only proposal A.2. and adopted it with the following amendments:

Paragraph 7.1., replace the figure "500 cd" by "400 cd".

Paragraph 7.2.2., replace the figure "1,500 cd" by "1,200 cd".

42. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration at their November 2006 sessions, as draft Supplement 10 to Regulation No. 87.

9. REGULATION No. 104 (Retro-reflective markings)

Documentation: ECE/TRANS/WP.29/GRE/2006/2; ECE/TRANS/WP.29/GRE/2006/21; informal documents Nos. GRE-56-19 and GRE-56-27 of Annex 1 to this report.

43. GRE noted that, at its March 2006 session, WP.29 approved the report of the previous GRE session (TRANS/WP.29/GRE/55) with the modifications to paragraph 38. (see report ECE/TRANS/WP.29/1050, para. 23).

44. GRE noted that GRE-56-27, tabled by India, referred to ECE/TRANS/WP.29/GRE/2006/2 which had been submitted to WP.29 and AC.1 for consideration at their June 2006 sessions as ECE/TRANS/WP.29/2006/66. GRE decided to remove both documents from the agenda. The experts from India were invited to re-consider their proposal and, if appropriate, to re-submit it for consideration to GRE at its next session.

45. The expert from CLEPA presented ECE/TRANS/WP.29/GRE/2006/21 proposing the insertion of flexing test requirements for retro-reflective marking materials. Taking into account GRE-56-19, GRE adopted the proposal, as reproduced in Annex 3 to this report. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration at their November 2006 sessions, as draft Supplement 4 to Regulation No. 104.

10. LAMPS WITH VARIABLE LUMINOUS INTENSITY

10.1. Direction indicators with variable luminous intensities (Regulation No. 6)

Documentation: TRANS/WP.29/GRE/2005/40.

46. GRE considered and adopted TRANS/WP.29/GRE/2005/40, as amended below:

Paragraph 6.1., footnote 2/, amend to read:

"2/ The total value of maximum intensity for an assembly of two or more lamps is given by multiplying by 1.4 the value prescribed for a single lamp, except for category 2a.

When an assembly of two or more lamps having the same function is deemed to be, for the purpose of installation on a vehicle, a "single lamp", this assembly shall comply with the minimum intensity required when one lamp has failed, and, all the lamps together shall not exceed the admissible maximum intensity (last column of the table).

In the case of a single lamp containing more than one light source:

- (i) all light sources which are connected in series are considered to be one light source;

- (ii) the lamp shall comply with the minimum intensity required when any one light source has failed. However, for front or rear direction indicator lamps designed for only two light sources, 50 per cent of the minimum intensity in the axis of reference of the lamp shall be considered sufficient, provided that a note in the communication form states that the lamp is only for use on a vehicle fitted with an operating tell-tale which indicates when any one of these two light sources has failed.
- (iii) when all light sources are illuminated the maximum intensity specified for a single lamp may be exceeded provided that the single lamp is not marked "D" and the maximum intensity specified for an assembly of two or more lamps (last column of the table) is not exceeded."

Paragraph 6.1., the table, the former reference to footnote 3/ and footnote 3/ (former), should be deleted.

Paragraph 7.2., the reference to footnote 4/ and footnote 4/, renumber as footnote 3/.

47. The secretariat was requested to submit the document to WP.29 and AC.1, for consideration at their November 2006 sessions, as draft Supplement 15 to the 01 series of amendments to Regulation No. 6.

10.2. Light-signalling lamps with variable luminous intensities (Regulation No. 7)

Documentation: TRANS/WP.29/GRE/2005/41.

48. GRE considered and adopted TRANS/WP.29/GRE/2005/41, not amended, and requested the secretariat to submit the document to WP.29 and AC.1, for consideration at their November 2006 sessions, as draft Supplement 12 to the 02 series of amendments to Regulation No. 7.

10.3. Rear fog lamps with variable luminous intensities (Regulation No. 38)

Documentation: TRANS/WP.29/GRE/2005/42.

49. GRE considered and adopted TRANS/WP.29/GRE/2005/42, not amended, and requested the secretariat to submit the document to WP.29 and AC.1, for consideration at their November 2006 sessions, as a part of (see para. 33) draft Supplement 12 to Regulation No. 38.

10.4. Installation of light-signalling devices with variable luminous intensities
(Regulation No. 48)

Documentation: TRANS/WP.29/GRE/2005/43; ECE/TRANS/WP.29/GRE/2005/43/Corr.1.

50. Following the discussion, GRE adopted TRANS/WP.29/GRE/2005/43 and Corr.1, both as amended by Annex 2 to this report. The secretariat was requested to submit both documents to WP.29 and AC.1, for consideration at their November 2006 sessions, as a part of (see para. 29) draft Supplement 2 to the 03 series of amendments to Regulation No. 48.

ROAD ILLUMINATION DEVICE REGULATIONS

11. REGULATION No. 19 (Front fog lamps)

Documentation: ECE/TRANS/WP.29/GRE/2006/19.

51. GRE deferred consideration of the document to its next session.

12. Determination of cut-off line and harmonized driving beam pattern (Regulations Nos. 98 and 112)

Documentation: ECE/TRANS/WP.29/GRE/2006/9; ECE/TRANS/WP.29/GRE/2006/10; informal document No. GRE-56-8 of Annex 1 to this report.

52. The expert from GTB withdrew ECE/TRANS/WP.29/GRE/2006/9. The secretariat was requested to distribute GRE-56-8 with an official symbol (ECE/TRANS/WP.29/GRE/2006/9/Rev.1).

13. Prohibition of Class A headlamps on four-wheeled vehicles (Regulation No. 48)

Documentation: ECE/TRANS/WP.29/GRE/2006/24.

53. The expert from Japan presented ECE/TRANS/WP.29/GRE/2006/24 regarding the prohibition of installation of Class A headlamps on four-wheel vehicles. GRE adopted the document as reproduced in Annex 2. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration at their November 2006 sessions, as a part of (see para. 40) the draft 04 series of amendments to Regulation No. 48.

14. Elimination of requirements for user's interference in devices incorporated in headlamps
(Regulations Nos. 98, 112 and 113)

Documentation: ECE/TRANS/WP.29/GRE/2006/12; ECE/TRANS/WP.29/GRE/2006/13; ECE/TRANS/WP.29/GRE/2006/14.

54. The expert from GTB withdrew ECE/TRANS/WP.29/GRE/2006/12 and ECE/TRANS/WP.29/GRE/2006/14. GRE agreed to resume consideration on ECE/TRANS/WP.29/GRE/2006/13 at its next session.

15. Reduced illumination of headlamps under certain conditions (Regulations Nos. 48 and 112)

Documentation: ECE/TRANS/WP.29/GRE/2006/15; ECE/TRANS/WP.29/GRE/2006/16.

55. GRE deferred consideration of the document to its next session.

16. ADAPTIVE FRONT-LIGHTING SYSTEM (AFS) (Regulation No. 48)

Documentation: ECE/TRANS/WP.29/GRE/2006/3.

56. Referring to the discussions on AFS issues during the previous GRE sessions, the expert from OICA introduced ECE/TRANS/WP.29/GRE/2006/3. The experts from Germany and the Netherlands pointed out that GRE, in principle, should not re-discuss documents sent to WP.29 and AC.1. In addition, they opposed the elimination of mandatory fitment of headlamp cleaning devices on headlamps featuring AFS with the luminous flux below 2,000 lm. GRE adopted, with the opposition of Germany and the Netherlands, ECE/TRANS/WP.29/GRE/2006/3, not amended, and requested the secretariat to submit the document together with TRANS/WP.29/GRE/2005/22, adopted at the previous GRE session, to WP.29 and AC.1, for consideration at their November 2006 sessions, as a Corrigendum to TRANS/WP.29/2005/54.

17. LED MODULES FOR ROAD ILLUMINATION DEVICES

17.1. Additional provisions for LED modules (Regulation No. 48)

Documentation: TRANS/WP.29/GRE/2005/36; ECE/TRANS/WP.29/GRE/2005/36/Corr.1.

57. GRE agreed to suspend consideration of this subject until an agreement could be found on requirements for LED modules (see para. 58 below).

17.2. Requirements for LED modules (Regulation No. 112)

Documentation: TRANS/WP.29/GRE/2005/37; ECE/TRANS/WP.29/GRE/2005/37/Corr.1.

58. GRE resumed the exchange of views on TRANS/WP.29/GRE/2005/37 and Corr.1. The expert from GTB volunteered to prepare a revised proposal for consideration at the next GRE session, taking into account the comments by GRE experts.

18. MOTORCYCLES

18.1. Rear-registration number plate space illumination devices (Regulation No. 50)

Documentation: ECE/TRANS/WP.29/GRE/2006/4; informal document No. GRE-56-24 of Annex I to this report.

59. GRE deferred consideration of the document to its next session.

18.2. REGULATION No. 53 (Installation of lighting and light-signalling devices for L₃ category vehicles)

Documentation: Informal document No. GRE-56-2 of Annex 1 to this report.

60. GRE deferred consideration of the document to its next session. The secretariat was requested to distribute GRE-56-2 with an official symbol.

18.3. High-intensity discharge (HID) headlamps (Regulation No. 113)

Documentation: Informal document No. GRE-56-7 of Annex 1 to this report.

61. The expert from IMMA introduced GRE-56-7 justifying the inclusion of provisions for high-intensity discharge headlamps (HID) into Regulation No. 113 as well as HID installation requirements into Regulation No. 53. GRE invited the expert from IMMA to prepare concrete proposals for amendments to Regulations No. 53 and 113, for consideration at the next GRE session. GRE agreed to keep GRE-56-7 as a reference document.

OTHER BUSINESS

19. Convention on Road Traffic (Vienna 1968)

Documentation: TRANS/WP.29/GRE/2005/29.

62. GRE agreed that TRANS/WP.29/GRE/2005/29 should be updated in the view of recent amendments to lighting Regulations and invited the expert from GTB to prepare a revised proposal for consideration at the next GRE session. With regard to the WP.1 request (see para. 13), GRE agreed to include an extended justification for ESS safety benefits in the revised document (ECE/TRANS/WP.29/GRE/2005/29/Rev.1) and, after consideration of this document at the next GRE October session, the justification part, as a separate document, would be submitted to WP.29 for its consideration and possible transmission to WP.1.

20. General discussion regarding the road map for GRE work

63. GRE deferred consideration of the document to its next session.

21. REGULATION No. 70 (Rear-marking plates for heavy and long vehicles)

Documentation: Informal documents Nos. GRE-56-10 and GRE-56-26 of Annex 1 to this report.

64. GRE adopted GRE-56-10, not amended, as reproduced below and requested the secretariat to submit the proposal to WP.29 and AC.1, for consideration at their November 2006 sessions, as draft Corrigendum 1 to Supplement 2 to the 01 series of amendments to Regulation No. 70.

Annex 3, amend to read (French text only):

" /fluorecents. Les plaques d'identification arrière des classes 3 ou 4 (matériaux rétro réfléchissants seulement) doivent porter

Annex 12, the title on the top of the second page, amend to read (French text only):

"PLAQUES D'IDENTIFICATION ARRIÈRE POUR REMORQUES ET SEMI-REMORQUES".

Annex 15, paragraph 4. b), add the following text (French text only):

"Classe 4 - centre rétro réfléchissant jaune à bord rétro réfléchissant rouge."

65. GRE agreed to resume consideration of GRE-56-26 (tabled by India) at its next session. The secretariat was requested to distribute GRE-56-26 with an official symbol.

22. REGULATION No. 69 (Rear-marking plates for slow moving vehicles)

Documentation: Informal document No. GRE-56-25 of Annex 1 to this report.

66. GRE deferred consideration of the document to its next session. The secretariat was requested to distribute GRE-56-25 with an official symbol.

AGENDA FOR THE NEXT SESSION

67. The Chairman announced that the next GRE session would be held either in Moscow or Warsaw, pending the final decision at WP.29 June session. He informed that an informal document No. GRE-57-1 would be placed in WP.29 homepage regarding the details for the venue of this session. He announced that GRE had received an invitation from Norway to hold its October 2007 session in Oslo. GRE did not consider the provisional agenda for the fifty-seventh session of GRE, scheduled from 2 to 6 October 2006. Instead, it was agreed that the Chairman, jointly with the secretariat, would propose a draft agenda.

Annex 1

LIST OF INFORMAL DOCUMENTS GRE-56-... DISTRIBUTED WITHOUT AN OFFICIAL SYMBOL DURING THE FIFTY-SIXTH SESSION OF GRE

No.	Transmitted by	Agenda item	Language	Title	Follow-up
1.	IMMA	5.2.	E	Proposal for draft amendments to Regulations Nos. 19, 38, 69, 88 and 98	(d)
2.	IMMA	18.2.	E	Proposal for draft amendments to Regulation No. 53	(b)
3.	Chairman	-	E	Proposed running order of the 56th GRE agenda	(c)
4.	OICA	4.1.	E	Proposal for draft amendments to Regulation No. 13	(c)
5.	OICA	4.1.	E	Proposal for draft amendments to Regulation No. 13-H	(c)
6.	European Commission	2.	E	Proposal for the draft 03 series of amendments to Regulation No. 10	(c)
7.	IMMA	18.3.	E	Proposal for inclusion of high-intensity discharge (HID) headlamps in Regulation No. 113	(c)
8.	GTB	12.	E	Proposal for draft amendments to Regulation No. 98	(b)
9.	France	3.2.	F	Proposition de projet de rectificatif au Règlement No 37	(d)
10.	France	21.	F	Proposition de projet de rectificatif au Règlement No 70	(d)
11.	Japan	4.1.	E	Proposal for draft amendments to Regulation No. 48 - (Emergency stop signal (ESS))	(c)
12.	Japan	2.	E	Comments on draft 03 series of amendments to Regulation No. 10 - (Electromagnetic compatibility)	(c)
13.	OICA	1.1.	E	OICA's proposal for a new global technical regulation (gtr) - Lighting and light-signalling devices for road vehicles: installation provisions for vehicles other than motorcycles	(c)
14.	OICA	4.2.	E	Proposal for draft amendments to Regulation No. 48 - (Hazard warning signal)	(c)
15.	OICA/CLEPA	4.5.	E	Draft amendment to Regulation No. 13	(a)
16.	OICA	4.12.	E	Proposal for draft amendments to Regulation No. 48 - (Extreme outer edge definition)	(b)
17.	Netherlands	4.4. and 7.	E	Netherlands' comments on proposals for draft amendments to Regulations Nos. 6 and 48 - (Activation of a tell-tale in the event of malfunction of direction indicators)	(c)
18.	Netherlands	4.1.	E	Netherlands' comments on proposal for draft amendments to Regulation No. 48 - (Emergency Stop Signals (ESS))	(c)
19.	Germany	9.	E	Proposal for draft amendments to Regulation No. 104 - (Alignment of the Regulation with the 03 series of amendments to Regulation No. 48)	(d)

20.	Germany/ Netherlands	4.3.	E	Proposal for draft amendments to Regulation No. 48 - (Operating voltage for lighting and light-signalling devices)	(c)
21.	Japan	4.13.	E	Interpretation of paragraph 6.12.9. of Regulation No. 48 - (Parking lamp functions performed by front and rear position lamps)	(d)
22.	Japan	4.14.	E	Japanese comments on paragraph 5.7. of Regulation No. 48 - (Reciprocally incorporated lamps of different colours)	(a)
23.	India	4.1.	E	India's comments on proposal for draft amendments to Regulation No. 48 - (Emergency Stop Signals (ESS))	(c)
24.	India	18.1.	E	India's comments on proposal for draft amendments to Regulation No. 50 - (Rear-registration number plate illumination devices)	(a)
25.	India	22.	E	Proposal for draft amendments to Regulation No. 69 - (Bonding strength and resistance to cleaning)	(b)
26.	India	21.	E	Proposal for draft amendments to Regulation No. 70 - (Bonding strength and resistance to cleaning)	(b)
27.	India	9.	E	Proposal for draft amendments to Regulation No. 104 - (Resistance to power washing)	(c)
28.	India	5.2.	E	India's comments on revised proposal for draft amendments to the scope of Regulations - (ECE/TRANS/WP.29/GRE/2005/27/Rev.1)	(c)
29.	Secretariat	4.1.	E	WP.1 request for justification concerning the road safety benefits due to the activation of emergency stop signal (ESS)	(c)
30.	GTB	4.4. and 7.	E	Proposals by GTB and OICA on Regulations Nos. 6 and 48 - Activation of a tell-tale, in the event of malfunction of direction indicators equipped with multiple light sources	(c)
31.	Chairman of informal group	1.1.	E	Proposal for a new global technical regulation (gtr) - Lighting and light-signalling devices for road vehicles: installation provisions for vehicles other than motorcycles	(b)

Note:

- (a) Continue consideration at the next GRE session as an informal document.
- (b) Continue consideration at the next GRE session as an official document.
- (c) Consideration completed or to be superseded.
- (d) Adopted and to be submitted to WP.29.

Annex 2

AMENDMENTS TO REGULATION No. 48 ADOPTED AT THE FIFTY-SIXTH SESSION
OF GRE

AMENDMENTS ADOPTED TO ECE/TRANS/WP.29/GRE/2006/31
(see para. 12 of the report)

Paragraph 2.27., amend to read:

"2.27. "Emergency stop signal" means a signal to indicate to other road users to the rear of the vehicle that a high retardation force has been applied to the vehicle relative to the prevailing road conditions."

Paragraph 6.22.1., delete "[Mandatory]" and amend to read: " ... or direction indicator lamps fitted as described in paragraph 6.22.7."

Paragraph 6.22.7.1.1., delete the first square brackets (the text inside remains) and amend to read: " ... the frequency shall be 4.0 +0.0/-1.0 Hz."

Paragraph 6.22.8., replace "None" by "Optional."

Paragraph 6.22.9.1., amend to read:

"6.22.9.1. Except as provided ... vehicle is equipped to tow a trailer, the control of the ... "

Paragraph 6.22.9.2., amend to read: " ... , or in phase with, that on the towing vehicle."

Paragraph 6.22.9.3., should be deleted.

Paragraphs 12.12. and 12.13., replace "Supplement 1" by "Supplement 3" (four times).

Paragraph 12.14., delete the word "indefinitely".

Annex 1, insert a new item 9.25., to read (proposal A.2. from GRE-56-11):

"9.25. Emergency stop signal: yes/no 2".

AMENDMENTS ADOPTED TO ECE/TRANS/WP.29/GRE/2006/30
(see para. 15 of the report)

Paragraph 6.6.7.2., amend to read:

"6.6.7.2. The hazard warning signal may be activated automatically in the event of a vehicle being involved in a collision or after the de-activation of the emergency stop signal, as specified in paragraph 6.22. In such cases, it may be turned "off" manually."

AMENDMENTS ADOPTED TO ECE/TRANS/WP.29/GRE/2006/6
(see para. 21 of the report)

Paragraph 6.12., amend to read: " the following text (Regulation No. 77 or 7)".

AMENDMENTS ADOPTED ON THE BASIS OF GRE-56-21
(see para. 27 of the report)

Paragraph 6.12.9., amend to read: " lamps on the same side of the vehicle. In this case, lamps that meet the requirements of front or rear (side) position lamps are deemed to meet the requirements of parking lamps.

AMENDMENTS ADOPTED TO ECE/TRANS/WP.29/GRE/2006/32
(see para. 29 of the report)

Paragraph 6.2.8., replace "operational" by "operating" and delete the strikethrough text.

AMENDMENTS ADOPTED TO ECE/TRANS/WP.29/GRE/2006/28
(see para. 40 of the report)

Paragraph 2.7.25., the reference to footnote 2/ and footnote 2/ should be deleted and the subsequent footnotes and the references to those footnotes should be renumbered accordingly.

Paragraph 4.2., replace "03" by "04" (two times) and delete the strikethrough text.

Paragraphs 6.2.7. and 6.2.8. to 6.2.8.3., should be deleted.

Paragraphs 6.19., 6.19.1. and footnote 8/, amend to read:

"6.19. DAYTIME RUNNING LAMP (Regulation No. 87) ~~8/~~

6.19.1. Presence

Mandatory on motor vehicles. Prohibited on trailers.

~~8/ — The presence of this device (as specified in paragraph 5.22.) may be forbidden on the basis of national regulations."~~

Note by the secretariat: The decision on the deletion of the footnote should be taken by WP.29.

Paragraph 6.19.7., amend to read:

"6.19.7. Electrical connections

The daytime running lamps shall be switched ON automatically when the device which starts and/or stops the engine is in a position which makes it possible for the engine to operate.

The daytime running lamps shall at short intervals.

Furthermore, the lamps referred to in paragraph 5.11. are not switched on when the daytime running lamps are switched ON."

Paragraph 12.1., replace "03" by "04" (two times) and delete the strikethrough text.

Paragraphs 12.2., 12.4., 12.5., 12.6. and 12.7., amend to read (paragraph 12.3. remains unchanged):

"12.2. As from 30 months for vehicles of categories M₁ and N₁ and 48 months for vehicles of other categories after the official date of entry into force of the 04 series of amendments, by the 04 series of amendments.

12.4. Until 30 months for vehicles of categories M₁ and N₁ and 48 months for vehicles of other categories after the official date of entry into force of the 04 series of

12.5. ECE approvals granted under this Regulation before 30 months for vehicles of categories M₁ and N₁ and 48 months for vehicles of other categories after the official date of entry into force of the 04 series of amendments and by the 04 series of amendments,

12.6. No Contracting Party to the 04 series of amendments to this Regulation.

12.7. Until 30 months for vehicles of categories M₁ and N₁ and 48 months for vehicles of other categories after the official date of entry into force of the 04 series of"

Paragraph 12.8., should be deleted.

Annex 2, replace "03" by "04" (six times) and delete the strikethrough text.

AMENDMENTS ADOPTED TO TRANS/WP.29/GRE/2005/43
(see para. 50 of the report)

Paragraph 2.10., amend the inserted sentence to read:

"Only in the case of a light-signalling device producing variable luminous intensities, its apparent surface that may be variable as specified in paragraph 2.7.1.3. shall be considered under all conditions permitted by the variable intensity control, if applicable."

AMENDMENTS ADOPTED TO ECE/TRANS/WP.29/GRE/2005/43/Corr.1
(see para. 50 of the report)

Paragraph 5.25., amend to read:

"5.25. Rear direction allowed, which respond simultaneously to at least "

ADOPTED TEXT BASED ON ECE/TRANS/WP.29/GRE/2006/24
(see para. 53 of the report)

Paragraph 6.1.2., amend to read:

"6.1.2. Number

Two or four, type approved according to Regulations Nos. 31, 98, or 112, excluding Class A headlamp.

For vehicles of the category N₃:

.... "

Paragraph 6.2.2., amend to read:

"6.2.2. Number

Two, type approved according to Regulations Nos. 31, 98, or 112, excluding Class A headlamp."

Annex 3

AMENDMENTS TO REGULATION No. 104 ADOPTED AT THE FIFTY-SIXTH SESSION
OF GRE (BASED ON ECE/TRANS/WP.29/GRE/2006/21 AND GRE-56-19)

(see para. 45 of the report)

Paragraphs 2.1.1., 2.1.2. and 2.1.3. (definitions), should be deleted.

Paragraph 2.1.4. (former), renumber as paragraph 2.1.1. and amend to read:

"2.1.1. "Sample unit" means the markings as defined in paragraph 2.2.1."

Paragraph 7.2., footnote 2/, amend to read:

"2/ Nothing in this as defined in paragraphs 7.2.1. and 7.2.2."

Annex 4, amend to read:

"TEST SAMPLES

1. Five test samples representing either in the case of planes, at least a surface of 500 mm x 500 mm shall be provided."

Annex 8, insert a new paragraph 9., to read:

"9. Flexing

- 9.1. For samples that are to be adhered to a flexible substrate, i.e. tarpaulin, the following shall apply:

"9.1.1. A specimen of the sample unit that measures 50 mm by 300 mm shall be bent once lengthwise, around a 3.2 mm mandrel with adhesive contacting the mandrel for a period of 1 second.

The test temperature shall be $23\text{ °C} \pm 2\text{ °C}$.

Note: For ease of testing, spread talcum powder on the adhesive to prevent sticking to the mandrel.

- 9.1.2. After this test, specimen shall not have cracking of the surface and shall not show any visible change that would reduce its effective performance.

Annex 9, should be deleted (including Appendices 1 and 2)."

Annex 4

GRE INFORMAL WORKING GROUPS

<u>Informal group</u>	<u>Chairman</u>	<u>Secretary</u>
gtr on lighting and light-signalling	Mr. M. Gorzkowski (Canada) Tel: (+1-613) 998-1967 Fax: (+1-613) 990-2913 E-mail: gorzkom@tc.gc.ca	
operating voltage for lighting and light-signalling devices <u>1/</u>	<u>2/</u>	<u>2/</u>

1/ To be confirmed by WP.29 at its June 2006 session.

2/ To be determined
