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Working Party on Lighting and Light-Signalling

REPORT OF THE WORKING PARTY ON LIGHTING AND LIGHT-SIGNALLING ON ITS SIXTIETH SESSION (Geneva, 1 – 3 October 2008)

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I. ATTENDANCE

1. The Working Party on Lighting and Light-Signalling (GRE) held its sixtieth session from 1 (morning) to 3 October 2008 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 the World Forum for Harmonization of Vehicle Regulations (WP.29) (TRANS/WP.29/690): Belgium; Canada; China; Czech Republic; Finland; France; Germany; Hungary; India; Italy; Japan; Netherlands; Norway; Poland; Republic of Korea; Russian Federation; South Africa; Spain; Sweden; United Kingdom of Great Britain and Northern Ireland. An expert from the European Commission (EC) participated. Experts from the following non-governmental organizations also took part in the session: International Organization of Motor Vehicle Manufacturers (OICA); European Association of Automobile Suppliers (CLEPA); International Electrotechnical Commission (IEC); International Motorcycle Manufacturers Association (IMMA). Upon the special invitation of the Chairman, the experts from the Working Party "Brussels 1952" (GTB) participated.

II. ADOPTION OF THE AGENDA (Agenda item 1)

- 2. GRE inserted new agenda items 5(j), 10(d) and 13(d) and adopted the agenda.
- III. DEVELOPMENT OF NEW GLOBAL TECHNICAL REGULATIONS (gtrs) (Agenda item 2)
- A. Exchange of views on the possible development of a gtr on installation of lighting and light-signalling devices (Agenda item 2(a))

Documentation: ECE/TRANS/WP.29/GRE/2006/49

3. GRE agreed to continue the consideration of this agenda item as an exchange of view on the basis of the holding pattern of gtr work.

B. Development of further gtrs (Agenda item 2(b))

4. The GRE Chairman regretted the lack of new proposals and renewed his request for sponsors to develop new gtrs. He reminded about the possible eligible items to develop with a gtr, according to the interest expressed by experts during the last GRE sessions: new headlamp beam combination, harmonized passing beam pattern for headlamps, new front fog-lamps and installation of lighting and light-signalling devices on motorcycles. He also reminded that new technologies, such as: Adaptive Front-lighting Systems (AFS), distributive lighting, LED headlamps, pedestrian visibility, etc., could be of interest to sponsors.

IV. 1958 AGREEMENT: AMENDMENTS TO EXISTING UNECE REGULATIONS

- A. Regulation No. 37 (Filament lamp) (Agenda item 3)
 - 1. Proposal for Supplement 33 to the 03 series of amendments (Agenda item 3(a))

<u>Documentation</u>: ECE/TRANS/WP.29/GRE/2008/27; ECE/TRANS/WP.29/GRE/2008/28; ECE/TRANS/WP.29/GRE/2008/39; ECE/TRANS/WP.29/GRE/2008/49; Informal documents Nos. GRE-60-06 and GRE-60-19 of Annex I to this report

- 5. GRE noted ECE/TRANS/WP.29/GRE/2008/27, ECE/TRANS/WP.29/GRE/2008/28 and GRE-60-19. The expert from GTB reported that these documents were being discussed by the expert from India (GRE-60-06) within the GTB Working Group Light Sources. GRE agreed to resume consideration of these proposals at its March 2009 session, based on results of the dialogue between the experts from India and GTB.
- 6. GRE considered and adopted ECE/TRANS/WP.29/GRE/2008/39 and ECE/TRANS/WP.29/GRE/2008/49, not amended, and requested the secretariat to submit the adopted proposals to WP.29 and AC.1, for consideration at their March 2009 session, as draft Supplement 33 to the 03 series of amendments to Regulation No. 37.

B. Regulation No. 48 (Installation of lighting and light-signalling devices) (Agenda item 4)

- 1. Automatic activation of the hazard warning signal (Agenda item 4(a))
- 7. GRE agreed to defer the discussion on this agenda item to its next session in March 2009, waiting for a new proposal tabled by the expert from Japan.
 - 2. Operating voltage for lighting and light-signalling devices (Agenda item 4(b))

Documentation: Informal document No. GRE-60-04 of Annex I to this report

8. Dr. K. Manz (Germany), Chairman of the informal group, introduced the proposal of amendments to Regulation No. 48 (GRE-60-04) agreed during the last session of the operating voltage informal group (OVIG). GRE adopted GRE-60-04 as reproduced in Annex II of this report. The secretariat was requested to submit the proposal to WP.29 and AC.1 for consideration at their March 2009 sessions as a part of Supplement 3 to the 04 series of amendments to Regulation No. 48. Accordingly, GRE acknowledged the work done by the OVIG informal group and agreed to dissolve the operating voltage informal group.

3. Interpretation of paragraphs 5.7., 5.11. and 5.24. of the Regulation (possibility of switching OFF the position lamps in certain conditions) (Agenda item 4(c))

<u>Documentation</u>: ECE/TRANS/WP.29/GRE/2008/29; ECE/TRANS/WP.29/GRE/2008/43; ECE/TRANS/WP.29/GRE/2008/60; Informal documents Nos. GRE-60-01, GRE-60-11 and GRE-60-18 of Annex I to this report

- 9. GRE noted GRE-60-18. However, the proposal did not receive the support of the group. GRE considered GRE-60-11 (superseding ECE/TRANS/WP.29/GRE/2008/29, ECE/TRANS/WP.29/GRE/2008/43; ECE/TRANS/WP.29/GRE/2008/60 and GRE-60-01) and adopted it, as reproduced in Annex II. However, the expert from the Netherlands expressed his concerns with regard to paragraph 5.11. This paragraph is too often referred to in Regulation No. 48 and these references may become ambiguous. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration at their March 2009 sessions, as a part of (see para. 8) draft Supplement 3 to the 04 series of amendments to Regulation No. 48.
 - 4. Interpretation of paragraph 5.7. of the Regulation (possibility of reciprocally incorporated lamps with stop lamps) (Agenda item 4(d))

<u>Documentation</u>: ECE/TRANS/WP.29/2008/86; ECE/TRANS/WP.29/GRE/2008/57; Informal documents Nos. GRE-60-02 of Annex I to this report

10. Referring to ECE/TRANS/WP.29/2008/86, GRE considered ECE/TRANS/WP.29/GRE/2008/57. The proposal received some comments tabled by the expert from Japan (GRE-60-02). GRE adopted ECE/TRANS/WP.29/GRE/2008/57 as amended below. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration at their March 2008 sessions, as a part of (see paras. 8 and 9) draft Supplement 3 to the 04 series of amendments to Regulation No. 48.

Page 3, paragraph 5.7.1.3.2., amend to read:

- "5.7.1.3.2. their apparent surfaces in the direction of the reference axis, based upon the areas bounded by the outline of their light emitting surfaces, are continuous and do not overlap."
 - 5. Daytime running lamps switching (Agenda item 4(e))

<u>Documentation</u>: ECE/TRANS/WP.29/2008/86; Informal documents Nos. GRE-60-10 of Annex I to this report

11. With regard to the mandatory fitting of dedicated daytime running lights and the possible of fitting of Adaptive Front-lighting Systems (AFS), the expert from the EC announced the publication of the European Union Directive 2008/89/EC (Official Journal L 257/14, 25/09/2008).

12. With reference to ECE/TRANS/WP.29/2008/86 and to the agreement reached during its April 2008 session (see ECE/TRANS/WP.29/GRE/59, para. 13), GRE considered GRE-60-10 tabled by the expert from OICA. Although the proposal received the support of a number of experts, some concerns were addressed, amongst others, regarding the activation of rear position lamps in conjunction with the daytime running lamps and tell-tale in combination with instrument panel illumination. GRE agreed to defer the discussion to its March 2009 session, waiting for a revised proposal prepared by a task force, organized by OICA and convened in December 2008 in Paris.

6. Clarifications on installation requirements (Agenda item 4(f))

Documentation: ECE/TRANS/WP.29/2008/85;

ECE/TRANS/WP.29/GRE/2008/30; ECE/TRANS/WP.29/GRE/2008/44;

ECE/TRANS/WP.29/GRE/2008/45; ECE/TRANS/WP.29/GRE/2008/50; Informal documents Nos. GRE-60-07, GRE-60-09, GRE-60-12, GRE-60-14 and GRE-60-15 of Annex I to this report

- Due to the absence of the expert of CLCCR, GRE agreed to defer the discussion of ECE/TRANS/WP.29/GRE/2008/30 and GRE-60-15 to its March 2009 session. The secretariat was requested to distribute GRE-60-15 with an official symbol.
- 14. GRE adopted GRE-60-07 (superseding ECE/TRANS/WP.29/GRE/2008/50), as reproduced in Annex II. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration at their March 2009 sessions, as a part of (see paras. 8, 9 and 10) draft Supplement 3 to the 04 series of amendments to Regulation No. 48.
- 15. With regard to ECE/TRANS/WP.29/2008/85, submitted as corrigendum for consideration and vote to WP.29 and AC.1 at their November sessions, GRE adopted ECE/TRANS/WP.29/GRE/2008/44 as amended below. GRE requested the secretariat to submit the adopted proposal to WP.29 and AC.1, for consideration at their November 2008 sessions per informal document GRE-60-12 as part of draft Supplement 2 to the 04 series of amendments to Regulation No. 48 and amending ECE/TRANS/WP.29/2008/85 (WP.29-146-04).

Paragraph 5.23., amend to read:

... replaced without the need for expert assistance and without ..." "5.23.

- 16. GRE also considered ECE/TRANS/WP.29/GRE/2008/45. The proposal did not receive the support of GRE and the expert from OICA withdrew it. Regarding the permission of optional additional side direction indicator lamps on long vehicles, GRE considered GRE-60-14. GRE agreed to resume the discussion at its March 2009 session and requested the secretariat to distribute GRE-60-14 with an official symbol.
- With regard to ECE/TRANS/WP.29/2008/86, submitted for consideration and vote 17. to WP.29 and AC.1 at their November sessions, GRE adopted GRE-60-09, as reproduced in Annex II of this report. GRE requested the secretariat to submit the adopted proposal to WP.29 and AC.1, for consideration at their November 2008 sessions as part of draft Supplement 2 to the

04 series of amendments to Regulation No. 48 and amending ECE/TRANS/WP.29/2008/86 (WP.29-146-05).

7. Arrangement of electrical connections (Agenda item 4(g))

<u>Documentation</u>: ECE/TRANS/WP.29/GRE/2008/23; Informal documents Nos. GRE-60-11 and GRE-60-18 of Annex I to this report

18. Regarding the electrical connections for front position lamps, GRE agreed to merge this issue with the discussion under agenda item 4(c) (see paragraph 9). Accordingly, the expert from Italy withdrew ECE/TRANS/WP.29/GRE/2008/23 superseded by GRE-60-11.

8. Proposal for a draft Regulation No. 48-H (Agenda item 4(h))

<u>Documentation</u>: ECE/TRANS/WP.29/GRE/2008/46; Informal documents Nos. GRE-60-08 and GRE-60-17 of Annex I to this report

19. The expert from the Netherlands presented ECE/TRANS/WP.29/GRE/2008/46 and GRE-60-08, introducing detailed justifications. The expert from India introduced his comments (GRE-60-17). GRE agreed with the Chairman's recommendation to wait for the AC.2 decision on this issue, as ECE/TRANS/WP.29/GRE/2008/46 would be discussed at AC.2 November 2008 session.

C. <u>Collective amendments (Agenda item 5)</u>

1. Simplification of the approval markings (Agenda item 5(a))

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

- 20. The expert from GTB informed GRE about the progress of the informal group on the "electronic database for type approval exchange of information" (DETA). Amongst others, he announced that the revised version of the draft questionnaire to be circulated to all World Forum delegates, would be available for the fourth DETA session scheduled to be held on 14 November 2008. GRE noted that the report of the third session was available on the website: http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/gendeta04.html >.
- 21. GRE agreed to wait for the informal group's conclusion before considering the GTB proposal for simplification of approval markings (ECE/TRANS/WP.29/GRE/2004/24).

2. Collective amendments on colour specifications (Agenda item 5(b))

<u>Documentation</u>: ECE/TRANS/WP.29/GRE/2008/31; Informal document No. GRE-60-13 of Annex I to this report

22. With regard to the introduction of colour specifications of passive lighting devices, GRE considered ECE/TRANS/WP.29/GRE/2008/31, amended by GRE-60-13, and adopted it as reproduced in Annex III to this report. The secretariat was requested to submit the proposal to

WP.29 and AC.1, for consideration at their March 2009 sessions, as draft Supplements to Regulations Nos. 3, 27, 48, 69, 70 and 104.

3. Phantom light and colour washout phenomena in signalling and marking devices (Agenda item 5(c))

23. The expert from Germany informed GRE about the research progress. He reported that a proposal with test requirements would be introduced at a later stage. GRE noted the Chairman's suggestion to cover in the proposal the possible issue of geometric shapes potentially compromising the effectiveness of light signalling and marking devices.

4. Regulations Nos. 7 and 38 (Agenda item 5(d))

Documentation: ECE/TRANS/WP.29/GRE/2008/47; ECE/TRANS/WP.29/GRE/2008/48

24. GRE adopted ECE/TRANS/WP.29/GRE/2008/47 and ECE/TRANS/WP.29/GRE/2008/48, both not amended, and requested the secretariat to submit the adopted proposals to WP.29 and AC.1, for consideration at their March 2009 sessions, as draft Corrigendum 2 to Supplement 12 to the 02 series of amendments to Regulation No. 7 and as Corrigendum 1 to Supplement 12 to Regulation No. 38, respectively.

5. Regulations Nos. 4, 6, 7, 23, 38, 50, 77, 87, 91 and 119 (Agenda item 5(e))

Documentation: ECE/TRANS/WP.29/GRE/2008/3

25. The expert from Germany informed GRE about the first exchange of views among interested experts on ECE/TRANS/WP.29/GRE/2008/3. GRE agreed to resume the discussion of this agenda item at its March 2008 session based on the conclusions of the discussion between the interested parties and revised document, if available.

6. Regulations Nos. 6, 7 and 48 (Agenda item 5(f))

<u>Documentation</u>: ECE/TRANS/WP.29/GRE/2008/51; ECE/TRANS/WP.29/GRE/2008/52; ECE/TRANS/WP.29/GRE/2008/53; Informal document No. GRE-60-26 of Annex I to this report

26. GRE adopted ECE/TRANS/WP.29/GRE/2008/51 and ECE/TRANS/WP.29/GRE/2008/52 both not amended, and ECE/TRANS/WP.29/GRE/2008/53 (amended by GRE-60-26) as reproduced in Annex II to this report. The secretariat was requested to submit the adopted proposals to WP.29 and AC.1, for consideration at their March 2009 sessions, as draft Supplement 18 to the 01 series of amendments to Regulation No. 6, as part of Supplement 15 to the 02 Series of amendments to Regulation No. 7 and as part of (see paras. 8, 9, 10 and 14) Supplement 3 to the 04 series of amendments to Regulation No. 48, respectively.

7. Regulations Nos. 4 and 48 (Agenda item 5(g))

Documentation: ECE/TRANS/WP.29/GRE/2008/5; ECE/TRANS/WP.29/GRE/2008/6

27. GRE agreed to defer the discussion on ECE/TRANS/WP.29/GRE/2008/5 and ECE/TRANS/WP.29/GRE/2008/6 until the expert from Germany provides sample plates/illuminating devices during future sessions.

8. Regulations Nos. 48 and 98 (Agenda item 5(h))

Documentation: ECE/TRANS/WP.29/GRE/2008/34

With regard to the alignment of the provisions concerning the maximum intensity of the main beam, GRE considered and adopted ECE/TRANS/WP.29/GRE/2008/34, not amended. The secretariat was requested to submit the adopted proposal to WP.29 and AC.1, for consideration at their March 2009 sessions, as part of (see paras. 8, 9, 10, 14 and 26) draft Supplement 3 to the 04 series of amendments to Regulation No. 48 and as part of draft Supplement 12 to Regulation No. 98, respectively.

9. Regulations Nos. 98, 112 and 123 (Agenda item 5(i))

<u>Documentation</u>: ECE/TRANS/WP.29/GRE/2008/38; Informal documents Nos. GRE-60-16 and GRE-60-20

GRE adopted ECE/TRANS/WP.29/GRE/2008/38 (amended by GRE-60-16 and GRE-60-20) as reproduced in Annex IV to this report. The secretariat was requested to submit the adopted proposal to WP.29 and AC.1, for consideration at their March 2009 sessions, as part of draft Corrigendum 2 to Supplement 9 to Regulation No. 98, as draft Corrigendum 2 to Supplement 8 to Regulation No. 112 and as draft Corrigendum 2 to Regulation No. 123, respectively.

10. Regulations Nos. 6 and 7 (Agenda item 5(j))

<u>Documentation</u>: ECE/TRANS/WP.29/2008/82; ECE/TRANS/WP.29/GRE/2008/61; ECE/TRANS/WP.29/GRE/2008/62

30. GRE considered and adopted ECE/TRANS/WP.29/GRE/2008/61 and ECE/TRANS/WP.29/GRE/2008/62 (superseding ECE/TRANS/WP.29/2008/82), as amended by Annex V. The secretariat was requested to submit the adopted proposal to WP.29 and AC.1, for consideration at their March 2009 sessions, as draft Corrigendum 1 to Supplement 16 to the 01 series of amendments to Regulation No. 6 and as part of (see para. 26) Supplement 15 to the 02 series of amendments to Regulation No. 7 and recommended WP.29 and AC.1 the withdrawal of ECE/TRANS/WP.29/2008/82 at their November 2008 sessions.

D. Regulation No. 19 (Front fog lamps) (Agenda item 6)

<u>Documentation</u>: ECE/TRANS/WP.29/GRE/2008/40; Informal document No. GRE-60-05 of Annex I to this report

31. GRE adopted ECE/TRANS/WP.29/GRE/2008/40 not amended and GRE-60-05, as reproduced in Annex VI to this report. The secretariat was requested to submit the proposals to WP.29 and AC.1, for consideration at their March 2009 sessions, as draft Corrigendum 3 to the 03 series of amendments to Regulation No. 19.

E. New draft Regulation for light-signalling devices (Agenda item 7)

<u>Documentation</u>: ECE/TRANS/WP.29/GRE/2008/32

32. GRE noted ECE/TRANS/WP.29/GRE/2008/32, tabled by the expert from France, regarding a new consolidated Regulation on general requirements present in Regulations Nos. 6, 7, 23, 38, 77, 87, 91 and 119. After a first exchange of views, GRE agreed to continue the discussion to its March 2009 session. GRE acknowledged the endeavor of the UNECE translation services to provide the English version of ECE/TRANS/WP.29/GRE/2008/32.

F. Conspicuity of motorcycles (Agenda item 8)

33. GRE welcomed a demonstration with two-wheeled vehicles carried out in front of the United Nations premises by the experts from Germany, aiming at showing the effectiveness of conspicuity of different configurations of daytime running lamps fitted on motorcycles. GRE agreed to take note of this practical demonstration as a basis for future discussion on this agenda item.

G. Regulation No. 45 (Headlamp cleaners) (Agenda item 9)

Documentation: ECE/TRANS/WP.29/GRE/2008/33; ECE/TRANS/WP.29/GRE/2008/42

34. GRE adopted ECE/TRANS/WP.29/GRE/2008/33 and ECE/TRANS/WP.29/GRE/2008/42, both not amended. The secretariat was requested to submit the proposals to WP.29 and AC.1, for consideration at their March 2009 sessions, as draft Corrigendum 3 to Supplement 4 to the 01 series of amendments to Regulation No. 45 and as draft Supplement 6 to the 01 series of amendments to Regulation No. 45.

H. Regulation No. 53 (Installation of lighting and light-signalling devices on L₃ categories of vehicles) (Agenda item 10)

1. Visibility of adaptive front-lighting systems (AFS) for motorcycles and glare (Agenda item 10(a))

Documentation: Informal document No. GRE-60-21 of Annex I to this report

35. The expert from Japan made a presentation to introduce GRE-60-21, aiming at

specifying the requirements concerning the vehicle's horizontal inclination angle adjustment-type headlamps installed on motorcycles. The presentation was complemented by a practical demonstration with a sample of this new type of headlamps. After a first exchange of views, GRE agreed to resume the discussion at its March 2009 session and requested the secretariat to distribute GRE-60-21 with an official symbol.

2. Proposal for Corrigendum 1 to draft Supplement 10 (Agenda item 10(b))

Documentation: ECE/TRANS/WP.29/GRE/2008/55

36. GRE considered and adopted ECE/TRANS/WP.29/GRE/2008/55 not amended. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration at their March 2009 sessions, as draft Corrigendum 1 to draft Supplement 10 to the 01 series of amendments to Regulation No. 53.

3. Installation of daytime running lamps (DRL) (Agenda item 10(c))

<u>Documentation</u>: ECE/TRANS/WP.29/GRE/2008/58; Informal documents Nos. GRE-60-03 and GRE-60-25 of Annex I to this report

37. The expert from Germany introduced ECE/TRANS/WP.29/GRE/2008/58 and its justification in GRE-60-03. GRE adopted ECE/TRANS/WP.29/GRE/2008/58 amended by GRE-60-25, as reproduced in Annex VII of this report. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration at their March 2009 sessions, as draft Supplement 11 to the 01 series of amendments to Regulation No. 53.

4. Proposal for draft amendments to Regulation No. 53 (Agenda item 10(d))

<u>Documentation</u>: Informal documents Nos. GRE-60-22, Rev.1 and Corr.1, GRE-60-23 and GRE-60-24 of Annex I to this report

38. The expert from Japan gave a presentation of GRE-60-23 and GRE-60-24, concerning the outcome of a study on the effectiveness of the use of automatic headlamps, daytime running lamps and position lamps on two-wheeled vehicles. Moreover, he introduced GRE-60-22/Rev.1/Corr.1 to amend Regulation No. 53 accordingly. GRE agreed to resume consideration of this agenda item at its March 2009 session and requested the secretariat to distribute GRE-60-22/Rev.1/Corr.1 with an official symbol

I. New agenda items (Agenda item 11)

1. Regulation No. 113 (Headlamps emitting symmetrical beams) (Agenda item 11(a))

Documentation: ECE/TRANS/WP.29/GRE/2008/35

39. GRE considered ECE/TRANS/WP.29/GRE/2008/35. Some experts raised concerns about the proposal clarifying allowance to use multiple light sources in motorcycle headlamps.

GRE agreed to defer the discussion on this subject to its March 2009 session waiting for a common solution among interested parties.

2. Regulation No. 98 (Headlamps with gas-discharge light sources) (Agenda item 11(b))

<u>Documentation</u>: ECE/TRANS/WP.29/GRE/2008/36; ECE/TRANS/WP.29/GRE/2008/41; ECE/TRANS/WP.29/GRE/2008/56

40. GRE considered and adopted ECE/TRANS/WP.29/GRE/2008/36, ECE/TRANS/WP.29/GRE/2008/41, both not amended, and ECE/TRANS/WP.29/GRE/2008/56 as amended below. The secretariat was requested to submit the proposals to WP.29 and AC.1, for consideration at their March 2009 sessions, as part of (see para. 28) draft Supplement 12 to Regulation No. 98 (ECE/TRANS/WP.29/GRE/2008/36 and ECE/TRANS/WP.29/GRE/2008/56) and as part of (see para. 29) draft Corrigendum 2 to Supplement 9 to Regulation No. 98 (ECE/TRANS/WP.29/GRE/2008/41).

Paragraph 5.8.1., amend to read:

- "5.8.1.application for type approval. **However, g**as-discharge light..."
 - 3. Regulation No. 112 (Headlamps emitting an asymmetrical passing beam) (Agenda item 11(c))

Documentation: ECE/TRANS/WP.29/GRE/2008/37

- 41. GRE adopted ECE/TRANS/WP.29/GRE/2008/37 not amended. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration at their March 2009 sessions as draft Supplement 11 to Regulation No. 112.
 - 4. Regulation No. 86 (Installation of lighting and light-signalling devices for agricultural or forestry tractors) (Agenda item 11(d))

Documentation: ECE/TRANS/WP.29/GRE/2008/54

42. GRE adopted ECE/TRANS/WP.29/GRE/2008/54 as amended by Annex VIII to this report. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration at their March 2009 sessions as draft Supplement 5 to Regulation No. 86.

V. ELECTION OF OFFICERS (Agenda item 12)

43. In compliance with Rule 37 of the Rules of Procedure (TRANS/WP.29/690), GRE called for the election of officers. The representatives of the Contracting Parties, present and voting, re-elected unanimously Mr. M. Gorzkowski (Canada) as Chairman for the GRE sessions scheduled for the year 2009.

VI. OTHER BUSINESS (Agenda item 13)

A. <u>Amendments to the Convention on Road Traffic (Vienna 1968)</u> (Agenda item 13(a))

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

44. GRE was informed that the Chairmen of WP.29 and of the Working Party on Road Traffic Safety (WP.1) were considering the possibility to amend Annex 5 of the Vienna Convention in order to acknowledge the use of innovative safety related technologies in vehicles entering International Traffic.

B. <u>Direction for future GRE work (Agenda item 13(b))</u>

45. GRE did not have any suggestions to further streamline the decision making process of the group.

C. Regulation No. 87 (Daytime running lamps (DRL)) (Agenda item 13(c))

Documentation: ECE/TRANS/WP.29/GRE/2008/59

46. GRE adopted ECE/TRANS/WP.29/GRE/2008/59 not amended. The secretariat was requested to submit the proposal to WP.29 and AC.1, for consideration at their March 2009 sessions as draft Supplement 14 to Regulation No. 87.

D. Adaptive driving beam (Agenda item 13(d))

47. The expert from GTB gave a presentation on the effectiveness of adaptive driving beams that was complemented by a practical demonstration on two vehicles within Palais des Nations. GRE agreed to take note of this practical demonstration as a basis for future discussion on this agenda item.

E. Tribute to Mr. D. Matthes and Mr. S. Showler (Agenda item 13(e))

48. Learning that Mr. D. Matthes (GTB), for many years GTB chairman and Mr. S. Showler (OICA) would no longer participate in future GRE sessions, the group acknowledged their fruitful contributions to the GRE work and wished them all the best in their future activities.

VII. PROVISIONAL AGENDA FOR THE NEXT SESSION

49. GRE did not consider the provisional agenda for the sixty-first session of GRE, scheduled to be held from 30 March to 3 April 2009. Instead, it was agreed that the Chairman, jointly with the secretariat, would propose a draft agenda.

Annex I

LIST OF INFORMAL DOCUMENTS DISTRIBUTED DURING THE SESSION (GRE-60-...)

No.	Transmitted by	Agenda item	Language	Title	Follow -up
1.	Japan	4(c)	Е	Proposal for amendments to ECE/TRANS/WP.29/GRE/2008/43 (Regulation No. 48)	(c)
2.	Japan	4(d)	E	Proposal for amendments to ECE/TRANS/WP.29/GRE/2008/57 (Regulation No. 48)	(d)
3.	Germany	10(c)	E	Proposal for amendments to ECE/TRANS/WP.29/GRE/2008/58 (Regulation No. 53)	(c)
4.	OVIG Chairman & Sec.	4(b)	E	Proposal for amendments to Regulation No. 48 (Installation of lighting and light- signalling devices)	(d)
5.	GTB	6	E	Proposal for draft corrigendum to Regulation No. 19 (Front fog lamps)	(d)
6.	GTB	3(a)	E	Proposal for Supplement 33 to the 03 series of amendments to Regulation No. 37 (Filament lamps)	(a)
7.	CLEPA	4(f)	Е	Proposal for amendments to ECE/TRANS/WP.29/GRE/2008/50 (Regulation No. 48)	(d)
8.	Netherlands	4(h)	Е	Detailed justification to document ECE/TRANS/WP.29/GRE/2008/46	(a)
9.	OICA	4(f)	Е	Proposal for amendments to ECE/TRANS/WP.29/2008/86	(d)
10.	OICA	4(e)	Е	Mandatory requirements for automatic switching of headlamps	(a)
11.	OICA	4(c) and 4(g)	E	OICA's understanding of the combination of proposals from GTB, Italy and Germany	(d)
12.	OICA	4(f)	Е	OICA proposal to amend document ECE/TRANS/WP.29/2008/85	(d)
13.	Czech Republic & CLEPA	5(b)	E	Draft amendments to ECE/TRANS/WP.29/GRE/2008/31 (Regs. Nos. 3, 27, 48, 69, 70 and 104)	(d)
14.	United Kingdom	4(f)	Е	Proposal for draft amendments to regulation No. 48	(b)
15.	CLCCR	4(f)	E	Proposal for draft amendment to Regulation No. 48 (Installation of lighting and lightsignalling devices)	(b)

16.	CLEPA	5(i)	E	Proposed amendments to	(d)
				ECE/TRANS/WP.29/GRE/2008/38	
17.	India	4(h)	E	India's comments on proposed draft	(a)
				Regulation No. 48-H	
18.	India	4(c) &	E	India's comments on new proposals to	(c)
		4(g)		Regulation No. 48	
19.	India	3(a)	E	India's comments on the new proposal to	(a)
				Regulation No. 37:	
				ECE/TRANS/WP.29/GRE/2008/39	
20.	France	5(i)	Е	Proposed amendments to	(d)
		()		ECE/TRANS/WP.29/GRE/2008/38	` /
21.	Japan	10(a)	Е	Proposed amendments to Regulation No. 53	(b)
				(AFS for motorcycles)	(-)
22/				(
Rev.1/	Japan	10(d)	Е	Proposed amendments to Regulation No. 53	(b)
Corr.1		,			,
23.	Japan	10(d)	Е	Study of methods improving the	(a)
23.	Jupun	10(4)		conspicuity of two-wheeled vehicles in	(4)
				daytime and at dawn/dusk	
24	Japan	10(d)	Е	Study on effectiveness of AHO and	(a)
24	Japan	10(u)	L	position lamps on two-wheeled vehicle	(a)
				•	
25.	IMMA	10(a)	Е	conspicuity	(4)
23.	IIVIIVIA	10(c)	E	Installation of daytime running lamps	(d)
26	F	5 (f)	Б	(DRL) (Regulation No. 53)	(.)
26.	France	5(f)	E	ECE/TRANS/WP.29/GRE/2008/53/Rev.1 -	(d)
				Proposal for Supplement 3 to the 04 series	
				of amendments to Regulation No. 48	

<u>Reconsideration of informal documents from the previous GRE sessions</u> (referring to agenda item and follow-up decision of the current session)

No.	Transmitted by	Agenda item	Language	Title	Follow- up
57-09	India		Е	India's comments on proposed draft gtr	(a)
59-06	Netherlands		E	Proposal for draft amendments to	(a)
				Regulation No. 48	
59-09	Japan		E	Proposed amendments to	(a)
				ECE/TRANS/WP.29/GRE/2008/7	
				(Regulation No. 48)	
59-35	Canada		E	Proposal for draft amendments to	(a)
				Regulation No. 48	

Notes:

- (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 II

AMENDMENTS TO REGULATION No. 48

ADOPTED ON THE BASIS OF GRE-60-04 (see para. 8 of the report)

Insert a new paragraph 3.2.7., to read:

"3.2.7. a description of the electric power supply conditions for the devices indicated in paragraphs 2.7.9., 2.7.10., 2.7.12., 2.7.14. and 2.7.15. above, including, if applicable, information on a special power supply/electronic light source control gear, or variable intensity control."

<u>Insert new paragraphs 5.27. to 5.27.4.</u>, to read:

- "5.27. The applicant shall demonstrate to the Technical Service responsible for type approval testing that the electric power supply conditions for the devices indicated in paragraphs 2.7.9., 2.7,10., 2.7.12., 2.7.14. and 2.7.15. above comply, when the electrical system of the vehicle is in a constant voltage operating condition, representative for the relevant category of powered vehicle as specified by the applicant, with the following provisions:
- 5.27.1. The voltage supplied at the terminals of devices which, according to their type approval documentation, have been tested by the application of a special power supply/electronic light source control gear, or in a secondary operating mode or at a voltage requested by the applicant, shall not exceed the voltage specified for the relevant devices or functions as they have been approved.
- 5.27.2. In all cases of electric power supply conditions not covered by paragraph 5.27.1., the voltage at the terminals of the device(s) or function(s) shall not exceed 6.75 V (6 Volt-Systems), 13.5 V (12 Volt-Systems) or 28 V (24 Volt-Systems) by more than 3 percent.
- 5.27.3. The provisions of paragraphs 5.27.1. and 5.27.2. shall not apply to devices which include an electronic light source control gear or a variable intensity control being part of the device.
- 5.27.4. A report shall be attached to the approval documentation describing the methods used to demonstrate compliance and the results obtained."

Insert new paragraphs 12.19. and 12.20., to read:

- "12.19. As from 36 months from the entry into force of Supplement 3 to the 04 series of amendments, Contracting Parties applying this Regulation shall grant approvals only if the vehicle type to be approved meets the requirements of this Regulation as amended by Supplement 3 to the 04 series of amendments.
- 12.20. Contracting Parties applying this Regulation shall not refuse to grant extensions of approvals to all previous versions of this Regulation which remain valid."

ADOPTED ON THE BASIS OF GRE-60-11 (see para. 9 of the report)

Paragraph 5.7.1.1., amend to read:

"5.7.1.1. The photometric and ...switched OFF.

However, when a front or rear position lamp is reciprocally incorporated with one or more other function(s) which can be activated together with them, the requirements ..."

Paragraph 5.11., amend to read:

- "5.11. The electrical connections **shall** be such that the front and rear position lamps, the end-outline marker lamps, if they exist, the side-marker lamps, if they exist, and the rear registration plate lamp can only be switched ON and OFF simultaneously. **This condition does not apply:**
- **5.11.1.** when front and rear position lamps are switched ON, as well as side-marker lamps when combined or reciprocally incorporated with said lamps, as parking lamps;
- **5.11.2.** when side-marker lamps are permitted to flash."

Insert new paragraph 5.11.3., to read:

"5.11.3. to front position lamps when their function is substituted under the provisions of paragraph 5.12.1. below."

Paragraph 5.12., amend to read:

"5.12. The electrical connections **shall** be such that and dipped-beam headlamps;"

Insert new paragraphs 5.12.1.to 5.12.1.3, to read:

- "5.12.1. The dipped-beam headlamps and/or the main-beam headlamps and/or the front fog lamps may substitute the function of the front position lamps, provided that:
- 5.12.1.1. their electrical connections are such that in case of failure of any of these lighting devices the front position lamps are automatically re-activated,

and

- 5.12.1.2. the substituting lamp/function meets, for the respective position lamp, the requirements concerning:
 - (a) the geometric visibility prescribed for the front position lamps in paragraph 6.9.5.; and
 - (b) the minimum photometric values according to the angles of light distribution.

and

5.12.1.3. appropriate evidence demonstrating compliance with the requirements indicated in paragraph 5.12.1.2. above is provided in the test reports of the substituting lamp."

Paragraph 6.9.7., amend to read:

"6.9.7. Electrical connections

In accordance with paragraph 5.11.

However, if a front position lamp is reciprocally incorporated with a direction indicator the electrical connection of the front position lamp on the relevant side of the vehicle or the reciprocally incorporated part of it may be such that it is switched off during the entire period (both ON and OFF cycle) of activation of the direction indicator lamp."

Paragraph 6.10.7., amend to read:

"6.10.7. Electrical connections

In accordance with paragraph 5.11.

However, if a rear position lamp is reciprocally incorporated with a direction indicator, the electrical connection of the rear position lamp on the relevant side of the vehicle or the reciprocally incorporated part of it may be such that it is switched OFF during the entire period (both ON and OFF cycle) of activation of the direction indicator lamp."

ADOPTED ON THE BASIS OF GRE-60-07 (see para. 14 of the report)

Paragraph 6.21.4.1.3., amend to read:

"6.21.4.1.3. ... the cumulative length may be reduced to 60 **per cent or, if this is not possible** in case of especially difficult vehicle designs or applications, to at least 40 per cent and shall be indicated in the communication document and test report. 15/"

Paragraph 6.21.4.2.3., amend to read:

"6.21.4.2.3. ... the cumulative length may be reduced to 60 per cent or, if this is not possible in case of especially difficult vehicle designs or applications, to at least 40 per cent and shall be indicated in the communication document and test report. 15/"

ADOPTED ON THE BASIS OF GRE-60-09 (see para. 17 of the report)

Paragraph 5.2.1., amend to read:

"5.2.1. In the case of headlamps fitted with measures to prevent discomfort to other road-users in a country where traffic operates on the side of the road opposite to that of the country for which the headlamp was designed, such measures shall be achieved **automatically or** by the vehicle user with the vehicle in the park condition without the need for special tools (other than those provided with the vehicle <u>5</u>/). The vehicle manufacturer shall provide with the vehicle a detailed description of the procedure.

AMENDMENTS ADOPTED TO ECE/TRANS/WP.29/GRE/2008/53 (see para. 26 of the report)

Paragraph 6.5.5.1., amend to read:

"6.5.5.1. ...

For M1 and N1 category vehicles, the value of 45° inward for the direction indicator lamps of categories 1, 1a or 1b, whose lower edge of the apparent surface is less then 750 mm above the ground, may be reduced to 20° under the horizontal plane containing the reference axis of this lamp."

Paragraph 6.5.5.2., amend to read:

"6.5.5.2. ...

 $[\]underline{5}$ / This does not apply to dedicated objects that may be added to the exterior of the headlamp"

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The value of 45° inward for the direction indicator lamps of categories 1, 1a or 1b, whose lower edge of the apparent surface is less then 750 mm above the ground, may be reduced to 20° under the horizontal plane containing the reference axis of this lamp.

...."

Paragraphs 6.9.5. to 6.9.5.2., amend to read:

"6.9.5. Geometric visibility

6.9.5.1. ...

For M_1 and N_1 category vehicles where the lower edge of the apparent surface of the lamps is less then 750 mm above the ground, the value of 45° inward may be reduced to 20° under the horizontal plane containing the reference axis of this lamp.

• • •

6.9.5.2. ...

Where the lower edge of the apparent surface of the lamps is less then 750 mm above the ground, the value of 45° inward may be reduced to 20° under the horizontal plane containing the reference axis of this lamp.

Vertical angle: 15°..."

Annex III

AMENDMENTS TO REGULATIONS Nos. 3, 27, 48, 69, 70 and 104

AMENDMENTS ADOPTED TO ECE/TRANS/WP.29/GRE/2008/31 (see para. 22 of the report)

A.1. REGULATION No. 3 (Retro-reflecting devices for power-driven vehicles and their trailers)

Paragraph 4.1., amend to read:

- "4.1. ... paragraph **2.30**. This shall be ..."
- A.2. REGULATION No. 27 (Advance-warning triangle)

<u>Insert a new paragraph 2.9.</u>, to read:

"2.9. ... paragraphs **2.30.** and **2.32.** of Regulation No. 48."

Paragraph 7.2.1.2., amend to read:

"7.2.1.2. ... within the limits according to paragraph **2.30.** of Regulation No. 48."

Annex 5,

Paragraph 2.1.1., amend to read:

- "2.1.1. ... paragraph **2.30.** of Regulation No. 48."
- A.3. REGULATION No. 48 (Installation of lighting and light-signalling devices) (The following text is based upon Supplement 01 to the 04 series of amendments).

. . .

Paragraph 2.30.2. (Y₃₄, Red Boundary), amend to read:

" Y_{34} Red Boundary: y=0.200x + 0.268"

Paragraph 2.30.4. (R₄₁, Purple Boundary), amend to read:

" R_{41} Purple Boundary: y=0.978 - x"

<u>Paragraph 2.31.1.</u> (W_{12} , Violet Boundary), replace decimal commas by decimal points and amend to read:

" W_{12} Violet Boundary y = x - 0.030

. . .

Annex III

	X	\mathbf{y}
\mathbf{W}_1	0.300	0.270
\mathbf{W}_2	0.385	0.355
W_3	0.345	0.395
W_4	0.260	0.310"

Paragraph 2.31.3., replace decimal commas by decimal points to read:

Paragraph 2.32.1., replace decimal commas by decimal points to read:

 $\begin{array}{ccccc} \text{"...} & & & & & & y \\ & & & & & & y \\ FR_1 & & \textbf{0,690} & & \textbf{0,310} \\ FR_2 & & \textbf{0,595} & & \textbf{0,315} \\ FR_3 & & \textbf{0,569} & & \textbf{0,341} \\ FR_4 & & \textbf{0,655} & & \textbf{0,345} \\ \end{array}$

A.4. REGULATION No. 69 (Rear-marking plates for slow-moving vehicles and their trailers)

The new paragraph 2.4.4., amend to read:

"2.4.4. paragraph **2.30.** and **2.31.** of Regulation No. 48."

The new paragraph 2.5.2., amend to read:

"2.5.2.paragraph **2.32.** of Regulation No. 48."

Annex 6,

Paragraph 2.1., amend to read:

"2.1. within the limits according to paragraph **2.31.** of Regulation No. 48."

The new paragraph 2.1.1., amend to read:

"2.1.1. Luminance factor for red colour shall be \geq **0.03.**"

Paragraph 2.2., amend to read:

"2.2.paragraph **2.30.** of the Regulation No. 48."

Paragraph 3.1., amend to read:

"3.1. paragraph **2.32.** of the Regulation No. 48."

The new paragraph 3.1.1., amend to read:

"3.1.1. Luminance factor shall be \geq **0.03.**"

A.5. REGULATION No. 70 (Rear-marking plates for heavy and long vehicles)

The new paragraph 2.4.4., amend to read:

"2.4.4.paragraph **2.30.** and **2.31.** of Regulation No. 48."

The new paragraph 2.5.2., amend to read:

"2.5.2. paragraph **2.32.** of Regulation No. 48."

Annex 6,

Paragraph 2.1., amend to read:

"2.1. within the limits according to paragraph **2.31.** of Regulation No. 48."

The new paragraph 2.1.1., amend to read:

"2.1.1. Luminance factor for yellow colour shall be \geq **0.16.** For red colour shall be \geq **0.03.**"

Paragraph 2.2., amend to read:

"2.2. ... within the limits according to paragraph **2.30.** of Regulation No. 48."

Paragraph 3.1., amend to read:

"3.1. ... to paragraph **2.32.** of Regulation No. 48."

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The new paragraph 3.1.1., amend to read:

- "3.1.1. Luminance factor for red colour shall be \geq **0.30.**"
- A.6. REGULATION No. 104 (Retro-reflective markings for heavy and long vehicles and their trailers)

The new paragraph 2.4.5., amend to read:

"2.4.5. ... paragraph **2.30.** of Regulation No. 48."

Annex 6,

Paragraph 2., amend to read:

"2. ... the limits according to paragraph **2.30.** of Regulation No.48."

Annex IV

AMENDMENTS TO REGULATIONS Nos. 98, 112 and 123

AMENDMENTS ADOPTED TO ECE/TRANS/WP.29/GRE/2008/38 (see para. 29 of the report)

REGULATION No. 98 (Headlamps with gas-discharge light sources) (The following text is based upon Supplement 9 to the Regulation)

Paragraphs	5.4.	to	5.4.2.2.,	amend to read:

- "5.4 ...
- 5.4.1. ...
 - (b) downward **movement of the beam. Horizontal movement** is allowed;
 - (c) any other measure to remove **or reduce** the asymmetrical part of the beam."

REGULATION No. 112 (Headlamps emitting an asymmetrical passing beam) (The following text is based upon Supplement 9 to the Regulation)

Paragraphs 5.8. to 5.8.8.2., amend to read:

- "5.8. ...
- 5.8.1. ...
 - (b) downward **movement of the beam. Horizontal movement** is allowed;
 - (c) any other measure to remove **or reduce** the asymmetrical part of the beam."

Annex V

AMENDMENTS TO REGULATIONS Nos. 6 and 7

AMENDMENTS ADOPTED TO ECE/TRANS/WP.29/GRE/2008/61 (see para. 30 of the report)

- 6.1.2.
 - (b) Minimum intensity if one lamp has failed.

Paragraph 6.4. (former), renumber as paragraph 6.2. and amend to read:

"6.2. In case of failure of a single lamp of the categories 1, 1a, 1b, 2a and 2b, containing more than one light source the following provisions shall apply:
..."

Paragraphs 6.5. to 6.10. (former), renumber as paragraphs 6.3. to 6.8.

AMENDMENTS ADOPTED TO ECE/TRANS/WP.29/GRE/2008/62 (see para. 30 of the report)

<u>Paragraphs 6.1.</u>, amend to read (delete the references...):

- "6.1. ...
- 6.1.7. In case of failure of a single lamp **containing more than one light source** the following provisions shall apply:..."

Annex VI

AMENDMENTS TO REGULATION No. 19

AMENDMENTS ADOPTED TO ECE/TRANS/WP.29/GRE/2008/40 (see para. 31 of the report)

Paragraph 6.4.3., correct the table to read:

"

Zone D	- 1.5° to - 3.5 °	- 10° to + 10°	8,400 max	Whole zone
•••	•••	•••		•••

,,

Annex VII

AMENDMENTS TO REGULATION No. 53

AMENDMENTS ADOPTED TO ECE/TRANS/WP.29/GRE/2008/58 (see para 37 of the report)

	(see para. 37 of the report)
Paragraph 5.11.1., a	amend to read:
"5.11.1.	daytime running lamp is installed, the headlam p shall"
Insert new paragrap	hs 6.13. to 6.13.4.2., to read:
" 6.13.4.1.1.	vehicle; if these lamps are side by side the edge of the illuminating surface shall not more than 250 mm from the median longitudinal plane of the vehicle.
6.13.4.1.2.	A daytime running lamp, shall be fitted in such a way that the edge of the illuminated surface lies not more than 250 mm from the median longitudinal plane of the vehicle.
6.13.4.1.4.	In the case of two daytime running lamps, the distance separating the illuminating surfaces shall not exceed 240 mm.
6.13.4.2.	In height: Above the ground not less than 250 mm and not more than 1,500 mm."
Paragraph 6.13.4.4	<u>1.</u> , should be deleted
New paragraphs 6	.13.5. to 6.13.7.1., amend to read:
"6.13.5.	Geometric visibility

outwards 20° and inwards 10°.

Furthermore, ... in paragraph 5.10. shall not switched ON....

Horizontal:

If installed,

...."

6.13.7.

6.13.7.1.

Electrical connections

Annex VIII

AMENDMENTS TO REGULATION No. 86

AMENDMENTS ADOPTED TO ECE/TRANS/WP.29/GRE/2008/54 (see para. 42 of the report)

Paragraph 6.1.11., should be deleted:

Paragraph 6.2.11., amend to read:

"6.2.11. OTHER REQUIREMENTS

The requirements of paragraph 5.5.2. shall not apply to the passing lamps.

Passing beam headlamps with light source(s) producing the principal dipped beam (as defined in Regulation No. 48) and having a total objective luminous flux which exceeds 2,000 lumens are prohibited."

- - - - -