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Working Party on Lighting and Light-Signalling (GRE)

REPORT OF THE WORKING PARTY ON LIGHTING AND LIGHT-SIGNALLING (GRE) ON ITS FIFTY-SECOND SESSION 1/

(30 March – 2 April 2004)

ATTENDANCE

1. GRE held its fifty-second session from 30 March (afternoon) to 2 April (morning only) 2004 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): Belgium; Canada; Czech Republic; Finland; France; Germany; Hungary; India; Italy; Japan; Luxembourg; Netherlands; Norway; Poland; Republic of Korea; Russian Federation; Spain; Sweden; United Kingdom; United States of America. A representative of the European Commission (EC) 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 Road Transport Union (IRU); International Electrotechnical Commission (IEC).

1/ Following the agreement reached at the fifty-first session, the fifty-second session of GRE proper was preceded by the re-established informal working group regarding the development of a gtr on lighting and light-signalling (see agenda TRANS/WP.29/GRE/2004/1, and para. 3 below).

2. The documents without a symbol distributed during the session are listed in the annex to this report.

3. The fourth informal meeting of the GRE working group developing a global technical regulation (gtr) on installation of lighting and light-signalling devices on motor vehicles, was held from 29 March (afternoon only) to 30 March 2004 (morning only), under the chairmanship of Mr. M. Gorzkowski (Canada). Experts from the following countries and organizations participated in the work: Canada; Czech Republic; France; Germany; Italy; Japan; Netherlands; Norway; Poland; Republic of Korea; Russian Federation; Sweden; United Kingdom; United States of America; European Commission (EC); International Organization of Motor Vehicle Manufacturers (OICA); European Association of Automobile Suppliers (CLEPA); Working Party "Brussels 1952" (GTB); International Road Transport Union (IRU). A summary of the proceedings of this informal meeting is given below (paras. 67 and 68).

1958 AGREEMENT

GENERAL REGULATIONS

1. REGULATION No. 10 (Electromagnetic compatibility)
Documentation: TRANS/WP.29/GRE/2002/5.

4. The expert from France recalled the purpose of TRANS/WP.29/GRE/2002/5. As the adoption of an amendment to the corresponding European Union (EU) Directive was still under discussion by the EU Member States, GRE agreed to resume consideration on this subject at its next session.

2. REGULATION No. 48 – Development (Installation of lighting and light-signalling devices)

2.1. Distributed Lighting Systems (DLS)
Documentation: TRANS/WP.29/GRE/2001/31/Rev.2; informal document No. GRE-52-18 of the annex to this report.

5. The expert from GTB informed GRE on the progress made on the revised proposal for the introduction of prescriptions regarding DLS (TRANS/WP.29/GRE/2001/31/Rev.2). The expert from the Netherlands and the United Kingdom questioned the fail safe provisions (informal document No. GRE-52-18). The expert from GTB agreed to take the comments into account and to prepare a proposal for consideration at the next GRE session. GRE postponed the adoption of the document awaiting fail-safe provisions.

2.2. Visibility of red light from the front
Documentation: TRANS/WP.29/GRE/2003/11; informal documents Nos. GRE-52-5, GRE-52-5bis, GRE-52-6 and GRE-52-7 of the annex to this report.

6. Recalling the purpose of TRANS/WP.29/GRE/2003/11 (tabled by France), the expert from the United Kingdom introduced informal document No. GRE-52-5 concerning an additional proposal for amending Regulation No. 91 (side-marker lamps) to limit the emission of red light by side-marker

lamps to the front of the vehicle. Following the discussion, GRE agreed on the text as reproduced below (based on informal document No. GRE-52-5bis):

Regulation No. 91:

Paragraph 7.1.2., amend to read (including a reference to footnote 2/ and the footnote 2/):

"7.1.2.	Maximum intensity	Within the specified angular field 2/	25.0 cd	25.0 cd

2/ In addition, for red side marker lamp, in the angular field from 60° to 90° in horizontal direction and +/-20° in vertical direction towards the front of the vehicle, the maximum intensity is limited to 0.25 cd."

7. GRE requested the secretariat to submit the adopted amendments to WP.29 and AC.1 as a draft Supplement 7 to Regulation No. 91 for consideration during their November 2004 sessions.

8. With regard to TRANS/WP.29/GRE/2003/11, GRE adopted the proposal, unamended, and requested the secretariat to submit it to WP.29 and AC.1 as a draft Supplement 10 of the 02 series of amendments to Regulation No. 48 for consideration during their November 2004 sessions.

9. The expert from the United Kingdom presented informal document No. GRE-52-6 concerning white retro-reflective material in rear lamps. He stated that problems had occurred with aftermarket lamp clusters where the manufacturer had replaced the red retro-reflector in the rear lamp cluster by a white retro-reflector. The expert from Germany confirmed that this subject was still under discussion within the GTB photometric working group. GRE agreed to resume consideration of this subject at its next session.

10. In response to informal document No. GRE-52-6, the expert from Canada introduced a proposal to limit the projection of white light towards the rear of the vehicle (informal document No. GRE-52-7). The expert from CLEPA stated that the proposed amendments were too stringent and that he could not support it. The expert from Canada volunteered to prepare a revised text. GRE agreed to resume consideration of this subject at its next session on the basis of the revised document (note by the secretariat: see TRANS/WP.29/GRE/2004/23).

2.3. Elimination of manual headlamp-levelling devices
Documentation: TRANS/WP.29/GRE/2003/19.

11. The expert from Germany recalled the purpose of TRANS/WP.29/GRE/2003/19 to eliminate manual headlamp-levelling devices. The expert from CLEPA was not in a position to provide the requested information regarding costs of such an amendment. Following a long and controversial discussion, the Chairman suggested resuming consideration of this subject at the next GRE session, and requested all experts to provide detailed information on the benefits of the proposed amendments.

2.4. Operating voltage for lighting and light signalling devices
Documentation: TRANS/WP.29/GRE/2003/20/Rev.1; informal document No. GRE-52-26 of the annex to this report.

12. Referring to informal document GRE-52-26 tabled by India, the Chairman recalled the previous discussion in GRE on TRANS/WP.29/GRE/2003/20/Rev.1. He confirmed the decision of the group to amend the first sentence of the proposed paragraph 5.25. to read " … be 13.0 V ± 0.5 V (12 Volt systems) and 27.0 V ± 1.0 V (24 Volt systems), measured at … ". In order to complete the proposal, the experts from France, Germany, Italy and the Netherlands volunteered to jointly prepare a new proposal including specific test provisions according to standard ISO 3559. The expert from ISO informed GRE about the intention of his organization to revise that standard in October 2004. GRE agreed to resume consideration of this subject at its next session on the basis of a new proposal.

2.5. Concealment of rear fog lamps
Documentation: TRANS/WP.29/GRE/2003/18.

13. With regard to TRANS/WP.29/GRE/2003/18, the expert from OICA gave a presentation on concealable rear fog lamps. Some delegations raised concerns about the possible negative impact on safety of such devices, especially regarding the activation delay after switching on these devices. GRE agreed to remove this item from the agenda.

2.6. Conditions for the illumination of stop lamps
Documentation: TRANS/WP.29/GRE/2002/28; TRANS/WP.29/2004/38; TRANS/WP.29/2004/40.

14. Referring to TRANS/WP.29/GRE/2002/28, the expert from the European Commission informed GRE on the progress made by GRRF at its fifty-fifth session regarding the requirements for the generation of a signal by the braking system, which would activate the stop lamps. Taking note of both documents (TRANS/WP.29/2004/38 and TRANS/WP.29/2004/40), GRE invited the European Commission to revise TRANS/WP.29/GRE/2002/28 and agreed to resume consideration at the fifty-third GRE session.

2.7. Emergency brake light display
Documentation: TRANS/WP.29/GRE/2004/21; informal documents Nos. GRE-52-3, GRE-52-15, GRE-52-16, GRE-52-20, GRE-52-35 and GRE-52-36 of the annex to this report; informal document No. 9 of the fifty-first GRE session.

15. The expert from the Netherlands introduced informal document No. GRE-52-36 regarding a study of an emergency brake light display system showing no significant impact of such a system on the following drivers' reaction time. Referring to TRANS/WP.29/GRE/2004/21, the expert from Japan proposed to add to the definition of "emergency braking" a deceleration value of 6 m/s^2 (informal document No. GRE-52-20). With regard to the signalling of emergency braking, the expert from the United Kingdom introduced the informal documents Nos. GRE-52-15 and GRE-52-16 on research results of the use of flashing stoplights and hazard warning lights for heavy braking. The experts from the Netherlands and the United Kingdom expressed their concern about different emergency braking signals already existing on the market and urged the group to find a

final solution to this problem. The expert from the European Commission suggested considering the use of both signals depending on the vehicle speed during the emergency braking, i.e. the automatic illumination of flashing stop lamps in case of activation at a vehicle speed higher than 10 km/h and the automatic illumination of hazard warming signals in case of activation at a speed less than 10 km/h. GRE welcomed that proposal and agreed to resume consideration at its next session on the basis of a revised document. For that purpose, the expert from the Netherlands, the United Kingdom and the European Commission were invited to join the experts from France and Germany to prepare a common proposal as Revision 1 to TRANS/WP.29/GRE/2004/21.

16. The expert from IEC introduced informal document No. GRE-52-3 regarding the flashing frequency of filament lamps in an emergency brake light application. The expert from the Russian Federation gave a presentation of an informative brake signalling systems, using dynamic illumination and luminescence conditions of different signalling lamps depending on the emergency braking situation (informal document No. GRE-52-35). GRE agreed to resume consideration of this subject at its next session and to keep, for that purpose, the informal document on the agenda.

2.8. Activation of hazard warning lamps

17. GRE noted that this subject has been considered under agenda item 2.7.

2.9. Electrical connections
Documentation: TRANS/WP.29/GRE/2003/22/Rev.1.

18. The expert from OICA recalled the purpose of TRANS/WP.29/GRE/2003/22/Rev.1 and stated that, at the present time, there was no real need for such specific requirements. The experts from France and the United Kingdom supported that view and referred to the existing ISO standard. The expert from Germany underlined the benefit for manufacturers in the case of adopting the proposal. As no common position on the proposal could be reached, GRE agreed to resume its consideration at the fifty-third session.

2.10. Technical requirements regarding the use of head lighting during daytime

19. As no new documents were available, GRE agreed to resume consideration of this subject at the next session, awaiting the final results of the studies by Japan and the European Commission.

2.11. Conditions for the installation of lighting and light-signalling devices
Documentation: TRANS/WP.29/GRE/2003/36.

20. With regard to TRANS/WP.29/GRE/2003/36, proposing to limit the installation of lighting and light-signalling devices to only such devices which were type approved according to ECE Regulations, the GRE experts had an intense discussion. Following the results of a "tour de table" on the possible adoption of the document (12 delegations were opposed, 6 delegations supported the proposal), the Chairman suggest resuming its consideration at the next session. He requested all experts to seek opinion from their legal departments on the presence, during the approval process

according to Regulation No. 48, of lighting or light-signalling devices not type approved according the ECE Regulations.

21. The expert from France reminded GRE experts that such restrictions were already inserted in the installation requirements for some lighting devices on motorcycles, and that no problems had occurred. The expert from the United States of America expressed his support for that restrictive sentence and suggest inserting similar requirements in the draft proposal for the gtr on lighting and light-signalling.

2.12. Use of additional light sources
Documentation: TRANS/WP.29/GRE/2004/9.

22. The expert from Japan introduced TRANS/WP.29/GRE/2004/9 to insert prescriptions for the use of an additional light source operating automatically in conjunction with the direction indicator. The experts from Germany, Italy, the Netherlands and the United Kingdom raised concerns about the acceptance of such a system. The expert from Japan volunteered to reconsider his proposal and, if needed, to prepare a revised document for the next session.

2.13. Increased conspicuity of vehicles by mandatory contour markings
Documentation: TRANS/WP.29/GRE/2004/18.

23. Expecting an improved conspicuity of vehicles and an increased road safety, the expert from Germany presented the above-mentioned proposal to mandate the installation of contour markings on vehicles of categories M3, N3 and O4. The expert from the European Commission stated that a cost-benefit analysis on this subject was still in progress within his organization and requested to postpone the adoption of the proposal. The expert from the United States of America informed GRE that the evidence of positive results of implementation of conspicuity treatment of large trailers in his country was available on the website of his organization (http://www.nhtsa.dot.gov). A large number of delegations could support the document in principle, altough, it was agreed to postpone its adoption to the fifty-third GRE session awaiting the study results by the European Commission.

2.14. Activation of tell-tales
Documentation: Informal document No. GRE-52-23 of the annex to this report.

24. The expert from the Netherlands presented informal document No. GRE-52-23 regarding the interpretation concerning the activation of a tell-tale, in the event of malfunction of direction indicators equipped with multiple light sources (i.e. LED's). The expert from Germany informed GRE that this item is on the agenda of the June meeting of the GTB working group on photometry. Following the discussion on different interpretations, GRE agreed to resume consideration of this subject at its next session on the basis of a concrete proposal by GTB.

3. REGULATION No. 37 (Filament lamps)
Documentation: TRANS/WP.29/GRE/2004/2; TRANS/WP.29/GRE/2004/16; TRANS/WP.29/GRE/2004/17; informal document No. GRE-52-27 of the annex to this report.

25. The expert from Germany introduced TRANS/WP.29/GRE/2004/2 to remove from Regulation No. 37 the prohibition of red coated filament bulbs as light sources for stop lamps. The expert from the Netherlands raised concerns about the colour washout and the need to insert specific test requirements. The expert from GTB confirmed that his organization was developing such test procedures and that the final proposal would be presented at one of the next GRE sessions (see para. 40). GRE adopted TRANS/WP.29/GRE/2004/2, not amended, and requested the secretariat to submit the document to WP.29 and AC.1, as a proposal for draft Supplement 25 to the 03 series of amendments to Regulation No. 37, for consideration during the November 2004 sessions.

26. With regard to a proposal for new data sheets for filament lamps, the expert from GTB presented TRANS/WP.29/GRE/2004/16. The expert from Germany supported the proposal, but expressed his discontent with the industry practice of introducing of new, non-regulated light sources as non-replaceable and then to urge GRE to adopt new replaceable light sources based on their existence in type approved vehicles. Therefore, he requested the industry to insert immediately requirements for replaceable light-sources, and to avoid non-replaceable light-sources. GRE adopted TRANS/WP.29/GRE/2004/16, not amended, and requested the secretariat to submit it to WP.29 and AC.1, as a part of the above-mentioned proposal (see para. 25) for draft Supplement 25 to the 03 series of amendments to Regulation No. 37.

27. The expert from Germany introduced TRANS/WP.29/GRE/2004/17 to clarify the situation of the conformity of production (COP) procedure in relation to the colour endurance test. Referring to informal document No. GRE-52-27, the expert from India requested to clarify the wording of the third footnote. Following the discussion, GRE adopted TRANS/WP.29/GRE/2004/17 with the following amendments to table 1:

"….			
Colour endurance test	All coated lamps of **one type and** one coating technology	20 ***/	1

….

***/ Representative distribution over categories, worst case, meaning a group of coated lamps using the same technology within the categories with the **most stringent** conditions for the coating."

28. The secretariat was requested to submit the document, as amended above, to WP.29 and AC.1, as a part of the above-mentioned proposal (see paras. 25 and 26) for draft Supplement 25 to the 03 series of amendments to Regulation No. 37.

4. COLLECTIVE AMENDMENTS TO REGULATIONS Nos. 5, 19, 31, 37, 48, 53, 74, 86 and 99

Documentation: TRANS/WP.29/GRE/2003/32.

29. Recalling the previous discussion of TRANS/WP.29/GRE/2003/32, the expert from GTB stated that there was no reason for a revision of the document. The expert from Germany pointed out that there was no longer a real need to have specifications for "selective yellow" in the Regulations and volunteered to prepare a new proposal for the deletion in the concerned Regulations of all references to "selective yellow". GRE supported that position and agreed to resume consideration of this subject at its next session on the basis of a new proposal.

5. NEW GENERAL ITEMS

5.1. Requirements regarding approval markings

Documentation: Informal document No. GRE-52-13 of the annex to this report.

30. Referring to the decision by WP.29 (see report TRANS/WP.29/992, para. 72), the expert from GTB introduced the above-mentioned informal document proposing the simplification of the requirements for approval markings of lighting and light-signalling devices. GRE welcomed the proposal and agreed that the approval markings should not be deleted entirely, but should continue to be replaced by a simplified marking. GRE agreed to resume this subject at its next session and, for that purpose, requested GRE experts to study carefully the document. The secretariat was requested to distribute informal document No. GRE-52-13 with an official symbol (note by the secretariat: see TRANS/WP.29/GRE/2004/24).

SIGNALLING AND MARKING DEVICE REGULATIONS

6. REGULATION No. 6 (Direction indicators)

Documentation: TRANS/WP.29/GRE/2003/30.

31. GRE concluded that there were no safety benefits in the reduction of visibility angles of direction indicators in case of failure of one light source; on the contrary, the safety level may be reduced. It was decided to take this item off the agenda.

7. REGULATION No. 7 (Position, stop and end-outline marker lamps)

7.1. Distributive lighting

Documentation: TRANS/WP.29/GRE/2003/8/Rev.1; informal document No. GRE-52-2 of the annex to this report.

32. With regard to new provisions on distributed lighting systems, the expert from GTB introduced informal document No. GRE-52-2 superseding TRANS/WP.29/GRE/2003/8/Rev.1. The expert from Germany requested to delete all references to non-replaceable light sources, altough, some other delegations preferred to keep the references (see para. 26). Referring to informal document No. GRE-52-18, the expert from the United Kingdom insisted on the insertion of fail-safe provisions

to the document. GTB was invited to insert into the proposal such fail-safe provisions, to review the need of provisions for non-replaceable light source and to add a justification. GRE agreed to resume consideration on this subject at the next GRE session based on a revised proposal by GTB.

7.2. Inboard angles of visibility
Documentation: TRANS/WP.29/GRE/2003/31; informal document No. GRE-52-28 of the annex to this report.

33. Referring to agenda item 6 (see para. 31 above), the Chairman suggested taking this item off the agenda.

7.3. Additional light source for night vision systems
Documentation: TRANS/WP.29/GRE/2004/7.

34. The expert from Japan presented the above-mentioned document for the possible installation of night vision systems inside the front position lamps. As a large number of delegations could not support the proposal, the expert from Japan volunteered to revise his document with regard to specific switching requirements. GRE agreed to resume consideration of this subject at its next session on the basis of a revised document by Japan.

8. REGULATION No. 87 (Daytime running lamp)
Documentation: TRANS/WP.29/GRE/2003/15; TRANS/WP.29/GRE/2004/5.

35. With regard to the reduction of DRL illuminating surface, the experts from GTB introduced TRANS/WP.29/GRE/2004/5, superseding the initial document TRANS/WP.29/GRE/2003/15. The expert from the United Kingdom stated that some investigations on this subject were still in progress in Japan and in his country, and maintained his study reservation. The experts from Germany, Italy and the Netherlands expressed their preference to insert into the proposal provisions for an automatic switching of DRL's as well as for transitional provisions. Concluding the discussion, the Chairman suggested taking both documents off the agenda and resuming consideration of this subject at the next GRE session on the basis of a new document. For that purpose, the experts from Germany, Italy and the United Kingdom were invited to join GTB in order to prepare a new proposal.

9. MOISTURE TEST FOR LIGHT-SIGNALLING DEVICES

36. As no new document was submitted on this subject, GRE agreed to take this item off the agenda, and to re-introduce it at a later time point, if needed.

10. REGULATION No. 70 (Rear marking plates)
Documentation: TRANS/WP.29/GRE/2004/10; TRANS/WP.29/GRE/2004/20.

37. The expert from Japan introduced TRANS/WP.29/GRE/2004/10 proposing a correction regarding the width of rear marking plates. GRE adopted the proposal, unamended, and requested the secretariat to transmit it to WP.29 and AC.1, as draft Corrigendum 2 to the 01 series of amendments to Regulation No. 70, for consideration at their November 2004 sessions.

38. The expert from Poland presented a proposal to clarify the requirements for the rigidity test of rear marking plates (TRANS/WP.29/GRE/2004/20). As a large number of delegations did not support the proposal or raised a study reservation, GRE agreed to resume its consideration at its next session.

11. COLLECTIVE AMENDMENTS REGARDING COLOUR SPECIFICATIONS
Documentation: Informal document No. GRE-52-14 of the annex to this report.

39. Recalling the considerations at the previous sessions, the expert from the United Kingdom introduced the above-mentioned informal document proposing collective amendments regarding colour specifications. GRE welcomed that proposal prepared jointly by the United Kingdom and IEC, and requested the secretariat to distribute it with an official symbol at the fifty-third session (note by the secretariat: see TRANS/WP.29/GRE/2004/25).

12. NEW ITEMS REGARDING SIGNALLING AND MARKING DEVICES

12.1. Phantom light and colour washout phenomena
Documentation: Informal document No. GRE-52-32 of the annex to this report.

40. With regard to phantom light and colour washout phenomena in signalling and marking devices with transparent (coloured or colourless) lenses (informal document No. GRE-52-32 tabled by Canada), GRE agreed to resume consideration on this subject at the next GRE session based on the document by GTB, if available.

12.2. REGULATION No. 65 (Special warning lamps)
Documentation: Informal document No. GRE-52-25 of the annex to this report.

41. The expert from France introduced informal document No. GRE-52-25 proposing a correction to TRANS/WP.29/2004/6 with regard to the definition of the reference centre and reference axis. GRE adopted the document as reproduced in TRANS/WP.29/2004/48 and requested the secretariat to transmit it to WP.29 and AC.1, as draft Corrigendum 1 to Supplement 4 to Regulation No. 65, for consideration at their June 2004 sessions.

12.3. FRONT DIRECTION INDICATOR VISIBILITY
Documentation: Informal document No. GRE-52-12 of the annex to this report.

42. The expert from the United Kingdom introduced the above-mentioned informal document concerning the front direction indicator visibility. Following a controversial discussion on the need of such amendments to the Regulation, GRE agreed to postpone consideration to its next session on the basis of the informal document No. GRE-52-12.

ROAD ILLUMINATION DEVICE REGULATIONS

13. REGULATION No. 98 (Headlamps with gas-discharge light sources)

13.1. Determination of the cut-off line
Documentation: TRANS/WP.29/GRE/2003/23 and Add.1.

43. With regard to the definition of the "cut-off" line of headlamps, the experts from the GTB introduced the consolidated document TRANS/WP.29/GRE/2003/23 and its Add. 1 proposing minimum requirements for the sharpness of the "cut-off" line. They also recalled the intention of GTB to consolidate the proposals regarding harmonized driving beam, harmonized passing beam and cut-off provisions into a single amendment, which would be submitted as soon as the final proposal for cut-off provisions (including requirements for horizontal aiming) was available. The expert from the United Kingdom requested that GTB should also consider an upper limit for the sharpness of the cut-off line. GRE invited GTB to prepare a consolidated proposal, including such requirements and agreed to resume consideration of this subject at the fifty-third session.

13.2. Harmonized driving beam pattern
Documentation: TRANS/WP.29/GRE/2003/34.

44. The expert from GTB recalled that the proposal for the harmonized driving beam would be included in the consolidated proposal mentioned in para. 43 above. GRE endorsed that suggestion.

13.3. Headlamp marking
Documentation: TRANS/WP.29/GRE/2004/3; TRANS/WP.29/GRE/2004/12.

45. The experts from Japan and the United Kingdom withdrew their documents. GRE agreed to resume consideration of lens marking at the forthcoming sessions based on a new proposal (see para. 30).

13.4. Additional light source for night vision systems
Documentation: TRANS/WP.29/GRE/2004/11; informal document No. GRE-52-30 of the annex to this report.

46. The expert from Japan presented TRANS/WP.29/GRE/2004/11 to insert provisions for the use of an additional light source for night vision systems. The experts from Italy and the Netherlands raised their concerns about the proposal. Following the discussion, the expert from Japan stated that the observations could be taken into account (including the comments of informal document No. GRE-52-30, tabled by India) and volunteered to prepare a new proposal for consideration at the next GRE session.

14. REGULATION No. 112 (Headlamps emitting an asymmetrical passing beam)

14.1. Determination of the cut-off line
Documentation: TRANS/WP.29/GRE/2003/24 and Add.1.

47. GRE agreed to postpone to its next session the consideration of TRANS/WP.29/GRE/2003/24 and Add.1 for the same reasons as mentioned in para. 43 above.

14.2. Harmonized driving beam
Documentation: TRANS/WP.29/GRE/2003/35; TRANS/WP.29/GRE/2004/6; informal document No. GRE-52-21 of the annex to this report.

48. The expert from GTB presented document TRANS/WP.29/GRE/2004/6 superseding TRANS/WP.29/GRE/2003/35 and identifying the necessary amendments to incorporate into the Regulation the revised proposal for a worldwide-harmonized passing beam. A large number of delegations welcomed the proposal. The expert from Japan introduced informal document No. GRE-52-21, proposing some additional amendments to the GTB proposal. The experts from the United Kingdom and CLEPA raised a study reservation on informal document No. GRE-52-21. The expert from Germany requested the incorporation of specifications on the operating voltage in order to avoid glare. Following the discussion, GRE agreed to resume its consideration at the next session and to keep, for that purpose, the informal document on the agenda. The Chairman and the expert from the United States of America invited GRE experts to investigate the possible elaboration of a global technical regulation (gtr) on voltage performances and automatic levelling specifications for the harmonized driving beam pattern.

14.3. Headlamp marking
Documentation: TRANS/WP.29/GRE/2004/4; TRANS/WP.29/GRE/2004/13.

49. The experts from the United Kingdom withdrew TRANS/WP.29/GRE/2004/4. The expert from Japan introduced TRANS/WP.29/GRE/2004/13, amending the provisions for the indication of the approval mark. The experts from Germany and the Netherlands expressed their concerns and stated that they could not support the document. GRE agreed to resume consideration of this subject at its next session on the basis of a revised proposal by Japan.

14.4. Additional light source for night vision systems
Documentation: TRANS/WP.29/GRE/2004/14.

50. Referring to the discussion of agenda item 13.4., the expert from Japan suggested postponing consideration of this subject to the next GRE session.

15. GLARE OF HEADLAMPS
Documentation: Informal documents Nos. GRE-52-33 and GRE-52-34 of the annex to this report.

51. The expert from Canada informed GRE experts on a forthcoming workshop on headlamp illumination with regard to the balance of glare and visibility (informal document No. GRE-52-33).

The expert from the United States of America introduced informal document No. GRE-52-34 concerning an investigation of headlamps glare with regard to intensity spectrum and size and, for the case of more detailed information, referred to the homepage of his organization.

16. REGULATION No. 19 (Front fog lamps)
Documentation: TRANS/WP.29/GRE/2004/8; TRANS/WP.29/GRE/2004/19; informal document No. GRE-52-29 of the annex to this report.

52. Referring to the discussion on agenda item 14.3. (see para. 49), the expert from Japan took note of informal document No. GRE-52-29 and volunteered to submit to GRE a revised proposal to TRANS/WP.29/GRE/2004/8 for consideration at its fifty-third session.

53. The expert from Germany introduced TRANS/WP.29/GRE/2004/19 to clarify its position with regard to the type approval of front fog lamps of the sealed beam type. The expert from GTB confirmed that his organization was in the process of elaborating a revision of Regulation No. 19 on front fog lamps. However, the experts from France, Italy and the United States of America raised concerns about the German proposal. Thus, the expert from Germany volunteered to prepare a revised proposal for consideration at the next GRE session.

17. ADAPTIVE FRONT-LIGHTING SYSTEM (AFS)

17.1. Regulation regarding AFS
Documentation: TRANS/WP.29/GRE/2002/18 and Add.1; informal documents Nos. GRE-52-1, GRE-52-4, GRE-52-8, GRE-52-9, GRE-52-10 and GRE-52-22 of the annex to this report.

54. The expert from GTB shortly reported on the results of the fifth and sixth AFS informal meetings, held in Bonn (Germany) from 28 to 30 October 2003 (informal document No. GRE-52-1) and from 17 to 19 February 2004 (informal document No. GRE-52-4). GRE acknowledged the good progress of work made by the AFS informal working group regarding the new draft Regulation on AFS (informal document No. GRE-52-8 superseding TRANS/WP.29/GRE/2002/18), the related amendments to Regulations Nos. 45 (informal document No. GRE-52-9) and 48 (informal document No. GRE-52-10 superseding TRANS/WP.29/GRE/2002/20). The Chairman of the AFS informal working group, Mr. M. Lowe (United Kingdom) and the expert from GTB/AFS, Mr. B. Wörner, volunteered to review the three latter documents, indicating the unresolved issues and the comments in informal document No. GRE-52-22 (tabled by Japan), and to send them to the secretariat in order to be distributed as official documents. GRE agreed to resume consideration of this subject at its next session on the basis of these documents.

17.2. Amendments concerning AFS
Documentation: TRANS/WP.29/GRE/2002/20.

55. GRE noted the progress made by the AFS informal working group (see para. 54 above).

17.3. Amendments to the measurement coordinate system
Documentation: TRANS/WP.29/GRE/2002/45/Rev.1.

56. As no new document was tabled on this subject, GRE agreed to take this item off the agenda and to resume its consideration in the AFS informal working group.

18. NEW ITEMS REGARDING ROAD ILLUMINATION DEVICES

57. The Chairman challenged GRE experts to think about a different regulatory approach to the road illumination devices. He stated that he would like to have a discussion on what were the true road illumination device performance characteristics that had to be regulated and how.

MOTORCYCLE LIGHTING AND LIGHT-SIGNALLING REGULATIONS

19. REGULATIONS Nos. 50, 53 and 74

19.1. Amber front position lamps
Documentation: TRANS/WP.29/GRE/2001/25; TRANS/WP.29/GRE/2001/26; TRANS/WP.29/GRE/2001/27.

58. With regard to the above-mentioned proposals by IMMA, concerning the use of amber colour front position lamps for motorcycles, GRE agreed to wait for the adoption until the question of allowance of the steady burning amber light towards the front of the vehicle was resolved.

19.2. Automatic headlamp "ON"
Documentation: TRANS/WP.29/GRE/2003/12/Rev.1; informal document No. GRE-52-11 of the annex to this report.

59. The expert from IMMA recalled the purpose of TRANS/WP.29/GRE/2003/12/Rev.1 and stated that the proposed amendment (see informal document No. GRE-52-11), tabled by the United Kingdom, was not acceptable. Following the discussion, GRE adopted TRANS/WP.29/GRE/2003/12/Rev.1 with the following amendment to paragraph 5.11.1.:

"5.11.1. The headlamp shall automatically be on when the engine is running."

60. The secretariat was requested to submit the document, as amended above, to WP.29 and AC.1, as draft Supplement 5 to the 01 series of amendments to Regulation No. 53 for consideration at their November 2004 sessions.

19.3. Position lamp optional on motorcycles with automatic headlamp "ON"
Documentation: TRANS/WP.29/GRE/2003/3.

61. As the study reservations by the Netherlands and the United Kingdom on this subject were not lifted, GRE agreed to resume its consideration at the fifty-third session.

19.4. Direction indicator lamps for motorcycles
Documentation: Informal document No. GRE-52-17 of the annex to this report.

62. The expert from IMMA introduced the above-mentioned proposal regarding an amendment to Regulation No. 50 to align the maximum intensities and their zones of the front direction indicator lamps to the provisions of Regulation No. 6. The Chairman welcomed that document and suggested postponing its adoption to the next GRE session. For that purpose, the secretariat was requested to distribute informal document No. GRE-52-17 with an official symbol (note by the secretariat: see TRANS/WP.29/GRE/2004/26).

20. REGULATION No. 113 (Headlamps emitting a symmetrical passing beam)
Documentation: TRANS/WP.29/GRE/2003/33 and Add.1; TRANS/WP.29/GRE/2004/15.

63. The expert from GTB recalled the purpose of TRANS/WP.29/GRE/2003/33 and Add. 1 regarding the introduction of measurement requirements for the "cut-off" gradient. Stating his preferences to have a softer "cut-off" line, the expert from the United Kingdom lifted his study reservation on the document, but invited GTB to further investigate this subject. Following the discussion, GRE adopted the documents, unamended, and requested the secretariat to submit the proposal to WP.29 and AC.1, as draft Supplement 3 to Regulation No. 113 for consideration during their November 2004 sessions. Nevertheless, GTB was asked to continue its work on the maximum value of the cut-off and the distance at which the cut-off has to be evaluated

64. With regard to the decision of GRE on his proposal to amend the indication of the approval mark (see para. 49), the expert from Japan suggested postponing the consideration of TRANS/WP.29/GRE/2004/15 to the next GRE session.

21. NEW ITEMS REGARDING MOTORCYCLE LIGHTING DEVICES

65. GRE noted that no proposal has been submitted to this subject.

1997 AGREEMENT; DRAFT RULE No. 2: UNIFORM PROVISIONS FOR PERIODICAL TECHNICAL INSPECTIONS OF WHEELED VEHICLES WITH REGARD TO THEIR ROADWORTHINESS
Documentation: Informal documents Nos. GRE-52-31 and GRE-52-31bis of the annex to this report.

66. Following the request by WP.29 at its one-hundred-and-thirty-second session (see report TRANS/WP.29/992, para. 61), the secretariat introduced informal document No. GRE-52-31 concerning the inspection requirements on lamps, reflectors and electrical equipment of vehicles. GRE raised some editorial comments in order to clarify the terminology of the text as reproduced in informal document No. GRE-52-31bis. The secretariat was requested to submit those comments to WP.29 and AC.4 for consideration at their next sessions.

1998 AGREEMENT

22. PROPOSAL FOR A GLOBAL TECHNICAL REGULATION (gtr)
Documentation: TRANS/WP.29/GRE/2001/6/Rev.2; informal documents Nos. GRE-52-24 and GRE-52-37 of the annex to this report.

67. Referring to TRANS/WP.29/GRE/2001/6/Rev.2 and informal document No. GRE-52-24, the Chairman of the informal working group on a gtr regarding lighting and light-signalling, Mr. M. Gorzkowski (Canada), reported on the progress made during the fourth meeting of the group (see para. 3 above). He informed GRE of his intention to transmit to the secretariat a new revised text to be published (see informal document No. GRE-52-37). He invited all GRE experts to participate in the next informal meeting of that group, scheduled to be held in Ottawa (Canada), from Monday, 7 June 2004, 10.00 h, to Friday, 11 June 2004, 12.00 h. For that purpose, the secretariat was requested to distribute informal document No. GRE-52-37 as an official document (TRANS/WP.29/GRE/2001/6/Rev.3).

68. With regard to the timeline for the development of the gtr, Mr. Gorzkowski stated his intention to conclude the consideration of the draft proposal during the informal meeting in June 2004. Furthermore, he hoped to finalize the draft proposal during the fifty-third GRE session, in October 2004. He expected to adopt the final document at the fifty-fourth GRE session and to submit it to WP.29 and AC.3 for consideration in November 2005. GRE endorsed that timeline. The Chairman expressed his intention of keeping WP.29 and AC.3 informed on the progress made by the group and the agreed timeline.

NEW INVENTIONS

23. Guidelines for the submission and evaluation of petitions concerning international automotive lighting regulations
Documentation: TRANS/WP.29/GRE/2003/35.

69. GRE noted that no new document was presented, and agreed to keep this item on the agenda.

OTHER BUSINESS

24. Proposal for amendments to the Convention on Road Traffic (Vienna 1968)

70. The expert from GTB informed GRE that the work on a proposal regarding the alignment of the in use specifications of the 1968 Vienna Convention on Road Traffic with the provisions in the UNECE lighting and light-signalling Regulations was still in progress. GRE agreed to resume consideration of this subject at one of the future sessions, on the basis of a proposal by GTB.

25. Road map for GRE work

71. The Chairman recalled his intervention of the previous session on a road map for the GRE work (see report TRANS/WP.29/GRE/51, paras. 64-66) in order to streamline its work results. GRE

noted that no new position had been presented and agreed to resume consideration of this subject at its next session.

26. LED for front-lighting devices
Documentation: Informal document No. GRE-52-19 of the annex to this report.

72. GRE followed with interest a presentation by the expert from GTB on the task force on LED forward lighting. The objective of the presentation was to provide information on LED characteristics and to introduce the proposal to amend Regulation No. 112 by including requirements for headlamps using LED as light sources in order to seek an early feedback by GRE experts.

27. New draft consolidated Resolution on Common Definitions, Masses and Dimensions (R.E.5)
Documentation: TRANS/WP.29/2004/25.

73. Following the request by WP.29 (see report TRANS/WP.29/992, para. 85), the Chairman introduced TRANS/WP.29/2004/25 regarding the proposal for a new classification of vehicle, their masses and dimensions. GRE experts welcomed the proposed definitions as they seemed to meet their needs for the development of regulations under both the 1958 and the 1998 Agreements.

Tribute to Mr. Maurizio Emanuel (GTB)

74. GRE noted that Mr. M. Emanuel had decided to take his merited retirement. The Chairman thanked him for his excellent contributions and technical expertise during the last thirteen years of participation in GRE and wished him a long and happy retirement. GRE expressed its appreciation to him with a long applause.

AGENDA FOR THE NEXT SESSION

75. For the fifty-third session, scheduled to be held in Geneva, Palais des Nations, from Monday 4 (14.30 h) to Friday 8 (until 12.30 h) October 2004, the secretariat refers to the draft agenda, which is available on the WP.29/GRE website as informal document No. GRE-52-38.

Annex

List of informal documents No. GRE-52-… distributed without a symbol

No.	Transmitted by	Agenda item	Language	Title	Follow-up
1.	GTB	17.	E	Report on the fifth session of the informal group on Adaptive Front-lighting Systems (AFS)	(a)
2.	GTB	7.1.	E	Revised proposal to document TRANS/WP.29/GRE/2003/8	(a)
3.	IEC	2.7.&3.	E	Filament lamps in an emergency brake light application	(a)
4.	GTB	17.	E	Report on the sixth session of the informal group on Adaptive Front-lighting Systems (AFS)	(a)
5. & 5.bis	United Kingdom	2.2.	E	Red light to the front from red rearmost side marker lamps	(d),(e)
6.	United Kingdom	2.2.	E	White retro-reflective material in rear lamps	(a)
7.	Canada	2.2.	E	Proposal for draft amendments to Regulation No. 48	(b)
8.	GTB	17.	E	Proposal for a new draft Regulation on AFS	(a)
9.	GTB	17.	E	Proposal for draft amendments to Regulation No. 45 (AFS)	(a)
10.	GTB	17.	E	Proposal for draft amendments to Regulation No. 48 (AFS)	(a)
11.	United Kingdom	19.2.	E	Proposal for draft amendments to Regulation No. 53	(a)
12.	United Kingdom	12.3.	E	Front direction indicator visibility	(c)
13.	GTB	5.1.	E	1958 Agreement - Regulations concerning lighting and light-signalling devices – Requirements regarding approval markings	(b)
14.	United Kingdom	11.	E	Proposal for collective amendments regarding colour specifications	(b)
15.	United Kingdom	2.7.	E	UK information on stoplights	(a)
16.	United Kingdom	2.8.	E	UK information on flashing hazard lights for heavy braking	(a)

No.	Transmitted by	Agenda item	Language	Title	Follow-up
17.	IMMA	19.1.	E	Proposal for draft amendments to Regulation No. 50	(b)
18.	United Kingdom	2.1.	E	Proposal for draft amendments to GTB proposal TRANS/WP.29/GRE/2001/31/Rev.2 on Regulation No. 48	(a)
19.	GTB	26.	E	GTB task force on LED forward lighting	(a)
20.	Japan	2.7.	E	Comments to TRANS/WP.29/GRE/2004/21, the joint German and French proposal	(a)
21.	Japan	14.2.	E	Japan's comment to TRANS/WP.29/GRE/2004/6 (Harmonized passing beam headlamp)	(c)
22.	Japan	17.1.	E	Comment on the AFS draft Regulation (R.xxx)	(a)
23.	Netherlands	2.14.	E	Interpretation concerning the activation of the tell-tale, in event of malfunction of direction indicators equipped with multiple LED's (multiple light sources)	(a)
24.	United Kingdom	22.	E	1998 Agreement – gtr on lighting installation – UK comments	(a)
25.	France	12.2.	E/F	Corrigendum to TRANS/WP.29/2004/6 on Regulation No. 65	(d),(e)
26.	India	2.4.	E	Proposal from India an the amendments by Germany	(a)
27.	India	3.	E	Proposal for incorporation of COP requirements for colour durability	(a)
28.	India	6.&7.2.	E	Consideration of revised proposal by GTB to reduce inboard angles in case of one light source failure, if available	(a)
29.	India	16.	E	Proposal by Japan suggesting amendment to Regulation No. 19 in order to amend the requirements for the approval marks	(a)
30.	India	13.4.& 14.4.	E	India's comments on proposal from Japan suggesting amendment to Regulation Nos. 98 and 112 for the use of additional light sources for night vision systems	(a)
31.& 31bis	Secretariat		E	1997 Agreement: Rule No. 2 (German comments)	(a)

No.	Transmitted by	Agenda item	Language	Title	Follow-up
32.	Canada	12.1.	E	Tail lamps for the 2004 Lexus RX330	(a)
33.	Canada	15.	E	Workshop on headlamp illumination: Balancing glare and visibility	(a)
34.	United States of America	15.	E	An investigation of headlamp glare: Intensity, spectrum and size	(a)
35.	Russian Federation	2.7.&2.8.	E	Study of perspective aspects of equipping vehicles with an informative brake signalling system (IBSS)	(c)
36.	Netherlands	2.7.&2.8.	E	Evaluation of emergency brake light display (EBLD) system	(a)
37.	Canada	22.	E	Draft proposal: Global technical regulation on lighting and light-signalling devices for road vehicle-installation provisions for vehicles other than motorcycles	(b)
38.	Secretariat		E	Draft provisional agenda for the fifty-third GRE session	(a)

Reconsideration of informal documents from the previous sessions of GRE
(referring to agenda item of the current session)

51st GRE session:

9.	Japan	2.7.	E	Study on the validity of emergency brake light display	(a)

50th GRE session:

23.	United States of America	22.	E	US proposal for gtr 48; unresolved issues for gtr on lighting and light-signalling devices	(a)

Notes regarding the follow-up of the informal documents:

(a) Consideration completed or to be superseded
(b) Continue consideration at the next session with an official symbol
(c) Continue consideration at the next session as an informal document
(d) Adopted
(e) To be transmitted to WP.29/AC.1
(f) To be transmitted to WP.29/AC.3
(f) To be transmitted to WP.29/AC.4