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

Working Party on Lighting and Light-Signalling (GRE)

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

(15 – 19 September 2003)

ATTENDANCE

1. GRE held its fifty-first session from 15 (afternoon) to 19 September (morning only) 2003 in Geneva, under the chairmanship of Mr. M. Gorzkowski (Canada). Experts from the following countries participated in the work following Rule 1(a) of the Rules of Procedure of WP.29 (TRANS/WP.29/690): Canada; Czech Republic; Finland; France; Germany; Hungary; 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 Electrotechnical Commission (IEC).

2. The documents without a symbol distributed during the session are listed in annex 1 to this report.

A. 1958 AGREEMENT

1. AMENDMENTS TO ANNEXED REGULATIONS

1.1. GENERAL REGULATIONS

1.1.1. REGULATION No. 10 (Electromagnetic compatibility)

Documentation: TRANS/WP.29/GRE/2002/5.

3. The Chairman recalled the purpose of TRANS/WP.29/GRE/2002/5 (tabled by France). As the amendment to the corresponding EU Directive has not yet been adopted by the EU Member States, GRE agreed to keep TRANS/WP.29/GRE/2002/5 on the agenda and to resume consideration on this subject at the fifty-second GRE session.

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

1.1.2.1. Definition of a "single lamp"

Documentation: TRANS/WP.29/GRE/2001/39, TRANS/WP.29/GRE/2003/29; informal document No. 14 of annex 1 to this report.

4. Recalling the justification of TRANS/WP.29/GRE/2001/39, the expert from GTB introduced TRANS/WP.29/GRE/2003/29 concerning the revised definition of a “single lamp”. Following the discussion, the expert from United Kingdom tabled informal document No. 14 amending TRANS/WP.29/GRE/2003/29.

5. GRE adopted the proposal as reproduced in annex 2 to this report. The secretariat was requested to transmit the adopted proposal to WP.29 and AC.1, as draft Supplement 9 to the 02 series of amendments to Regulation No. 48, for consideration at their March 2004 sessions.

1.1.2.2. Distributed Lighting Systems (DLS)

Documentation: TRANS/WP.29/GRE/2001/31/Rev.1.

6. The expert from GTB recalled the purpose of TRANS/WP.29/GRE/2001/31/Rev.1 and confirmed that the work on a revised proposal was still in progress. With regard to the new definitions concerning light sources (see TRANS/WP.29/GRE/50, para. 7), he asked for GRE's consent. GRE endorsed that request and agreed to resume consideration of this subject at its next session on the basis of Revision 2 to the above-mentioned document.

1.1.2.3. Visibility of red light to the front

Documentation: TRANS/WP.29/GRE/2003/11.

7. The expert from France recalled the purpose of TRANS/WP.29/GRE/2003/11 concerning the visibility of the red light emitted by side-marker lamps to the front of the vehicle. The expert from the United Kingdom maintained his study reservation and expressed his preference to amend Regulation No. 91 (side-marker lamps) with regard to the light pattern. He volunteered to prepare a new proposal for consideration at the next GRE session. The experts from the Netherlands supported the position of the United Kingdom. GRE agreed to resume consideration at its next session on the basis of a new proposal by France and the United Kingdom.

1.1.2.4. Retro-reflectors on trailers

Documentation: TRANS/WP.29/GRE/2003/1, TRANS/WP.29/GRE/2003/1/Rev.1.

8. The expert from Finland recalled the purpose of TRANS/WP.29/GRE/2003/1 and introduced also the revised text of TRANS/WP.29/GRE/2003/1/Rev.1. The experts from Germany and the United Kingdom lifted their study reservations on the original text. GRE adopted TRANS/WP.29/GRE/2003/1, not amended, and requested the secretariat to submit it to WP.29 and AC.1 as a part of draft Supplement 9 of the 02 series of amendments to Regulation No. 48 (see para. 5), for consideration during their March 2004 sessions.

1.1.2.5. Elimination of manual headlamp-levelling devices

Documentation: TRANS/WP.29/GRE/2003/19.

9. The expert from Germany introduced TRANS/WP.29/GRE/2003/19 regarding the improvement of road safety by the deletion of the manual headlamp-levelling devices on motor vehicles. A large number of delegations could support the proposal in principle, but considered premature to mandate the automatic headlamp-levelling system. With regard to the introduction of transitional provisions, the expert from Germany suggested to fix a period of 36 months for vehicles of category M1 and 60 months for vehicles of categories other than M1, however, under condition that these time periods would not be deferred. Following the discussion, GRE agreed to postpone its adoption to a later time point, awaiting the cost-benefit analyses to be tabled by OICA and CLEPA.

1.1.2.6. Operating voltage for lighting and light signalling devices

Documentation: TRANS/WP.29/GRE/2003/20/Rev.1.

10. The expert from Germany introduced TRANS/WP.29/GRE/2003/20/Rev.1 proposing new provisions to clarify the discrepancies between the electrical supply conditions, during the type approval test and during the operation of the vehicle. The experts from France and Italy raised their concerns on the constraints for measuring the voltage and requested complementary specifications. The expert from OICA expressed concern of his organization with regard to the proposal. The

experts from GTB and OICA volunteered to provide Germany with some information on that subject. GRE agreed to resume consideration at its next session on the basis of a revised proposal.

1.1.2.7. Concealment of rear fog lamps

Documentation: TRANS/WP.29/GRE/2003/18.

11. With regard to the OICA proposal for amendments to the Regulation in order to allow the concealment of rear fog lamps (TRANS/WP.29/GRE/2003/18), the expert from the United Kingdom requested to add a specification for an operational tell tale. The experts from the United Kingdom, and the Netherlands maintained their study reservations. The expert from Germany added his study reservation and requested from OICA information regarding safety benefits of their proposal. GRE agreed to resume consideration on this subject at the next GRE session.

1.1.2.8. Conditions for the illumination of stop lamps

Documentation: TRANS/WP.29/GRE/2002/28.

12. With regard to TRANS/WP.29/GRE/2002/28, the expert from the United Kingdom informed GRE on the progress made by GRRF at its fifty-third session regarding the requirements for the generation of a signal by the braking system, which would activate the stop lamps. He reconfirmed GRRF's decision not to advise GRE on a deceleration value, but to provide a trigger signal for the activation of the stop lamps. GRE agreed to urge GRRF in order to provide a final decision on this important subject and to resume consideration at the fifty-second GRE session.

1.1.2.9. Emergency brake light display

Documentation: TRANS/WP.29/GRE/2002/21/Rev.1, TRANS/WP.29/GRE/2002/22/Rev.1, TRANS/WP.29/GRE/2002/43, TRANS/WP.29/GRE/2002/47, TRANS/WP.29/GRE/2003/21; informal documents Nos. 1, 6 and 9 of annex 1 to this report.

13. The expert from Japan introduced informal document No. 9 regarding the results of study on the validity of emergency brake light display. The expert from the Netherlands confirmed that his country also initiated a research study on the use of the rear fog lamp as emergency flashing lamp and that the results of the study were expected to be published at the beginning of 2004. The expert from Germany withdrew TRANS/WP.29/GRE/2002/47. With regard to the automatic signalling of emergency braking, he presented informal document No. 6 proposing a revised text to TRANS/WP.29/GRE/2002/22/Rev.1. The expert from IEC stated that a flashing frequency of 5 Hz would be acceptable for 5 W, but not for 21 W filament light sources. The expert from France introduced informal document No. 1 amending TRANS/WP.29/GRE/2003/21 and clarifying the situation of the automatic switching of the hazard-warning signal. She pointed out that her proposal was more general, and she stated that the automatic switching of the hazard-warning signal could occur not only as the follow-up to the emergency braking, but also in case of other imminent danger situation (e.g. bursting of a tyre, etc.). The expert from OICA stated that his organisation was interested in considering both possibilities at the same time. He added that in case of automatic switching on, the system should switch off automatically and in case of manual switching on, the

system should also be manually switched off. The expert from GTB stated that simultaneous operation of flashing stop lamps and hazard warning signals would create confusion for other road users and should be avoided.

14. Following the discussion, GRE agreed to resume consideration on this subject at its next session. For that purpose, the secretariat was requested to distribute informal document No. 1 as Revision 1 to TRANS/WP.29/GRE/2003/21 and informal document No. 6, including some eventual amendments by Germany with regard to determination of the flash frequency and its duty cycle, if available, as Revision 2 to TRANS/WP.29/GRE/2002/22. Furthermore, it was agreed to keep informal document No. 9 on the agenda of the fifty-second session.

1.1.2.10. Electrical connections

Documentation: TRANS/WP.29/GRE/2003/22; informal document No. 2 of annex 1 to this report.

15. The expert from Germany introduced informal document No. 2 to improve road safety by the introduction of uniform prescriptions for the electrical connections between the towing vehicle and the trailer. Regarding the concern by France about the updating of the references to ISO standards, the expert from GTB confirmed that such references existed already in some Regulations (e.g. Regulation No. 13). As no common position could be reached, GRE agreed to resume consideration of this subject at its next session. For that purpose the secretariat was requested to prepare informal document No. 2 as Revision 1 to TRANS/WP.29/GRE/2003/22.

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

Documentation: TRANS/WP.1/2002/12, TRANS/WP.1/80/Rev.2; informal document No. 10 of annex 1 to this report.

16. The Chairman recalled the purpose of TRANS/WP.1/2002/12 and TRANS/WP.1/80/Rev.2 (formerly TRANS/WP.1/80/Rev.1 and Corr.1). The expert from Japan introduced informal document No. 10 concerning the interim results of a study on the effects of daytime running lights (DRLs) of four-wheeled vehicles on the improvement of their conspicuity vis-à-vis conspicuity of motorcycles under dim ambient light conditions. The expert from the European Commission informed GRE that his organization was also conducting a research study on various issues of daytime running lamps and the impact on other road users. He added that the study was intended to be completed by the end of this year. The expert from Italy informed GRE on the modified regulation regarding the use of DRLs in Italy.

17. GRE agreed to resume its consideration at the fifty-second session, on the basis of the final results of the studies by Japan and the European Commission.

1.1.2.12. Conditions for the installation of lighting and light-signalling devices

Documentation: TRANS/WP.29/GRE/2003/36, TRANS/WP.29/GRE/2003/43; informal document No. 7 of annex 1 to this report.

18. The expert from the United Kingdom introduced informal document No. 7 concerning the interpretation of the requirements for the ability to adjust headlamp aim. With regard to paragraph 5.2. of the Regulation, GRE concluded that only the accessibility of the adjusting devices was addressed by that paragraph. GRE also agreed that all asymmetric lamps should have horizontal and vertical adjustment, and symmetrical lamps should have at least vertical adjustment.

19. The expert from France introduced TRANS/WP.29/GRE/2003/43 proposing a corrigendum to paragraph 6.18.9. (French text only) of the Regulation. GRE adopted the proposal, not amended, and requested the secretariat to submit it to WP.29 and AC.1, as Corrigendum 1 to Supplement 2 to the original version of Regulation No. 48, for consideration at their March 2004 sessions.

20. The expert from Germany presented TRANS/WP.29/GRE/2003/36 proposing to limit allowance of installation of lighting and light-signalling devices to only such devices, which were type approved according to ECE Regulations. As no common position could be found, GRE agreed to resume consideration of this subject at its next session. For that purpose, all delegations were requested to seek advice from their legal departments if a type approval according to ECE Regulation No. 48 obliges the country to accept vehicles equipped with devices not approved in that country.

1.1.3. REGULATION No. 86 (Installation of lighting and light-signalling devices for tractors)

21. The expert from GTB reiterated his position on the elaboration of a new proposal on the optional or mandatory presence of rear marking plates on slow moving vehicles and informed GRE that GTB had at present time no more the intention to present a proposal on that subject. GRE agreed to remove this agenda item and to reintroduce it at a later time point, if necessary.

1.1.4. REGULATION No. 37 (Filament lamps)

Documentation: TRANS/WP.29/GRE/2003/27, TRANS/WP.29/GRE/2003/42; informal document No. 4 of annex 1 to this report.

22. With regard to the proposals TRANS/WP.29/GRE/2003/27 (tabled by IEC) and TRANS/WP.29/GRE/2003/42 (tabled by GTB) proposing updates of the sheets for filament lamps, GRE adopted both documents. The secretariat was requested to submit both documents, not amended, to WP.29 and AC.1, as a proposal for draft Supplement 24 to the 03 series of amendments to Regulation No. 37, for consideration during the March 2004 sessions.

23. The expert from Germany suggested to review the list of sheets and to remove all obsolete filament lamps out of Regulation No. 37. GRE agreed to mandate GTB in order to identify the data sheets of all obsolete filament lamps and to insert in the data sheet of the replacement filament lamps a footnote "for replacement purposes only".

24. The expert from Germany introduced informal document No. 4 proposing the deletion of footnote **/ from all filament lamps emitting red light in order to provide also for stop-lamps the benefits of the replaceability and safety requirements. A large number of delegations supported the proposal and GRE agreed to resume consideration of this subject at the next GRE session, awaiting the results of the interim report of the study regarding effect of phantom-light caused by sunlight or headlamp on function and the colour of signal lamp with a clear lens, conducted by GTB. The secretariat was requested to distribute informal document No. 4 with an official symbol (note by the secretariat: see TRANS/WP.29/GRE/2004/2).

1.1.5. REGULATION No. 99 (Gas-discharge light sources)

Documentation: TRANS/WP.29/GRE/2003/28; informal document No. 13 of annex 1 to this report.

25. The expert from IEC introduced TRANS/WP.29/GRE/2003/28 and informal document No. 13, proposing editorial corrections to the existing text. GRE adopted TRANS/WP.29/GRE/2003/28 with the following amendment to paragraph 3.10., provided by informal document No. 13:

"3.10. UV radiation

The UV radiation of the gas-discharge light source shall be such that:

$$k_{UV} = \frac{\int_{\lambda=250 \text{ nm}}^{400 \text{ nm}} E_e(\lambda) \cdot S(\lambda) \cdot d\lambda}{k_m \cdot \int_{\lambda=380 \text{ nm}}^{780 \text{ nm}} E_e(\lambda) \cdot V(\lambda) \cdot d\lambda} \leq 10^{-5} \text{ W/m}$$

where:
...."

26. The secretariat was requested to transmit TRANS/WP.29/GRE/2003/28, as amended, to WP.29 and AC.1, as a proposal for a draft Corrigendum 1 to Supplement 1 to Regulation No. 99, for consideration during their March 2004 sessions.

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

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

27. The expert from GTB introduced TRANS/WP.29/GRE/2003/32 proposing the alignment of the definition of the colour "selective yellow" in the ECE Regulations with the provisions of the Vienna Convention. As no common agreement could be reached, the expert from GTB suggested to prepare a revised document, including consideration of existing allowance for yellow headlamps in Regulations Nos. 5 and 31 that contradicts provisions of Regulation No. 48. GRE agreed to resume consideration its fifty-second session on the basis of the revised document.

1.2. SIGNALLING AND MARKING DEVICE REGULATIONS

1.2.1. REGULATION No. 3 (Retro-reflecting devices)

Documentation: TRANS/WP.29/GRE/2003/2/Rev.1.

28. Recalling the discussion of the installation on vehicles of triangular retro-reflectors of Class IIIB (para. 8 above), the expert from Finland introduced TRANS/WP.29/GRE/2003/2/Rev.1. GRE adopted the proposal, not amended, and requested the secretariat to submit it to WP.29 and AC.1, as a proposal for draft Supplement 9 to the 02 series of amendments to Regulation No. 3, for consideration during their March 2004 sessions.

1.2.2. REGULATION No. 6 (Direction indicators)

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

29. The expert from GTB introduced TRANS/WP.29/GRE/2003/30 proposing reduction of inboard angles of visibility in case of a failure of one light source in devices having more than one light source. As no common position could be reached, GRE agreed to resume consideration at its next session if revised document by GTB is available.

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

Documentation: TRANS/WP.29/GRE/2003/8, TRANS/WP.29/GRE/2003/31.

30. Recalling the purpose of TRANS/WP.29/GRE/2003/8 proposing new provisions regarding distributed lighting systems, the expert from GTB informed GRE that the work on Revision 1 to the document was still in process. The expert from Germany requested clarifications with regard to fail-safe provisions. GRE agreed to resume consideration on this subject at the next GRE session on the basis of a revised proposal by GTB.

31. As TRANS/WP.29/GRE/2003/31 was addressed for the same purpose than document TRANS/WP.29/GRE/2003/30 (see para. 29 above), the Chairman suggested to resume consideration of this subject at the next GRE session if a revised document by GTB is available.

1.2.4. REGULATION No. 65 (Special warning lamps)

Documentation: TRANS/WP.29/GRE/2002/3/Rev.1.

32. The expert from the United Kingdom introduced TRANS/WP.29/GRE/2002/3/Rev.1 proposing provisions to improve the visibility of vehicles using special warning lamps. GRE adopted the document with the following amendments:

Paragraphs 1.2. to 1.2.7., amend to read:

- " ...
- 1.2.4. the nature of the beam (e.g. rotating or stationary flashing),
 - 1.2.5. the colour of the light emitted,
 - 1.2.6. the light source,
 - 1.2.7. **the** light source module;
 - 1.2.8. ..."

Paragraph 3.3., subparagraph i), delete at the end the word "either" and in subparagraph iii), replace the word "removable" by the word "replaceable".

Paragraph 4.5. (new), amend to read:

- "4.5. **In the case of lamps with light source module(s), the light source module(s) shall**
bear:
- 4.5.1. the trade name ..."

Paragraph 4.6. (renumbered), amend to read:

"... the main body of the special warning **lamp** also comprises the space described in paragraph 3.2. above and bears the approval marks of the actual functions
If different types of special warning lamps comprise the same main body, **it is acceptable, if** an inner part of the optical arrangement ...
..."

Paragraph 7., second subparagraph, correct the word "calorimetric" by the word "colorimetric".

New added annex 9, to be deleted in total.

33. GRE adopted TRANS/WP.29/GRE/2002/3/Rev.1, as amended, and requested the secretariat to submit it to WP.29 and AC.1, as a proposal for draft Supplement 4 to Regulation No. 65, for consideration during their March 2004 sessions.

1.2.5. REGULATION No. 87 (Daytime running lamp)

Documentation: TRANS/WP.29/GRE/2003/15.

34. Recalling the initial consideration of TRANS/WP.29/GRE/2003/15, regarding reduction of DRL illuminating surface, the experts from the Netherlands and Sweden lifted their study reservations. The expert from Germany suggested to add at the end of the proposed sentence the words "if incorporated, combined or grouped with the headlamp". The experts from Japan and the United Kingdom maintained their study reservations, awaiting the results of the study conducted by Japan (para. 16 above).

35. Following the discussion, GRE agreed to resume consideration of this subject at its next session. For that purpose, the expert from GTB volunteered to provide a compatible proposal, based on the outcome of the work within GTB.

1.2.6. MOISTURE TEST FOR LIGHT-SIGNALING DEVICES

36. Recalling the consideration of it last session, GRE agreed to keep this subject on its agenda and to resume consideration at the next GRE session.

1.2.7. REGULATION No. 70 (Rear marking plates)

Documentation: Informal document No. 11 of annex 1 to this report.

37. The expert from Poland agreed to withdraw informal document No. 11 and to submit a new proposal including additional specifications for the rear marking plates. GRE agreed to resume consideration on this subject at its fifty-second session.

1.2.8. COLLECTIVE AMENDMENTS REGARDING COLOUR SPECIFICATIONS

38. Recalling the considerations at its fiftieth session, GRE agreed to insert this agenda item to consider improving colour definitions, expecting for the next session a joint proposal by the United Kingdom and IEC.

1.3. ROAD ILLUMINATION DEVICE REGULATIONS

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

Documentation: TRANS/WP.29/GRE/2002/11, TRANS/WP.29/GRE/2003/23, TRANS/WP.29/GRE/2003/34, TRANS/WP.29/GRE/2003/37; informal documents Nos. 3, 8, 15 and 15 bis of annex 1 to this report.

39. With regard to the consolidated document TRANS/WP.29/GRE/2003/23 defining the "cut-off" line for headlamps, the experts from the United Kingdom and the United States of America requested to include provisions limiting the maximum sharpness for headlamps. The expert from GTB informed GRE that this document was still under consideration within GTB regarding the horizontal aiming of the headlamps and confirmed to take the concerns into account. GRE agreed to postpone to the next session its consideration of TRANS/WP.29/GRE/2003/23 and TRANS/WP.29/GRE/2003/34. For that purpose the secretariat was requested to revise TRANS/WP.29/GRE/2003/23 by inserting the proposed text of informal document No. 3.

40. TRANS/WP.29/GRE/2002/11 was superseded by TRANS/WP.29/GRE/2003/34. The expert from GTB introduced TRANS/WP.29/GRE/2003/34, aiming the insertion of specifications for the harmonized driving beam pattern. The expert from United Kingdom presented informal document No. 8 concerning the marking of headlamps. Following the discussion GRE agreed to resume consideration of both documents at its next session. The secretariat was requested to distribute

informal document No. 8 with an official symbol (note by the secretariat: see TRANS/WP.29/GRE/2004/3 and TRANS/WP.29/GRE/2004/4).

41. The expert from Germany presented TRANS/WP.29/GRE/2003/37 to insert in the Regulation provisions for an additional light source for night vision purposes. The expert from Italy introduced informal document No. 15 amending TRANS/WP.29/GRE/2003/37. Following the discussion, the expert from the European Commission tabled informal document No. 15 bis. GRE adopted the proposal as reproduced in annex 3 to this report. The secretariat was requested to transmit the adopted proposal to WP.29 and AC.1, as draft Supplement 5 to Regulation No. 98, for consideration at their March 2004 sessions.

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

Documentation: TRANS/WP.29/GRE/2002/12, TRANS/WP.29/GRE/2003/24, TRANS/WP.29/GRE/2003/35, TRANS/WP.29/GRE/2003/38; informal documents Nos. 8 and 16 of annex 1 to this report.

42. TRANS/WP.29/GRE/2002/12 was superseded by TRANS/WP.29/GRE/2003/35. GRE agreed to postpone to its fifty-second session the consideration of TRANS/WP.29/GRE/2003/24 and TRANS/WP.29/GRE/2003/35 for the same reasons as mentioned in paragraphs 39 and 40 above. The secretariat was requested to prepare Revision 1 to TRANS/WP.29/GRE/2003/24 on the basis of informal document No. 3.

43. Referring to TRANS/WP.29/GRE/2003/38, the expert from the European Commission introduced informal document No. 16. GRE adopted the proposal as reproduced in annex 4 to this report. The secretariat was requested to transmit the adopted proposal to WP.29 and AC.1, as draft Supplement 4 to Regulation No. 112, for consideration at their March 2004 sessions.

1.3.3. GLARE OF HEADLAMPS

44. GRE noted that no new document was tabled, however, it was agreed to keep this item on the agenda of the fifty-second session.

1.3.4. REGULATION No. 19 (Front fog lamps)

Documentation: TRANS/WP.29/GRE/2003/41.

45. The expert from GTB introduced TRANS/WP.29/GRE/2003/41 to clarify its position with regard to the type approval of front fog lamps of the sealed beam type. GRE preferred to have a concrete proposal for amendments to the Regulation rather to agree on a gentleman agreement. The expert from Germany volunteered to prepare a proposal of amendments to the Regulation, for consideration at the next GRE session.

1.4. MOTORCYCLE LIGHTING AND LIGHT-SIGNALLING REGULATIONS

1.4.1. REGULATIONS Nos. 50, 53 and 74

Documentation: TRANS/WP.29/GRE/2001/25, TRANS/WP.29/GRE/2001/26, TRANS/WP.29/GRE/2001/27, TRANS/WP.29/GRE/2003/3, TRANS/WP.29/GRE/2003/12/Rev.1.

46. Recalling the purpose of TRANS/WP.29/GRE/2001/25, TRANS/WP.29/GRE/2001/26 and TRANS/WP.29/GRE/2001/27, the expert from the United Kingdom maintained his study reservation with regard to allowance for amber front position lamps on motorcycle and confirmed that the work on a possible compromise on this subject was still in progress. With regard to TRANS/WP.29/GRE/2001/26, the expert from Japan stated that paragraph 6.6.7., subparagraph a) was not acceptable.

47. Referring to TRANS/WP.29/GRE/2003/3 tabled by IMMA, the experts from the Netherlands and the United Kingdom raised their concerns regarding safety in case of failure of the headlamp. The expert from the United Kingdom maintained his study reservations on document TRANS/WP.29/GRE/2003/12/Rev.1 (tabled by Japan) regarding automatic activation of headlamps.

48. GRE agreed to resume consideration on these subjects at its next session.

1.4.2. REGULATION No. 113 (Headlamps emitting a symmetrical passing beam)

Documentation: TRANS/WP.29/GRE/2003/26, TRANS/WP.29/GRE/2003/33; informal document No. 3 of annex 1 to this report.

49. GRE adopted TRANS/WP.29/GRE/2003/26 (tabled by IMMA) proposing a correction to TRANS/WP.29/2003/34. The secretariat was requested to submit the proposal to WP.29 and AC.1, as draft Corrigendum 1 to Supplement 2 to Regulation No. 113, not amended, for consideration during their March 2004 sessions.

50. The expert from GTB introduced TRANS/WP.29/GRE/2003/33 and informal document No. 3 regarding the introduction of a definition and measurement of the "cut-off" gradient. The expert from United Kingdom raised his study reservation. GRE agreed to resume consideration at its next session and requested the secretariat to revise the document by inserting the proposed text of informal document No. 3.

2. PROPOSALS FOR NEW REGULATIONS TO BE ANNEXED TO THE 1958 AGREEMENT

2.1. Adaptive Front-lighting System (AFS)

Documentation: TRANS/WP.29/GRE/2002/18, TRANS/WP.29/GRE/2002/18/Add.1.; informal document No. 5 of annex 1 to this report.

51. The expert from GTB shortly reported on the results of the fourth AFS informal meeting, held

in Frankfurt from 15 to 17 July 2003 (informal document No. 5). GRE endorsed the expert group's intention to finalize the outstanding issues at fifth informal meeting of the GRE-AFS working group, scheduled to be held in Bonn (Germany) from 28 to 30 October 2003. GRE agreed to resume consideration of this subject at its next session.

2.2. Amendments concerning the AFS

Documentation: TRANS/WP.29/GRE/2002/20.

52. GRE referred the consideration of TRANS/WP.29/GRE/2002/20 tabled by GTB to the AFS working group (see para. 51).

2.3. Amendments to the measurement coordinate system

Documentation: TRANS/WP.29/GRE/2002/45/Rev.1.

53. GRE referred the consideration of TRANS/WP.29/GRE/2002/45/Rev.1 tabled by the expert from Poland to the AFS working group (see para. 51).

B. 1997 AGREEMENT

3. DRAFT RULE No. 2: UNIFORM PROVISIONS FOR PERIODICAL TECHNICAL INSPECTIONS OF WHEELED VEHICLES WITH REGARD TO THEIR ROADWORTHINESS

Documentation: TRANS/WP.29/2003/16.

54. As agreed during the fiftieth GRE session, the experts timely responded to WP.29's request and considered in depth item 4 of TRANS/WP.29/2003/16 concerning lamps, reflectors and electrical equipment. GRE agreed in principle on the text. Some editorial comments were raised in order to clarify and align the terminology of the text with regard to the new definitions in the ECE Regulations regarding lighting and light-signalling. The Chairman stated his intention to report the results of the discussion within GRE to WP.29 and AC.4 at their November 2003 sessions.

C. 1998 AGREEMENT

4. PROPOSALS FOR NEW REGULATIONS UNDER THE 1998 AGREEMENT

4.1. Installation requirements for lighting and light-signalling devices

Documentation: TRANS/WP.29/GRE/2001/6/Rev.1, TRANS/WP.29/GRE/2003/39; TRANS/WP.29/GRE/2003/40; informal document No. 12 of annex 1 to this report and informal document No. 23 of the fiftieth GRE session.

55. The expert from Germany withdrew his proposals TRANS/WP.29/GRE/2003/39 and TRANS/WP.29/GRE/2003/40 and confirmed to reintroduce them after the adoption of the related proposals for amendments to Regulation No. 48.

56. The expert from the United States of America recalled the purpose of informal document No. 23 of the fiftieth GRE session. He highlighted the unresolved issues with specific provisions in the draft gtr and the United States' regulation as well as proposed solutions. The GRE experts were requested to prepare for in-depth discussion during the next session in order to finalize the proposed solutions. The experts were also requested to provide the expert from the United States, if possible, with comments or research/study data on several items highlighted by informal document No. 23.

57. With regard to the development of a global technical regulation (gtr) concerning lighting and light-signalling, Germany proposed as a first step to define, the position of holes for lighting devices in the bodywork of the vehicles as well as the electrical connections. The performances (colour, presence, photometric requirements, etc.) of the devices would be defined in follow-up gtrs dealing with specific devices. GRE agreed to discuss, during the next session, in more detail informal document No. 23 presented by the United States as well as the German suggestion. GRE also agreed to request WP.29/AC.3 to re-establish an informal group. The secretariat was requested to organize a meeting (without interpretation) of the informal group prior to the fifty-second GRE session, and starting on Monday, 29 March 2004, 14.00 h, to Tuesday, 30 March 2004, 12.30 h.

58. The expert from Canada shortly introduced informal document No. 12 concerning the proposal for the gtr on lighting and light-signalling. GRE agreed to consider the proposal in detail during the next session. For that purpose, the expert from Canada was requested to provide the secretariat with the latest amendments to informal document No. 12 (taking into account the issues raised by informal document No. 23 and the following discussion) in order to be distributed for the next session as Revision 2 to TRANS/WP.29/GRE/2001/6/Rev.1.

D. NEW INVENTIONS

5. Guidelines for the submission and evaluation of petitions concerning international automotive lighting regulations

Documentation: TRANS/WP.29/GRE/2003/35.

59. The secretariat informed GRE about the decision of WP.29/AC.2 during its June 2003 session (see report TRANS/WP.29/926, paras. 6 and 74) not to annex TRANS/WP.29/GRE/2003/35 to the Consolidated Resolution R.E.3, but to consider it together with the document relating to the treatment of interpretation issues by the Contracting Parties (see TRANS/WP.29/2003/100). TRANS/WP.29/GRE/2003/35 was referred back to GRE for reconsideration.

60. GRE agreed to keep this subject on the agenda and to consider its application towards future inventions presented to GRE.

E. ELECTION OF OFFICERS

61. Following the announcement by the secretariat on Monday afternoon, 15 September 2003, and in compliance with Rule 37 of the Rules of Procedure of WP.29 (TRANS/WP.29/690), GRE called the election of officers on Thursday morning. Mr. Marcin Gorzkowski (Canada) was re-elected Chairman for the sessions scheduled for the year 2004, and he thanked the group for its confidence.

F. OTHER BUSINESS

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

Documentation: TRANS/WP.29/GRE/2002/29, TRANS/WP.29/GRE/2002/39.

62. The expert from GTB recalled the purpose of documents TRANS/WP.29/GRE/2002/29 and TRANS/WP.29/GRE/2002/39 regarding the alignment of the in use specifications of the 1968 Vienna Convention on Road Traffic with the construction provisions in the UNECE lighting and light-signalling Regulations.

63. Following the discussion, GRE underlined the importance of that alignment of both regulating tools, and especially annex 5 of the Vienna Convention, with regard to harmonized minimum requirement for the exchange of vehicles in use. GRE agreed to withdraw both documents and to resume consideration of this subject at later time, on the basis of new proposals by GTB.

7.2. General comments on the work of GRE

64. The Chairman recalled his invitation expressed at the previous session (see report TRANS/WP.29/GRE/50, paras. 94 to 96) to review the work protocol of GRE in order to streamline its work results. GRE considered the possibility of consolidating lighting Regulations in order to avoid duplication of text and, as a consequence, a multitude of collective amendments and corrigenda. The expert from Japan underlined the benefit, at present time, of the stand-alone situation of the ECE Regulations and stated that this fact made it easier for Contracting Parties to sign them, Regulation by Regulation. The expert from GTB recalled the streamlined procedure of adoption of new or amended Regulations by the Contracting Parties, introduced by Revision 2 of the 1958 Agreement. In the view of GRE, this fact would make it easier to convince WP.29 of the need to consolidate the lighting Regulations in one or more general Regulation(s). GRE agreed to elaborate the practicability of such a consolidation of lighting Regulations (i.e. by vehicle categories, type of lamps or others).

65. As a result of the discussion, GRE instructed GTB to cease development of a new Regulation for front fog lamps, but to prepare an amendment to the existing Regulation No. 19. With regard to the proposal on adaptive front-lighting systems (AFS), GRE agreed to finalize it, in a first step, as a proposal for a new Regulation and to consider in a further step the insertion of its specific provisions into the existing Regulations.

66. GRE noted the Chairman's intention to establish a "dispute group", dealing arbitrary with the disputes of different interpretations of Regulations by Contracting Parties as well as an "editorial

group" (consisting of members of the Contracting Parties, non-governmental organizations and the secretariat), checking the consistency of the proposal adopted by GRE before their submission to WP.29. GRE agreed to resume consideration of this subject at its next session.

7.3. Declaration of compliance with specific (former) version of an ECE Regulation

Documentation: TRANS/WP.29/2003/44.

67. Following the request by WP.29 (see report TRANS/WP.29/926, para. 76), the secretariat introduced TRANS/WP.29/2003/44 concerning the declaration of compliance with specific (former) version of an ECE Regulation and confirmed that this declaration has no legal implication for the Contracting Parties. The expert from Japan raised his concerns to accept such a procedure, given that the proposed D-marking would give confusion on the market.

68. GRE noted that such specifications already existed in the transitional provisions of some ECE Regulations relating to specific lighting and light-signalling devices.

69. The Chairman stated his intention to inform WP.29 that there was no need to add Regulation No. 10 nor any Regulation relating to lighting or light-signalling devices to the list annexed to that proposal.

AGENDA FOR THE NEXT SESSION

70. For the fifty-second session, scheduled to be held in Geneva, Palais des Nations, from Monday 29 (14.30 h) March 2004 to Friday 2 (until 12.30 h) April 2004, the secretariat refers to the draft agenda, which is available as informal document No. 17 of the fifty-first GRE session on the UNECE WP.29 website:

<http://www.unece.org/trans/main/welcwp29.htm>
(select GRE and find "Informal Documents").

As part of the secretariat's efforts to reduce expenditure, all the official documents as well as the informal documents distributed prior to the session, by mail or placed on the WP.29 web-site, will not be available in the conference room for distribution to session participants. Delegates are kindly requested to bring all relevant r copies of documents to the meeting.

Annex 1

LIST OF INFORMAL DOCUMENTS DISTRIBUTED WITHOUT A SYMBOL

No.	Transmitted by	Agenda item	Language	Title
1.	France	1.1.2.9.	E/F	Proposal for amendments to Regulation No. 48
2.	Germany	1.1.2.10.	E	Proposal for draft amendments to Regulation No. 48
3.	GTB	1.4.2.	E	Proposal for amendment to TRANS/WP.29/GRE/2003/33
4.	Germany	1.1.4.	E	Proposal for draft amendments to Regulation No. 37
5.	AFS/GTB	2.1.	E	Report on the fourth session of the GRE informal group on Adaptive Front-lighting Systems (AFS)
6.	Germany	1.1.2.9.	E	Proposal for draft amendments to Regulation No. 48
7.	United Kingdom	1.1.2.12.	E	Ability to adjust headlamp aim
8.	United Kingdom	1.3.1.	E	UK proposal for headlamp marking
9.	Japan	1.1.2.9.	E	Study on the validity of emergency brake light display
10.	Japan	1.1.2.11.	E	Study on the effects of four-wheeled vehicles' daytime running lights on the improvement of their conspicuity and on the impairment of conspicuity of motorcycles
11.	Poland	1.2.7.	E	Proposal for draft amendments to Regulation No. 70
12.	Canada	4.1.	E	Proposal for a gtr: Uniform provisions concerning vehicles with regard to the installation of lighting and light-signalling devices
13.	IEC	1.1.5.	E	Proposal for draft supplement 3 to Regulation No. 99
14.	United Kingdom	1.1.2.1.	E	UK proposal to amend TRANS/WP.29/GRE/2003/29
15.	Italy	1.3.1.	E	Italian proposal for amendments to TRANS/WP.29/GRE/2003/37
15.	European bis Commission	1.3.1.	E	EC proposal for amendments to TRANS/WP.29/GRE/2003/37
16.	European Commission	1.3.2.	E	EC Proposal for amendments to TRANS/WP.29/GRE/2003/38
17.	Secretariat		E	Draft provisional annotated agenda of the 52nd GRE session

Annex 2

AMENDMENTS TO REGULATION NO. 48 BASED ON INFORMAL DOCUMENT No. 14
ADOPTED BY GRE AT ITS FIFTY-FIRST SESSION (see para. 5 of this report)

Paragraph 2.16.1., amend to read:

"2.16.1. "A single lamp" means:

- a) a device or part of a device having one lighting or light-signalling function, one or more light source(s) and one apparent surface in the direction of the reference axis, which may be a continuous surface or composed of two or more distinct parts, or
- b) any assembly of two independent lamps, whether identical or not, having the same function, both approved as type "D" lamp and installed so that the projection of their apparent surfaces in the direction of the reference axis occupies not less than 60 per cent of the smallest quadrilateral circumscribing the projections of the said apparent surfaces in the direction of the reference axis."

Paragraph 5.7., amend to read:

"5.7. Grouped, combined or reciprocally incorporated lamps

5.7.1. Lamps may be grouped, combined or reciprocally incorporated with one another provided that all requirements regarding colour, position, orientation, geometric visibility, electrical connections and other requirements, if any, are fulfilled.

5.7.1.1. However, where stop lamps and direction indicator lamps are grouped, any horizontal or vertical straight line passing through the projections of the apparent surfaces of these functions on a plane perpendicular to the reference axis, shall not intersect more than two borderlines separating adjacent areas of different colour.

5.7.2. Where the apparent surface of a single lamp is composed of two or more distinct parts, it shall satisfy the following requirements:

5.7.2.1. Either the total area of the projection of the distinct parts on a plane tangent to the exterior surface of the transparent material and perpendicular to the reference axis shall occupy not less than 60 per cent of the smallest quadrilateral circumscribing the said projection, or the distance between two adjacent/tangential distinct parts shall not exceed 15 mm when measured perpendicularly to the reference axis."

Annex 3

AMENDMENTS TO TRANS/WP.29/GRE/2003/37 ADOPTED BY GRE AT ITS FIFTY-FIRST SESSION BASED ON INFORMAL DOCUMENT No. 15 bis (see para. 41 of this report):

Paragraph 6.2.5., amend to read:

"6.2.5. Only one gas-discharge light source is permitted for each passing beam headlamp. A maximum of two additional light sources are permitted as follows:

6.2.5.1. One additional light source inside the passing beam headlamp according to Regulation No. 37 may be used to contribute to bend lighting.

6.2.5.2. One additional light source according to Regulation No. 37, inside the passing beam headlamp, may be used for the purposes of generating infrared radiation. It shall only be activated at the same time as the gas-discharge light source. In the event that the gas-discharge light source fails, this additional light source shall be automatically switched off.

The test voltage for the measurement with this additional light source shall be the same as in paragraph 6.2.5.4.

6.2.5.3. In the event of failure of an additional light source, the headlamp shall continue to fulfil the requirements of the passing beam."

Paragraph 6.2.5.1. (former), renumber as paragraph 6.2.5.4.

Paragraph 6.2.7., amend to read:

"6.2.7. The requirements in paragraph 6.2.6. above shall also apply to headlamps designed to provide bend lighting and/or that include the additional light source referred to in paragraph 6.2.5.2.

6.2.7.1. If bend lighting is obtained by;"

Paragraphs 6.2.7.1. to 6.2.7.3. (former), renumber as paragraphs 6.2.7.1.1. to 6.2.7.1.3.

Annex 4

AMENDMENTS TO TRANS/WP.29/GRE/2003/38 ADOPTED BY GRE AT ITS FIFTY-FIRST SESSION BASED ON INFORMAL DOCUMENT No. 16 (see para. 43 of this report):

Paragraph 6.1.1., amend to read:

"6.1.1. ... illumination when emitting the driving beam."

Paragraph 6.2.9., amend to read:

"6.2.9. The requirements in paragraph 6.2.5. above shall also apply to headlamps designed to provide bend lighting and/or that include the additional light source referred to in paragraph 6.2.10.2.

6.2.9.1. If bend lighting is obtained by;"

Paragraphs 6.2.9.1. to 6.2.9.3. (former), renumber as paragraphs 6.2.9.1.1. to 6.2.9.1.3.

Add paragraph 6.2.10., to read:

"6.2.10. Only one principal light source is permitted for each passing beam headlamp. However, a maximum of two additional light sources are permitted as follows:

6.2.10.1. One additional light source inside the passing beam headlamp according to Regulation No. 37 may be used to contribute to bend lighting.

6.2.10.2. One additional light source according to Regulation No. 37, inside the passing beam headlamp, may be used for the purposes of generating infrared radiation. It shall only be activated at the same time as the principle light source. In the event that the principal light source fails, this additional light source shall be automatically switched off.

6.2.10.3. In the event of failure of an additional light source, the headlamp shall continue to fulfil the requirements of the passing beam."
