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Seventy-first session

Geneva, 31 March - 3 April 2014

Report of the Working Party on Lighting and Light-Signalling on its seventy-first session

Contents

			1 aragrapus	ruge
I.	Atte	endance	1	2
II.	Ado	option of the agenda (agenda item 1)	2-4	3
III.	Dev	velopment of new global technical regulations (agenda item 2)	5	3
IV.	_	gulation No. 37 (Filament lamps) and Regulation No.128 (Light emitting diodes at sources) (agenda item 3)	6-9	3
V.	_	gulation No. 48 (Installation of lighting and light-signalling devices) enda item 4)	10-23	4
	A.	Proposal for amendments to the 04, 05 and 06 series of amendments	10	4
	B.	Proposal for amendments to the 06 series of amendments	11-15	4
	C.	Other amendments to Regulation No. 48	16-22	5
	D.	Vehicle signature	23	6
VI.	Col	lective amendments (agenda item 5)	24-32	6
	A.	Simplification of the approval markings	24	6
	B.	Phantom light and colour washout phenomena in signalling and marking devices	25	6
	C.	Regulations Nos. 53 and 74	26-27	6
	D.	Regulations Nos. 48 and 112	28-29	7

	E.	Regulations Nos. 3, 4, 6, 7, 19, 23, 38, 50, 69, 70, 77, 82, 87, 89, 91, 104, 112, 113, 119 and 123	30-31	7
	F.	Regulations Nos. 6 and 48	32	8
VII.		off Horizontal Reference Document for light-signalling devices enda item 6)	33-40	8
VIII.	Reg	gulation No. 7 (Position, stop and end-outline lamps) (agenda item 7)	41-43	9
IX.	Reg	gulation No. 27 (Advance warning triangle) (agenda item 8)	44	10
X.	Reg	gulation No. 65 (Special warning lamps) (agenda item 9)	45	10
XI.		gulation No. 86 (Installation of lighting and light-signalling devices for icultural tractors) (agenda item 10)	46-49	10
XII.	Coı	nspicuity of motorcycles (agenda item 11)	50	11
XIII.	Oth	ner business (agenda item 12)	51-67	11
	A.	Amendments to the Convention on Road Traffic (Vienna 1968)	51	11
	B.	Decade of action for road safety 2011-2020	52	11
	C.	Development of an International Whole Vehicle Type Approval (IWVTA) .	53-55	11
	D.	Any other business	56-67	12
XIV.	Dir	ection of future GRE work (agenda item 13)	68-69	14
	A.	Work tasks of GRE	68	14
	B.	Work progress of the International Autimotive Lighting and Light	69	15
XV.	Tril	butes	70-71	15
XVI.	Pro	visional agenda for the next session	72	15
Annexes				
I.	Lis	t of informal documents considered during the session		17
II.	Ado	opted amendments to ECE/TRANS/WP.29/GRE/2014/9		19
III.	Adopted amendments to ECE/TRANS/WP.29/GRE/2014/13			20
IV.		opted revised Terms of Reference and Rules of Procedure of the GRE Informal Gr Agricultural Vehicle Lighting Installation (AVLI)		21
V.	GR	E informal groups		23

I. Attendance

1. The Working Party on Lighting and Light-Signalling (GRE) held its seventy-first session from 31 March to 3 April 2014 in Geneva, under the chairmanship of Mr. M. Gorzkowski (Canada). Experts from the following countries participated in the work following Rule 1(a) of the Rules of Procedure of the World Forum for Harmonization of Vehicle Regulations (WP.29) (TRANS/WP.29/690, Amend. 1 and 2): Austria; Belgium; Canada; China; Czech Republic; Finland; France; Germany; Hungary; India; Italy; Japan; the Netherlands; Poland; the Republic of Korea; the Russian Federation; Serbia; Spain; Turkey and the United Kingdom of Great Britain and Northern Ireland (UK). Experts from the European Commission (EC) participated. Experts from the following non-governmental

organizations also took part in the session: European Association of Automotive Suppliers (CLEPA); International Electrotechnical Commission (IEC); International Motorcycle Manufacturers Association (IMMA) and International Organization of Motor Vehicle Manufacturers (OICA). Upon the invitation of the Chair, the experts from the International Automotive Lighting and Light Signalling Expert Group (GTB) and from the European Committee of Associations of Manufacturers of Agricultural Machinery (CEMA) participated.

II. Adoption of the agenda (agenda item 1)

Documentation: ECE/TRANS/WP.29/GRE/2014/1 and Add.1,

Informal documents GRE-71-01-Rev.3, GRE-71-08 and GRE-71-20

- 2. GRE considered and adopted the agenda proposed for the seventy-first session (ECE/TRANS/WP.29/GRE/2014/1 and Add.1) as reproduced in GRE-71-01-Rev.3 (including the informal documents distributed during the session).
- 3. GRE also adopted the running order for the session as proposed in GRE-71-08.
- 4. The list of informal documents is reproduced in Annex I to the report. The list of GRE informal groups is reproduced in Annex V to the report. GRE took note of the official document submission deadline (GRE-71-20) for the October 2014 session of GRE.

III. Development of new global technical regulations (agenda item 2)

Documentation: ECE/TRANS/WP.29/GRE/70, para. 5

5. In absence of new proposals, GRE agreed to defer consideration of this agenda item to its next session.

IV. Regulation No. 37 (Filament lamps) and Regulation No. 128 (Light emitting diodes light sources) (agenda item 3)

Documentation: Informal documents GRE-71-06 and GRE 71-07

- 6. The expert from IEC presented GRE-71-06 with the aim to introduce proper references to the IEC cap sheet numbers, in accordance with IEC Publication 60061, for new categories of light sources WT21W, WTY21W, WT21/7W and WTY21/7W which have been introduced into United Nations (UN) Regulation No. 37. A similar request (GRE 71-07) was also made for new light source category LW2 which had been previously inserted in UN Regulation No. 128.
- 7. The experts from Germany and UK expressed their concerns that, in the past, GRE had approved the respective amendment proposals without the relevant references (i.e. blanks in square brackets) which were not available at that time and which *de facto* required the adoption of an additional supplement for inserting the proper reference at a later stage.
- 8. GRE adopted both proposals and requested the secretariat to submit them to WP.29 and the Administrative Committee of the 1958 Agreement (AC.1) for consideration at their November 2014 sessions as draft Supplement 43 to the 03 series of amendments to UN Regulation No. 37 and draft Supplement 3 to the original series of amendments to UN Regulation No. 128.

9. For the future, GRE decided that amendment proposals introducing new light sources into UN Regulations could only be adopted when completed (i.e. accompanied by the relevant complete reference to the corresponding standard).

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

A. Proposal for amendments to the 04, 05 and 06 series of amendments

Documentation: ECE/TRANS/WP.29/GRE/2014/6

10. The expert from GTB introduced ECE/TRANS/WP.29/GRE/2014/6 to clarify the definitions and requirements associated with the installation of "single lamps", "lamps marked D" and "interdependent lamps". GRE adopted this proposal and requested the secretariat to submit it to WP.29 and AC.1 for consideration at their November 2014 sessions as draft supplements to the 04, 05 and 06 series of amendments to UN Regulation No. 48.

B. Proposal for amendments to the 06 series of amendments

Documentation: ECE/TRANS/WP.29/2011/99 and Corr.1,

ECE/TRANS/WP.29/GRE/2014/11, ECE/TRANS/WP.29/GRE/2013/2,

Informal documents GRE-71-11, GRE-71-15 and GRE-71-32

- 11. The expert from GTB introduced the results of their studies on visibility and glare (GRE-71-15 and GRE-71-32). The study concentrated on levelling in relation to load and its major objectives were to improve the understanding of different factors that influence visibility and glare and to identify results of the study that might reveal alternatives for automatic static levelling. The expert from OICA recalled their presentations on loading definitions and achievable aiming tolerances (see also GRE-67-27 and GRE-68-20).
- 12. The expert from Poland introduced a revised proposal ECE/TRANS/WP.29/GRE/2014/11 on initial aiming of dipped-beam headlamps and considering the original 75 +/- 25 m visibility distance requirement.
- 13. GRE was of the view that the study had pointed out that the type of light source and its luminous flux are not the deciding factors in headlamp glare. Instead, the most important factors seem to be the vehicle pitch angle, loading conditions and initial headlamp aim. Therefore, the light source choice (LED) and the light source 2,000 lm criteria in UN Regulation No. 48 were found unnecessarily restrictive and creating barriers to new technologies. Different views were expressed whether automatic levelling should become a requirement for all categories of vehicles and light sources. Operating voltage was also mentioned as an additional factor of glare.
- 14. GRE invited the experts from Poland, GTB and OICA to submit one coherent proposal for amendments to UN Regulation No. 48 addressing the visibility distance and glare issues to the next GRE session.
- 15. The expert from the Netherlands recalled the GRE considerations, at its sixty-ninth and seventieth sessions, of tell-tale requirements and the possible need for aligning UN Regulation No. 48 with relevant requirements contained in UN Regulation No. 121. Given the complexity of the issue, he suggested continuing with more in-depth discussions on these issues in a smaller group of interested experts (GRE-71-11). Following this request,

GRE consented to establishing a taskforce on tell-tale requirements, for which the expert from the Netherlands would act as Chair and OICA as secretary. GRE decided to keep this issue on the agenda and requested the task force to report on its findings at the next session of GRE.

C. Other amendments to Regulation No. 48

Documentation: ECE/TRANS/WP.29/GRSG/2014/3,

Informal documents GRE-71-03, GRE-71-18, GRE-71-25 and GRE-

71-29

- 16. The secretariat proposed a correction to para. 6.2.7.6.1. of Revision 8 of UN Regulation No. 48 (GRE-71-03). The Chair also proposed the replacement in para. 6.6.7.2. of the incorrect reference to para. 6.22. by para. 6.23. GRE adopted the proposal amended by the Chair and decided to defer the submission of this proposal to WP.29 and AC.1 awaiting the adoption of further corrections that the expert from Italy volunteered to prepare (see para. 17 below).
- 17. The expert from Italy informed the GRE that he had found a number of errors in Regulation No. 48. GRE invited the expert from Italy to submit a document for the next session (see para. 16 above).
- 18. GRE noted that the Working Party on General Safety Provisions (GRSG), at its forthcoming session in May 2014, would consider ECE/TRANS/WP.29/GRSG/2014/3 by Germany proposing to insert into UN Regulation No. 107 (M₂ and M₃ buses) a new requirement to automatically activate hazard warning lights when excess temperature is detected in a rear engine and/or in a heater compartment. The Chair expressed his concern that this signal may be misused unnecessarily in case of heat excess not leading to fire. GRE noted that the right term should be "hazard warning signal". Should this proposal be adopted by GRSG, UN Regulation No. 48 would have to be amended accordingly. Thus, GRE decided to await the outcome of discussion in GRSG and to revert to this issue at the next session on the basis of a proposal for amending UN Regulation No. 48 which the expert from Germany volunteered to submit.
- 19. The expert from France introduced GRE-71-18 proposing two amendments to series 04 and 05 series of amendments to UN Regulation No. 48:
- (a) The first amendment introduced interdependent lamp systems in para. 5.18.4. (b) and was based on ECE/TRANS/WP.29/2014/21 adopted during March 2014 session as a new supplement for 06 series of amendments to UN Regulation No. 48.
- (b) The second amendment suggested that the speed limit in paragraph 6.22.7.4.3 was reduced from 70 to 60 km/h and the requirements of paragraph 6.22.7.4.3(a) was amended to indicate a clear alternative to either detect the motorway conditions with sensors or only activate the E mode above a speed of 110 km/h. The objective of this amendment proposal was to improve the performance of the system by avoiding unnecessary on-off activation of the motorway light.
- 20. GRE adopted proposal (a) above and requested the secretariat to transmit it to WP.29 and AC.1 for consideration at their November 2014 sessions as draft supplement to the 04 and 05 series of amendments to UN Regulation No. 48. GRE decided to come back to proposal (b) at its next session.
- 21. The expert from Germany presented GRE-71-25 introducing flashing side marker lamps for vehicles of categories N_2 , N_3 , O_3 and O_4 , aimed at informing vulnerable road users about the intention of a heavy goods vehicle to make a turn. The experts from Italy, Netherlands and CLEPA delivered a number of comments, in particular suggesting the

extension of this proposal to M_2 and M_3 buses. The expert from Germany volunteered to submit a revised official document for the next session of GRE.

22. The expert from OICA introduced GRE-71-29 proposing the simultaneous lightning of both cornering lamps for slow manoeuvres in forward motion, in order to increase safety. GRE requested the secretariat to distribute this proposal at the next session with an official symbol.

D. Vehicle signature

Documentation: ECE/TRANS/WP.29/GRE/2013/39

23. GRE noted that the expert from Germany had withdrawn ECE/TRANS/WP.29/GRE/2013/39 on the separation of position lamps.

VI. Collective amendments (agenda item 5)

A. Simplification of the approval markings

Documentation: ECE/TRANS/WP.29/GRE/70, para. 15,

Informal document GRE-71-21

24. The secretariat delivered a presentation (GRE-71-21) outlining the progress made in establishing the Database for the Exchange of Type Approval documentation (DETA) which, inter alia, would allow the simplification of the approval markings by implementing the "unique identifier" (UI) function. GRE noted that, until all Contracting Parties adopt the DETA marking scheme, the use of UI may remain optional, unless stated otherwise in a given UN Regulation. GRE agreed to resume consideration of this item at its October 2014 session.

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

Documentation: ECE/TRANS/WP.29/GRE/69, para. 18

25. GRE noted that the activities by GTB on this matter were still ongoing and that their results would soon be submitted to GRE for consideration.

C. Regulations Nos. 53 and 74

Documentation: ECE/TRANS/WP.29/GRE/2013/43/Rev.1

- 26. The expert from Italy introduced ECE/TRANS/WP.29/GRE/2013/43/Rev.1 proposing to delete obsolete references in UN Regulations Nos. 53 and 74. The proposal received some comments. The expert from Italy volunteered to provide a revised proposal to GRE at its October 2014 session.
- 27. The expert from Germany proposed the deletion of the reference to Class B headlamps. Several delegations pointed out that the deletion of Class B headlamps could entail problems for some markets and that transitional provisions would need to be foreseen. GRE agreed to address this issue at its next session on the basis of a written proposal, which the expert from Germany volunteered to prepare.

D. Regulations Nos. 48 and 112

Documentation: ECE/TRANS/WP.29/GRE/2013/62,

Informal document GRE-71-13

- 28. The expert from IEC introduced GRE-71-13 proposing alternatives to ECE/TRANS/WP.29/GRE/2013/62 on electronic light source control gear:
- (a) Restricting the voltage range for (halogen) filament light sources, to avoid (semi-)permanent too low or too high luminous intensity of the headlamp and subsequent shorter lifetime of the filament light source and;
- (b) Inserting a lower voltage limit and verifying that the headlamp performance, in terms of luminous intensity, under the normal operating conditions of the vehicle's electrical system is still compliant with the requirements of UN Regulation No. 112.
- 29. A number of experts delivered remarks on this document. GRE invited other experts to transmit their comments, if any, to IEC and decided to revert to this issue on the basis of a revised document to be prepared by IEC.

E. Regulations Nos. 3, 4, 6, 7, 19, 23, 38, 50, 69, 70, 77, 82, 87, 89, 91, 104, 112, 113, 119 and 123

Documentation: ECE/TRANS/WP.29/GRE/2013/45,

ECE/TRANS/WP.29/GRE/2013/55/Rev.1,

ECE/TRANS/WP.29/2014/3

- 30. Based on an updated proposal tabled by the expert from Italy (ECE/TRANS/WP.29/GRE/2013/55/Rev.1), GRE resumed consideration of the insertion of compliance obligations with installation requirements, at the time of type approval of lighting components, according to the component UN Regulations. While several experts supported the proposal, some others were of the view that the underlying issue might go beyond the competence of GRE and that WP.29 should be asked for guidance. The Chair suggested clarifying and possibly rephrasing the wording "UN Regulations ... and their series of amendments in force at the time of application for type approval". GRE agreed to continue this discussion at the next session and decided that this proposal would become part of a horizontal document collecting common provisions of UN lighting and light-signalling Regulations (see VII below).
- 31. The expert from GTB presented ECE/TRANS/WP.29/2014/3 clarifying the definition of "type" with regard to manufacturer, trade names and marks and to introduce editorial improvements to the requirements for markings. This document superseded ECE/TRANS/WP.29/GRE/2013/45 and GRE-70-02 adopted by GRE at its seventieth session. Various experts identified a number of issues which would require further consideration and clarification. GRE agreed to continue this discussion at the next session and suggested that ECE/TRANS/WP.29/2014/3 become part of a horizontal document collecting common provisions of UN lighting and light-signalling Regulations (see VII below).

F. Regulations Nos. 6 and 48

Documentation: ECE/TRANS/WP.29/GRE/2013/60,

ECE/TRANS/WP.29/GRE/2013/61

32. Having recalled its considerations at the previous session (ECE/TRANS/WP.29/GRE/70, paras. 25 and 26) on direction indicators with variable apparent surface, GRE agreed not to prohibit the use of such indicators for a hazard decided warning signal and to extend the adopted proposals (ECE/TRANS/WP.29/GRE/2013/60 as amended at the seventieth GRE session) to the 06 series of amendments to UN Regulation No. 48. The secretariat was mandated to submit them to WP.29 and AC.1 for consideration at their November 2014 sessions as a new Supplement to the 06 series of amendments to UN Regulation No. 48.

VII. Draft Horizontal Reference Document for light-signalling devices (agenda item 6)

Documentation: ECE/TRANS/WP.29/GRE/2008/32,

Informal documents GRE-59-01, GRE 63-27, GRE-66-13, GRE-66-14, GRE-71-16, GRE-71-17, GRE-71-22, GRE-71-23 and

GRE-71-24

- 33. Having pointing out that the European Union (EU) refers to UN Regulations in its legislation, the expert from EC informed GRE about three concerns that EC and some EU member States have with regard to the GRE scope of activities:
- (a) A large number of GRE-related UN Regulations (forty-one) and their constant updating are a serious burden for the efficient management of the system, both for the United Nations and EU. Consequently, around one third of all documents under the WP.29 umbrella are from GRE. A lot of resources are required for their official translation into various languages, and there is a considerable backlog in this area. Thus, according to the expert from EC, the incurred costs should be minimized by simplifying and streamlining the documentation originating from GRE;
- (b) Some UN Regulations prepared and/or amended by GRE in the past were rather descriptive and not enough performance based. According to the expert from EC, descriptive provisions could, in some cases, distort the market competition and impede new technologies and innovations;
- (c) Too prescriptive and descriptive approach could make UN Regulations less attractive to countries outside the ECE region. According to the expert from EC, probably for this reason two years ago Japan had not adhered to UN Regulation No. 128. Moreover, the United States of America, who has only one regulation related to lighting and light signalling, would oppose developing multitude UN GTRs in this area, given the present number of UN Regulations on this subject. As an alternative example, he mentioned the area of fuel efficiency and emissions where there were fewer documents, that were not too prescriptive, and where the Asian countries supported a new UN GTR which had recently been adopted.
- 34. The expert from EC was also confident that GRE had all the necessary competencies to address these concerns and urged GRE to do so without delay.
- 35. The expert from GTB contributed to the discussion by presenting GRE-71-17 and GRE-71-24 containing some ideas on simplification of lighting and light-signalling UN Regulations. According to him, these UN Regulations are at present a mix of regulatory (legal) and technical aspects which should be separated in the future. A solution could be

found in creating a three-level documentation structure, as proposed in GRE-71-24, where provisions common for different UN Regulations would be put in a single document similar to Consolidated Resolution R.E.3.

- 36. GRE took note of the outcome of the first session of the Special Interest Group (SIG) which had taken place in Brussels on 12 February 2014 and had been attended by 20 experts (GRE-71-16). In particular, SIG was of the view that priority should be given to reducing the administrative burden presented by the numerous collective amendments. To achieve this, SIG proposed to reactivate the GRE Horizontal Reference Document (HRD) Informal Group and to update its Terms of Reference (ToR).
- 37. On behalf of SIG, the expert from EC presented draft ToR of a new informal working group (IWG) (GRE-71-22) and stated that EC would be prepared to act as Co-Chair of IWG. Regarding the position of Chair, he suggested that an EU member State or another Contracting Party assume this role. Before IWG becomes operational, SIG would continue its activities. In this respect, the expert from EC informed GRE that the second meeting of SIG would take place in Brussels during the week 9-13 June 2014.
- 38. GRE had a first exchange of views on the proposed ToR with a particular focus on paras. 2, 3 and 4 of GRE-71-22.
- 39. GRE addressed the issue of the legal implications of placing the common requirements into a horizontal reference document, such as R.E.3 managed by WP.29. The expert from EC and the secretariat pointed out that, if needed, they would seek legal advice from, respectively, EU and United Nations legal services. The secretariat informed GRE that R.E.3 had proved to be very instrumental for all UN Regulations, in particular, with regard to common definitions. In this context, the secretariat also drew the attention of GRE to the work undertaken by the secretariat to harmonize the definitions in lighting and light-signalling UN Regulations (GRE-71-23). GRE requested the SIG to consider this document and consolidate harmonized definitions into the horizontal document.
- 40. The Chair invited experts to consider the underlying issues, in particular the draft ToR of IWG in GRE-71-22 to be discussed at the next SIG session, and to report back to GRE at its next session. He also suggested that the newly proposed IWG take into due consideration ECE/TRANS/WP.29/GRE/2008/32, GRE-59-01, GRE 63-27, GRE-66-13 and GRE-66-14.

VIII. Regulation No. 7 (Position, stop and end-outline lamps) (agenda item 7)

Documentation: ECE/TRANS/WP.29/GRE/2014/5, Informal document GRE-71-02

- 41. GRE noted that the expert from GTB had withdrawn its document ECE/TRANS/WP.29/GRE/2014/5 amending the requirements to clarify the "n-1 rule" provisions in relation to an interdependent lamp system.
- 42. The secretariat informed GRE about complaints on the intensity of (LED) stop lamps which had been reviewed by the secretariat, GRE Chair and Vice-Chair (GRE-71-02). These complaints mainly related to situations such as "stop and go" or standstill at traffic lights where the driver of the following vehicle experienced discomfort and glare due to the high intensity of stop lights. No one seemed to dispute the need for a high intensity light-signal in case of an emergency.
- 43. The Chair recalled that GRE, at its sixty-sixth and sixty-seventh sessions, had already discussed a proposal by GTB to allow for reducing the intensity of stop lamps when

the vehicle speed was below 20 km/h. Due to lack of consensus, this proposal had been withdrawn at that time. GRE was of the view that no study proved any blinding or glare effect specific to LED stops lamps and that the reported complaints were probably related to discomfort problems in a narrow range of urban traffic conditions and that stop lamps were so far performing very well their most important safety function. Therefore, no further action was foreseen by GRE.

IX. Regulation No. 27 (Advance warning triangle) (agenda item 8)

Documentation: ECE/TRANS/WP.29/GRE/70, ECE/TRANS/WP.29/1108

44. No new proposals were submitted under this item. GRE noted that the first part of the proposals for the new 04 series of amendments to UN Regulation No. 27 adopted at the previous session (ECE/TRANS/WP.29/GRE/70, para. 34 and Annex VII) had been subsequently approved by WP.29 and AC.1 at their March 2014 sessions (ECE/TRANS/WP.29/1108, paras. 50 and 75). At the same time, the other part of the proposals dealing with the Conformity of Production requirements adopted at the previous session (ECE/TRANS/WP.29/GRE/70, para. 35) had been referred by WP.29 back to GRE for further considerations (ECE/TRANS/WP.29/1108, para. 51). GRE noted that these proposals would be discussed under agenda item 12 (d) together with other documents returned by WP.29 to GRE for further consideration.

X. Regulation No. 65 (Special warning lamps) (agenda item 9)

Documentation: ECE/TRANS/WP.29/GRE/70, ECE/TRANS/WP.29/1108

45. No new proposals were submitted under this item. GRE noted that the first part of the proposals for the new 04 series of amendments to UN Regulation No. 65 adopted at the previous session (ECE/TRANS/WP.29/GRE/70, para. 36 and Annex X) had been subsequently approved by WP.29 and AC.1 at their March 2014 sessions (ECE/TRANS/WP.29/1108, paras. 50 and 75). At the same time, the other part of the proposals dealing with the Conformity of Production requirements adopted at the previous session (ECE/TRANS/WP.29/GRE/70, para. 37) had been referred by WP.29 back to GRE for further considerations (ECE/TRANS/WP.29/1108, para. 51). GRE noted that these proposals would be discussed under agenda item 12 (d) together with other documents returned by WP.29 to GRE for further consideration.

XI. Regulation No. 86 (Installation of lighting and light-signalling devices for agricultural tractors) (agenda item 10)

Documentation: ECE/TRANS/GRE/2014/2,

Informal documents GRE-71-14 and GRE-71-19

46. The expert from the Netherlands, chairing the informal Group on Agricultural Vehicle Lighting Installation (AVLI), introduced ECE/TRANS/GRE/2014/2 containing the AVLI proposals to update and revise UN Regulation No. 86 with a view to improving the visibility of agricultural vehicles. In particular, the proposals provided for updating the present UN Regulation No. 86 provisions; optional installation of "innovative" lamps (e.g. daytime running lamps, cornering lamps etc.); aligning, where appropriate, the requirements with the corresponding provisions of UN Regulation No. 48.

- 47. To ensure an earlier revision of UN Regulation No. 86, the Chair of AVLI suggested splitting its work into two phases and, to this end, proposed to revise the ToR and rules of procedures of the Group (GRE-71-19). According to the revised ToR, while the first phase should focus on updating the present UN Regulation No. 86 in order to improve the visibility of existing agricultural tractors, the second phase could address extending the scope of the present UN Regulation No. 86 to new categories of vehicles such as agricultural trailers and towed machinery.
- 48. GRE stressed the urgent need for modification of UN Regulation No. 86, which had not been updated for fifteen years, and agreed with the proposed two-phase approach. GRE adopted the revised terms of reference and the rules of procedures of AVLI, reproduced in Annex IV to the report. To avoid the need for transitional provisions, GRE decided to remove the square brackets in paragraphs 6.4.1., 6.10.1. and 6.19.1. of ECE/TRANS/GRE/2014/2, thus making reversing lamps, rear fog-lamps and daytime running lamps optional. GRE requested AVLI to submit to its next session, a revised document ECE/TRANS/WP.29/GRE/2014/2/Rev.1 which would address comments made during the discussion, in particular by the expert from Italy (GRE-71-14).
- 49. GRE noted that, in order to introduce new categories of vehicles into UN Regulation No. 86, the Consolidated Resolution (R.E.3) should be amended accordingly to include such categories. In this context, the expert from IMMA also pointed out differences between the definitions of the L categories of vehicles in R.E.3 and in the EU legislation To inform WP.29 and other GR's about these intentions, GRE mandated its Chair to orally raise these issues at the June 2014 session of WP.29 as well as requested the secretariat to prepare a proposal as soon as possible to ensure their early distribution to other GR's.

XII. Conspicuity of motorcycles (agenda item 11)

50. In absence of any new proposal, GRE agreed to defer consideration of this agenda item to its next session.

XIII. Other business (agenda item 12)

A. Amendments to the Convention on Road Traffic (Vienna 1968)

51. GRE noted that the Working Party on Road Traffic Safety (WP.1) had adopted the definition and allowance for the Advanced Driver Assistance Systems (ADAS). WP.1 had not yet concluded its consideration of the GRE draft proposals for amendments to the Vienna 1968 Convention regarding lighting and light-signalling (ECE/TRANS/WP.1/2011/4/Rev.3) and had postponed this issue to the next session of WP.1 in September 2014.

B. Decade of action for road safety 2011-2020

52. As no information was reported under this item, GRE agreed to defer it to the next session.

C. Development of an International Whole Vehicle Type Approval (IWVTA)

Documentation: ECE/TRANS/WP.29/GRE/2014/12,

Informal document GRE-70-30

- 53. The Secretary to AC.1 reported on the progress in preparing Revision 3 of 1958 Agreement, including UN Regulation No. 0 on IWTA (ECE/TRANS/WP.29/2014/53 and WP.29-162-04), as well as the proposed revised guidelines for supplements and series of amendments to UN Regulations (WP.29-162-18) whose main elements are as follows:
- (a) Contracting Parties may apply former versions of UN Regulations, "graved in stone";
- (b) establish common date (e.g. 1 September each year) of entry into force of new series of amendments to UN Regulations;
- (c) only one new series of amendments per year would be allowed;
- (d) in case of several series of amendments in force, for every supplement the respective GR and WP.29 should indicate the series of amendments it refers to. The secretariat should prepare separate documents for each series of amendments for adoption by WP.29 and AC.1;
- (f) the guidelines for transitional provisions established by WP.29 (ECE/TRANS/WP.29/1044/Rev.1) would be amended accordingly.
- 54. GRE took note of the above information and expressed no objections to setting the common annual date of entry into force of new series of amendments on 1 September.
- 55. The experts from Finland and Japan presented ECE/TRANS/GRE/2014/12 amending UN Regulation No. 4 (Rear registration plate lamps) for the purposes of IVWTA and introducing provisions for illuminating registration plates of five different sizes (categories) which are currently used around the world. When applying for the first approval or at a later stage, the applicant should indicate the category(ies) which the device is intended to illuminate. GRE adopted the proposal and requested the secretariat to submit it to WP.29 and AC.1 for consideration at their November 2014 sessions as draft Supplement 18 to UN Regulation No. 4.

D. Any other business

Documentation: ECE/TRANS/WP.29/GRE/2013/64/Rev.1,

ECE/TRANS/WP.29/GRE/2013/65/Rev.1,

ECE/TRANS/WP.29/2013/68, ECE/TRANS/WP.29/2013/69, ECE/TRANS/WP.29/2013/71, ECE/TRANS/WP.29/2013/72, ECE/TRANS/WP.29/2013/75, ECE/TRANS/WP.29/2013/76, ECE/TRANS/WP.29/2013/79, ECE/TRANS/WP.29/2013/83, ECE/TRANS/WP.29/2013/84, ECE/TRANS/WP.29/2013/85, ECE/TRANS/WP.29/2013/86, ECE/TRANS/WP.29/2013/87, ECE/TRANS/WP.29/2013/88, ECE/TRANS/WP.29/2013/89, ECE/TRANS/WP.29/2013/90, ECE/TRANS/WP.29/2013/92, ECE/TRANS/WP.29/2013/93, ECE/TRANS/WP.29/2013/94, ECE/TRANS/WP.29/2014/31, ECE/TRANS/WP.29/2014/32,

ECE/TRANS/WP.29/1106, para. 54, ECE/TRANS/WP.29/1108, para. 51, (ECE/TRANS/WP.29/GRE/2013/19), ECE/TRANS/WP.29/GRE/2014/4,

ECE/TRANS/WP.29/GRE/2014/7, ECE/TRANS/WP.29/GRE/2014/8, ECE/TRANS/WP.29/GRE/2014/9,

ECE/TRANS/WP.29/GRE/2014/10,

Informal documents GRE-71-04, GRE-71-05, GRE-71-09, GRE-71-10, GRE-71-12-Rev.1, GRE-71-26, GRE-71-27, GRE-71-28, GRE-71-30 and GRE-71-31

- 56. The expert from GTB introduced ECE/TRANS/WP.29/GRE/2014/4 proposing to amend the requirements of failure indication by removing the differentiation between filament and LED light sources. GRE adopted this proposal and requested the secretariat to submit it to WP.29 and AC.1 for consideration at their November 2014 sessions as draft Supplement 26 to the 01 Series of UN Regulation No. 6.
- 57. The expert from IMMA presented ECE/TRANS/WP.29/GRE/2014/7 with a proposal to amend UN Regulation No. 50, as further corrected by GRE-71-04 and GRE-71-12-Rev.1, introducing the possibility of interdependent lamps for dedicated motorcycle lamps. The expert from India also presented GRE-71-30 containing an amendment to this proposal. GRE generally supported the proposal but, given the late submission of GRE-71-30, decided to revisit this issue at its next session on the basis of a revised document ECE/TRANS/WP.29/GRE/2014/7/Rev.1 to be prepared by IMMA.
- 58. The expert from IMMA proposed ECE/TRANS/WP.29/GRE/2014/8 to introduce the possibility of installing interdependent lamps for L3 category vehicles in UN Regulation No. 53, together with additional editorial corrections. GRE felt that these amendment proposals should be aligned with the proposed amendments to UN Regulation No. 48 (agenda item 4 (a)) and decided to revert to this issue at its next session on the basis of a revised document to be prepared by IMMA.
- 59. The expert from IMMA introduced ECE/TRANS/WP.29/GRE/2014/9 with a proposal for amendments to UN Regulation No. 53 to allow for the use of different brake lamp activation methods for Powered Two Wheelers (PTWs) as well as to introduce the concept of a high-mounted stop lamp to PTWs to improve the conspicuity of the vehicles during stopping. GRE adopted this proposal, as amended by Annex II to this report and requested the secretariat to submit it to WP.29 and AC.1 for consideration at their November 2014 sessions as a new Supplement to the 01 series of amendments to UN Regulation No. 53.
- 60. The expert from IMMA presented ECE/TRANS/WP.29/GRE/2014/10 with a proposal to correct typographical errors introduced during the previous amendment to UN Regulation No. 113 (ECE/TRANS/WP.29/2012/83). GRE adopted this proposal as a new Supplement to the 01 series of amendments to UN Regulation No. 113 and requested the secretariat to submit it to WP.29 and AC.1 for consideration at their November 2014 sessions.
- 61. The expert from CLEPA presented revised proposals ECE/TRANS/WP.29/GRE/2013/64/Rev.1 and ECE/TRANS/WP.29/GRE/2013/65/Rev.1, introducing requirements for a new class 5 of devices into UN Regulation No. 70 and requirements and for a new class F of devices into UN Regulation No. 104. GRE adopted this proposal and requested the secretariat to submit it to WP.29 and AC.1 for consideration at their November 2014 sessions as a new Supplement to the 01 series of amendments to UN Regulation No. 70 and as a new Supplement to the original text of UN Regulation No. 104.
- 62. The expert from CLEPA also proposed ECE/TRANS/WP.29/GRE/2014/13 introducing a new class F of retro-reflecting materials into UN Regulation No. 48, to be applied to special utility vehicles or trailers not regularly covered by standard contour marking materials. GRE adopted this proposal, as amended by Annex III to this report and requested the secretariat to submit it to WP.29 and AC.1 for consideration at their November 2014 sessions as a new Supplement for the 04, 05 and 06 series of amendments to UN Regulation No. 48.

- 63. The expert from Japan introduced GRE-71-27 and GRE-71-28, proposing to insert a new footnote to read "The Contracting Parties applying this UN Regulation may prohibit the use of Retro-Reflecting materials approved as Class F on the basis of national regulations." GRE concluded that it is obvious even without such a footnote that the Contracting Parties may prohibit the use of such materials. As a result of discussion, these informal documents were withdrawn.
- 64. The secretariat proposed editorial changes to Amendment 3 to Revision 5 of UN Regulation No. 6, as contained in GRE-71-05. GRE adopted this proposal and requested the secretariat to take this editorial correction into consideration when issuing Revision 6 to the UN Regulation.
- 65. The expert from Belgium introduced GRE-71-26 proposing amendments to UN Regulation No. 10 with regard to electromagnetic compatibility of trolleybuses, with a view to aligning the additional safety prescriptions for trolleybuses (Annex 12 to UN Regulation No. 107) with the corresponding electrical standards (see ECE/TRANS/WP.29/GRSG/2013/16). GRE invited the expert from Belgium to re-submit his contribution as official document for consideration at the next session.
- GRE noted that WP.29, at its November 2013 and March 2014 sessions, had referred back to GRE a number of documents due to concerns over the conformity of production (CoP) provisions in the proposed amendments to UN Regulations Nos. 3, 4, 6, 7, 19, 23, 27, 38, 50, 65, 69, 70, 77, 87, 91, 98, 112, 113 and 119 (see ECE/TRANS/WP.29/1106, para. 54 and ECE/TRANS/WP.29/1108, para. 51). GRE reviewed the common wording of these documents and agreed to delete the text in parenthesis mentioning "light sources manufacturers" (e.g. see para. 10.3 in ECE/TRANS/WP.29/2013/79) To make progress, GRE agreed to take the CoP provisions out from these documents and put them in a horizontal document (see paras. 31-38 above) for further consideration. The secretariat was requested to delete the proposed amendments to the CoP provisions and CoP annexes of these documents. If any of these documents contained also other amendments, the secretariat was requested to prepare revisions of these documents and to re-submit them to WP.29 and AC.1 at their November 2014 sessions. Experts were invited to verify the content of the revised documents in advance and report on identified problems, if any, at the next session GRE session in October 2014. The experts from Austria and CLEPA expressed concerns that referring the extracted CoP provisions to a horizontal document might lead to a substantial delay in their adoption.
- 67. The expert from France introduced GRE-71-09 and GRE-71-10 proposing to delete an unjustified design restrictive requirement of a minimum luminous flux of 1,000 lm for LED's in UN Regulations Nos. 112 and 123. While several experts supported this proposal, some others pointed out that those alternative criteria should be developed to guarantee a minimum performance of LED light sources. GRE decided to revert to this issue at the next session and requested the secretariat, in cooperation with the expert from France, to re-issue GRE-71-09 and GRE-71-10 as official documents.

XIV. Direction of future GRE work (agenda item 13)

A. Work tasks of GRE

Documentation: ECE/TRANS/WP.29/2012/119

68. GRE agreed to deal with this agenda item together with item 6.

B. Work progress of the International Automotive Lighting and Light Signalling Expert Group (GTB) task forces

Documentation: Informal documents GRE-71-33, GRE-71-34, GRE-71-35 and GRE-71-36

69. The expert from GTB presented a status report of the GTB Working Group activities (GRE-71-33, GRE-71-34, GRE-71-35 and GRE-71-36).

XV. Tributes

- 70. GRE was informed about the new responsibilities of Ms. Darnoux, Mr. Sakai and Mr. Tsuburai who would no longer attend the GRE sessions. GRE thanked them for their contributions and wished them all the best in their new responsibilities.
- 71. GRE was informed about the new responsibilities of Mr. Guichard, who would no longer be the GRE Secretary. GRE thanked Mr. Guichard for his contributions and wished him all the best in his new responsibilities. GRE also welcomed Mr. Glukhenkiy (konstantin.glukhenkiy@unece.org) as new Secretary to GRE.

XVI. Provisional agenda for the next session

- 72. The following provisional agenda was adopted for the seventy-second session of GRE, scheduled to be held in Geneva from 20 October 2014 (starting at 09.30 a.m.) to 22 October 2014 (concluding at 17.30 p.m.):
- 1. Adoption of the agenda.
- 2. 1998 Agreement UN Global Technical Regulations (UN GTR).
- 3. 1997 Agreement UN Rules.
- 4. 1958 Agreement UN Regulations.
 - (a) UN Regulations Nos. 37 and 128.
 - (b) UN Regulation No. 48 (Installation of lighting and light-signalling devices):
 - (i) Proposal for amendments to the 04, 05 and 06 series of amendments;
 - (ii) Proposal for amendments to the 06 series of amendments;
 - (iii) Other amendments to UN Regulation No. 48;
 - (iv) Vehicle signature.
 - (c) Draft Horizontal Reference Document and collective amendments.
 - (d) UN Regulation No. 7 (Position, stop and end-outline lamps).
 - (e) UN Regulation No. 27 (Advance warning triangle).
 - (f) UN Regulation No. 65 (Special warning lamps).
 - (g) UN Regulation No. 86 (Installation of lighting and light-signalling devices for agricultural tractors).
 - (h) Conspicuity of motorcycles.
 - (j) Other business:

- (i) Amendments to the Convention on Road Traffic (Vienna 1968);
- (ii) Decade of action for road safety 2011-2020;
- (iii) Development of an International Whole Vehicle Type Approval (IWVTA);
- (iv) Any other business.
- (k) Direction for future GRE work:
 - (i) Work tasks of GRE;
 - (ii) Work progress of the International Automotive Lighting and Light Signalling Expert Group (GTB) task forces.
- 5. Election of officers.

Annex I

List of informal documents considered during the session

Informal documents GRE-71-...

No.	(Author) Title	Follow- up
1r3	(Secretariat) Updated provisional agenda of the 71st GRE session	b
2	(Secretariat) Complaints about the intensity of (LED) stop lamps	f
3	(Secretariat) Proposal for amendments to Revision 8 of UN Regulation No. 48	b - d
4	(Secretariat) Proposal for an amendment to ECE/TRANS/WP.29/GRE/2014/7	f
5	(Secretariat) Proposal for amendments to Amend.3 to Rev. 5 of UN Regulation No. 6	a
6	(IEC) Proposal for Supplement 43 to the 03 series of amendments to UN Regulation No.37	a
7	(IEC) Proposal for Supplement 3 to the original series of amendments to UN Regulation No.128	a
8	(Chair) Running order of the provisional agenda of the 71st session of GRE	a
9	(France) Proposal for Supplement to the 01 series of amendments to Regulation No. 112	c
10	(France) Proposal for Supplement to the 01 series of amendments to Regulation No. 123	c
11	(Netherlands) Tell-tale requirements in Regulation No. 48 versus Regulation No. 121	e
12	(IMMA) Amendments to ECE/TRANS/WP.29/GRE/2014/7	g
12r1	(IMMA) Amendments to ECE/TRANS/WP.29/GRE/2014/7	e
13	(Germany, Netherlands and IEC) Alternatives to ECE/TRANS/WP.29/GRE/2013/62	e
	on electronic light source control gear	
14	(Italy) Revision of UN Regulation No.86 - Lighting installation for agricultural tractors	d
15	(GTB) Study on Visibility and Glare	f
16	(Special Interest Group of Experts) Simplification of Lighting Regulations	f
17	(GTB) Simplification of UN Lighting and Light-Signalling Regulations	d
18	(France) Proposal for a Supplement to the 04 series of amendments and a Supplement to the 05	b
	series of amendments to Regulation No. 48	
19	(AVLI) Revised ToR and RoP of Agricultural Vehicle Lighting Installation IWG	b
20	(Secretariat) 71st GRE: General Information & WP.29 highlights	f
21	(Secretariat) Status report on DETA	f
22	(Special Interest Group of Experts) Draft ToR and RoP of the [Simplification of the UN Lighting	e
	and Light-Signalling Regulations IWG]	
23	(Secretariat) Definitions in Lighting and Light-Signalling Regulations	f
24	(GTB) Simplification of Lightings and Light-Signalling Regulations	f
25	(Germany) Proposal to amend UN regulation No. 48 concerning the activation of side marker	С
	lamps for turning heavy goods vehicles	
26	(Belgium) Proposal for amendments to UN Regulation No. 10 (EMC)	С
27	(Japan) Proposal for amendments to ECE/TRANS/WP.29/GRE/2014/13	g
28	(Japan) Proposal for amendments to ECE/TRANS/WP.29/GRE/2013/65/Rev.1	g
29	(OICA) Proposal for amendments to the 04, 05 and 06 series of amendments of Regulation	c
	No. 48	

ECE/TRANS/WP.29/GRE/71

No.	(Author) Title	Follow- up
30	(India) India's comments on ECE/TRANS/WP.29/GRE/2014/7	e
31	(India) India's comments on ECE/TRANS/WP.29/GRE/2014/9	g
32	(GTB) Study on Visibility and Glare	f
33	(GTB) GTB Working Group on Signal Lighting: Status Report	f
34	(GTB) GTB Working Group on Light Sources: Status Report	f
35	(GTB) GTB Working Group on Installation: Status Report	f
36	(GTB) (Post session) Triangular Retro Reflector	d

Notes:

- (a) Endorsed or adopted without amendment;
- (b) Endorsed or adopted with amendments;
- (c) Resume consideration on the basis of a document with an official symbol;
- (d) Kept as reference document/continue consideration;
- (e) Revised proposal for the next session;
- (f) Consideration completed or to be superseded;
- (g) Withdrawn.

Annex II

Adopted amendments to ECE/TRANS/WP.29/GRE/2014/9

Paragraph 6.4.3.2., amend to read:

"6.4.3.2. For the category S3 device specified in UN Regulation No. 7

In height: The horizontal plane tangential to the lower edge of the apparent surface shall not be less than 850 mm above the ground.

However, the horizontal plane tangential to the lower edge of the apparent surface shall be above the horizontal plane tangential to the upper edge of the apparent surface of the category S1 device specified in UN Regulation No. 7 or stop lamp specified in UN Regulation No. 50.

In length: at the rear of the vehicle."

Annex III

Adopted amendments to ECE/TRANS/WP.29/GRE/2014/13

Paragraph 2.47.16.4., amend to read:

"2.47.16.4. Retro-Reflecting materials approved as Class D or E **or F** according to UN Regulation No. 104 and used for other purposes in compliance with national requirements, e.g. advertising."

Annex IV

Adopted revised Terms of Reference and Rules of Procedure of the GRE Informal Group on Agricultural Vehicle Lighting Installation (AVLI)

I. Terms of Reference

- 1. The informal group shall in a first phase update the present UN Regulation No. 86 in order to align it with the state of the art of existing agricultural tractors with the aim to improve their visibility.
- 2. The informal group will use as a basis for the discussions the present UN Regulation No. 86 and the proposals from CEMA and Italy submitted and presented during the sixty-ninth session of GRE, held in Geneva (8 11 April 2013).
- 3. The informal group will in a second phase consider extending the scope of the present UN Regulation No. 86, including agricultural trailers and towed machinery. The inclusion of such other vehicle categories in the Consolidated Resolution (R.E.3) will be left for decision by GRE and WP.29.
- 4. The informal group shall not include novel lighting or light-signalling devices which are not specified yet within the UNECE 1958 Agreement.
- 5. The informal group shall not include installation requirements for the special warning lamp according to UN Regulation No. 65, due to conflicts with national legislation of the Contracting Parties.
- 6. The target completion date for the first phase of the work of the informal group shall be the seventy-second session of GRE in September 2014. The target completion date for the second phase shall be the seventy-fourth session of GRE in the fall of 2015.
- 7. The informal group is intended to propose to GRE amendments to UN Regulation No. 86. The adoption process remains the responsibility of GRE, WP.29 and AC.1 in line with the rules defined by the 1958 Agreement.

II. Rules of Procedure

- 1. The informal group is a subgroup of GRE, and is open to Contracting Parties, Vehicle Manufacturers and Suppliers, Technical Services, Automotive Lighting Experts, etc.
- 2. A Chair, a Co-Chair and a Secretary will manage the informal group.
- 3. The official working language of the informal group will be English.
- 4. All documents and/or proposals must be submitted to the Secretary of the group in a suitable electronic format in advance of the meeting. The group may refuse to discuss any item or proposal which has not been circulated 10 working days in advance.
- 5. An agenda and related documents will be made available on the website by the Secretary of the group, in advance of all scheduled meetings.
- 6. Decisions will be reached by consensus. When consensus cannot be reached, the Chairs of the group shall present the different points of view to GRE. The Chairs may seek guidance from GRE as appropriate.
- 7. The progress of the informal group will be routinely reported to GRE wherever possible as an informal document and presented by the Chairmen, the Secretary or their representative(s).

8. All working documents shall be made available by the Secretary on the website of the group: www2.unece.org/wiki/pages/viewpage.action?pageId=5802511.

Annex V

GRE informal groups

Informal group	Chair	Secretary
Agricultural Vehicle Lighting Installation (AVLI)	Mr. Gerd Kellermann (Germany) Phone: +49 228 300 43 04 Fax: +49 228 300 807 43 04 E-mail: gerd.kellermann@bmvbs.bund.de and Mr. Derwin Rovers (The Netherlands) Phone: +31 793458230 Fax: +31 793458041 E-mail: drovers@rdw.nl	Mr. Andreas Schauer (CEMA) Phone: +49 69 66 01 1308 Fax: +49 69 66 03 1464 E-mail: andreas.schauer@vdma.org