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Working Party on Brakes and Running Gear

Seventy-third session

Geneva, 18–20 September 2012

### Report of the Working Party on Brakes and Running Gear on its seventy-third session (18–20 September 2012)

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### I. Attendance

The Working Party on Brakes and Running Gear (GRRF) held its seventy-third session from 18 to 20 September 2012 in Geneva. The meeting was chaired by Mr. B. Frost (United Kingdom). 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, ECE/TRANS/WP.29/690/Amend.1 and Amend. 2): Australia, Belgium, Canada, China, Czech Republic, Denmark, Finland, France, Germany, Hungary, India, Italy, Japan, Netherlands, Norway, Poland, Republic of Korea, Russian Federation, Slovakia, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland and United States of America. Experts from the European Commission (EC) also participated. Experts from the following non-governmental organizations participated: European Association of Automobile Suppliers (CLEPA), International Motorcycle Manufacturers Association (IMMA), International Organization for Standardization (ISO), and International Organization of Motor Vehicle Manufacturers (OICA). Upon the special invitation of the Chair, experts from the following non-governmental organizations participated: the International Association of the Body and Trailer Building Industry (CLCCR), the European Tyre and Rim Technical Organisation (ETRTO) and Federation of European Manufacturers of Friction Materials (FEMFM).

### II. Adoption of the agenda (agenda item 1)

Documentation: ECE/TRANS/WP.29/GRRF/2012/15,

ECE/TRANS/WP.29/GRRF/2012/15/Add.1,

Informal document GRRF-73-01

2. GRRF adopted the agenda ECE/TRANS/WP.29/GRRF/2012/15, its Add.1 and the running order GRRF-73-01 without changes.

### III. Advanced Emergency Braking Systems (agenda item 2)

Documentation: ECE/TRANS/WP.29/2011/93/Amend.1,

ECE/TRANS/WP.29/2011/92/Amend.1,

Informal documents AEBS-LEDW-01-07-Rev.3 and

AEBS-LDWS-17-02-Rev.1.

3. The expert from the EC reported on the progress made by the informal group on Advanced Emergency Braking Systems (AEBS). He presented an amendment to the Terms of Reference (AEBS-LEDW-01-07-Rev.3) necessary for completing the second step of work by the Informal Group. GRRF endorsed this amendment as reproduced in Annex II to this reminded the Working Party that ECE/TRANS/WP.29/2011/92/Amend.1 and ECE/TRANS/WP.29/2011/93/Amend.1 were listed on the agenda of the November 2012 session of WP.29. He expected that the European Union would be in position to vote at that session.

4. GRRF noted that the informal group resumed its work on technical requirements on AEBS for vehicles of the category N<sub>2</sub> below eight tons as well as the category M<sub>2</sub>. OICA presented their review of the issues associated with applying the technology to these vehicle classes noting the lack of real world experience (AEBS-LDWS-17-02-Rev.1). The expert from the EC reminded GRRF about the tight time line and the necessity to produce an informal document before the next session of GRRF to finish the work on time. GRRF noted the intention of the informal group to convene again in Paris on 7 December 2012 and in Geneva on 18 February 2013.

## IV. Regulations Nos. 13 and 13-H (Braking) (agenda item 3)

#### A. Electronic Stability Control (ESC)

Documentation: Informal documents GRRF-72-02 and GRRF-72-17.

- 5. The expert from OICA noted the lack of support for GRRF-72-02 and withdrew the document. GRRF agreed to remove this item from the agenda.
- 6. The Chair of the informal working group on "Alternative Method to assess the Electronic Vehicle Stability Control system" (AMEVSC) reported on the progress made by the group on the use of test reports according to Annex 19 of UN Regulation No. 13. He underlined the discussion that took place within the group on the rights and obligations when using a procedure of test reports linked to the 1958 Agreement and noted the progress made in understanding the differing acceptance of test reports by Contracting Parties. He volunteered to prepare an informal document for the next session of GRRF, providing answers to the questions raised during the discussion. The expert from CLEPA withdrew GRRF-72-17.

#### B. Trailer braking

- 7. The expert from Denmark informed GRRF about the outcome of an informal meeting held in Brussels on 26 June 2012 dealing with the truck and trailer brake compatibility, coupling force control, and test points for Periodical Technical Inspections (PTI). He advised that the experts from OICA and CLEPA had provided the group with information about the functionalities of a coupling force control device. The group had noted that some studies have been done prior to the entry into force of the recent provisions on compatibility of truck and trailer brakes. The group had concluded that some time was necessary to permit the market penetration of the new technologies required by the latest series of amendments to UN Regulation No. 13. The group had concluded that the problem raised by Denmark is expected to be resolved as the new provisions in UN Regulation No. R13 take effect.
- 8. GRRF decided to remove this item from the agenda.

### C. Automated Connections between Vehicles (ACV)

Documentation: Informal documents GRRF-73-09 and GRRF-73-15.

- 9. The expert from Sweden, chairing the informal group on Automated Connections between Vehicles (ACV), reported on the progress made by the group (GRRF-73-09). The informal group produced the informal document GRRF-73-15 proposing to amend UN Regulation No. 13 with provisions for Automated Connections between Vehicles. Following a discussion on the interoperability and safety provided by such systems, GRRF requested the informal group to provide some clarifications and a risk analysis for consideration at the next session of GRRF.
- 10. The expert from Sweden sought GRRF's guidance on the part of the mandate of ACV informal group with respect to road trains. Some governmental experts expressed their wish to work on this matter. The expert from CLEPA reminded GRRF about the existence of GRRF-66-08. This document will be reinserted into the agenda of the next session of GRRF. At the request of the informal group, the chair provided guidance on the prioritization of work, proposing to finish the work on ACV and then to start to work on road trains. In this respect, the chair requested the informal group to review the terms of reference of ACV and to prepare an updated version if necessary.

#### **D.** Clarifications

Documentation: ECE/TRANS/WP.29/GRRF/2012/2,

ECE/TRANS/WP.29/GRRF/2012/11, ECE/TRANS/WP.29/GRRF/2012/21, ECE/TRANS/WP.29/GRRF/2012/34,

Informal documents GRRF-73-02, GRRF-73-06,

GRRF-73-09 and GRRF-73-14.

- 11. The expert from OICA introduced a proposal for editorial corrections to Regulation No. 13 (GRRF-73-02). GRRF agreed to two of the three proposed changes and adopted the proposal as reproduced in Annex 3 to this report. The secretariat was requested to submit it to WP.29 and AC.1 for consideration at their March 2013 session as Corrigendum 2 to UN Regulation No. 13.
- 12. GRRF noted the state of discussions in WP.29 on dynamic or static references to other UN Regulations and private standards. GRRF welcomed the recommendation to proceed on a case by case approach. The expert from Japan introduced a proposal to insert in Regulations Nos. 13 and 13-H a reference to Regulation No. 10 and its 04 series of amendments. The experts from OICA and CLEPA proposed to make a reference to the 03 series, as the 04 series only defines new requirements for hybrid electric vehicles (HEV) and electric vehicles (EV) vehicles. OICA recalled the purpose of ECE/TRANS/WP29/GRRF/2011/34 and especially the justification part. GRRF agreed to resume the discussion at its next session. For this purpose, the Chair requested the secretariat to distribute GRRF-73-14 with an official symbol, to keep ECE/TRANS/WP.29/2012/21 and to reinsert ECE/TRANS/WP.29/2012/34 on the agenda.

- 13. The expert from Belgium recalled the work progress (GRRF-73-09) made by the informal group on AMEVSC proposing updated provisions of Annex 21 (and its appendix) to UN Regulation No. 13 dealing with the use of simulation tools duly validated to prove compliance of the vehicle stability function (ECE/TRANS/WP.29/GRRF/2012/2). The Secretary introduced GRRF-73-06. GRRF was supportive of the proposal but raised some detailed issues. The Chair invited GRRF to provide the Secretary of the informal group with written comments to allow a revision to be prepared as an official document for consideration by GRRF at its next session .
- 14. The Chair recalled the purpose of ECE/TRANS/WP.29/GRRF/2012/11 and GRRF-72-28 on the introduction of an electro-hydraulic transmission for electrical brake systems. The expert from the Netherlands reported on a first meeting with Germany and his intention to produce an enhanced proposal for consideration at the next session. GRRF agreed to resume the discussion at its next session, keeping these documents as a reference.

### E. Braking symbols in Regulation No. 121 (Identification of controls, tell-tales and indicators)

Documentation: ECE/TRANS/WP.29/2012/GRRF/14,

ECE/TRANS/WP.29/2012/30,

Informal documents GRRF-73-19 and GRRF-73-24.

15. GRRF had noted during its last session, the submission to WP.29 by Working Party on General Safety Provisions (GRSG) of ECE/TRANS/WP.29/2012/30 proposing to remove the ESC tell-tale requirements from UN Regulations Nos. 13 and 13-H and to insert these requirements into UN Regulation No. 121. GRRF had supported the text proposed in ECE/TRANS/WP.29/GRRF/2012/14. The experts from the Russian Federation and OICA proposed to clean up the transitional provisions and introduced GRRF-73-19 and GRRF-73-24, summarizing the transitional provisions of UN Regulations Nos. 13-H and 13 including explanations and useful details. The expert from OICA agreed to prepare an official document on the basis of these proposals for consideration at the next GRRF session. The Chair underlined the need for simultaneous adoption of amendments by WP.29 and AC. 1 and therefore suggested to keep ECE/TRANS/WP.29/2012/30 on the agenda of WP.29, awaiting the adoption by GRRF of amendments to Regulations Nos. 13 and 13-H. He expressed his intention to inform WP.29.

#### F. Other business

Documentation: ECE/TRANS/WP.29/GRRF/2012/16.

16. The expert from OICA presented ECE/TRANS/WP.29/GRRF/2012/16 to align Regulation No. 13-H with FMVSS 135 on electric vehicle requirement with special regard to the regenerative braking system. GRRF supported, in principal, the proposal and noted some comments. GRRF agreed to resume consideration of this subject at its next session.

### V. Regulation No. 55 (Mechanical couplings) (agenda item 4)

17. In the absence of the Secretary and the Chair of the informal group on the Regulation No. 55, the expert from Germany informed GRRF about the proposed of terms of reference (TOR) for the informal group as described in the working paper R55-01-02. GRRF agreed to review this document as an informal document at its next session.

### VI. Motorcycle braking (agenda item 5)

Documentation: Informal documents GRRF-73-10 and GRRF-73-11.

- 18. The expert from IMMA introduced GRRF-73-10 proposing to clarify some provisions, simplify the test procedures in UN Regulation No. 78. IMMA also introduced GRRF-73-11 proposing similar amendments to the test procedures in GTR No. 3. GRRF noted the intention and provided some immediate comments. GRRF also noted that an amendment to the GTR will require the sponsorship of a Contracting Party to the 1998 Agreement before the proposal is transmitted to WP.29.
- 19. The expert from IMMA invited all GRRF experts to submit their comments by email (grrf@unece.org). He volunteered to prepare revised proposals, taking into account the comments received for consideration as official documents at the next session of GRRF.

# VII. Regulation No. 90 (Replacement brake linings) (agenda item 6)

Documentation: Informal document GRRF-73-04.

- 20. The expert of FEMFM introduced GRRF-73-04 taking into account some remarks received during the last session of GRRF. He recalled the purpose of the proposal and underlined that so called "chemically and physically identical replacement brake lining assemblies" and "chemically and physically identical drum brake linings" should not have to be tested but should be approved on the basis of the homologation of the original equipment supplier. In that case, the applicants for approval should only demonstrate that they supply the brake lining assemblies or the drum brake linings for the vehicle or brake manufacturer as original equipment for the specific model/models for which approval is being sought, and that they produce the parts under the same production conditions, quality assurance system, and with the same results of the conformity of production tests as for the original parts.
- 21. The expert of Spain reported some weaknesses in a similar case (for discs and drums), where this type of provision was already in force. Based on this experience, he underlined the need to be precise. He added, the goal is to make sure that only original manufacturers can use this procedure. GRRF reviewed the wording of the informal document and the expert of FEMFM invited GRRF to send him any further contributions to allow him to submit in due time an updated wording in the form of an official document for consideration at the next session of GRRF.

### VIII. Tyres (agenda item 7)

### A. Global Technical Regulation on tyres

Documentation: ECE/TRANS/WP.29/GRRF/2012/22,

Informal documents GRRF-73-03, GRRF-73-12, GRRF-73-13, GRRF-73-22 and GRRF-73-25.

- 22. The expert from France introduced GRRF-73-03 proposing the technical report on the development of the tyre GTR. GRRF noted a number of comments. The expert from France volunteered to submit a revised proposal for consideration at the next session of GRRF as an official document.
- 23. The secretary of the tyre GTR informal group reported on the progress made. He presented the text of a draft (ECE/TRANS/WP.29/GRRF/2012/22) which GRRF partially reviewed, taking into account the amendments proposed in GRRF-73-12, GRRF-73-13, GRRF-73-22 and GRRF-73-25. GRRF agreed that the informal group should continue to work on the draft GTR and to hold their next meeting immediately before GRRF on Monday 18 February 2013. From this meeting GRRF anticipate an updated final text for adoption during its 74<sup>th</sup> session.

### B. Regulations Nos. 30 and 54 (Pneumatic tyres)

24. GRRF agreed to consider this subject together with item 7(d).

#### C. Regulation No. 106 (Tyres for agricultural vehicles)

Documentation: ECE/TRANS/WP.29/GRRF/2012/20.

25. The expert from ETRTO presented a minor amendment to UN Regulation No. 106 (ECE/TRANS/WP.29/GRRF/2012/20). GRRF adopted this document and requested the secretariat to submit it to WP.29 and AC. 1 as Supplement 10 to UN Regulation No. 106.

### D. Regulation No. 117 (Tyres - Rolling resistance, rolling noise and wet grip)

Documentation: ECE/TRANS/WP.29/2012/54,

ECE/TRANS/WP.29/2012/55,

ECE/TRANS/WP.29/GRRF/2012/17, ECE/TRANS/WP.29/GRRF/2012/18, ECE/TRANS/WP.29/GRRF/2012/19,

Informal documents GRRF-73-05-Rev.1, GRRF-73-08, GRRF-73-17, GRRF-73-18, GRRF-73-21 and

GRRF-73-26.

26. The Chair recalled the purpose of ECE/TRANS/WP.29/2012/54 harmonizing the definitions of "snow tyres" and "snow tyres for use in severe snow conditions" in UN Regulations Nos. 30, 54 and 117, for further

consideration by GRB. The Chair of GRB presented GRRF-73-05, a proposal generated by GRB during its session in September 2012 which slightly modifies the GRRF proposal. GRB preferred to remove the marking M+S from UN Regulation No. 117. Only "snow tyres for severe condition" with the "Alpine Marking" are entitled to the bonus on limit values set in the Regulation (e.g. for "rolling noise"). GRRF endorsed the proposal by GRB as reproduced in GRRF-73-05-Rev.1 and agreed to submit it to WP.29 and AC.1 for consideration at their November 2012 sessions together with ECE/TRANS/WP.29/2012/54 as Supplement 02 to the 02 series of amendments to UN Regulation No. 117 (see WP.29-158-09).

- 27. The expert from ETRTO introduced ECE/TRANS/WP.29/GRRF/2012/17 amending UN Regulation No. 117, introducing the possibility to use a test track according to the new ISO standard 10844:2011. The expert from ETRTO preferred to insert transitional provisions into the proposed amendments (GRRF-73-26). GRRF endorsed the amendments proposed by GRB (GRRF-73-17) and confirmed there was no conflict with on-going amendments under consideration at GRRF.
- 28. The expert from ETRTO introduced ECE/TRANS/WP.29/GRRF/2012/18 correcting the provisions of the temperature compensation in Regulation No. 117. GRRF noted that this proposal had been simultaneously transmitted to GRB who had made recommendations for submission to WP.29 and AC.1 for consideration at their March 2013 sessions as Supplement 03 to the 02 series of amendments to UN Regulation No. 117.
- 29. The expert from ETRTO introduced ECE/TRANS/WP.29/GRRF/2012/19 amending the testing procedure for snow tyres of the category C3. GRRF noted some comments. GRRF agreed to consider a revised proposal at its next session
- 30. The expert of France presented a joint proposal of France / EC (GRRF-73-08) on wet grip testing provisions for Tyres of category C2 and C3. The expert from ETRTO introduced GRRF-73-18 and GRRF-73-21 in response to GRRF-73-08 with a proposal for limit values as well as transitional provisions. GRRF agreed to resume discussion on these issues on the basis of revised proposals tabled by ETRTO at its next session.

#### E. Other business

Documentation: Informal document GRRF-73-20.

31. The expert from the Russian Federation introduced GRRF-73-20 to correct the Russian version of UN Regulation No. 109. GRRF adopted the proposed correction as reproduced in Annex 4 to this report and requested the secretariat to submit it to WP.29 and AC.1 for consideration at their March 2013 sessions as a Corrigendum to Revision 1 to UN Regulation No. 109.

### IX. Other Business (agenda item 8)

#### A. Election of officers

Documentation: TRANS/WP.29/690, its Amend.1 and 2.

32. In compliance with Rule 37 of the Rules of Procedure (TRANS/WP.29/690 as amended by Amendments 1 and 2), GRRF called for the election of officers on Tuesday morning. Mr. B. Frost (United Kingdom) was unanimously elected Chair of GRRF for this session and for the GRRF sessions scheduled for the year 2013. Mr. H. Kubota (Japan) was elected Vice-Chair of GRRF for the sessions scheduled in 2013.

### B. Report of the 156<sup>th</sup> and 157<sup>th</sup> sessions of WP.29 in June 2012

Documentation: ECE/TRANS/WP.29/1095,

ECE/TRANS/WP.29/1097.

33. The Secretary reported on the highlights of the 156<sup>th</sup> and 157<sup>th</sup> sessions of WP.29. (ECE/TRANS/WP.29/1095, ECE/TRANS/WP.29/1097)

### C. Regulation No. 79 (Steering Equipment)

Documentation: Informal document GRRF-73-16 and GRRF-73-23.

- 34. The expert from OICA introduced GRRF-73-23 concerning UN Regulation No. 79. It proposed the alignment of the test speed and braking performance requirement for vehicles of category  $M_1$  in the event of energy source failure with those in UN Regulation No. 13H. The expert from France proposed to evaluate the need of a similar alignment for vehicles of category  $N_1$ . GRRF agreed to resume consideration of this subject at its next session on the basis of an official document.
- 35. The expert from Japan presented GRRF-73-16 suggesting possible regulatory intervention for "Lane Keeping Assist Systems (LKAS)" and Parking Assist Systems (PAS)" technologies. GRRF agreed to revisit this subject under a new agenda item on the basis of an updated document, if available.

### D. International Whole Vehicle Type Approval (IWVTA)

Documentation: Informal document WP.29-156-21-Rev.1.

- 36. The expert from the EC informed GRRF about the progress of the Informal Group on IWVTA (WP.29-156-21-Rev.1). GRRF decided to insert a new item on its agenda.
- 37. For the liaison between the Working Parties and its Informal Group on International Whole Vehicle Type Approval (IWVTA), WP.29 decided that each Working Party elects an Ambassador (see report ECE/TRANS/WP.29/1097, paras. 38 and 39 and WP.29-156-21-Rev.1.).

Mr. I. Lafuente (Spain) was unanimously elected Ambassador of GRRF to IWVTA.

### E. Template for official documents

Documentation: Informal document WP.29-157-07-Rev.1.

38. The secretariat reminded GRRF about the decision of WP.29 on the format of official documents and invited all delegates to use the template (WP.29-157-07-Rev.1) for submitting documents.

### F. Acronyms

Documentation: Informal document GRSP-51-03.

39. GRRF noted that acronyms have been used in different working parties with different meanings which lead to confusion. (e.g. "RESS"). To avoid such confusion it has been recommended to establish a list of acronyms. The Working Party on Passive Safety (GRSP) had started this work with GRSP-51-03. GRRF agreed to resume discussion on this subject at its next session.

#### G. Tributes

- 40. GRRF was informed about the new responsibilities of Mr. S. Sopp, who would no longer chair GRRF. GRRF thanked Mr. Sopp for his excellent chairmanship and contributions and wished him all the best in his new responsibilities.
- 41. GRRF was informed about the difficulties experienced by the secretariat in preparing the working documents for this GRRF session (ECE/TRANS/WP.29/1097, para. 6) and, therefore, thanked Mr. R. Hubert for his support because without this positive attitude the GRRF session could have been cancelled.

### X. Provisional agenda for the seventy-fourth session

42. GRRF noted that its seventy-fourth session would be held in Geneva from 19 February 2013 (starting at 9.30 a.m.) to 22 February 2012 (concluding at 5.30 p.m.).

### Annex I

# List of informal documents considered during the session

# List of informal documents (GRRF-73-...) of the session (English only)

No.	(Author) Title	Follow- up <sup>i</sup>
2	(OICA) Draft Corrigendum to Regulation No. 13 (Heavy vehicle braking)	(b)
3	(France) Proposal to develop and preliminary report on the development of a global technical regulation concerning uniform provisions for pneumatic radial tyres for passenger and light truck (commercial) vehicles	(c+e)
4	(FEMFM) Proposal for Supplement 2 to the 02 series of amendments to Regulation No. 90 (Replacement brake lining assemblies)	(c)
5rev.1	(GRB) GRB Proposal for amendments to ECE/TRANS/WP.29/2012/54 (Regulation No. 117)	(a)
6	(AMEVSC) Proposal for Supplement 10 to the 11 series of amendments to Regulation No. 13 (Heavy vehicle braking)	(c+e)
7	(AMEVSC Chair) Report of the GRRF Alternative Method for Electronic Vehicle Stability Control (AMEVSC) informal working group	<i>(f)</i>
8	(EC/France) Amendments to the 02 series of amendments to Regulation No. 117 (Tyre rolling noise, wet grip adhesion and rolling resistance)	(d)
9	(ACV Chair) Report of the GRRF informal group on Automated Connections between Vehicles (ACV)	(f)
10	(IMMA) Proposal for an amendment to Regulation No. 78 (Uniform provisions concerning the approval of vehicles of categories L1, L2, L3, L4 and L5 with regard to braking)	(c+e)
11	(IMMA) Proposal for an amendment to GTR No. 3 (Motorcycle Brake Systems)	(c+e)
12	(ETRTO/RMA/JATMA) Proposal for amendments to ECE/TRANS/WP.29/GRRF/2012/22 (Draft GTR on Tyres)	(f)
13	(TyreGTR) Amendments to document GRRF-72-23 agreed by the experts of the informal group during the 13th ad-hoc working group meeting for a gtr on tyres on 29 June 2012	(f)
14	(Japan) Proposal for draft amendments to UN Regulation Nos. 13 and 13-H	(c)
15	(ACV) Proposed amendment to UN Regulation No. 13	(e)
16	(Japan) The necessity of new Regulations for new technologies regarding R79	<i>(f)</i>
17	(GRB) Proposal for the 03 series of amendments to Regulation No. 117 - Proposal based on ECE/TRANS/WP.29/GRB/2012/15 and ECE/TRANS/WP.29/GRB/2012/18	(a)
18	(ETRTO) Wet grip adhesion for C2 and C3 tyres	<i>(f)</i>
19	(OICA) Proposal for Revision of the Transitional Provisions to Regulation No. 13-H	(c+e)
20	(Russian Federation) Proposal for draft corrigendum to Revision 1 to Regulation No. 109	(a)
21	(ETRTO) Wet grip adhesion for C2 and C3 tyres	<i>(f)</i>
22	(Slovak Republic) Proposal for amendments to the Draft GTR on Tyres	<i>(f)</i>
23	(OICA) Proposal for of amendments to Regulation No. 79 (Steering Equipment for vehicles)	(c)
24	(OICA) Proposal for Revision of the Transitional Provisions to Regulation No. 13	(c)
25	(OICA) Proposal for amendments to ECE/TRANS/WP.29/GRRF/2012/22 (Proposal for a gtr on tyres)	<i>(f)</i>
26	(ETRTO) Proposal for a draft Supplement to the 02 series of amendments to Regulation No.	<i>(f)</i>

No.	(Author) Title	Follow- up <sup>i</sup>
	117	
27	(Secretariat) Summary of decisions on documents considered at the 73 <sup>rd</sup> session of GRRF	

### Reconsideration of informal documents from the previous sessions of GRRF or other Working Parties (English only)

No.	(Author) Title	Follow-
	(010) 101 PD 1 010 PD 1 010 PD 1	up¹
AEBS-LDWS- 17-02	(OICA and CLEPA) CLEPA/OICA proposal for AEBS Step 2	<i>(f)</i>
AEBS-LDWS- 01-07-rev.3	(IG AEBS/LDWS) Review of the Terms of Reference and Rules of Procedure	(a)
GRRF-72-02	(OICA/CLEPA) Proposal for amendment to Regulation Nos. 13 and 13-H	<i>(g)</i>
WP.29-157-07	(Secretary) Template	<i>(f)</i>
GRRF-68-08	(CLEPA) Draft Proposal for Amendment to Regulation No. 13: Requirements for Road Train Combinations	(d)
GRRF/2011/34	(CLEPA/OICA) Proposal for amendments to Regulation No. 13 (Heavy vehicle braking) and Regulation $N^{\circ}13$ -H (Brakes of M1 and N1 vehicles)	(d)
IG R55-01-02	(IG R55) Terms of references: IG R55	( <i>d</i> )
WP.29/2012/30	(CLEPA/OICA) Proposal for amendments to Regulation No. 13 (Heavy vehicle braking) and Regulation N°13-H (Brakes of M1 and N1 vehicles)	<i>(g)</i>
WP.29/2012/54	(GRRF) Proposal for Supplement 2 to the 02 series of amendments to Regulation No. 117 (Tyres - Rolling resistance, rolling noise and wet grip)	<i>(b)</i>
WP.29/2012/55	(GRRF) Proposal for Supplement 2 to the 02 series of amendments to Regulation No. 117 (Tyres - Rolling resistance, rolling noise and wet grip)	(a)
WP.29-156-21	(IWVTA) Proposal for "Candidate items for technical regulations applicable to IWVTA" and "Guideline for GRs to review technical regulations applicable to IWVTA"	<i>(f)</i>
GRSP-51-03	(EC) Abbreviations and Acronyms used in the UN Regulations of GRSP (and other GRs) (1958 Agreement)	<i>(f)</i>
GRRF-72-02	(OICA/CLEPA) Proposal for amendment to Regulation Nos. 13 and 13-H	(g)
GRRF-72-17	(CLEPA) Proposal for amendments to Regulation No. 13 (Heavy vehicle braking)	<i>(g)</i>

### Notes:

- (a) Endorsed or adopted without changes.
- (b) Endorsed or adopted with changes.
- (c) Resume consideration on the basis of an official document.
- (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

## Amendments to the Terms of Reference of the informal working group AEBS/LDWS

Terms of Reference amend to read:

- 1. The informal group shall prepare draft regulatory proposals for new Regulations on Advanced Emergency Braking Systems (AEBS) and Lane Departure Warning Systems (LDWS) to be annexed to the 1958 Agreement.
- The group will focus on systems for heavy vehicles in categories N2, N3, M2, and M3 vehicles. Vehicles of category M1 and N1 may be covered in a later stage.1
- 3. The group should take full account of existing data and research in developing its regulatory proposals. It should consider pre-existing standards (e.g. ISO, SAE, Japanese guidelines and regulations) and national legislations for AEBS and LDW in developing its proposals.
- 4. **a)** Draft regulatory texts on LDWS should be submitted to the sixty-eighth session of GRRF in September 2010<sup>1</sup> and on AEBS to the sixty-ninth session of GRRF in February 2011.
  - b) Draft proposals for pass/fail values for the warning and activation test requirements for vehicles of category  $N_2 \leq 8$  tonnes and of category  $M_2$  should be established for inclusion in Annex 3 of the 01 series of amendments of the draft regulation on AEBS (ECE/TRANS/WP.29/2011/93). These draft proposals should be submitted to the 74<sup>th</sup> session of GRRF in February 2013.
- 5. The target completion date for the work of the informal group with regard to point 4.b) shall be the 75<sup>th</sup> session of GRRF in September 2013.
- 6. These targets will be reviewed in **February 2013**.
- 7. Final decisions on regulatory proposals rest with GRRF, WP.29 and the Contracting Parties.

<sup>&</sup>lt;sup>1</sup> AEBS/LDWS-02-12

#### **Annex III**

### **Draft Corrigendum to Regulation No. 13 (Heavy vehicle braking)**

### Annex 12 of Regulation No. 13

Paragraphs 10.3 to 10.4.2., correct to read

10.3. Check of braking efficiency

10.3.1. The sum of the braking forces exerted on the circumference of the trailer wheels shall not be less than  $B^* = 0.50 \, \mathrm{g.G_A}$ , including a rolling resistance of 0.01 g.G<sub>A</sub>: this corresponds to a braking force B of 0.49 g.G<sub>A</sub>. In this case, the maximum permissible thrust on the coupling shall be:

 $D^* = 0.067 \text{ g.G}_A$  in the case of multi-axled trailers with pivoted drawbar;

and

 $D^* = 0.10 \text{ g.G}_A$  in the case of trailers with rigid drawbar.

To check whether these conditions are complied with the following inequalities shall be applied:

**10.3.1.1.** In mechanical-transmission inertia braking systems:

$$\left[\frac{B.R}{\rho} + n \cdot P_o\right] \frac{1}{(D^* - K) \cdot \eta_H} \le i_H$$

10.3.1.2. In hydraulic-transmission inertia braking systems:

$$\left[\frac{B.R}{n.\rho'} + p_o\right] \frac{1}{(D^* - K).\eta_H} \le \frac{i_h}{F_{HZ}}$$

10.4. Check of control travel

10.4.1. In control devices for multi-axled trailers with pivoted drawbars where the brake rod linkage depends on the position of the towing device, the control travel s shall be longer than the effective (useful) control travels', the difference being at least equivalent to the loss of travel so. The travel loss of so shall not exceed 10 per cent of the effective travels'.

10.4.2. The effective (useful) travel of control s' shall be determined for single and multi-axle trailers as follows:

### **Annex IV**

# Proposal for draft Corrigendum to Revision 1 to Regulation No. 109 (Retreaded tyres for commercial vehicles)

(This proposal concern Russian language only)

### I. Proposal

Pages 1 and 3, heading of the Regulation, amend to read:

Единообразные предписания, касающиеся официального утверждения производства шин с восстановленным протектором для транспортных средств индивидуального нользования для коммерческих перевозок и их прицепов

### Annex V

### **GRRF** informal groups

Informal group	Chairperson	Secretary
Tyre GTR	Mr. I. Yarnold (United Kingdom) Phone: +44 207 944 2080 Fax: +44 207 944 2169 E-mail: ian.yarnold@dft.gsi.gov.uk	Mr. JC. Noirhomme (ETRTO) Phone: +32 2 344 4059 Fax: +32 2 344 1234 E-mail: info@etrto.org
Automatic Emergency Braking and Lane Departure Warning Systems (AEBS/LDWS)	Mr. J. Renders (EC) Phone: +32 2 2969962 Fax: +32 2 2969637 E-mail: johan.renders@ec.europa.eu	Mr. O. Fontaine (OICA) Phone: +33 1-43590013 Fax: +33 1-45638441 E-mail: ofontaine@oica.net
Alternative Method to assess the Electronic Vehicle Stability Control system (AMEVSC)	Mr. M. Loccufier (Belgium) Phone: +32 2-2773578 Fax: +32 2-2774021 E-mail: michel.loccufier@mobilit.fgov.be	Mr. P. Jennison (CLEPA) Phone: +49 893-5472131 Fax: +49 893-5472535 E-mail: paul.jennison@knorr-bremse.com
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