



Economic Commission for Europe
Inland Transport Committee
World Forum for Harmonization of Vehicle Regulations
Working Party on Brakes and Running Gear
Seventy-sixth session

Geneva, 17–21 February 2014

**Report of the Working Party on Brakes and Running Gear
 on its seventy-sixth session**
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I. Attendance

1. The Working Party on Brakes and Running Gear (GRRF) held its seventy-sixth session from 17 to 21 February 2014 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, Latvia, the Netherlands, Norway, Republic of Korea, Russian Federation, Slovakia, Spain, Sweden, Switzerland, South Africa, Turkey, the United Kingdom of Great Britain and Northern Ireland (UK) and the United States of America (USA). An expert from the European Commission (EC) also participated. Experts from the following non-governmental organizations (NGOs) participated: the European Association of Automotive Suppliers (CLEPA), the International Motorcycle Manufacturers Association (IMMA), the International Organization for Standardization (ISO), the European Tyre and Rim Technical Organisation (ETRTO) and the International Organization of Motor Vehicle Manufacturers (OICA). Upon the special invitation of the Chair the following Non-Governmental Organizations (NGOs) participated: International Association of the Body and Trailer Building Industry (CLCCR), the Federation of European Manufacturers of Friction Materials (FEMFM), Fédération Européenne de la Manutention (FEM) and Imported Tyre Manufacturers Association (ITMA).

II. Adoption of the agenda (agenda item 1)

Documentation: ECE/TRANS/WP.29/GRRF/2014/1 and Add.1
Informal documents GRRF-76-01 and GRRF-76-37-Rev.1

2. GRRF considered and adopted the agenda prepared for the seventy-sixth session (ECE/TRANS/WP.29/GRRF/2014/1 and Add.1).
3. GRRF also adopted the running order for the session as proposed in GRRF-76-01 and the updated consolidated agenda GRRF-76-37-Rev.1, including all informal documents considered during the session.
4. The informal documents distributed during the session are listed in Annex I of this report.

III. Advanced Emergency Braking Systems (agenda item 2)

Documentation: Informal documents GRRF-76-15, GRRF-76-16 and GRRF-76-17-Rev.1

5. The expert from OICA introduced GRRF-76-15, GRRF-76-16 and GRRF-76-17-Rev.1 proposing to insert a footnote in the scope of the original version of Regulation No. 131, the 01 series of amendments to Regulation No. 131 and Regulation No. 130, containing guidance or recommendations to the Contracting Parties applying these Regulations for potential exemptions.
6. Several Contracting Parties (CPs), felt that guidance could be useful, however others felt that it would not be appropriate to use a regulation to advise Contracting Parties on policy considerations. OICA agreed to consider other options for consideration by GRRF.

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

A. Electronic Stability Control (ESC)

Documentation: ECE/TRANS/WP.29/GRRF/2014/10
Informal documents GRRF-76-18 and GRRF-76-40

7. This item was discussed in conjunction with agenda item 10(b), see para. 36. The expert from OICA introduced ECE/TRANS/WP.29/GRRF/2014/10 as amended by GRRF-76-18 proposing to delete the provisions related to the introduction of ESC and BAS in the two draft Regulations mentioned in para. 36. in favour of separate and discrete regulations for these technologies. GRRF agreed to resume consideration of this item and keep the documentation on the agenda of the September 2014 session of GRRF.

B. Automated Connections between Vehicles (ACV)

Documentation: Informal document GRRF-76-29

8. The Chair of the informal working group on ACV introduced GRRF-76-29 proposing follow-up actions for the ACV informal working group, on road trains. GRRF noted that this matter would interest both braking experts and mechanical coupling experts. GRRF supported GRRF-76-29 and requested a proposal for a Terms of Reference update for the informal group, which the chair of the informal group volunteered to prepare.

C. Clarifications

Documentation: (ECE/TRANS/WP.29/GRRF/2013/29)
ECE/TRANS/WP.29/GRRF/2014/13
Informal document GRRF-76-24

9. The Chair of GRRF recalled the purpose of ECE/TRANS/WP.29/GRRF/2013/13, adopted during the seventy-fifth GRRF session. The document remained on the agenda of GRRF, pending the submission of the adopted text to WP.29 and AC.1 for each Regulation.

10. The expert from Germany introduced GRRF-76-24 based on ECE/TRANS/WP.29/GRRF/2013/29 and proposing amendments to Regulation No. 13 introducing provisions for electro-mechanical braking systems. GRRF acknowledged the status report and expected a revised proposal at its September 2014 session, addressing the remaining open issues, which the experts from Germany and the Netherlands volunteered to prepare.

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

Documentation: ECE/TRANS/WP.29/GRRF/2014/7
ECE/TRANS/WP.29/GRRF/2014/16
Informal documents GRRF-76-02, GRRF-76-04 and GRRF-76-30

11. The expert from UK reported on the outcome of the group of experts working on updated transitional provisions of UN Regulations Nos. 13 (GRRF-76-02) and introduced ECE/TRANS/WP.29/GRRF/2014/7. GRRF adopted this proposal as reproduced in Annex II to this report and requested the secretariat to submit it to World Forum for Harmonization of Vehicle Regulations (WP.29) and the Administrative Committee of the

1958 Agreement (AC.1) for consideration at their June 2014 sessions as part of the draft Supplement 12 to the 11 series of amendments to UN Regulation No. 13.

12. The expert from UK also reported on the outcome of the group of experts working on updated transitional provisions of UN Regulations Nos. 13-H (GRRF-76-04) and introduced ECE/TRANS/WP.29/GRRF/2014/16 as amended by GRRF-76-30. GRRF adopted this proposal as reproduced in Annex III to this report and requested the secretariat to submit it to WP.29 and AC.1 for consideration at their June 2014 sessions as part of the draft Supplement 16 to UN Regulation No. 13-H.

13. At the request of the expert from Japan, GRRF agreed to take note that the consolidation of the transitional provisions does not change the interpretation of the current text of the Regulation (e.g. transitional provisions for supplements). GRRF agreed that the absence of the historical dates from the latest text simplified interpretation of the requirements for the purposes of issuing type approval. GRRF also noted that references to "registration" had been removed in favour of "national or regional type approval" as recommended by the guidelines in ECE/TRANS/WP.29/1044/Rev.1.

14. GRRF agreed to note in this report the meaning of "according to the basis of the requirement that existed at the time of the original approval" in para. 12.5. of ECE/TRANS/WP.29/GRRF/2014/7. In this context, GRRF agreed that "the requirement that existed" refers to those requirements applied at that time, taking into consideration of the transitional provisions.

E. Other business

Documentation: Informal documents GRRF-76-09, GRRF-76-20, GRRF-76-21 and GRRF-76-31

15. As a follow-up to ECE/TRANS/WP.29/GRRF/75, para. 14, the secretariat introduced GRRF-76-09 containing the draft revision 8 of UN Regulation No. 13. GRRF noted some comments and requested the secretariat to take them into account when issuing the Revision 8 to Regulation No. 13.

16. The expert from the Russian Federation introduced GRRF-76-20, proposing a clarification of UN Regulation No. 13. GRRF adopted this proposal as reproduced below and requested the secretariat to submit the proposal to WP.29 and AC.1 for consideration at their June 2014 sessions as a part of the draft Supplement 12 to the 11 series of amendments to UN Regulation No. 13.

Footnote 12, amend to read:

"_____

...more than 2 axles and hydraulic transmission), **Class I, Class A and articulated vehicles of categories M₂ and M₃**, N₂ tractors for semi-trailer with a gross vehicle mass (GVM) between 3.5 and 7.5 tonnes..."

17. The expert from CLEPA introduced GRRF-76-21. GRRF requested the secretariat to distribute this document with an official symbol at its September 2014 session.

18. The expert from CLEPA withdrew GRRF-76-31.

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

Documentation: ECE/TRANS/WP.29/GRRF/2014/14

19. The expert from Germany introduced ECE/TRANS/WP.29/GRRF/2014/14 on behalf of the Chair of the informal working group on Regulation No. 55. GRRF requested clarifications on the changes to the standard ISO 7641/1-2012 when compared with the current regulated version. GRRF agreed to revisit this item at its next session.

VI. Motorcycle braking (agenda item 5)

A. Regulation No. 78

Documentation: ECE/TRANS/WP.29/GRRF/2014/5
ECE/TRANS/WP.29/GRRF/2014/6
Informal documents GRRF-76-19, GRRF-76-32, GRRF-76-36-Rev.1 and GRRF-76-45

20. The expert from IMMA introduced ECE/TRANS/WP.29/GRRF/2014/5 and ECE/TRANS/WP.29/GRRF/2014/6 as amended by GRRF-76-19 and GRRF-76-36-Rev.1 proposing general clarifications to UN Regulation No. 78 and specific clarifications for the use of Combined Braking Systems (CBS). The proposals received some comments and the expert from IMMA consolidated these requested changes into a revised proposal (GRRF-76-45). The expert from India introduced GRRF-76-32 on three wheelers, which GRRF agreed to revisit on the basis of a revised proposal at its September 2014 session. GRRF requested the secretariat to distribute GRRF-76-45 with an official symbol at the September 2014 session.

B. Global Technical Regulation No. 3

Documentation: ECE/TRANS/WP.29/GRRF/2014/3
ECE/TRANS/WP.29/GRRF/2014/4
Informal documents GRRF-76-35-Rev.1 and GRRF-76-44

21. The expert from IMMA introduced on behalf of the sponsor, Italy, ECE/TRANS/WP.29/GRRF/2014/3 and ECE/TRANS/WP.29/GRRF/2014/4 as amended by GRRF-76-35-Rev.1, proposing similar amendments to those proposed for Regulation No. 78 (see para. 20). These proposals received comments and the expert from IMMA consolidated these requested changes into a revised proposal (GRRF-76-44). GRRF requested the secretariat to distribute GRRF-76-44 with an official symbol at its September 2014 session.

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

Documentation: ECE/TRANS/WP.29/GRRF/2014/9
Informal documents GRRF-75-18, GRRF-76-42-Rev.1

22. The Chair of GRRF presented ECE/TRANS/WP.29/GRRF/2014/9 based on GRRF-75-18, discussed at the seventy-fifth GRRF session. The expert from CLEPA introduced GRRF-76-42-Rev.1 proposing an amendment to the scope of the Regulation as well as further minor clarifications. GRRF adopted this proposal as amended by Annex IV

of this report and requested the secretariat to submit the proposal to WP.29 and AC.1 for consideration at their June 2014 sessions as a part of the draft Supplement 2 to the 02 series of amendments to Regulation No. 90.

VIII. Tyres (agenda item 7)

A. Global Technical Regulation on tyres

Documentation: ECE/TRANS/WP.29/2013/63

23. The expert from USA, referring to ECE/TRANS/WP.29/2013/63, reported on the progress made on unresolved issues before its potential adoption. GRRF noted that testing results on the wet traction test procedure from the USA would need to be evaluated before a recommendation could be made to refer the GTR for adoption by WP.29/AC.3. The Chair of GRRF indicated that he would provide a status update to WP.29 at the upcoming March session and ask for additional time to consider the USA research results. A second issue concerning the bead unseat test for which the expert from China had planned to offer a proposal was resolved when it was announced that China would accept the existing procedure in the GTR.

Note by the secretariat: WP.29 agreed (in March 2014) to hold an extraordinary GRRF session during the Thursday afternoon session of WP.29 on 26 June 2014 dedicated to this agenda item.

B. Regulation No. 117

Documentation: ECE/TRANS/WP.29/2013/66
Informal documents GRRF-76-05, GRRF-76-07, GRRF-76-08, GRRF-76-11, GRRF-76-12, GRRF-76-26, GRRF-76-27, GRRF-76-28 and WP.29-162-05

24. Recalling the purpose of ECE/TRANS/WP.29/2013/66, the Chair of GRRF stressed that WP.29 was expecting GRRF to conclude its deliberation about the wet grip limit values. The GRRF experts introduced their positions (GRRF-76-05, GRRF-76-07, GRRF-76-08, GRRF-76-11, GRRF-76-12, GRRF-76-26, GRRF-76-27, GRRF-76-28). The expert from the EC reported on the concerns expressed by the Directorate-General for Mobility and Transport of the European Commission (DG Move). GRRF confirmed the limit values proposed in para. 6.2.2. for Tyres of C2 category and agreed to amend the proposed limit values in para. 6.2.3. for Tyres of C3 category in ECE/TRANS/WP.29/2013/66. GRRF requested the secretariat to submit this amendment as reproduced in WP.29-162-05 to WP.29 and AC.1 for consideration at their March 2014 session.

C. Other business

Documentation: ECE/TRANS/WP.29/GRRF/2013/20
ECE/TRANS/WP.29/GRRF/2013/22
ECE/TRANS/WP.29/GRRF/2014/2
ECE/TRANS/WP.29/GRRF/2014/15
Informal documents GRRF-76-06, GRRF-76-25, GRRF-76-38 and GRRF-76-41

25. The expert from ETRTO presented GRRF-76-25, supporting ECE/TRANS/WP.29/GRRF/2013/20 amended by GRRF-76-06 as well as

ECE/TRANS/WP.29/GRRF/2013/22 and proposing the insertion of All Terrain Vehicle (ATV) tyres in UN Regulation No. 75.

26. In response to the proposal above, the expert from IMMA presented GRRF-76-41 supporting the insertion of provisions for ATV tyres in UN Regulation No. 106. GRRF agreed to revisit this subject at its September 2014 session on the basis of a revised proposal that the experts from IMMA and ETRTO agreed to prepare.

27. The expert from ETRTO introduced ECE/TRANS/WP.29/GRRF/2014/2 as amended by GRRF-76-41, inserting a new marking and, under "categories of use", a definition for construction application (Industrial tractor) tyres. GRRF adopted this proposal as amended by Annex V and requested the secretariat to submit it to WP.29 and AC.1 for consideration at their June 2014 sessions as a part of the draft Supplement 11 to Regulation No. 106.

28. The expert from ETRTO also introduced ECE/TRANS/WP.29/GRRF/2014/15 clarifying the marking requirements in Regulation No. 106. GRRF adopted this proposal, not amended, and requested the secretariat to submit it to WP.29 and AC.1 for consideration at their June 2014 sessions as a part of the draft Supplement 11 to Regulation No. 106.

IX. Intelligent Transport Systems (ITS) (agenda item 8)

Documentation: Informal document GRRF-76-43

29. The Chair of GRRF announced the next ITS informal group session scheduled to be held in March 2014 in Geneva.

30. He invited a presentation from two experts from the EU research project on vehicle platooning "Companion", (GRRF-76-43). GRRF welcomed the idea of the Chair to share information about innovations related to vehicles automations and self-driving vehicles. GRRF agreed to dedicate one permanent agenda item to this subject and requested the secretariat to explore possibilities to dedicate an (additional) session (half a day) to this subject.

X. Steering equipment (agenda item 9)

A. Regulation No. 79

Documentation: ECE/TRANS/WP.29/GRRF/2014/8

31. At the request of the author of ECE/TRANS/WP.29/GRRF/2014/8, GRRF agreed to defer this agenda item to its next session.

B. Lane Keeping Assist System (LKAS) and Parking Assist System (PAS)

Documentation: Informal document GRRF-76-10

32. The expert from Sweden introduced GRRF-76-10 reporting on a meeting of interested experts on LKAS. He concluded that he, together with the expert from Japan and other interested experts, would meet again with a view to producing an informal document proposing amendments to Regulation No. 79, defining provisions addressing the safety of LKAS.

XI. International Whole Vehicle Type Approval (IWVTA) (agenda item 10)

33. The Ambassador and the Chair of GRRF gave a short oral report on the activities of the IWVTA informal group and its subgroups.

34. The expert from OICA resumed the discussion that started during the seventy-fifth GRRF session on the proposal to separate the Tyre Pressure Monitoring System (TPMS) provisions from UN Regulation No. 64. GRRF agreed to resume consideration of this proposal at its next session on the basis of a written proposal, which the expert from OICA volunteered to prepare.

A. Regulation on tyre installation

Documentation: ECE/TRANS/WP.29/GRRF/2014/13
Informal document GRRF-76-39

35. The expert from OICA introduced ECE/TRANS/WP.29/GRRF/2014/13, as amended by GRRF-76-39, proposing the wording of a draft regulation on the Tyre installation for M₁ vehicles. The proposal received some comments and GRRF agreed to revisit this item on the basis of a revised proposal that the expert from OICA volunteered to prepare.

B. Regulation No. 13-H

Documentation: ECE/TRANS/WP.29/GRRF/2014/11
ECE/TRANS/WP.29/GRRF/2014/12
Informal documents GRRF-76-13, GRRF-76-14, GRRF-76-22,
GRRF-76-23, GRRF-76-33 and GRRF-76-34

36. The expert from OICA introduced a proposal for a draft Regulation on Brake Assist Systems (ECE/TRANS/WP.29/GRRF/2014/11 amended by GRRF-76-14 and GRRF-76-33) and a proposal for a draft Regulation on Electronic Stability Control (ECE/TRANS/WP.29/GRRF/2014/12 amended by GRRF-76-13). Addressing the open question on how to deal with the original Annex 8 of Regulation No. 13-H, he presented GRRF-76-40 and the corresponding proposal amending the draft mentioned above (GRRF-76-22 and GRRF-76-23). GRRF agreed to resume consideration of this item and keep the documentation on the agenda of the September 2014 session of GRRF.

XII. 1997 Agreement (agenda item 11)

37. The Chair recalled that amendments to UN Rules Nos. 1 and 2 were under consideration by AC.4 at its March 2014 session.

XIII. Other business (agenda item 13)

A. Highlights of the November 2013 session of WP.29

Documentation: ECE/TRANS/WP.29/1106

38. The Secretary reported on the highlights of the 161st sessions of WP.29 (ECE/TRANS/WP.29/1106).

B. Revision and extension of approvals

Documentation: (ECE/TRANS/WP.29/GRRF/2013/31)

39. The Chair recalled the purpose of ECE/TRANS/WP.29/GRRF/2013/31 and recalled the work done by the informal group on IWVTA on this issue. GRRF agreed to delete this agenda item.

C. Any other business

Documentation: Informal document GRRF-76-03

40. The expert from the UK introduced GRRF-76-03 containing the list of acronyms contained in the UN Regulations under the responsibility of GRRF. The expert from the UK noted that "VSF" was used in GRRF as "Vehicle Stability Function" while in GRSP as "V. Seat Fixture"

41. The expert from Denmark reported on complaints received from road user's and truck drivers associations stating that there can be too much air pressure transmitted to the semi-trailer resulting in unnecessary tell-tale activation and asked whether other experts received similar comments. GRRF agreed that more information was needed on this issue and invited experts to consider whether similar concerns existed in their national territories.

XIV. Provisional agenda for the seventy-seventh session

42. The following provisional agenda was adopted for the seventy-seventh session of GRRF, scheduled to be held in Geneva from 16 (starting at 2.30 p.m.) to 19 (concluding at 12.30 p.m.) September 2014¹:

1. Adoption of the agenda.
2. Advanced Emergency Braking Systems.
3. Regulations Nos. 13 and 13-H (Braking):
 - (a) Electronic Stability Control (ESC);
 - (b) Automated Connections between Vehicles (ACV);
 - (c) Clarifications;
 - (d) Braking symbols in Regulation No. 121 (Identification of controls, tell-tales and indicators);
 - (e) Other business.
4. Regulation No. 55 (Mechanical couplings).
5. Motorcycle braking:
 - (a) Regulation No. 78;
 - (b) Global Technical Regulation No. 3.
6. Regulation No. 90 (Replacement brake linings).
7. Tyres:

¹ GRRF noted that the deadline for submission of official documents to the UNECE secretariat was 19 June 2014, twelve weeks prior to the session.

- (a) Global Technical Regulation on tyres;
 - (b) Regulation No. 117;
 - (c) Other business.
- 8. Intelligent Transport Systems (ITS).
- 9. Steering equipment:
 - (a) Regulation No. 79;
 - (b) Lane Keeping Assist System (LKAS) and Parking Assist Systems (PAS).
- 10. International Whole Vehicle Type Approval (IWVTA):
 - (a) Regulation on tyre installation;
 - (b) Regulation No. 13-H.
- 11. Exchange of view on innovations, automations and self-driving cars.
- 12. Other business:
 - (a) Highlights of the March and June 2014 sessions of WP.29;
 - (b) Any other business.
- 13. Elections of Officers.

Annex I

List of informal documents considered during the session

[English only]

Informal documents GRRF-76-...

No.	<i>(Author) Title</i>	<i>Follow-up</i>
1	(GRRF chair) Running order	A
2	(Ad hoc group on transitional provisions) Regulation No. 13 - Transitional provisions	F
3	(UK) Abbreviations and Acronyms (A&A) used in the UN Regulations of GRSP, GRRF (and other GRs) (1958 Agreement)	F
4	(Ad hoc group on transitional provisions) Regulation No. 13-H - Transitional provisions	F
5	(Japan) Comments on UN Regulation No. 117 C3 tyres wet grip thresholds	F
6	(ETRTO) Proposal for amendments to ECE/TRANS/WP.29/GRRF/2013/20	D
7	(Denmark and The Netherlands) Proposal for amendments to ECE/TRANS/WP.29/2013/66 concerning the proposal for a supplement to the 02 series of amendments to Regulation No. 117	F
8	(Denmark, Germany and The Netherlands) Proposal for amendments to ECE/TRANS/WP.29/2013/66 concerning the proposal for a supplement to the 02 series of amendments to Regulation No. 117	F
9	(Secretariat) Provisional Revision 8 to UN Regulation No. 13	F
10	(LKAS Chair) Report of the Ad-hoc meeting on Lane Keeping Assist System (LKAS)	F
11	(European Commission) Proposal for amendments to ECE/TRANS/WP.29/2013/66 concerning the proposal for Supplement 5 to the 02 series of amendments to Regulation No. 117	G
12	(European Commission) Ad Hoc meeting on R117 C2 and C3 tyres Wet Grip thresholds	G
13	(OICA/CLEPA) Proposal for amendments to ECE/TRANS/WP.29/GRRF/2014/12	D
14	(OICA/CLEPA) Proposal for amendments to ECE/TRANS/WP.29/GRRF/2014/11	D
15	(OICA/CLEPA) Proposal for Supplement 1 to the 00 series of amendments to Regulation No. 130	F
16	(OICA/CLEPA) Proposal for Supplement 01 to the 00 series of amendments to Regulation No. 131	F
17 – Rev.1	(OICA) Proposal for Supplement 02 to the 01 series of amendments to Regulation No. 131	F
18	(OICA/CLEPA) Addendum to ECE/TRANS/WP.29/GRRF/2014/10	D
19	(The Netherlands) Comments from The Netherlands on the document ECE/TRANS/WP.29/GRRF/2014/6	F
20	(Russian Federation) Proposal for amendments to Regulation No. 13	B
21	(CLEPA) Proposal for amendments to Regulation No. 13, based on GRRF-75-17	C
22	(OICA) Proposal for amendments to the draft regulation on Brake Assist Systems (BAS)	D
23	(OICA) Proposal for amendments to the draft regulation on Electronic Stability Control (ESC)	D
24	(Germany) Report on the status of work on the issue of electro-mechanical transmission systems (ECE/TRANS/WP29/GRRF/2013/29)	E
25	(ETRTO) AT tyres: What are they?	F
26	(GRB Chair) Proposal for amendments to UN Regulation No. 117 (amending ECE/TRANS/WP.29/GRB/2013/10) on rolling resistance determination	F
27	(GRB Chair) Method of deceleration measuring and data processing for tyre rolling resistance determination. Testing and evaluation of the variant method using the $d\omega/dt$ form	F

<i>No.</i>	<i>(Author) Title</i>	<i>Follow-up</i>
28	(GRB Chair) Method of deceleration measuring and data processing for tyre rolling resistance determination. Testing and evaluation of the variant method using the $d\omega/dt$ form	F
29	(ACV Chair) Proposed continuations of the work related to modular vehicle combinations	A
30	(Ad hoc group on transitional provisions) Proposal for an addendum to ECE/TRANS/WP.29/GRRF/2014/16	A
31	(CLEPA) Proposal for amendments to Regulation No. 13	G
32	(India) India's Comments on ECE/TRANS/WP.29/GRRF/2014/4 and ECE/TRANS/WP.29/GRRF/2014/5	E
33	(India) Proposal for amendments to ECE/TRANS/WP.29/GRRF/2014/11	F
34	(India) Proposal for amendments to ECE/TRANS/WP.29/GRRF/2014/12	F
35 – Rev.1	(Italy) Proposal for amendments to ECE/TRANS/WP.29/GRRF/2014/4	F
36 – Rev.1	(IMMA) Proposal for amendments to ECE/TRANS/WP.29/GRRF/2014/5	F
37 – Rev.1	(Secretariat) Update provisional agenda (incl. the informal documents submitted until 14/02/2014)	A
38	(IMMA) Evaluation of type approval possibilities for "AT" tyres	F
39	(OICA) Proposal for amendments to document ECE/TRANS/WP.29/GRRF/2014/13	D
40	(OICA) Reference to CEL Annex in Regulation No. 13-H (split) and the new ESC and BAS draft Regulations	D
41	(ETRTO) Proposal for amendments to ECE/TRANS/WP.29/GRRF/2014/2	A
42 – Rev.1	(CLEPA) Proposal for amendments to Regulation No. 90	A
43	(Scania) Companion project - Presentation about "vehicle platooning"	F
44	(Italy) Revised proposal for amendments to UN GTR No. 3	C
45	(IMMA) Revised proposal for amendments to UN Regulation No. 78	C

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 Regulation No. 13

Paragraph 12, amend to read:

- "12. Transitional Provisions
- 12.1. As from the official date of entry into force of the 11 series of amendments (11 July 2008), no Contracting Party applying this UN Regulation shall refuse to grant or refuse to accept UN type approvals under this UN Regulation as amended by the 11 series of amendments.
- 12.2. Contracting Parties applying this Regulation shall grant approvals only if the vehicle type to be approved meets the requirements of this Regulation as amended by the 11 series of amendments.
- Notwithstanding the above requirements, compliance with the requirements of Supplement 7 to the 11 series of amendments shall not be required for all new type approvals before 28 October 2014.
- 12.3. As from the application dates shown in the following table in respect of the 11 series of amendments to this Regulation, Contracting Parties applying this Regulation shall not be obliged to accept, a vehicle type approved to the 10 series of amendments to this Regulation.

	<i>Vehicle category</i>	<i>Application date (as from the date after entry into force of the 11 series of amendments, 11 July 2008)</i>
Vehicles not exempted from stability control requirements by paragraphs 5.2.1.32 and 5.2.2.23 including the footnotes	M ₂	84 months (11 July 2015)
	M ₃ (Class III)	36 months (11 July 2011)
	M ₃ <16 tonnes (pneumatic transmission)	48 months (11 July 2012)
	M ₃ (Class II and B) (hydraulic transmission)	84 months (11 July 2015)
	M ₃ (Class III) (hydraulic transmission)	84 months (11 July 2015)
	M ₃ (Class III) (pneumatic control transmission and hydraulic energy transmission)	96 months (11 July 2016)
	M ₃ (Class II) (pneumatic control transmission and hydraulic energy transmission)	96 months (11 July 2016)
	M ₃ (other than above)	48 months (11 July 2012)
	N ₂ (hydraulic transmission)	84 months (11 July 2015)
	N ₂ (pneumatic control transmission and hydraulic energy transmission)	96 months (11 July 2016)
	N ₂ (other than above)	72 months (11 July 2014)
	N ₃ (2 axle tractors for semi-trailers)	36 months (11 July 2011)
	N ₃ (2 axle tractors for semi-trailers with pneumatic control transmission (ABS))	60 months (11 July 2013)
	N ₃ (3 axles with electric control transmission (EBS))	60 months (11 July 2013)
	N ₃ (2 and 3 axles with pneumatic control transmission (ABS))	72 months (11 July 2014)
	N ₃ (other than above)	48 months (11 July 2012)

	O ₃ (combined axle load between 3.5 - 7.5 tonnes)	72 months (11 July 2014)
	O ₃ (other than above)	60 months (11 July 2013)
	O ₄	36 months (11 July 2011)
Vehicles of category M, N and O exempted from stability control requirements (by paragraphs 5.2.1.32 and 5.2.2.23 including the footnotes) but not exempted from the other requirements of the 11 series of amendments		24 October 2016

- 12.4. Notwithstanding the requirements of paragraph 12.3, until 24 October 2016, no Contracting Party applying this Regulation shall refuse **to accept** a vehicle type **approval** which does not meet the requirements of Supplement 2 to the 11 series of amendments to this UN Regulation.
- 12.5. **Contracting Parties applying this UN Regulation shall not refuse to grant extensions of UN type approvals for existing types which have been granted according to the basis of the requirement that existed at the time of the original approval.**
- 12.6. Notwithstanding the transitional provisions above, Contracting Parties whose application of this Regulation comes into force after the date of entry into force of the most recent series of amendments are not obliged to accept approvals which were granted in accordance with any of the preceding series of amendments to this Regulation.
- 12.7. As from 24 months after the entry into force of supplement ~~{H}~~ 12 to the 11 series of amendments, Contracting Parties applying this UN Regulation shall grant UN type approvals to vehicle types only if the vehicle type to be approved meets the requirements of this UN Regulation as amended by supplement ~~{H}~~ 12 to the 11 series of amendments.

Annex 21, paragraph 2.1.4., amend to read:

- "2.1.4. Interventions of the vehicle stability function shall be indicated to the driver by a flashing optical warning signal **fulfilling the relevant technical requirements of Regulation No. 121**. The indication shall be present as long as the vehicle stability function is in an intervention mode. ~~The yellow warning signals specified in paragraph 2.1.5. below may be used for this purpose. The warning signal specified in paragraph 5.2.1.29.1.2. of this Regulation shall not be used for this purpose.~~

Additionally ...

... shall not generate the above signal.

~~The signal shall be visible to the driver, even in daylight, such that the driver can easily verify the satisfactory condition of the signal without leaving the driver's seat."~~

Paragraph 2.1.5., amend to read:

- "2.1.5. A vehicle stability function failure or defect shall be detected and indicated to the driver by ~~a yellow~~ **an** optical warning signal **fulfilling the relevant technical requirements of Regulation No. 121**.

The warning signal specified in paragraph 5.2.1.29.1.2. of this Regulation ~~may~~ **shall not** be used for this purpose ~~but shall not be used for interventions as defined in paragraph 2.1.4. of this annex.~~

The warning signal shall be constant and remain displayed as long as the failure or defect persists and the ignition (start) switch is in the 'on' (run) position."

Paragraph 2.1.6., amend to read:

- "2.1.6. In the case of a power-driven vehicle equipped with an electric control line and electrically connected to a trailer with an electric control line the driver shall be warned by a specific optical warning signal **fulfilling the relevant technical requirements of Regulation No. 121** whenever the trailer provides the information "VDC Active" via the data communications part of the electric control line. The optical signal defined in paragraph 2.1.4. above may be used for this purpose."

Annex III

Adopted amendments to Regulation No. 13-H

Paragraph 12, amend to read:

- "12. Transitional Provisions
- 12.1. As from the date of entry into force of the [xx] Supplement to this UN Regulation no Contracting Party applying this UN Regulation shall refuse to grant or refuse to accept UN type approvals to this UN Regulation as amended by Supplement [xx].
- 12.2. As from 24 months after the date of entry into force of Supplement [xx] to this UN Regulation Contracting Parties applying this UN Regulation shall grant UN type approvals only if the vehicle type to be approved meets the requirements of this UN Regulation as amended by Supplement [xx].
- 12.3. Notwithstanding the provisions of paragraphs 12.1 and 12.2 above, Contracting Parties applying this Regulation shall continue to grant approvals to those vehicle types not fitted with a Vehicle Stability Function or ESC and BAS, that meet Annex 9 of this Regulation. ~~as amended by supplement [xx]~~.
- 12.4. Contracting Parties applying this UN Regulation shall not refuse to grant extensions of UN type approvals for existing types, regardless of whether they are fitted with a Vehicle Stability Function or ESC and BAS or not, on the basis of the provisions valid at the time of the original approval.
- 12.5. Subject to the provisions of paragraph 12.6 below, even after the date of entry into force of Supplement [xx] to this UN Regulation, UN type approvals to any Supplements of this UN Regulation shall remain valid and Contracting Parties applying this UN Regulation shall continue to accept them, ~~regardless of whether they are fitted with a Vehicle Stability Function or ESC and BAS~~.
- 12.6. Contracting Parties applying this Regulation shall not be obliged to accept, for the purpose of national or regional type approval, a UN type approval for those vehicle types not fitted with a Vehicle Stability Function or ESC and BAS."

Annex 9, part A, paragraph 3.4.1.1., amend to read:

- "3.4.1.1. ~~Shall be displayed in direct and clear view of the driver, while in the driver's designated seating position with the driver's seat belt fastened~~ **fulfil the relevant technical requirements of Regulation No. 121;**"

Delete paragraphs 3.4.1.2. to 3.4.1.5.

Paragraphs 3.4.1.6. to 3.4.1.9. (former), renumber as paragraphs 3.4.1.2. to 3.4.1.5.

Throughout Regulation No. 13-H, renumber the references to these paragraphs accordingly.

Paragraphs 3.5.2. and 3.5.3., amend to read:

- "3.5.2. A control, whose only purpose is to place the ESC system in a mode in which it will no longer satisfy the performance requirements of paragraphs 3., 3.1., 3.2. and 3.3., shall ~~be identified by the symbol shown for "ESC Off" below or the~~

~~text "ESC OFF"~~ **fulfil the relevant technical requirements of Regulation No. 121.**

- 3.5.3. A control for an ESC system whose purpose is to place the ESC system in different modes, at least one of which may no longer satisfy the performance requirements of paragraphs 3., 3.1., 3.2., and 3.3., shall ~~be identified by the symbol below with the text "OFF" adjacent to the control position for this mode.~~ **fulfil the relevant technical requirements of Regulation No. 121.**

Alternatively, in the case where the ESC system mode is controlled by a multi-functional control, the driver display shall identify clearly to the driver the control position for this mode using ~~either the symbol in paragraph 3.5.2. or the text "ESC OFF".~~ the "off" symbol for electronic stability control system as defined in Regulation No. 121."

Paragraph 3.5.2., the pictogram, shall be deleted

Paragraph 3.5.3., the pictogram, shall be deleted

Paragraph 3.6.2.1., amend to read:

- "3.6.2.1. Shall ~~be displayed in direct and clear view of the driver while in the driver's designated seating position with the driver's seat belt fastened;~~ **fulfil the relevant technical requirements of Regulation No. 121.**"

Delete paragraphs 3.6.2.2. to 3.6.2.5.

Paragraphs 3.6.2.6. to 3.6.2.8. (former), renumber as paragraphs 3.6.2.2. to 3.6.2.4.

Throughout Regulation No. 13-H, renumber the references to these paragraphs accordingly

Annex IV

Adopted addendum to ECE/TRANS/WP.29/GRRF/2014/9

Paragraph 1.2., amend to read:

- 1.2. Original brake discs, ~~and~~ brake drums, **brake lining assemblies and drum brake linings** fitted at time of manufacturing of the vehicle and original replacement **brake** discs, ~~and~~ **brake** drums, **brake lining assemblies and drum brake linings** intended for the servicing of the vehicle are not subject to this Regulation."

Paragraph 3.2.1.2., amend to read:

- "(c) When testing brake discs and drums for vehicles with more than 2 axles:

$$m = 0.55 m_{\text{axle}} \quad m_{\text{axle}}: \text{maximum technically permitted mass of the axle}"$$

Annex 12,

Paragraph 3.2.1.2., amend to read:

- "3.2.1.2. Test mass

The test mass for calculating the inertia mass shall be as follows:

$$m = 0.55 m_{\text{axle}} \quad m_{\text{axle}}: \text{maximum technically permitted mass of the axle}"$$

Annex V

Adopted amendments to ECE/TRANS/WP.29/GRRF/2014/2

Insert a new paragraph 2.15.9., to read:

"2.15.11. the letters "IND" after the nominal rim diameter marking in case of tyres for construction application (industrial tractors)"

Annex 5,

Add a new table 8, to read:

"Table 8 – Tyres for Construction Applications (Industrial Tractors)

Tyre Size Designation	Theoretical rim width code (A1)	Nominal section Width (S1) (mm)		Overall Diameter (D) (mm)		Nominal rim Diameter (d) (mm)
		Radial	Diagonal	Radial	Diagonal	
14.9-24	13	378	378	1 245	1 240	610
14.9-28	13	378	378	1 350	1 345	711
16.9-24	15	429	429	1 320	1 310	610
16.9-28	15	429	429	1 420	1 410	711
16.9-34	15		429		1 560	864
17.5L-24	15	445	445	1 250	1 241	610
18.4-24	16	467	467	1 395	1 375	610
18.4-26	16		467		1 425	660
18.4-28	16	467	467	1 490	1 477	711
18.4-30	16		467		1 525	762
19.5L-24	17	495	495	1 320	1 314	610
21L-24	18	533	533	1 395	1 378	610
23.1-26	20		587		1 580	660