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World Forum for Harmonization of Vehicle Regulations

Working Party on Noise and Tyres

Seventy-fifth session

Geneva, 8–11 February 2022 (hybrid)

Report of the Working Party on Noise and Tyres on its seventy-fifth session*

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^{*} The present document was not edited before being sent to the United Nations translation services.

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I. Attendance

The Working Party on Noise and Tyres (GRBP) held its seventy-fifth session from 8 to 11 February 2022 in Geneva. The meeting was chaired by Mr. S. Ficheux (France). 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/Rev.2): Canada, China, Czech Republic, Finland, France, Germany, Hungary, India, Ireland, Italy, Japan, Netherlands, Norway, Republic of Korea, Russian Federation, South Africa, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland and United States of America. An expert from the European Commission (EC) participated. Experts from the following non-governmental organizations also participated: American Automotive Policy Council (AAPC), Bureau International Permanent des Associations de Vendeurs et Rechapeurs de pneumatiques (BIPAVER), International Motor Vehicle Inspection Committee (CITA), European Association of Automotive Suppliers (CLEPA), European Garage Equipment Association (EGEA), European Tyre and Rim Technical Organization (ETRTO), Federation of European Motorcyclists' Associations (FEMA), Motorcycle Manufacturers Association (IMMA), International Organization for Standardization (ISO), Imported Tyre Manufacturers Association (ITMA), International Organization of Motor Vehicle Manufacturers (OICA).

II. Adoption of the agenda (agenda item 1)

Documentation: ECE/TRANS/WP.29/GRBP/2022/1, Informal documents GRBP-75-01 and GRBP-75-23

2. GRBP considered and adopted the agenda (ECE/TRANS/WP.29/GRBP/2022/1, as amended by GRBP-75-01. GRBP noted the running order proposed by the Chair (GRBP-75-23). The list of informal documents is contained in Annex I. The list of GRBP informal groups is reproduced in Annex VI.

III. UN Regulation No. 51 (Noise of M and N categories of vehicles) (agenda item 2)

Documentation: ECE/TRANS/WP.29/GRBP/2022/3,

ECE/TRANS/WP.29/GRBP/2022/4, ECE/TRANS/WP.29/GRBP/2022/8,

ECE/TRANS/WP.29/GRBP/2022/9, Informal documents GRBP-75-04-Rev.1, GRBP-75-05, GRBP-75-06-Rev.1, GRBP-75-07, GRBP-75-08, GRBP-75-16, GRBP-75-17, GRBP-75-18, GRBP-75-19-Rev.1 and Add.1, GRBP-75-20, GRBP-75-21-Rev.1, GRBP-75-32, GRBP-75-36,

GRBP-75-37, GRBP-75-38, GRBP-75-40, GRBP-75-41

- 3. GRBP was informed about the activities of the Informal Working Group on Additional Sound Emission Provisions (IWG ASEP) (GRBP-75-38), of the Informal Working Group on Measurement Uncertainties (IWG MU) (GRBP-75-05) and of the Task Force on Vehicles' Sound (TF VS) (GRBP-75-32).
- 4. The expert from IWG ASEP GRBP introduced a proposal that aimed to clarify the current wording of UN Regulation No. 51 (ECE/TRANS/WP.29/GRBP/2022/3). GRBP adopted the proposal, as amended by GRBP-75-36 and subject to deletion "or later" for the ISO standard references in Annexes 3 and 8, and requested the secretariat to submit it for consideration and vote at the June 2022 sessions of WP.29 and AC.1 as a new Supplement to the 03 series of amendments to UN Regulation No. 51.
- 5. GRBP also addressed another proposal by IWG ASEP that introduced Real Driving Additional Sound Emission Provisions (RD ASEP) as a preliminary test procedure for the

The meeting was conducted in a hybrid format. On 8–10 February 2022, simultaneous interpretation was provided into the official UNECE languages.

purpose of collecting experience on the new test and evaluation concept. (ECE/TRANS/WP.29/GRBP/2022/4). GRBP adopted this proposal, as amended by GRBP-75-37, and requested the secretariat to submit it for consideration and vote at the June 2022 sessions of WP.29 and AC.1 as a new Supplement to the 03 series of amendments to UN Regulation No. 51.

6. The expert from Norway, in his capacity of Chair of IWG MU, presented proposals that introduced a temperature- and test-track compensation for vehicle noise (ECE/TRANS/WP.29/GRBP/2022/8). GRBP adopted the proposal, subject to the following correction of the equation for the mean value of logarithms of speeds v_i in Annex 3, Appendix 3, paragraph 4.3.:

$$\overline{v} = \frac{1}{n} \sum_{i=1}^{n} v_i$$

- 7. GRBP requested the secretariat to submit the proposal for consideration and vote at the June 2022 sessions of WP.29 and AC.1 as a new Supplement to the 03 series of amendments to UN Regulation No. 51.
- 8. The expert of IWG MU proposed to align the entry into force of draft Supplements (GRBP-75-04-Rev.1). GRBP agreed to request WP.29 and AC.1 to postpone to their June 2022 sessions consideration of draft Supplement 7 to the 03 series of amendments to UN Regulation No. 51 (ECE/TRANS/WP.29/2022/4), in order to combine it into a consolidated proposal with the amendments mentioned in paragraphs 4, 5 and 7 above.
- 9. The expert from China proposed to extend the transitional period in paragraph 11.8. of the 03 series of amendments to UN Regulation No. 51, due to the difficulties in meeting the noise limits by microvans and microtrucks available at the national market (GRBP-75-40 and GRBP-75-41). GRBP agreed to extend the transitional period until the end of 2023 and requested the secretariat to include this modification in draft Supplement 7 to the 03 series of amendments to UN Regulation No. 51 (paragraph 8 above). For any further extension, GRBP invited the expert from China to submit an official document to the next session.
- 10. The expert from IWG MU introduced a general approach how to handle measurement uncertainties (ECE/TRANS/WP.29/GRBP/2022/9, as amended by GRBP-75-07, and GRBP-75-08). GRBP endorsed this document and requested the secretariat to publish it as a document of reference on the GRBP website. The expert from IWG MU pointed out that an amendment to this document would be presented at the next session. GRBP that WP.29 should be informed about the developed general approach to measurement uncertainties, because it could apply to UN Regulations beyond the scope of GRBP.
- 11. The expert from IWG MU proposed to update their Terms of Reference (GRBP-75-06-Rev.1). GRBP adopted the revised Terms of Reference, as laid down in Annex II.
- 12. The experts from OICA reported on the outcome of three studies:
- Study on future sound limits values for type approval for vehicles of categories M and N (GRBP-75-16 and GRBP-75-17);
- Study on tyre performance (GRBP-75-18, GRBP-75-19-Rev.1 and GRBP-75-19-Rev.1-Add.1);
- Aggregation study with ETRTO on tyre performance (GRBP-75-20 and GRBP-75-21-Rev.1).
- 13. GRBP noted the reported results and requested the secretariat to publish them as documents for reference on the dedicated webpage.

IV. UN Regulation No. 138 (Quiet road transport vehicles) (agenda item 3)

Documentation: Informal documents GRBP-75-02-Rev.1 and Add.1, GRBP-75-03,

GRBP-75-42, GRBP-75-44

- 14. The expert from ISO reported on technical measurement development for standard ISO 16254 (GRBP-75-03). He also presented an updated standard ISO 10844:2021 (GRBP-75-02-Rev.1/Add.1) and proposed to include it into UN Regulations Nos. 51, 117 and 138 (GRBP-75-02-Rev.1). GRBP invited the expert from ISO to submit an official document to the next session.
- 15. GRBP recalled several proposals that had been briefly considered at the previous session (ECE/TRANS/WP.29/GRBP/72, para. 12). In view of a range of draft amendments to UN Regulation No. 138, GRBP agreed to start this work within a dedicated task force on quiet road transport vehicles (TF QRTV) which could later be transformed into an informal working group. The expert from OICA prepared draft Terms of Reference (GRBP-75-42) which received comments from the expert of China (GRBP-75-44). GRBP sought a Contracting Party who could take the lead of the task force, thanked OICA for having agreed to act as secretary and requested that the first meeting of the task force be convened in the coming months.

V. Tyres (agenda item 4)

A. UN Regulation No. 30 (Tyres for passenger cars and their trailers)

Documentation: ECE/TRANS/WP.29/GRBP/2021/9, Informal document GRBP-75-22

16. The expert from ETRTO reported on their ongoing assessment (GRBP-75-22) of the new definition of "radial tyre" that had been proposed by the experts from France and EC at the previous session (ECE/TRANS/WP.29/GRBP/2021/9). GRBP looked forward to the outcome of the ETRTO activities and expected that a final proposal would be submitted to the next session. The experts from the Netherlands and Russian Federation pointed out that the radial tyre definition may not necessarily cover new types of tyre structures and that adding a new subgroup of tyres with their own definition should be considered as an alternative.

B. UN Regulation No. 54 (Tyres for commercial vehicles and their trailers)

Documentation: ECE/TRANS/WP.29/GRBP/2021/13,

Rev.2

17. GRBP recalled that, at its previous session, it decided to continue consideration of ECE/TRANS/WP.29/GRBP/2021/13 in view of other draft amendments to UN Regulation No. 54 (ECE/TRANS/WP.29/GRBP/72, para. 16). The expert from ETRTO tabled a proposal that aimed to consolidate the calculation of reference dimensions with that provided in United Nations Global Technical Regulation (UN GTR) No. 16 (ECE/TRANS/WP.29/GRBP/2022/6).

18. GRBP adopted ECE/TRANS/WP.29/GRBP/2022/6 and ECE/TRANS/WP.29/GRBP/2021/13, as amended by GRBP-75-31-Rev.2, and requested the secretariat to submit it for consideration and vote at the June 2022 sessions of WP.29 and AC.1 as draft Supplement 25 to the original series of amendments to UN Regulation No. 54.

C. UN Regulation No. 106 (Tyres for agricultural vehicles and their trailers)

Documentation: ECE/TRANS/WP.29/GRBP/2022/7

19. GRBP considered a proposal that had been prepared by the expert from ETRTO with the aim to align the definitions of "diagonal", "bias-ply" and "bias belted" tyre structures with the definitions in UN Regulations Nos. 30 and 75 (ECE/TRANS/WP.29/GRBP/2022/7). GRBP adopted the proposal and requested the secretariat to submit it for consideration and

vote at the June 2022 sessions of WP.29 and AC.1 as draft Supplement 20 to UN Regulation No. 106.

D. UN Regulation No. 117 (Tyre rolling resistance, rolling noise and wet grip)

Documentation: ECE/TRANS/WP.29/2022/11, Informal documents GRBP-74-04,

GRBP-75-25-Rev.1, GRBP-75-26-Rev.1, GRBP-75-27, GRBP-75-28,

GRBP-75-29, GRBP-75-30

20. The experts from the Informal Working Group for Wet Grip on Worn Tyres (WGWT) reported on their progress (GRBP-75-27) and presented updated Terms of Reference of IWG WGWT (GRBP-75-28). GRBP adopted the revised Terms of Reference, as contained in Annex III.

- 21. GRBP recalled that, at the previous session, it had adopted draft amendments on the procedure and thresholds on wet grip performance for C1 tyres in worn state which was subsequently submitted to WP.29 as draft 03 series of amendments to UN Regulation No. 117 (ECE/TRANS/WP.29/2022/11). To complement the document, the expert from IWG WGWT tabled further amendments (GRBP-75-25-Rev.1). GRBP adopted this proposal and requested the secretariat to submit it for consideration and vote at the June 2022 sessions of WP.29 and AC.1 as part of a new 03 series of amendments to UN Regulation No. 117. The expert from IWG WGWT also presented a concept proposal for addressing wet grip requirements for C2 and C3 tyres in worn state (GRBP-75-26-Rev.1).
- 22. GRBP agreed to request WP.29 and AC.1 to postpone to their June 2022 sessions consideration of ECE/TRANS/WP.29/2022/11, in order to combine it into a consolidated proposal with the adopted amendments mentioned in the previous paragraph.
- 23. The expert from EC proposed to strengthen tyre rolling resistance and wet grip performance requirements (GRBP-75-29 and GRBP-75-30). GRBP invited him to submit an official document for consideration at the next session. The experts from Germany and the Netherlands stressed the importance of rolling noise and the need to include it in the scope of the future modifications as well.
- 24. GRBP noted that the experts from France continued consultations with other laboratories on monitoring of the machine deviation for rolling resistance measurements (GRBP-74-04). GRBP invited experts to provide comments to the authors, with a view to preparing an official document for the next session.

E. UN Regulation No. 141 (Tyre pressure monitoring system)

Documentation: ECE/TRANS/WP.29/GRBP/2022/2, Informal documents GRBP-75-10, GRBP-75-11, GRBP-75-33 and GRBP-75-34

- 25. The experts from the Task Force on Tyre Pressure Monitoring System and on Tyre Installation (TF TPMSTI) reported on their progress (GRBP-75-11) and introduced a proposal that aimed at implementing the requirements for a Tyre Pressure Refill System (TPRS) and a Central Tyre Inflation System (CTIS) (ECE/TRANS/WP.29/GRBP/2022/2 and GRBP-75-10). The expert from CLEPA suggested further amendments (GRBP-75-33 and GRBP-75-34).
- 26. GRBP adopted the proposal, as amended by GRBP-75-10 and GRBP-75-33, and requested the secretariat to submit it for consideration and vote at the June 2022 sessions of WP.29 and AC.1 as draft Supplement 2 to the 01 series of amendments to UN Regulation No. 141.

F. Draft UN Regulation on studded tyres

Documentation: Informal document GRBP-75-09

27. The expert from Finland reported on the progress of the Task Force on Studded Tyres (TF ST) (GRBP-75-09). GRBP noted that TF ST would present a working document to the next session with the aim to add procedures and requirements for ice grip marking.

VI. Draft UN Regulation on reversing alarm (agenda item 5)

Documentation: ECE/TRANS/WP.29/GRBP/2022/5, Informal documents GRBP-75-12, GRBP-75-13

28. The Task Force on Reverse Warning Sound (TF RWS) reported on their activities (GRBP-75-12) and presented a draft new UN Regulation (ECE/TRANS/WP.29/GRBP/2022/5). GRBP adopted the proposal, as amended by GRBP-75-13, and requested the secretariat to submit it for consideration and vote at the June 2022 sessions of WP.29 as a draft new UN Regulation on reverse warning sound. GRBP also requested the secretariat to inform the Working Party on General Safety Provisions (GRSG) about this decision.

VII. Exchange of information on national and international requirements on noise levels (agenda item 6)

29. No issues were considered under this item.

VIII. Proposal for amendments to the Consolidated Resolution on the Construction of Vehicles (agenda item 7)

Documentation: ECE/TRANS/WP.29/GRBP/2022/9

30. GRBP recalled that the reference document with a general approach and scientific background for handling measurement uncertainties in UN Regulations (ECE/TRANS/WP.29/GRBP/2022/9) was addressed under agenda item 2 (paragraph 10 above).

IX. Development of the International Whole Vehicle Type Approval system (agenda item 8)

31. No new information was provided.

X. Highlights of the recent sessions of the World Forum for Harmonization of Vehicle Regulations (agenda item 9)

Documentation: Informal document GRBP-75-24

32. GRBP took note of the highlights of the November 2021 session of WP.29 on GRBP and common issues (GRBP-75-24).

XI. Exchange of views on the future work of the Working Party on Noise and Tyres (agenda item 10)

Documentation: Informal document GRBP-75-35

33. The Chair presented an updated list of GRBP priorities (GRBP-75-35) GRBP delivered comments and requested its Chair to circulate a revised document as soon as possible. GRBP noted that priority items would be submitted to WP.29 for inclusion into the WP.29 programme of work for the years 2022-2023.

XII. Other business (agenda item 11)

Documentation: ECE/TRANS/WP.29/2021/148, Informal documents GRBP-74-18, GRBP-75-14, GRBP-75-15, GRBP-75-39-Rev.1, GRBP-75-43-Rev.1

- 34. The experts from BIPAVER, France and the Netherlands proposed a new scheme of approval for retreaded snow tyres for use in severe snow conditions in accordance with UN Regulation No. 109 (GRBP-75-14). GRBP invited experts to provide comments to the authors, with a view to preparing an official document for the next session.
- 35. In cooperation with the Working Party on Pollution and Energy (GRPE), GRBP established a Task Force on Tyres' Abrasion (TF TA) under the Co-Chairmanship of France and the European Commission, adopted its Terms of Reference (Annex IV, based on GRBP-75-39-Rev.1) and encouraged all experts to participate in the activities of TF TA. Many experts volunteered to contribute to the work of TF TA.
- 36. GRBP took note of a proposal for extension of the Electronic Database for the Exchange of Type Approval Documentation (DETA), with the aim to improve the use of the "Unique Identifier" (UI) in UN Regulations (GRBP-74-18) and decided to come back to this issue at the next session.
- 37. The expert from the Informal Working Group on Periodical Technical Inspections (IWG PTI) introduced a draft WP.29 framework document on vehicle whole-life compliance (ECE/TRANS/WP.29/2021/148 and GRBP-75-15). Following an exchange of views, GRBP requested its Chair to report to WP.29 on the GRBP considerations.
- 38. Based on GRBP-75-43-Rev.1, GRBP adopted a list of main decisions (Annex VI) in accordance with silence procedure.
- 39. GRBP was informed that Messrs. Y. Shirahashi (Japan), J. P. Laguna Gomez (Spain), A. Vosinis (EC), H.-M. Gerhard (OICA) and M. Klopotek von Glowczewski (OICA) would no longer attend GRBP meetings. GRB thanked them for their valuable contributions and wished them success in the future.

XIII. Provisional agenda for the next session (agenda item 12)

40. For its seventy-sixth session, scheduled to be held in Geneva from 14 to 16 September 2022, GRBP decided to keep the same structure for the provisional agenda. GRBP noted that the deadline for the submission of official documents to the secretariat would be 22 June 2022, twelve weeks prior to the session.

Annex I

List of informal documents (GRBP-75-...) distributed during the session

Symbol	Transmitted by	Agenda item	Title	Follow-up
1	Secretariat	1	Updated provisional agenda for the seventy-fifth session	a a
2-Rev.1	ISO	2, 3, 4	Proposal for amendments to UN Regulations Nos. 51, 117, 138	b
2-Rev.1- Add.1	ISO	2, 3, 4	ISO 10844:2021 technical changes and benefits	a
3	ISO	3	ISO 16254 Technical Measurement Development	a
4-Rev.1	IWG MU	2	Proposal for an amended entry into force of Supplements 7 and 8 to the 03 series of amendments to UN Regulation No. 51	a
5	IWG MU	2	Status report	a
6-Rev.1	IWG MU	2	Revised Terms of Reference	d
7	IWG MU	2	Proposal for an amendment to the document of reference (ECE/TRANS/WP.29/GRBP/2022/9)	a
8	IWG MU	2	How to handle measurement uncertainties due to their regulatory impact	o a
9	TF ST	4 (f)	Status report	a
10	TF TPMSTI	4 (e)	Amendments to ECE/TRANS/WP.29/GRBP/2022/2	d
11	TF TPMSTI	4 (e)	Status report	a
12	TF RWS	5	Status report	a
13	TF RWS	5	Amendments to ECE/TRANS/WP.29/GRBP/2022/5	d
14	BIPAVER, France and Netherlands	11	Proposal for amendments to the 01 series of amendments to UN Regulation No. 109	b
15	IWG PTI	11	Proposal for a Framework Document on Vehicle Whole-Life Compliance (ECE/TRANS/WP.29/2021/148)	e a
16	OICA	2	Study on future sound limits values for type approval for vehicles of category M & N	a
17	OICA	2	Study on future sound limits values for type approval for vehicles of category M & N: presentation	a
18	OICA	2	Tyre Performance Study Report	a
19-Rev.1	OICA	2	Tyre Performance Study: presentation	a
19- Rev.1- Add.1	OICA	2	Tyre Performance Study: presentation (abstract)	a
20	OICA	2	Tyre Performance Aggregation Study	a
21-Rev.1	OICA	2	Tyre Performance Aggregation Study: presentation	a
22	ETRTO	4 (a)	Activities on new definition of radial structure for passenger car tyres and comments on ECE/TRANS/WP.29/GRBP/2021/9	b

Symbol	Transmitted by	Agenda item	Title	Follow-up
23	Chair	1	Running order	a
24	secretariat	9	General information and WP.29 highlights	a
25-Rev.1	IWG WGWT	4 (d)	Proposal to amend document ECE/TRANS/WP.29/2022/11	d
26-Rev.1	IWG WGWT	4 (d)	Concept proposal for addressing wet grip on worn tyre requirements for C2 and C3 tyres	c
27	IWG WGWT	4 (d)	Status report	a
28	IWG WGWT	4 (d)	Proposal for revised Terms of Reference	d
29	EC	4 (d)	Amendments to UN Regulation No. 117	b
30	EC	4 (d)	Evolution of tyre limits for rolling resistance in new condition and for wet grip in new & worn condition in UN Regulation No. 117	b
31-Rev.2	ETRTO	4 (b)	Amendments to ECE/TRANS/WP.29/GRBP/2021/13 and ECE/TRANS/WP.29/GRBP/2022/6	d
32	TF VS	2	Status report	a
33	CLEPA	4 (e)	Proposal for a new Supplement to the 01 series of amendments to UN Regulation No. 141	d
34	CLEPA	4 (e)	Explanation of the proposal for a new Supplement to the 01 Series of Amendments to Regulation No. 141	d
35	Chair	10	GRBP priorities	a
36	IWG ASEP	2	Amendment to ECE/TRANS/GRBP/2022/3	d
37	IWG ASEP	2	Amendment to ECE/TRANS/GRBP/2022/4	d
38	IWG ASEP	2	Status report	a
39-Rev.1	EC and France	11	Terms of Reference of the Task force on Tyres' abrasion (TF TA)	a
40	China	2	Proposal for an amendment to the 03 series of amendments to UN Regulation No. 51	d
41	China	2	Proposal for a micro-van and micro-truck	d
42	OICA	3	Draft Terms of Reference for a new IWG on UN Regulation No. 138	I с
43-Rev.1	secretariat	11	Draft list of main decisions	a
44	China	3	Comments on GRBP-75-42	c

Notes:

- a Consideration completed or superseded.
- b Continue consideration at the next session with an official symbol.
- c Continue consideration at the next session as an informal document.
- d Adopted and to be submitted to WP.29.

Annex II

Revised Terms of Reference of the Informal Working Group on Measurement Uncertainties (based on GRBP-75-06-Rev.1)

A. Introduction

- 1. In line with ECE/TRANS/WP.29/GRB/68, para. 8, this document establishes the Terms of Reference of the Informal Working Group on Measurement Uncertainties (IWG MU).
- 2. The aim of IWG MU is to propose harmonized measures for evaluating systematic and random errors in order to improve the test procedures in at least UN Regulations Nos. 51 and 117 (for rolling sound emissions only) by reducing measurement uncertainties.

B. Objectives

- 3. IWG MU shall develop and propose harmonized measures for evaluating systematic and random errors based on the International Organization of Standardisation (ISO) Guide to the expression of uncertainty in measurement (GUM 98-3).
- 4. The scope and purpose of IWG MU shall cover at least UN Regulation Nos. 51 and 117. IWG MU shall develop harmonized technical requirements for these UN Regulations with consideration of their test procedures.
- IWG MU shall, where appropriate, develop a practice guide for compensation and/or correction factors.
- 6. A general approach shall then be made in such a way that it would be possible to use it for improving the test procedures in other UN Regulations. This approach could be either documented in the Consolidated Resolution on the Construction of Vehicles (R.E.3) or as a reference document.
- 7. IWG MU shall report to GRBP.

C. Rules of Procedure

- 8. IWG MU is open to all participants of GRBP. However, it is recommended that a maximum of two technical experts per country and organization participate in IWG. IWG will be chaired by Norway. OICA shall act as Secretary.
- 9. The working language shall be English.
- 10. All documents and/or proposals shall be submitted to the Secretary in a suitable electronic format at least one week before the session.
- 11. An agenda and the latest draft documents shall be circulated to the members of IWG in advance of all scheduled meetings.
- 12. All IWG documents shall be made available on a dedicated ECE website.
- 13. Decisions of IWG MU shall be reached by consensus. When consensus cannot be reached, the IWG Chair shall present the different points of view to GRBP and seek guidance as appropriate.

D. Timeline

- 14. The aim of IWG MU is to present:
- (a) For the seventy-third session of GRBP in January 2021: a draft reference document and an informal document with amendments to UN Regulation No. 51 (done).

- (b) For consideration and adoption at the seventy-fourth session of GRBP in September 2021: an official document with amendments to UN Regulation No. 51(done: document ECE/TRANS/WP.29/GRBP/2021/22 with draft Supplement 7 to the 03 series of amendments to UN Regulation No. 51 was submitted).
- (c) For consideration at the seventy-fourth session of GRBP in September 2021: an informal document with general guidelines on how to improve the test procedures in other UN Regulations under the auspices of GRBP in order to reduce measurement uncertainties (done: informal document GRBP-74-11).
- (d) For consideration and adoption at the seventy-fifth session of GRBP in February 2022: an official document with general guidelines on how to improve the test procedures in other UN Regulations in order to reduce measurement uncertainties.
- (e) For consideration and adoption at the seventy-seventh session of GRBP in February 2023: an informal document with amendments to UN Regulation No. 117.
- (f) For consideration and adoption at the seventy-eighth session of GRBP in September 2023: a working document with amendments to UN Regulation No. 117.

Annex III

Revised Terms of Reference of the Informal Working Group for Wet Grip on Worn Tyres (based on GRBP-75-28)

A. Introduction

- 1. At the sixty-ninth session of the Working Party on Noise (GRB), it was pointed out that the wet grip performance of tyres decreases with tyre wear, so the current testing (performed on new tyres) does not represent the worst-case situation. The process of adapting the requirements on tyres should continue, in particular to ensure that tyre performance is also assessed, if relevant, at the end of a tyre's life (in worn state) and to promote the idea that tyres should meet the requirements throughout their life and not be replaced prematurely. UN Regulation No. 117 now contains detailed provisions on noise, rolling resistance and wet grip performance of tyres that can be amended to take into account some other prescriptions.
- 2. An informal working group (IWG) was created in 2019 to define prescriptions for wet grip performance of tyres in worn state (WGWT).
- 3. This proposal establishes the updated Terms of Reference for the IWG WGWT.
- 4. The aim of the group is to propose an amendment to UN Regulation No. 117 under the 1958 Agreement.

B. Objectives

- 5. The scope and purpose are based on ECE/TRANS/WP.29/GRB/2019/6 and ECE/TRANS/WP.29/GRBP/70, para. 18.
- 6. The future amendment to UN Regulation No. 117 will apply to new pneumatic tyres of class C1 and will address also the suitable requirements to those of classes C2 and C3.
- 7. IWG WGWT shall:
 - Consider the scope and elaborate the target;
 - For tyres of Class C1
 - Evaluate the method for preparing a tyre to be tested in worn state at its type-approval;
 - Define the test conditions;
 - o Describe the test methods;
 - Define the type-approval thresholds of tyre wet grip performance in worn state;
 - Introduce the moulded special reference test tyre SRTTworn;
 - o Improve the precision of test procedure by using the molded SRTTworn.
 - Address the suitable requirements for tyres of classes C2 and C3
- 8. IWG WGWT shall work in the framework of the 1958 Agreement and shall report to GRBP.

C. Rules of Procedure

- 9. IWG WGWT shall be open to all participants of the Working Party on Noise and Tyres (GRBP).
- 10. IWG shall be co-chaired by France and the European Commission. The European Tyre and Rim Technical Organisation (ETRTO) shall act as Secretary.

- 11. The working language will be English.
- 12. All documents and/or proposals must be submitted to the Secretary of IWG in a suitable electronic format at least one week before a scheduled meeting.
- 13. An agenda and the latest draft document will be circulated to all members of IWG in advance of all scheduled meetings.
- 14. All IWG documentation will be made available on the dedicated ECE website.

D. Timeline

- 15. IWG shall aim to present:
 - a progress report and an informal document at the seventy-fifth session of GRBP in February 2022 to complete ECE/TRANS/WP.29/GRBP/2021/12 submitted for adoption at the seventy-fourth session of GRBP;
 - two working documents for adoption at the seventy-sixth session of GRBP in September 2022 at the latest:
 - o on wet grip of tyres of classes C2 and C3 in worn state;
 - on wet grip of tyres of class C1 in worn state to supplement the initial proposal in ECE/TRANS/WP.29/GRBP/2021/12 to improve the precision of the test procedure tyre with the introduction of the moulded SRTTworn tyre and to refine the C1 threshold for clusters, if any.
 - An informal document at the seventy-eighth session of GBRP in September 2023 and a working document for adoption at the seventy-nineth session of GRBP in January 2024 at the latest on wet grip of C1 class tyres in worn state to improve the precision of test procedure.

Annex IV

Terms of Reference of the Task Force on Tyres' Abrasion (based on GRBP-75-39-Rev.1)

A. Introduction

- 1. Microplastics are synthetic polymers released from a wide range of sources. They can be introduced in the environment intentionally or unintentionally, and they affect all environmental compartments, including air, water, soils / sediments and biota. A European Commission study ² reported that automotive tyres are the highest contributor of unintentionally released microplastics in the environment. Tyre wear is caused by the friction process between tyres and the road surface; therefore, tyre wear is emitted wherever vehicles travel. Tyre abrasion (i.e. the amount of tyre material released per km travelled) is a metric that could be applied to define tyre wear, allowing for the classification and type approval of tyres based on their environmental impact.
- 2. During the 185th session of WP.29, the European Commission emphasised the need to work on tyres' microplastic emissions following the priorities set out in the European Union work programme UNECE activities 2022-2023 proposals under the responsibility of the Directorate-General for Internal Market, Industry, Entrepreneurship and Small and Medium Enterprises (DG GROW) (informal document WP.29-185-17). In parallel, GRBP and GRPE in their work programmes identified the need to consider the development of a tyre abrasion test method with the aim of controlling and mitigating tyre wear particles and thus the release of microplastics in the environment.
- 3. It was agreed to create a Task Force (TF) to work on the development of a standardized methodology for measuring and limiting tyre abrasion.
- 4. This proposal establishes the Terms of Reference for the Task Force on Tyres' Abrasion (TF TA).
- 5. The aim of TF TA is to prepare and to propose a new UN Regulation or a new requirement to UN Regulation No. 117 under the 1958 Agreement for the type approval of tyres. TF TA will report to and consult with both GRPE and GRBP.

B. Objectives

- 6. The UN Regulation will address the tyres' abrasion performance by determining a standardized measurement method which will allow for the quantification of the microplastic emissions in the environment. At the same time, TF TA will investigate the correlation between abrasion rate and durability and consider the inclusion of both abrasion rate and durability in the proposed UN Regulation.
- 7. The future UN Regulation will apply to new pneumatic tyres.
- 8. TF TA shall:
 - (a) Develop a procedure for measuring the abrasion of tyres: test conditions and methods.
 - (b) Rate the abrasion performance of a wide range of tyres available in the market.
 - (c) Define abrasion limits for tyres in order to limit the emission of microplastics to the environment.
 - (d) Assess potential correlation between abrasion performance and durability of tyres.

https://ec.europa.eu/environment/marine/good-environmental-status/descriptor-10/pdf/microplastics_final_report_v5_full.pdf

- (e) Develop a UN Regulation (or addition to UN Regulation No 117) for the type approval of tyres in respect to their abrasion.
- 9. TF TA shall work in the framework of the 1958 Agreement and shall report to both GRBP and GRPE.

C. Rules of Procedure

- 10. TF TA shall be open to all participants of GRBP and GRPE.
- 11. TF shall be co-chaired by the European Commission and France.
- 12. The technical secretariat shall be taken by the representative of ETRTO.
- 13. The working language will be English.
- 14. The process will pursue consensus. When consensus cannot be reached, the co-chairs of TF TA shall present the different points of view to GRBP.
- 15. The progress of the TF TA will be reported to GRBP and GRPE as an informal document by one of the co-chairs.
- 16. All documents and/or proposals must be submitted to the co-chairs and the secretary of TF in a suitable electronic format at least one week before a scheduled meeting.
- 17. An agenda and the latest draft document will be circulated to all members of TF in advance of all scheduled meetings.
- 18. All TF TA's documentation will be made available on the dedicated ECE website.

D. Timeline

19. The aim of TF TA is to present an informal document for consideration during the seventy-eighth session of GRBP in September 2023 (submitted for information to the eighty-eighth session of GRPE in June 2023). The final objective of TF TA is to present a working document for consideration during the seventy-nineth session of GRBP in February 2024 (submitted for feedback to the eighty-nineth session of GRPE in January 2024).

Annex V

Decisions adopted under silence procedure

Decision No.	Agenda Item	Decision
1	1	GRBP adopted the provisional agenda ECE/TRANS/WP.29/GRBP/2022/1 as updated by
		GRBP-75-01
2	2	GRBP adopted ECE/TRANS/WP.29/GRBP/2022/4, as amended by GRBP-75-37, and
		requested the secretariat to submit it for consideration and vote at the June 2022 sessions
		of WP.29 and AC.1 as a new Supplement to the 03 series of amendments to UN
	2	Regulation No. 51
3	2	GRBP adopted ECE/TRANS/WP.29/GRBP/2022/3, as amended by GRBP-75-36 and
		subject to deletion "or later" for ISO references in Annexes 3 and 8 and requested the
		secretariat to submit it for consideration and vote at the June 2022 sessions of WP.29 and
4	2	AC.1 as a new Supplement to the 03 series of amendments to UN Regulation No. 51
4	2	GRBP adopted ECE/TRANS/WP.29/GRBP/2022/8, subject to a correction of the
		equation in Annex 3, Appendix 3, paragraph 4.3., and requested the secretariat to submit it for consideration and vote at the June 2022 sessions of WP.29 and AC.1 as a new
		Supplement to the 03 series of amendments to UN Regulation No. 51
5	2	GRBP agreed to request WP.29 and AC.1 to postpone to their June 2022 sessions
	2	consideration of draft Supplement 7 to the 03 series of amendments to UN Regulation No.
		51 (ECE/TRANS/WP.29/2022/4), in order to combine it with the amendments mentioned
		in decisions 2, 3 and 4 above into a consolidated proposal
6	2	GRBP adopted revised Terms of Reference of IWG MU (GRBP-75-06-Rev.1)
7	2	GRBP endorsed on a general approach how to handle measurement uncertainty
ĺ	Ĩ	(ECE/TRANS/WP.29/GRBP/2022/9, as amended by GRBP-75-07) and requested the
		secretariat to publish it as a document of reference on the GRBP website. GRBP noted
		that an amendment to this document would be presented at the next session
8	5	GRBP adopted ECE/TRANS/WP.29/GRBP/2022/5, as amended by GRBP-75-13, and
		requested the secretariat to submit it for consideration and vote at the June 2022 sessions
		of WP.29 as a draft new UN Regulation on reversing alarm. GRBP requested the
		secretariat to inform GRSG about this decision
9	3	GRBP took note of GRBP-75-02-Rev.1 and invited the expert from ISO to submit it as an
		official document to the next session
10	4 (d)	GRBP adopted GRBP-75-25-Rev.1 and requested the secretariat to submit it for
		consideration and vote at the June 2022 sessions of WP.29 and AC.1 as part of a new 03
		series of amendments to UN Regulation No. 117
11	4 (d)	GRBP agreed to request WP.29 and AC.1 to postpone to their June 2022 sessions
		consideration of draft 03 series of amendments to UN Regulation No. 117
		(ECE/TRANS/WP.29/2022/11), in order to combine it with the amendments mentioned in
		decision 10 above into a consolidated proposal
12	4 (d)	GRBP adopted revised Terms of Reference of IWG WGWT (GRBP-75-28)
13	4 (d)	GRBP took note of GRBP-75-29 and GRBP-75-30 and invited the expert from EC to
		submit an official document for consideration at the next session
14	4 (e)	GRBP adopted ECE/TRANS/WP.29/GRBP/2022/2, as amended by GRBP-75-10 and
		GRBP-75-33, and requested the secretariat to submit it for consideration and vote at the
		June 2022 sessions of WP.29 and AC.1 as draft Supplement 2 to the 01 series of
		amendments to UN Regulation No. 141
		GRBP adopted ECE/TRANS/WP.29/GRBP/2022/6 and
1.5	4 (1-)	ECE/TRANS/WP.29/GRBP/2021/13, as amended by GRBP-75-31-Rev.2, and requested
15	4 (b)	the secretariat to submit it for consideration and vote at the June 2022 sessions of WP.29
		and AC.1 as draft Supplement 25 to the original series of amendments to UN Regulation
16	4 (a)	No. 54 GDDD adopted ECE/TD ANS/AVD 20/GDDD/2022/7 and requested the secretarist to
16	4 (c)	GRBP adopted ECE/TRANS/WP.29/GRBP/2022/7 and requested the secretariat to submit it for consideration and vote at the June 2022 sessions of WP.29 and AC.1 as a
		draft Supplement to UN Regulation No. 106

17	4 (a)	GRBP noted the ETRTO activities on a new definition of radial structure in UN
		Regulation No. 30 (GRBP-75-22 in response to ECE/TRANS/WP.29/GRBP/2021/9) and
		expected that a final proposal would be submitted to the next session
18	11	GRBP noted GRBP-75-14 and invited experts to provide comments to the authors, with a
		view to preparing an official document for the next session
19	3	In view of a range of proposals for amendments to UN Regulation No. 138 (QRTV),
		GRBP agreed to start this work within a dedicated task force (TF QRTV) which could
		later be transformed into an IWG. GRBP sought a Contracting Party who could take the
		lead of TF. GRBP thanked OICA for having agreed to act as secretary and requested that
		the first meeting of TF be convened in the coming months
20	11	In cooperation with GRPE, GRBP established a task force on tyres' abrasion, adopted its
		Terms of Reference (GRBP-75-39-Rev.1) and encouraged all experts to participate in its
		activities
21	2	GRBP noted the outcome of three studies on noise and on tyre performance (GRBP-75-
		16, GRBP-75-17, GRBP-75-18, GRBP-75-19-Rev.1, GRBP-75-19-Rev.1-Add.1, GRBP-
		75-20 and GRBP-75-21-Rev.1) and requested the secretariat to publish them as
		documents for reference on the dedicated webpage
22	11	GRBP took note of GRBP-74-18 and decided to come back to the issue of using "Unique
		Identifier – UI" at the next session
23	11	GRBP had an exchange of views on GRBP-75-15 on the whole life compliance of
		vehicles and requested its Chair to report to WP.29 on the GRBP considerations
24	2	GRBP considered GRBP-75-40 and agreed to extend the transitional period until the end
		of 2023. The secretariat was requested to include this modification in draft Supplement 7
		to the 03 series of amendments to UN Regulation No. 51 (decision 5 above). For any
		further extension, GRBP invited the expert from China to submit an official document to
		the next session
25	4 (d)	GRBP noted that the experts from France continued consultations with other laboratories
		on GRBP-74-04. GRBP invited experts to provide comments to the authors, with a view
		to preparing an official document for the next session
26	10	GRBP delivered comments on an updated list of GRBP priorities (GRBP-75-35) and
		requested its Chair to circulate a revised document as soon as possible. GRBP noted that
		priority items would be submitted to WP.29 for inclusion into the WP.29 programme of
		work for the years 2022-2023.
27	11	GRBP adopted a draft list of main decisions at its 75th session (GRBP-75-43-Rev.1)

Annex VI

GRBP informal groups

Informal group	Chair(s) and Co-Chair(s)	Secretary	Expiry date of the mandate
Quiet Road Transport Vehicles (QRTV) for GTR	Mr. Ezana Wondimneh (USA) Tel: +1 202 366 21 17 Email: Ezana.wondimneh@dot.gov Mr. Ichiro Sakamoto (Japan) Tel:+81 422 41 66 18 Fax:+81 422 76 86 04 Email: i-saka@ntsel.go.jp	Mr. Andreas Vosinis (Directorate General Growth, European Commission) Tel:+ 32 2 2992116 Email: andreas.vosinis@ec.europa.eu	December 2023
Wet Grip performance for Tyres in Worn state (WGWT)	Mrs. Elodie Collot (France) Phone: +33 171 80 17 43 Fax: +33 1 71 80 17 17 Email: elodie.collot@utacceram.com	Mr. Nicolas de Mahieu (ETRTO) Phone: +32 23 44 40 59 Email: info@etrto.org	January 2024
Measurement Uncertainties (IWG MU)	Mr. Truls Berge (Norway) Tel: + 47 905 72 026 Email: truls.berge@sintef.no	Mr. Klaus Neuhaus (OICA) Tel: +49 170 911 2186 Email: klaus.neuhaus@porsche.de	September 2023