Terms of Reference:

GRBP Informal Working Group on

Measurement Uncertainties (IWG MU) under the 1958 Agreement

Revised draft for adoption by GRBP at its seventy-fifty session (subject to WP.29 adoption)

A. Introduction

- 1. Following ECE/TRANS/WP.29/GRB/68, Agenda item V para. 8, this document establishes Terms of Reference for the work of the Informal Working Group on Measurement Uncertainties under the 1958 Agreement.
- 2. The aim of the Informal Working Group is to propose harmonized measures for evaluating systematic errors and random errors to improve the test procedures for at least UN Regulation No. 51 and No. 117 (for Rolling Sound emissions only) to reduce measurement uncertainties.

B. Objective of the Informal Working Group on Measurement Uncertainties

- 1. The Informal Working Group shall develop and propose harmonized measures for evaluating systematic errors and random errors based on GUM 98-3.
- 2. The scope and purpose of the Informal Working Group should cover at least UN Regulation No. 51 and No. 117. The Informal Working Group shall develop harmonized technical requirements for these UN Regulations with consideration to their test procedures.
- 3. The Informal Working Group shall, where appropriate, develop a practice guide for compensation and/or correction factors.
- 4. A general approach shall then be made in such a way that it is possible to use it to improve test procedures in other UN Regulations. This approach could be either documented in the Consolidated Resolution on Construction of Vehicles (R.E.3) or as a Document for reference.
- 5. The Informal Working Group shall report to GRBP.

C. Rules of Procedure

- 1. The Informal Working Group is open to all participants of GRBP. However, it is recommended that a maximum of two technical experts per country and organization participate in this group. The Informal Working Group will be chaired by Norway. OICA shall act as Secretary.
- 2. The working language will be English.
- 3. All documents and/or proposals must be submitted to the Secretary of the Informal Working Group in a suitable electronic format at least one week before the session.
- 4. An agenda and the latest draft document will be circulated to all members of the Informal Working Group in advance of all scheduled meetings.
- 5. All Informal Working Group documentation will be made available on the dedicated UNECE website.
- 6. The Informal Working Group decisions will be reached by consensus. When consensus cannot be reached, the Informal Working Group Chairman shall present the different points of view to GRBP and seek guidance from GRBP as appropriate.

D. Timeline

- 1. The aim of the Informal Working Group is to present
 - **a.** during the 73rd GRBP in January 2021 a Draft document for Reference and an Informal document for amendments to UN Regulation No. 51 (Done)
 - b. during 74th GRBP in September 2021 a Working document for amendments to UN Regulation No. 51 for consideration and adoption.
 (Done: The Working document (see <u>IWGMU-12-05</u> or <u>GRBP/2021/22</u> Supplement 7 to UN Regulation No. 51.03) has been submitted to the 74th session of GRBP)
 - c. during 74th GRBP in September 2021 an Informal document containing general Guidelines for how to improve test procedures in other UN Regulations to reduce measurement uncertainties for consideration (**Done**, see GRBP-74-11).
 - **d.** during 75th GRBP in February 2022 an Informal document for amendments to UN Regulation No. 117, and a Working document containing general Guidelines for how to improve test procedures in other UN Regulations to reduce measurement uncertainties for consideration and adoption.
 - e. during 76th GRBP in September 2022 77th GRBP in February 2023 a Working an Informal document for amendments to UN Regulation No.117.
 - f. during 78th GRBP in September 2023 a Working document for amendments to UN Regulation No. 117 for consideration and adoption.

The changes are marked in **bold** and strike through for deleted text (Reference: GRBP-74-12).

Justification

The revised Terms of Reference (GRBP-74-12) were adopted at the 74th session of GRBP (September 2021). This revised document intended to present an Informal document to amend UN Regulation No. 117 for the 75th session of GRBP. However, due to the pandemic, the experts from the tyre industry (ETRTO) were unable to fulfill their planned contribution to the uncertainty budget when measuring the noise of tyres within the time for the February 2022 session. Therefore, the timetable for the work related to Regulation No. 117 has been shifted with approximately 24 months for this part.

In addition, a second Document of Reference is proposed for the 75th session, as a continuation of the Working document GRBP/2022/9. This document proposes a procedure how to handle measurement uncertainties due to its regulatory impact.

Furthermore, the IWG MU proposes to amend UN Regulation No. 51. by two new Appendixes in Annex 3 with tables showing the measurement uncertainties for different test conditions such as type approval, COP or field testing. An Informal document is planned to be presented in the 76th session of GRBP.