United Nations GRPE-87-51



# **Economic and Social Council**

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## **Economic Commission for Europe**

**Inland Transport Committee** 

World Forum for Harmonization of Vehicle Regulations

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Item 17.12 of the provisional agenda
Progress on the development of new UN GTRs
and of amendments to established UN GTRs:
Draft UN GTR on Global Real Driving Emissions (GRDE);

# Revised authorization to develop a UN GTR on Global Real Driving Emissions (RDE)

### Submitted by the Working Party on Pollution and Energy \*

The text reproduced below was prepared by the Working Party on Pollution and Energy. It was adopted by the Executive Committee (AC.3) of the 1998 Agreement at its November 2021 session (ECE/TRANS/WP.29/1161, para. 130). It is based on ECE/TRANS/WP.29/2021/149. It is a revised authorization to develop a UN GTR on Global Real Driving Emissions (RDE). This document shall be appended to the UN GTR in accordance with the provisions of paragraphs 6.3.4.2., 6.3.7. and 6.4. of the 1998 Agreement.

<sup>\*</sup> In accordance with the programme of work of the Inland Transport Committee for 2022 as outlined in proposed programme budget for 2022 (A/76/6 (part V sect. 20) para 20.76), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

#### I. Mandate and Objectives

1. In the framework of the 1998 Agreement the main objective of this proposal is to request a revision of the authorization to develop a UN GTR on Global RDE with the following objective:

Continue development of the RDE GTR with a methodology for determining the real driving emissions of light duty vehicles appropriately adapted for broader areas of vehicle operation and additional pollutants.

#### II. Introduction

- 2. The draft GTR developed by the RDE Phase 1 group was largely informed by established RDE test procedures from both the European Commission and Japan. Many stakeholders participated in the development of the draft GTR and it met the immediate need of many Contracting Parties. However, it was generally recognized that the test procedure should be expanded to include a broader areas of vehicle operation and additional pollutants.
- 3. It is therefore appropriate to continue to develop the global technical regulation on RDE. The RDE Phase 2 GTR will consider extended conditions of driving, considering the varying conditions on driving patterns, traffic and ambient conditions which occur in the different areas in the world where cars are used. Furthermore, the RDE GTR structure should be developed in a way that it is possible for countries to implement the RDE GTR into their national legislation considering local normal driving, traffic and ambient conditions as well as variations in regulated pollutants and air toxics.
- 4. In order to develop the proposal a second phase of the IWG on Real Driving Emissions is necessary.
- 5. In order to accommodate developments in the national emission type approval regulations, e.g. Euro 7 in Europe or a new upcoming proposal on the emissions from light duty vehicles in the USA, the contracting parties suggest to delay the work on the GTR until the national rules are adopted.

#### III. Areas of work

- 5. The group shall focus its work in the following areas:
- (a) Create a consolidated list of goals of the real driving emissions (RDE) procedure- phase 2

Working within the IWG, stakeholders should identify and document an agreed upon list of goals for the Phase 2 project. This should include, but not limited to, expanded vehicle operation representative of real-world driving, a less prescriptive and more flexible test procedure, and consideration of additional pollutants, such as particle mass measurement (PM).

(b) Establish Consensus Goals

The consolidated version will be reviewed with the following objectives:

- (i) Streamline the GTR text by focusing on the test procedure;
- (ii) Identify areas for further technical improvements with particular focus in the evaluation methods;
- (iii) Study the differences in conditions on normal driving patterns, traffic and ambient conditions in the different areas in the world where cars are used and review the regional needs;
- (iv) Produce a draft GTR with the technical procedure for RDE.
- (c) Finalizing a draft GTR on RDE

The draft GTR shall be edited by the group and proposed for acceptance to the June 2023 GRPE session at a date which will be decided when the RDE IWG will recommence its work.

#### IV. Existing regulations

6. UN Regulation No. 83 contains uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements. However this Regulation has no provisions for checking the real driving emissions of pollutants.

The IWG on RDE has in the meantime prepared and proposed for approval a new UN Regulation on RDE. The Regulation is pending approval following a decision on a technical element planned for approval in WP.29 in its June 2023.

#### V. Revised Timeline

- 7. The plan below is indicative only and will be regularly reviewed and updated to reflect progress and feasibility of the timeline.
- (a) June 2021: Acceptance of the Terms of Reference by GRPE and request for new mandate;
- (b) RDE IWG meetings and work will recommence once the national regulations are set.
- <u>(b)</u> Sept. 2021 February 2023: technical research and meetings of IWG (c) January 2023
- (c) January 2023: Draft GTR available as informal document, guidance on any open issues by GRPE;
  - (d) January 2023 March 2023: Final drafting work on UN GTR text;
- (e) March 2023: Transmission by RDE IWG of a draft UN GTR as a working document for consideration at the June 2023 GRPE session;
  - (f) April to May 2023: final corrections may be submitted as informal documents;
- (g) June 2023: Final discussion and approval of the draft UN GTR by GRPE; consideration of the need to extend the mandate of the RDE IWG to work on additional items;
- (h) Transmission of the draft UN GTR as a working document twelve weeks before the November 2023 session of AC.3 and aim for endorsement by AC.3 of the draft UN GTR based on a working document by GRPE at its November 2023 session.