

Proposal for the Terms of Reference and rules of procedure for the informal group on Real Driving Emissions (RDE-IWG)

1. Procedural Background

In its June 2018 session, AC.3 decided to set up an informal group under GRPE to prepare, within the coming years, a GTR on Real Driving Emissions procedure.

The goal of the informal group is to prepare and propose to GRPE, for its June 2020 session a draft text of an RDE GTR, including suggestions for the organization of any future work.

The mandate for the informal group will be until January 2021.

2. Introduction

The European Union has developed a new methodology for testing vehicle emissions during real driving, the so called Real Driving Emissions (RDE) methodology (based on the 4 phases of WLTP). The methodology was implemented in European legislation in three steps between 2015 and 2017 (RDE1, RDE2 and RDE3). The consolidated text describing the European methodology can be found in the Annex IIIa of Regulation (EU) 2017/1151, in the following link: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02017R1151-20170727>.

The European Union has recently finalised the last step of this methodology (RDE4), which is included in Annex IIIa of the proposal recently voted by the Technical Committee of Motor Vehicles (can be found in: <https://ec.europa.eu/docsroom/documents/29231>). With this last step, the European methodology is finalized. Reviews of some technical elements, will still take place in the future.

Japan has also developed the methodology for RDE based on the methodology developed in Europe but focusing on the 3 phases of WLTP. The methodology was implemented in Japan in March 2018.

Several countries, like Korea and China have also adopted similar RDE tests in regional legislation based on the methodology developed in Europe. Harmonization of such approaches is therefore desirable.

It is therefore appropriate to develop a UN GTR on RDE. The UN GTR on RDE should cover normal driving of light duty vehicles, taking into account the varying conditions on driving patterns, traffic and ambient conditions which occur in the different areas in the world where such vehicles are used. Furthermore the UN GTR on RDE structure should be developed in a way that it is possible for

countries to implement the UN GTR on RDE into their national legislation taking into account local normal driving, traffic and ambient conditions.

3. Terms of Reference:

The group shall focus its work in the following items:

- A. Develop a procedure for testing the emissions of light duty vehicles on the road under a variety of normal conditions of use
- B. Consider the need for extending the work into a second phase to cover extra items that could not be covered in the first phase.

The following is a breakdown of tasks to be dealt with during the first phase:

(1) Create a consolidated version of the existing real driving emissions (RDE) procedures

The European technical working group on RDE-LDV has been working continuously since 2011 in order to develop the RDE procedure. Automotive industry, instrument manufacturers, technical experts, environmental NGOs and European legislators participated to the work of the group. The current level of maturity of the procedure is very good, especially following the work that took place in 2017 in order to improve the procedure and evaluation methods. It is therefore appropriate to make use of the work already performed in this group in order to have a good base for the first draft of the RDE procedure based on the 4 phases of WLTP.

Japan has set the working group mainly composed by experts to develop RDE methodology in Japan. The working group has published a final report in April 2017 to introduce the methodology. The methodology based on 3 phases of WLTP was implemented in March 2018.

The consolidated version was created by using the current Annex IIIA of the European Regulation (EC) 2017/1151. The changes made in the current proposal for amendments to Annex IIIA (RDE 4) were also incorporated in evident mode in the consolidated version. The consolidated version also incorporated in evident mode the difference brought by the Japanese 3 phase WLTP adaptations. The consolidated draft was ready for the first meeting of the RDE IWG.

(2) Reviewing the consolidated ~~draft~~version

The consolidated ~~draft-version~~ will be reviewed with the following objectives:

- (a) Remove issues that are not appropriate for a UN GTR, such as limits and compliance issues
- (b) Identify areas for further technical improvements with particular focus in the evaluation

methods

- (c) 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.
- (d) Produce a draft UN GTR with the technical procedure for RDE

(3) Draft and finalise a proposal for a UN GTR on RDE

The draft UN GTR shall be edited by the group and proposed for acceptance to the June 2020 GRPE session.

(4) Study the possibility to work on additional items at a second stage

At the end of the work and before the end of the first phase, the IWG shall consider the necessity to study additional items in a second stage. As an example, the extension of RDE testing to other pollutants will be considered.

4. Rules of the Procedures

1. The informal group is open to all participants of GRPE. A limitation of number of participants from any country and organization to participate in the informal group is not foreseen.
2. A Chairperson, two Vice-Chairs and two Technical Secretaries will govern the informal group.
3. The Chairperson is taken by the representatives of the European Commission and the Vice-Chairs are taken by the representatives of Japan and Korea.
4. The Technical Secretary is taken by the representatives of OICA and JASIC.
5. The official language of the informal group will be English.
6. All documents and/or proposals shall be submitted to the Technical Secretary of the group in a suitable electronic format in advance of the meeting. The group may refuse to discuss any item or proposal which has not been circulated 10 working days in advance.
7. An agenda and related documents will be circulated to all members of the informal group at least two weeks in advance of all scheduled meetings.
8. The process will pursue consensus. When consensus cannot be reached, the Chairperson of the group shall present the different points of view to GRPE.
9. The progress of the informal group will be reported to GRPE orally or as an informal document by the chairperson or another participant of the group.
10. All working papers should be distributed in digital form. A specific website will be created in the UNECE wiki pages (<https://wiki.unece.org/pages/viewpage.action?pageId=917779>) and link will be notified to all related parties.

5. Timeline:

The plan below is indicative only and will be regularly reviewed and updated to reflect progress and feasibility of the timeline. This timeline deals only with the first phase of the development.

- (1) **June 2018:** Approval to develop a UN GTR on RDE by AC.3;
- (2) **Sept. 2018-February 2020:** meetings of IWG
- (3) **January 2020:** Draft UN GTR available as informal document, guidance on any open issues by GRPE;
- (4) **January 2020-March 2020:** Final drafting work on UN GTR text;
- (5) **March 2020:** Transmission by RDE IWG of a draft UN GTR as a working document for consideration at the June 2020 GRPE session
- (6) **April to May 2020:** final corrections may be submitted as informal documents
- (7) **June 2020:** 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
- (8) Transmission of the draft UN GTR as a working document twelve weeks before the November 2020 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 2020 session.