

Terms of reference and rules of procedure for the Informal Working Group on Vehicle Interior Air Quality (Draft)

Submitted by the Informal Working Group on VIAQ

This proposal expands on the issues of the vehicle interior air quality, addressing exhaust gases entering into vehicle cabin air, to develop a test procedure in a recommendation.

Terms of reference and rules of procedure for the Informal Working Group on Vehicle Interior Air Quality (VIAQ)

1. Background

- 1.1 VIAQ informal working group developed a new Mutual Resolution on Vehicle Interior Air Quality taking into account emissions of chemical substances from the interior materials. This issue is linked to evaporative emissions from chemical compounds used in some of the vehicles' interior elements, such as the dashboard, seat etc. The mutual resolution contains provisions and harmonized test procedures for the measurement of interior air emissions from interior materials.
- 1.2 However, other important sources of air pollution in the vehicle cabin include harmful substances entering into the cabin through the heating, ventilation and air conditioning system (HVAC), and through other leaks in the vehicle cabin. The sources of these substances coming into the cabin include vehicle exhaust gases, fuel vapors, and the outside air pollution. The list of chemical substances includes CO, NO, NO₂, SO₂, volatile organic compounds (VOC), formaldehyde (CH₂O), aromatic and aliphatic hydrocarbons, particulate matter (PM).
- 1.3 The group considered the inclusion in the scope of interior air pollutants from outside sources as a possible extension of the mandate at this stage. As an extension of the existing Mutual Resolution on VIAQ, this will take into account both interior air emissions generated from interior materials and exhaust gases from the vehicle entering into the cabin. Since there are too many variables in regards to outside air pollution sources, this stage will not address outside air pollution originating from any source other than the vehicle itself.

2. Procedural Background

- ~~2.1 At its 164th session, the World Forum for Harmonization of Vehicle Regulations (WP.29) AC.3 endorsed the proposed action plan to, in a first stage, collect information, review existing standards and develop recommendations. AC.3 noted the several aspects linked to VIAQ including safety matters (ECE/TRANS/WP.29/1112, para. 133).~~
- ~~2.2 At the 71th GRPE session, the expert from the Russian Federation stated that the work should not only focus on the interior air emissions generated from interior materials but also on the air pollutants entering the vehicle together with the intake air from outside. GRPE considered the inclusion in the scope of interior air pollutants from the outside air as a possible extension of the mandate at a later stage (ECE/TRANS/WP.29/GRPE/71, para. 65).~~
- ~~2.3 At the 74th GRPE session, the Chair of the IWG on Vehicles Interior Air Quality explained the on-going discussions on the possibility to request a second mandate to include the outside air pollutants as a source of emissions to the interior of vehicles in the scope of the work of the IWG on VIAQ (ECE/TRANS/WP.29/GRPE/74, para. 49).~~
- 2.1 At the 75th GRPE session, the Chair of the IWG on Vehicles Interior Air Quality requested an extension of the mandate of the IWG on VIAQ until November 2020 to expand the work to consider not only emissions generated by interior materials but also gases from other sources that enter into the vehicle cabin. He introduced a first draft of the updated terms of reference and rules of procedure (GRPE-75-14) for this

second stage of the work and expressed the group's intention to submit a final version at the next GRPE session in January 2018. For this second stage of the work, he noted that the Russian Federation would chair the IWG, together with Korea as Vice-Chair and OICA for the Secretary. He explained that the endorsement by GRPE at this session of the extension of the mandate of the IWG on VIAQ would allow the group to continue working without any interruption between the end of the current mandate and the next GRPE session in January 2018. He invited all Contracting Parties to be involved in the new stage of work (ECE/TRANS/WP.29/GRPE/75, para. 47).

- 2.2 At the 172nd WP.29 session, WP.29 endorsed the extension of the mandate of the IWG on VIAQ until November 2020 to extend the work to consider not only emissions generated by interior materials, but also gases from other sources that enter into the vehicle cabin. WP.29 noted that a first draft of the updated terms of reference and rules of procedure was submitted by the IWG on VIAQ at the June 2017 GRPE session (GRPE-75-14) and that a final version is expected to be considered by GRPE at its January 2018 session (ECE/TRANS/WP.29/1131, para 44).

3. Objective

- 3.1 The VIAQ informal working group will have an open structure which will enable the exchange of information and experiences on relevant regulations, policy measures and harmonization efforts.
- 3.2 This proposal expands on the issues of the vehicle interior air quality, addressing exhaust gases entering into vehicle cabin air, to develop a test procedure in a recommendation by including Part 3 in the Mutual Resolution No. 3.

4. Terms of reference

- 4.1 The following terms of reference describe the main tasks of the IWG.
- (a) Identify and collect the information and research data on interior air quality and its relevance for vehicles, taking into account the activities being carried out by various governments, and non-governmental organizations.
 - (b) Identify and understand the current regulatory requirements with respect to vehicle interior air quality in different markets.
 - (c) Identify, review and assess existing test procedures suitable for the measurement of harmful substance concentrations into the vehicle cabin (including test modes, sample collection methods and analysis methods, etc.)
 - (d) Develop provisions and test procedures in a recommendation by including Part 3 in the Mutual Resolution No. 3.

5. Timeline

- 5.1 The work of the group on Vehicle Interior Air Quality should be completed by November 2020. An extension of the mandate of the group should be considered in due time by GRPE, if necessary.
- (a) January 2018: Discussion for the directions and working items
 - (b) January 2019: Start working with draft document

- (c) January 2020: Submit the draft document to GRPE
- (d) June 2020: Adoption of the draft document by GRPE
- (e) November 2020: Adoption of the draft document by WP.29

6. Scope and work items

6.1 Interior air emissions emitted from interior materials

- (a) Continue to work, review, and assess the harmonized test procedures
- (b) Update the interior emissions sections for the Mutual Resolution

6.2 Exhaust gases entering into vehicle cabin air

- (a) Collect the information and research data on relevant and similar issues, and understand the current regulatory requirements with respect to vehicle interior air quality in different markets
- (b) Review, assess and develop new test procedures suitable for the measurement methods of exhaust gases entering into the vehicle cabin (including test modes, sample collection methods and analysis methods, etc.)
- (c) Discuss ~~the maximum permissible concentrations of harmful substances in the vehicle interior air~~ **the potential of harmful substances in the vehicle interior air with toxicologists (e.g. WHO).**
- (d) Develop a draft for test procedures in a recommendation.

~~6.3 Vehicle cabin air affected by outside air pollution sources~~

- ~~(a) Collect the information and research on relevant and similar issues~~

7. Rules of procedure

7.1 The following rules of procedure describe the functioning principles of the informal working group.

- (a) The IWG is open to all participants from any country or organization of WP.29 and its subsidiary bodies. A limitation of the number of participants for the IWG is not foreseen.
- (b) A Chair (Russian Federation), a vice chair (Republic of Korea) and a secretary (OICA) will manage the IWG.
- (c) The official language of the IWG will be English.
- (d) All documents and/or proposals shall be submitted to the secretary of the group in a suitable electronic format, preferably in line with the UNECE guidelines in advance of the meetings. The group may refuse to discuss any item or proposal which has not been circulated 5 working days in advance of the scheduled meetings.
- (e) The informal group shall meet regularly in conjunction with the GRPE sessions, presuming the availability of meeting rooms. Additional meetings will be organized upon demand.
- (f) An agenda and related documents will be circulated to all members of the informal working group in advance of all scheduled meetings.

- (g) The work process will be developed by consensus. When consensus cannot be reached, the Chair of the informal group shall present the different points of view to GRPE. The Chair may seek guidance from GRPE as appropriate.
 - (h) The progress of the informal group will be routinely reported to GRPE orally or as an informal document by the Chair or the secretary.
 - (i) All working documents shall be distributed in digital format. The specific VIAQ section on the UNECE website shall continue to be utilised.
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