Vehicle Interior Air Quality (VIAQ)
Informal Working Group
The 1st Meeting

10 June 2015
VIAQ IWG Organization

- Chair
  - Republic of Korea: Mr. JongSoon LIM (jongsoon@ts2020.kr)

- Vice-Chair
  - To be determined

- Technical Secretary
  - OICA: Mr. Andreas WEHRMEIER (andreas.wehrmeier@bmw.de)
133. The representative of the Republic Korea recalled the discussion on this item at the previous session of AC.3. He introduced WP.29-164-12-Rev.2 proposing ToR and Rules of Procedure for the IWG on Vehicle Indoor Air Quality (VIAQ). 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. AC.3 agreed to refer this informal document to GRPE and to delete at this stage this subject of the AC.3 agenda. It was agreed that the Chair of GRPE would regularly report back to WP.29 and AC.3
48. The expert from Korea introduced GRPE-70-09 containing the draft terms of reference for an IWG on VIAQ, already endorsed in principle by WP.29, at its November 2014 session. The expert from OICA introduced GRPE-70-19 proposing, among other amendments, to rename this item Vehicle Interior Air Quality (VIAQ).

**GRPE adopted the proposals for terms of reference to the IWG on VIAQ** as reproduced in Annex VI of this report. GRPE noted that the chairmanship shall be under the responsibility of Korea and that the secretariat shall be under the responsibility of OICA.
● Rule making Procedure of WP.29 and GRPE

- Recommendation
  - RE3 (1958 Agreement)
  - SR1 (1998 Agreement)
  - Mutual Resolution (1958 & 1998 Agreement)

Mandate (164th WP.29) → Draft of VIAQ Recommendation (Formal document)

Adoption (70th GRPE) → Draft of VIAQ Recommendation (Informal document)
1. Background

1.1 A variety of interior materials and adhesives are used for the construction of the interior space of vehicles, containing several chemical constituents. As a result, various kinds of chemical substances may be emitted from the interior materials inside the completed vehicles. In some circumstances, such as the early stages of vehicle life and elevated temperatures, the amounts of chemical substances emitted e.g. Volatile Organic Compounds (VOCs) can be particularly high and some of them may impair air quality in the vehicle.

1.2 Notwithstanding deviations in the extent and a certain degree of dependency on the reaction of each individual, some of the substances that can be emitted inside vehicles could have the potential to cause symptoms such as nausea, allergies, fatigue, stinging eyes and headaches. Beyond affecting at first drivers' and passengers' well-being and comfort, such symptoms may have also consequences on health but also safe driving.

1.3 In order to improve air quality in the vehicle, discussions and decisions by the international community involving recommendation to minimize emission of VOCs and harmful substances upon manufacturing vehicles are necessary in a timely manner.
2. Objective

2.1 The informal working group (IWG) on VIAQ will have an open structure which will enable the exchange of information and experiences on relevant regulations, policy measures and standardization efforts.

2.2 Internationally, several different standards already exist but the exact methods of measurements and pollutant emission requirements are still not defined under the 1958 Agreement or 1998 Agreement. The objective of this proposal is to develop a recommendation (R.E.3, S.R.1 or a new Mutual Resolution) concerning the protection of passengers from VOCs emitted by interior materials used for the construction of vehicles.

2.3 The recommendation (R.E.3, S.R.1 or a new Mutual Resolution) shall include provisions and harmonized test procedures for the measurement of interior VOCs taking into account existing standards.

2.4 The IWG shall conduct comprehensive studies for the existing individual contents regarding management of interior air quality of vehicles. It shall draft a new recommendation to provide drivers and passengers with better driving environments for vehicles, also enabling more cost-effective management for the vehicle industry through unification of standards and measurement methods.
3. Terms of Reference

3.1 The following terms of reference describe the main tasks of the new 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, non-governmental organizations and universities.

(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 emissions of vehicle interior air pollutants (including sample collection methods and analysis methods, etc.).

(d) Develop provisions and harmonized test procedures.

(e) Draft a new recommendation (R.E.3 under the 1958 Agreement, S.R.1 under the 1998 Agreement or a new Mutual Resolution under both Agreements) concerning the protection of drivers and passengers from VOCs emitted by interior materials used in the construction of vehicles, including provisions and harmonized test procedures.

(f) Stay abreast of developing issues through regular dialogue and expert presentations.
4. Timeline

4.1 The target completion date for the work of the informal working group and possible adoption of the recommendation (R.E.3, S.R.1 or a new Mutual Resolution) shall be the 173rd session of WP.29 in November 2017.

(a) Nov. 2014: Consideration of drafted terms of reference of the proposal to establish the VIAQ informal working group by WP.29/AC.3
(b) Jan. 2015: Approval of terms of reference of the VIAQ by GRPE
(c) Mar. 2015: Approval of the VIAQ informal working group by WP.29
(d) Jun. 2015: First VIAQ informal working group meeting during the 71\textsuperscript{st} session of GRPE
(e) 2015 – 2017: Meetings of the IWG, with regular reporting to GRPE and WP.29
(g) Jun. 2017: Adoption of the recommendation on VIAQ by GRPE
(h) **Nov. 2017:** Adoption of the recommendation on VIAQ by WP.29
5. **Scope and Work items**

5.1 Information collection

(a) Collect current research on vehicle interior air quality
(b) Review and assess existing test procedures of each regulation
(c) Define the category of vehicles to which vehicle interior air quality recommendations will apply

5.2 **Development of relevant provisions and harmonized test procedure for VIAQ**

(a) Determine the test conditions, test apparatus and materials, whole vehicle test chamber, test vehicle conditions, measurement procedures, etc.
(b) Set the sampling point, sampling devices, sampling procedures, analysis of samples, data processing, etc.
(c) Develop a draft recommendation for a test procedure, for inclusion in RE3 and/or SR1 or a new Mutual Resolution
6. Rules of Procedures

6.1 The following rules of procedure describe the functioning principles of the new 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 (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 IWG shall meet regularly in conjunction with the GRPE sessions, presuming the availability of meeting rooms. Additional meetings will be organized upon demand.
6. Rules of Procedures

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

(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 documents shall be distributed in digital format. The specific VIAQ section on the UNECE website shall be used for this purpose.
Roadmap, Timeline

- **Roadmap**

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- **2015**
  - WP.29: Kick-off, 1, 2
  - GRPE: 70, 71
  - VIAQ: Collect information and review existing test procedures

- **2016**
  - WP.29: 3, 4, 5, 6
  - GRPE: 72, 73
  - VIAQ: Develop provisions and harmonized test procedures

- **2017**
  - WP.29: 7
  - GRPE: 171, 172, 173 (Informal document, formal document)
  - VIAQ: 7, 8, 9

- **January 2017**: Present a final report as an informal document to GRPE
- **November 2017**: Possible adoption of Recommendation (R.E.3, SR1 or mutual resolution)