

**Progress Report of the  
VIAQ (Vehicle Interior Air Quality)  
Informal Working Group**

**26th October 2016**

Chair: Jongsoon Lim, Korea

Co-Chair : Yunshan GE, China

Technical secretary: Andreas Wehrmeier, OICA

## ● VIAQ Background, ToR and Mandate

- **WP.29 Mandate**(ECE/TRANS/WP.29/1112)
  - AC.3 endorsed the proposed action plan to, in a first stage, collect information, review existing standards and develop recommendations.
  - End of mandate : November 2017
- **GRPE Adoption**(ECE/TRANS/WP.29/GRPE/70)
  - GRPE adopted the proposals for terms of reference to the IWG on VIAQ as reproduced in Annex VI of this report.
- **Review of VIAQ Terms of Reference**
  - The scope of the work is to develop a recommendation (R.E.3, S.R.1, or a new Mutual Resolution) to harmonize test procedures of interior air emissions emitted/generated from interior materials.

- **VIAQ IWG Meetings since last GRPE**

- **5<sup>th</sup> VIAQ IWG Meeting**

- Geneva, Switzerland, 8<sup>th</sup> June 2016 (VIAQ-05-13)

- **6<sup>th</sup> VIAQ IWG Meeting**

- Drafter's meeting, 22<sup>nd</sup> September 2016 (conference call)
- Paris, 26<sup>th</sup> – 27<sup>st</sup> October 2016

## ● Status of Working Items (VIAQ-05-04)

### ➤ The direction of work

- test mode suitable for the interior air emission.

Test mode	Descriptions
Ambient mode	simulates cars parked in the garage overnight.(ambient temp)
Parking mode	simulates cars parked outside in the sunlight(high temp)
Driving mode	simulates air-conditioning conditions right after parking mode(Idling)

- Substances to be measured: Formaldehyde, Acetaldehyde, Benzene, Toluene, Xylene, Ethylbenzene, Styrene, and Acrolein

### ➤ Working items : 28 total working items

- Closed working items: 15, open issue working items: 13

### ➤ Development of recommendation document

- VIAQ-05-05: VIAQ recommendation document (initial version)

## ● Status of Working Items (VIAQ-05-04)

### ➤ Closed working item lists

- **Protection covers:** be taken off one day before the measurement.
- **Sampling point:** Driver seat (nose position)
- **Analytcs method:** ISO 16000-3 (Aldehydes) and ISO 16000-6 (VOCs)
- **Definition of new vehicle:** new car from serial production, no prototype car
- **Vehicle age at measurement:** 28d  $\pm$  5 days after production date
- **Definition of production date:** Sign off date of production line
- **Vehicle transportation & storage conditions:** VIAQ-04-09
- **Vehicle storage conditions in the plant before transportation :** Storage conditions vary in the plant and cannot be controlled.

## ● Status of Working Items (VIAQ-05-04)

### ➤ Open working items

- **Vehicle categories:** Category M1, to add N1(Korea), Category 1-1(proposal)
- **Ambient mode (test temperature): avoid regional options**  
(Current Status) Ambient test temperature : 25 °C vs 23 °C  
Korea, China, India: 25 °C  
EC, Russia, OICA: 23 °C
- **Sampling method:** Aldehydes is 1.0 L/min and VOCs is 0.2 L/min, 30min
- **Preconditioning:** Storage is 1 day before measurement (soak time)
- **Parking mode:** Sun simulation Radiation of 400W/m<sup>2</sup> and 4h soak time
- **Driving mode:** Sampling for 30 min with air conditioning
- **Repeated test:** 1 vehicle only once + scientific examination on repeatability
- **Selection of vehicles:** give information on how to select a worst case car



## ● **Next VIAQ IWG Meeting**

### ➤ **7<sup>th</sup> VIAQ IWG Meeting**

- Geneva, Switzerland, January, during 74<sup>th</sup> GRPE session
- Half a day is requested (11<sup>th</sup> January 2017)

### ➤ **8<sup>th</sup> VIAQ IWG Meeting**

- March 2017 (TBD)