

## **Report to WP.29 about results of the 8<sup>th</sup> meeting of Informal Group on Periodical Technical Inspections**

The 8<sup>th</sup> IWG on PTI meeting was arranged with support of International motor vehicle inspection committee (CITA) and held on 24 October 2017 in Brussels (Belgium).

### **1. Development of new rules for vehicles and their parts and equipment incorporating new technologies**

In the result of review the proposal for a new Rule on periodical technical inspections of motor vehicles using compressed natural gas (CNG) and/or liquefied natural gas (LNG) in their propulsion system (ECE/TRANS/WP.29/2017/134) the group decided to modify the text to state clearly that it applies to CNG, LPG and LNG. The modified document was submitted WP.29.

Proposal for new Rule on safety requirements for hybrid and electric vehicles (ECE/TRANS/WP.29/2017/135) was not modified.

### **2. Consistency between the 1958 Geneva Agreement and the 1997 Vienna Agreement**

Sweden and Finland proposed that all regulations concerning safety critical systems or component shall have a chapter describing provisions for periodic technical inspection or technical inspection. Vehicle, system and component manufacturers shall declare the method for checking conformity with in service allowed condition, wear or end of life for a component.

It was recalled that the similar approaches were proposed to WP.29 by the Russian Federation (documents WP29-147-11 and WP29-165-07).

The group noted that method and procedure for approval of the in service allowed condition, wear or end of life for a component shall be established for the realization of the approach as well as amendments into the 1958 Geneva Agreement.

The new concept “Whole life vehicle compliance” was suggested. It is based on the principal that the relevant safety and environmental features of the vehicles shall be kept during their whole life, when reasonable and with room for deterioration factors if necessary.

The concept of whole life compliance makes necessary to ensure the coordination between vehicle approval and vehicle inspection. Tampering of emissions systems is an example on where a better harmonization between standards for new and in-use vehicles may be very efficient.

The group agreed to ask guidance of WP.29.

### **3. Tampering the emission systems**

Following the guidance of WP.29 the group studied documents on emission manipulations, submitted by Switzerland.

CITA made a presentation on different ways of tampering of emission systems and possible solutions in the short and long term. In the short term, the limits of emissions during PTI may be reduced to facilitate the identification of removal of particle traps as described in the project SET – Sustainable Emission Testing. Moreover, CITA has set up a working group to develop traditional inspection approaches to identify tampering.

The group decided that in the long term, it is necessary to increase the collaboration between new and in-use vehicle standardization to make more difficult to tamper and to facilitate the detection when it happens.

Germany has modified their standards for vehicle inspection to reduce the acceptable limits and to include particle number measurement. The process of change will take from 2018 to 2022.

In the UK:

- Vehicles with hand-welded particle traps are rejected.
- They are lowering the opacity limits.
- They acknowledge that detecting ad-blue emulators plugged in the OBD port is easier in the UK, since connectors use to be on the left side and the driver has not time to remove them in case of road side inspection.
- In some cases, the OBD plug is disable to make more difficult the detection of tampering.
- A British company is developing a procedure a pass/fail device to detect the removal of particle traps. More information will be available when the device is patented.

It was stated that there shall be the right legal ground to fight against tampering. In particular selling the manipulation devices shall be forbidden.

The group agreed that current approval standards do not contain provisions to limit tampering and to facilitate its detection. On top of that, the development of stricter emission standards will increase the risk of tampering.

It was stated that tampering of SCR is so far involving heavy duty vehicles. In the future it is foreseeable that light vehicles are involved too.

#### **4. Possible further steps and items to be treated by the group**

The group continued to discuss proposals for possible further steps and items to be treated by the group or WP.29 (WP29-172-17). It was agreed to review the documents available on the proposed items and define the priority issues.

The group confirmed the proposal to establish a new subsidiary working party on PTI. It can provide a proper preparation of the proposals for solution of the above mentioned problems. Taking into consideration the discussion on the subject during the 172 session of WP.29 the decision was supported to allocate half a day during World Forum sessions for meetings of the group until a systematic long term solution for the work of the group is reached.

Final draft proposals for further items, related to PTI, to be treated by the IWG or the WP.29, will be submitted for review at 174 session of WP.29.