

## **Report to WP.29 about results of the 11<sup>th</sup> meeting of Informal Group on Periodical Technical Inspections**

The 11<sup>th</sup> IWG on PTI meeting was arranged with support of International Organisation of Motor Vehicle Manufacturers (OICA) and held on 6 June 2018 in Paris (France).

### **1. The updated Terms of Reference**

The draft revised Terms of Reference (ToR) for the IWG on PTI was presented at the 174<sup>th</sup> session of WP.29 (WP.29-174-07). As these ToR contained several provisions that have been scrutinised by the representatives from Sweden, United Kingdom and OICA, WP.29 referred the document back to the IWG on PTI for further development. A revised version was expected for consideration and potential adoption at the June 2018 session.

The group reviewed the document WP.29-174-07 with the comments made by OICA.

It was clarified and agreed that the IWG on PTI deals with in service compliance of vehicles, their systems and components. In-service compliance includes certain requirements that are laid down by type-approval requirements at the date of first registration or first entry into service as well as retrofitting obligations or national legislation.

It was agreed that:

- UN Regulations developed by the respective working parties (GR) may indeed foresee technical means to enable PTI assessment of the safety and environmental performance of vehicles in use, and this should allow PTI fulfil its role at a reasonable cost, well balanced with the expected safety and environmental benefits;
- development of future options for in service compliance enforcement requires particular attention to:
  - o measures to ensure in service compliance of vehicles or their systems and components, including those that are type approved under the UN Regulations, attached to the 1958 and 1998 Geneva Agreements, as appropriate;
  - o when necessary, to develop relevant requirements for the performance of systems and components including automated / autonomous driving systems for in service compliance;
  - o electronic vehicle interface, measurement and communication technologies.

It was supported that there shall be provided the appropriate coordination between the 1958 and 1998 Geneva Agreement and the 1997 Vienna Agreement and measures to ensure in-service conformity of vehicles or their systems and components type approved under the UN Regulations, attached to the 1958 and 1998 Geneva Agreements. Type approval regulations developed by the respective working parties (GR) may consider inputs of this group where they foresee technical means to enable PTI assessment of the compliance of vehicles in use. The role of PTI is to verify in service vehicle compliance.

The ways to identify tampering of safety and environment related components and systems have to be considered, when appropriate, and taking into account cybersecurity and intellectual property rights, access to the relevant sensors' readings and actuators.

The IWG should develop proposals for establishment of requirements for in service compliance verification of the performance of equipment and systems, including automated/autonomous driving systems, in all the relevant driving conditions, as well as other than those tested, and methods for their assessment.

Where necessary and possible, the rules for periodical technical inspections among the various Agreements, Conventions and Resolutions should be harmonised to allow improved safety and sustainability of road transport and exclude legislative obstacles for technological developments.

WP.29 develops an approach for the approval of automated driving systems (ADS). It is a complex problem covering technical inspections of the systems in use. The IWG on PTI should consequently carefully follow-up the activities under the 1958 and 1998 Agreements and provide its expertise where needed.

There was not found an agreement on the aim of the objective verification of the safety and environment related systems. The IWG considers that the functionality of the safety and environment related systems shall be verified, since according to ISO 19439:2006 “functionality” is the degree to which the system provides and facilitates the implementation of a set of tasks. OICA proposes to verify “functioning” of the systems that covers incorrect performance of the systems. The group ask guidance of WP.29 on the subject.

The IWG on PTI outlines its plan (including working items to be covered, any steps, deliverables and expected timelines) to be approved by the WP.29.

The group agreed to submit the draft revised Terms of Reference to WP.29 for consideration and approval at its the 175<sup>th</sup> session.

## **2. Development of inspection techniques against tampering practices**

Following the request of WP.29 the group continued discussion on tampering. The draft document containing the proposals, prepared by CITA and CORTE, regarding measures against emissions tampering was reviewed. The proposition is split in two parts, the first one identifying the solutions to be taken in the short-term to improve the inspection techniques to identify tampering, and the activities to undertake in the mid- and long-term to modify the design of vehicles to make them more tampering proof and to facilitate the detection of tampering if occurs.

The group approved the document and decided to submit it to the 175<sup>th</sup> session of WP.29 for consideration.

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### **3. Coordination between the provisions of the 1968 Vienna Convention and 1997 Vienna Agreement**

The group follows the directive where necessary and possible, the rules for periodical technical inspections among the various Agreements, Conventions and Resolutions should be harmonised to allow improved safety and sustainability of road transport and exclude legislative obstacles for technological developments. Consolidated Resolution on Road Traffic (R.E.1) is referred as the document used for confirmation of vehicle roadworthiness. It was agreed that the document shall be reviewed and modified, if necessary, to ensure consistency with the 1997 Vienna Agreement, the improved safety and sustainability of road transport and exclude legislative obstacles for technological developments. The proposals shall be submitted to the following meetings of the group.

The group thanked OICA and especially Mr. Van der Straaten for hosting it and fruitful discussion.