Report to WP.29 about results of the 24th meeting of the Informal Working Group on Periodical Technical Inspections

The 24th IWG on PTI meeting was arranged with support of the International Motor Vehicle Inspection Committee (CITA) and held on October, 14, 2021 in the form of virtual participation. 23 experts from Finland, Japan, the Netherland, the Russian Federation, Sweden, the United Kingdom and representatives of the automotive industry took part in the meeting.

I. Organization of the IWG on PTI work

It was noted that the revised Terms of Reference for the group had been approved at the 184th session of WP.29.

It was agreed that the group will take part in further development of technical provisions and/or guidance and/or resolutions for whole-life compliance of the vehicles coordinated by WP.29.

Another priorities of the work include guidance for PTI, emission and odometer tampering, new technologies, access to vehicles data and the 1968 Vienna Convention.

II. In-service compliance assessment

The IWG on PTI continues considerations on a proposal for a framework document on vehicle whole-life compliance (ECE/TRANS/WP.29/2021/148) and comments received from GRs, if any.

III. Information on the national PTI legal system and measures, events, conventions

The group was informed about development of EU legislation in PTI field, including modification of EU Roadworthiness Package. Following the aim the 1997 Vienna Agreement to achieve greater uniformity in the rules adapted to the technical progress and to ensure a high level of safety and protection of the environment and to harmonize as far as possible the frequency of tests and the compulsory items to be tested the group decided to consider the information for the next discussions.

IV. Measures to detect tampering

The group discussed recommendation on application of PN measurement methods and decided to include it into Resolution R.E.6. The corresponding draft proposal will be considered at the next meeting and submitted to GRPE for technical assessment.

The group was informed about the results of trying a commercially available tampering chip on a Euro VI truck. The device provides a constant voltage signal to simulate the signal from the urea pressure sensor, removes the signal to the urea pump and connects to L- and H-
CAN. The result is the complete overside of urea consumption, no MIL lighting, no DTC, no triggering of the counters and no torque reduction inducement. The tampering chip does not even need to modify the signal of the NOx sensor. The presentation shows an increase of emissions around 400% and a payback period because of urea savings of less than one week in international haulage.

It was highlighted that it is not reasonable that vehicle design impedes inspection and increases the cost of anti-tampering initiatives.

Since tampering includes a behavioural component, it is not likely to find a systematic approach to avoid it. The group agreed to send the results to the GRPE and join efforts to develop the most efficient anti-tampering strategy on emissions.

V. Access to vehicles data

The group considered information about sovereign cases related to the remote access to vehicle data remote access and agreed to keep this subject in the agenda when appropriate.