**RWEG 2 March 2023**

***Item 4. topic 2 – Moderated by Eduard Fernández (CITA)***

***Improve current test requirements and procedures, and training of inspectors***

***Summary***

**More advanced testing on noise**

Some suggested that this could eventually better fit to roadside inspection. It requires complex testing environment, and it would be difficult to fit it in a regular PTI and test centre. Moreover, type approval values are not always available. But some are testing it already now on motorcycles and mopeds.

According to some, there should be a simple test only, otherwise it cannot be done by test centres. The starting point is a visual check [of the vehicle], if not ok, then a stationary test could follow. However, it was suggested that the stationary method does not always detect tampering.

Available space is a limit, it requires cca 100 sqm for M and N vehicles, which would be difficult to arrange today. More feasible for two-wheelers.

Other suggested that stationary noise test should remain the reference. Pass-by would be very difficult/not possible to manage for the test centres. Pass-by possible for roadside inspections only.

Some countries undertake noise tests during roadside inspections.

**More advanced testing on lighting**

Some MSs said that software control will be needed in future, as for ADAS, OBD maybe more suitable. There is a need to be able to test AFLS – Advanced Front Light Systems, and this is also linked to type approval.

Most agreed that the most problematic part of PTI, access to in-vehicle data will be needed, quite a few updates needed. Type approval of testing devices and standard requirements for the test centres will be needed.

**More advanced testing on braking**

There were diverging views on the usefulness of the extrapolation method. According to some, it was not reliable, partly because no data from manufacturer was available. One MS said that the extrapolation method for LDV as provided by OBD was still better than nothing.

Regarding regenerative braking, no modification is not needed.

Several MSs suggested that extrapolation methods are only suitable for HDVs. Some called for harmonised brake test procedure. For HDV it should be possible to use ISO standards, though the one referred to in the Directive (21069) is outdated, many countries do not use it. If using extrapolation methods, then some elements have to be mandatory but in general, if new methods then also new equipment is needed.

Roller brake test could be the main tool, combined with load simulation by lifting axles. Requirements for new testing equipment should be avoided.

It was suggested that it should be allowed to use reference braking forces for all vehicles. For M1 and N1, thresholds can be increased, which leads to more road safety.

**More advanced testing on suspension**

Rules for adaptive suspensions are not harmonised and current rules are not useful for some new models of shock absorbers. New suspension systems are more advanced than existing PTI equipment, which leads to the situations where 2 to 3 years old cars don’t pass the test.

Some said that requirements for new testing equipment should be avoided. The was some support for the phase-shift approach as applied in Belgium. Testing should involve a combination of play plates and good visual inspection, according to some.

According to others, testing on suspension should be mandatory but the method should not be prescribed ie it should remain technologically neutral, allowing different methods.

**More advanced testing on load restraint systems**

Only a few comments were made: some felt that requirements for new testing equipment should be avoided, while according to others, checking load restraints systems is important and needs to be further defined.

**More advanced testing on other items**

Testing of A/C systems was not considered suitable for PTI.

**Training of inspectors for PTI update**

Training of inspectors for electric vehicles is needed, but it should not be set as a precondition for recruitment since already today there is a shortage of new inspectors. All training requirements should be set out in the Directive.

Inspectors would need to obtain more IT knowledge/skills. Annex IV is perhaps too relaxed regarding the requirements.

Periodical trainings of inspectors are sometimes more problematic; some suggested that if ISO 17020 standards applied at annual update trainings, there is no value added of such training.

According to others, test for inspectors should be every 2 years, and it is important that trainings follow the fast developments in technology.

**AOB**

One participant suggested that Annex III in the PTI directive would benefit from further clarity, in particular voluntary vs mandatory obligations should be clarified better, make it simpler and mandatory instead. According to others, the Annexes to the Directive would benefit from streamlining in the sense that there is a lot of mandatory equipment prescribed, but then the testing itself is voluntary.

Access to in-vehicle data is a key issue and should be for free. PTI should have access to approval data. Regarding the required data, use-cases need to be considered. There should be a link between data for PTI and data for vehicle registers.

There should be clear delineation on what has to be checked, i.e. safety systems that must be checked vs comfort systems that do not require checking. For example, camera alignment for ADAS systems would need to be checked.