Economic Commission for Europe
Inland Transport Committee
Eighty-third session
Geneva, 23–26 February 2021
Item 7 (i) of the provisional agenda
Strategic questions of a horizontal and cross-sectoral policy or regulatory nature:
Harmonization of vehicle regulations

Latest Developments in Vehicle Regulations

Note by the secretariat*

Summary

The work in the World Forum for Harmonization of Vehicle Regulations (WP.29) continued to strengthen vehicle safety and environmental protection, resulting in numerous new and amended vehicle regulations and rules under the 1958, 1997 and the 1998 Agreements.

Important topics were the establishment of a first set of UN Regulations on highly automated vehicles by the Working Party on Autonomous/Automated Vehicles (GRVA), the Database for the Exchange of Type Approval (DETA) at the United Nations Economic Commission for Europe (ECE), implementation and further development of the 1998 Agreement and Periodic Technical Inspections (PTI) under the 1997 Agreement.

The Inland Transport Committee (ITC) is invited to:

- **Endorse** the activities listed in this document
- **Welcome** the establishment of the first set of UN Regulations on highly automated vehicles prepared by GRVA
- **Note** the limitation of the session of WP.29 and its subsidiaries as reaction on the COVID-19 impact and the UN financial crisis
- **Thank** Germany for the intermediate hosting of DETA and **reaffirm** its request for a sustained financing for hosting DETA at ECE either under the United Nations regular budget or through voluntary contributions from contracting parties.

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* This document was scheduled for publication after the standard publication date owing to circumstances beyond the submitter's control.
General comments

1. The work of WP.29 and its subsidiary bodies (GRs), had been heavily impacted by the COVID-19 pandemic and the United Nations financial crisis. Following the March 2020 session of WP.29 in-person meetings were no longer possible and interpretation services for virtual meetings were only provided as of late June 2020 and to a very limited content. Furthermore, and to accommodate participation of delegates from all continents, timing of the sessions needed to be limited to early afternoons. This resulted in e.g. that the June 2020 WP.29 session had to be limited to a two hours session only and thus the agenda had to be reduced to the necessary minimum to accommodate decision taking/voting. Furthermore, for several GR sessions no interpretation was provided by UNOG Conference Services and therefore these sessions were not counted as official. In addition, necessary silence procedures, imposed by EXCOM, needed to be followed leading to a heavy administrative burden.

I. Vehicle automation


3. The first set of UN Regulations for automated vehicles adopted at the June 2020 session of WP.29 entered into force on 22 January 2021. These new UN Regulations not only cover the UN Regulation No. 157 on Automated Lane Keeping Systems – the first application of vehicle automatization of SAE levels 3, but also forward-looking UN Regulations Nos. 155 and 156 on Cyber Security and on Over the Air Software Updates respectively. These new UN regulations address the safety and security of automated vehicles with performance based and technical neutral provisions, which represent state of the art technology but not restricting future innovations.

II. 1958 Agreement

4. In addition to the three new UN Regulations related to automated vehicles (see para. 3 above) two new United Nations vehicle regulations, aimed at improving vehicle safety and environmental performance entered into force in 2020:

   (a) UN Regulation No. 153 on Fuel System Integrity and Electric Power Train Safety at rear-end collision;

   (b) UN Regulation No. 154 on Worldwide harmonized Light vehicles Test Procedure (WLTP Regulation) on 22 January 2021.

5. WP. 29 adopted two more new UN Regulations in 2020 aiming at the protection of vulnerable Road users. Existing UN Regulations were updated by 96 amendments, which adapt the regulations to the most recent technological innovations and introduce more stringent limits aimed at increasing both the safety and environmental performance of vehicles. The new UN Regulation No. 158 on devices for Reversing Motion and motor vehicles with regard to the driver’s awareness of vulnerable road users behind vehicles and new UN Regulation No. 159 on the Moving Off Information System for the Detection of Pedestrians and Cyclists were adopted at the November 2020 session of WP.29 and would enter into force in June 2021.

6. As funding for the hosting of DETA at ECE could not be secured so far both under RB or XB, WP.29 was grateful to Germany who is currently hosting the system on an intermediate basis. WP.29 would continue to look into possibilities for sustained solutions for the funding of the hosting of DETA.
7. As regards the development of additional functionalities/modules of DETA, the International Motor Vehicle Inspection Committee reconfirmed its readiness to finance the development of the module for Declaration of Conformity. The industry associations: International Organization of Motor Vehicle Manufacturers, the European Association of Automotive Suppliers and the European Tyre and Rim Technical Organization confirmed their intention to finance the module for the Unique Identifier, where current contractual issues would need to be solved with a possible involvement of the secretariat.

III. 1997 Agreement

8. At the 182nd session of WP.29 the Resolution R.E.6 related to requirements for testing equipment, for skills and training of inspectors as well as for supervision of test centres was amended by introduction of elements for enforcement of the roadworthiness and environmental behaviour of vehicles in use via guidelines for roadside technical inspections.

9. These guidelines cover inter alia innovative approaches for the selection of vehicles to be controlled at the roadside. These may cover elements like remote sensing of pollutants, temperature of brakes or axle loads as well as intelligence-based approaches such as risk-profiling of operators and will help to reduce administrative burden and costs both for well performing operators but also for the inspection bodies.

IV. 1998 Agreement

10. In 2020, WP.29 concluded several years of work on a new Global Technical Regulation (UN GTR) No. 21 on the Determination of Electrified Vehicle Power, that was adopted by the Executive Committee of the 1998 Agreement at its November 2020 session.

11. Eight amendments to Global Technical Regulations No. 3 (Motorcycle braking), No. 6 (Safety glazing), No. 7 (Head restraints), No. 15 (Worldwide harmonized Light vehicle Test Procedure), No. 16 (Tyres), No. 18 (On-Board Diagnostic (OBD) systems for L-category vehicles) and to No. 19 (Evaporate Emission Test Worldwide harmonized Light Duty Test Procedure) were adopted during 2020. This will adapt the UN GTRs to the most recent technological innovations and introduce more stringent requirements aimed at increasing both the safety and environmental performance of vehicles.

V. Link with the 2030 Agenda for Sustainable Development

12. Accession to United Nations vehicle agreements and adherence to annexed UN Regulations, Rules and UN GTRs can contribute to progress in achieving targets 3.6, 3.9, 7.3, 9.1, 11.2 and 13.2 of the Sustainable Development Goals.