Economic Commission for Europe
Inland Transport Committee

Eightieth session
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Item 5 (b) of the provisional agenda
Strategic questions of a modal and thematic nature:
Harmonization of vehicle regulations

Latest Developments in Vehicle Regulations

Note by the secretariat

I. 1958 Agreement

1. In 2017, five new United Nations Vehicle Regulations aimed at improving vehicle safety and environmental performance entered into force:

   (a) UN Regulation No. 139 on Brake Assist Systems, adopted at the June 2016 session of WP.29 on higher safety level in case of emergency braking;

   (b) UN Regulation No. 140 on Electronic Stability Control, adopted at the June 2016 session of WP.29 on automatic counteractions by the system in case of driving manoeuvres where the driver seemed to lose control of the vehicle;

   (c) UN Regulation No. 141 on Tyre Pressure Monitoring systems, adopted at the June 2016 session of WP.29 on increased safety, lower fuel consumption and less GHG emissions in case of lowered inflation pressure of individual tyres of a vehicle;

   (d) UN Regulation No. 142 on tyre installation, adopted at the June 2016 session of WP.29 on the safety performance requirements for vehicles related to the use of the appropriate tyres;

   (e) UN Regulation No. 143 on Heavy Duty Dual-Fuel Engine Retrofit Systems, adopted at the November 2016 session of WP.29 on the environmental performance requirements for the use of alternative fuels in addition to diesel.

2. Existing UN Regulations were updated by 107 amendments, adapting the regulations to the most recent technological innovations and introducing more severe limits aimed at increasing both the safety and environmental performance of vehicles. Among these, WP.29 adopted in March 2017 an amendment to UN Regulation No. 79 (Steering equipment) containing provisions for automatically commended steering functions with
safety requirements and the corresponding testing procedures for lane keeping systems, corrective steering functions and remote controlled parking. These amendments are the first elements towards automated vehicle regulations.

3. Also in 2017, WP.29 continued to develop performance requirements for intelligent vehicle systems and driver assistance systems for automated vehicles and, thus, to pave the way for future autonomous vehicles. The WP.29 Informal Working Group on ITS/Autonomous Driving focused its activities on:

   (a) The preparation of a proposal of a harmonized definition of “automated driving technologies”;

   (b) The determination of items to be addressed during the establishment of internationally harmonized regulations on automated driving technologies that would enable drivers to benefit from a higher degree of automation of the driving task; and

   (c) The harmonized general guidelines for e-Security and e-Safety in motor vehicles, which were adopted as an annex to the Consolidated Resolution R.E.3.

4. On 14 September 2017, Revision 3 of the 1958 Agreement on type approval for vehicles, parts and components entered into force. The main objectives of Revision 3 consist of:

   (a) New provisions for the internationally recognised whole vehicle type approval “IWVTA” system;

   (b) The possibility for contracting parties to grant type approvals according to previous versions of UN Regulations;

   (c) An electronic Database for the Exchange of Type Approval documentation (DETA) between all the contracting parties to the agreement to be established at ECE;

   (d) Modification of the voting conditions for the adoption of new UN Regulations or their amendments to existing UN Regulations (i.e. currently a two-thirds majority); and

   (e) Review and strengthening of the current provisions with the aim to improve the functioning and reliability of the type approval procedures and the conditions for their mutual recognition, i.e. quality assurance assessment, certification and conformity of production procedures, the tasks, responsibilities and competences of involved parties and aspects related to enforcement such as ensuring market surveillance and safeguard measures.

5. Following the discrepancies between ECE member States on the financing of the hosting of DETA under the ECE regular budget during consultations prior to the 2017 Commission session, WP.29 decided to use extrabudgetary funding for DETA. For this, ECE contacted all Contracting Parties to the 1958 Agreement with a request for donations.

6. At the 173rd Session of WP.29 in November 2017, Germany offered to temporarily host and finance DETA under the condition that UNECE takes over DETA under regular budget at the latest from 2022 onwards and that the industry covers the development costs of the Unique Identifier and the Declaration of Conformity, which was welcomed by WP.29. However, the fulfilment of the conditions could not be granted by both industry and UNECE at that stage.
II. 1997 Agreement

7. In 2017, amendments to provisions for periodic technical inspections on environmental related elements (Rule No. 1), on the roadworthiness (Rule No. 2) were established extending the scope to passenger cars and small vans, introducing three risk categories of defects and assessment criteria for each of the test items as well as further test items for electronic controlled safety systems.

8. A new Resolution R.E.6 on the administrative and technical provisions required for carrying out the technical inspections according to the technical prescriptions specified in Rules annexed to the 1997 Agreement was adopted in March 2017. These provisions relate to the test facilities and test equipment, skills and training of inspectors, and quality control by supervision.

III. 1998 Agreement

9. In 2017, WP.29 concluded several years of work on the new Global Technical Regulations:

   (a) The new Global Technical Regulation No. 19 on an evaporate emission test in the Worldwide harmonized Light Duty Test Procedure, which was adopted at the June 2016 session of WP.29, established harmonized test procedures that allow the measurement of the crankcase and evaporative emissions, and then to reduce the emission of unburned fuel which are of a toxic nature;

   (b) The amendment and adoption of Global Technical Regulations No. 1 (door locks and door retentions) and No. 15 (Worldwide harmonized Light Duty Test Procedure).

10. Special Resolution S.R.2, adopted at the June 2016 session of WP.29 was further implemented in its aim to reach higher transparency. The secretariat initiated the first steps by making the WP.29 website more user-friendly, and by amending the WP.29 rules of procedures which will ease the procedure for NGOs, academia and civil society to attend sessions of the World Forum.

IV. Link with the 2030 Agenda for Sustainable Development

11. Accession to United Nations vehicle agreements and adherence to annexed UN Regulations, Rules and Global Technical Regulations 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.