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Item 4.13 of the provisional agenda

1958 Agreement:

Proposal for amendments to the Consolidated Resolution on the Construction of Vehicles (R.E.3) submitted by the Working Parties to the World Forum for consideration

Proposal for an amendment to the Consolidated Resolution on the Construction of Vehicles (R.E.3)

Submitted by the Working Party on Automated/Autonomous and Connected Vehicles *

The text reproduced below with provisions on software identification number was adopted by the Working Party on Automated/Autonomous and Connected Vehicles (GRVA) at its fifth session (ECE/TRANS/WP.29/GRVA/5, para. 38). It is based on ECE/TRANS/WP.29/GRVA/2020/5. GRVA requested the secretariat to clarify the follow-up of this document (ECE/TRANS/WP.29/GRVA/2020/5) with the World Forum for Harmonization of Vehicle Regulations (WP.29) at its March 2020 session. Following consultation, the secretariat is submitting this document as an amendment to the Consolidated Resolution R.E.3. (see ECE/TRANS/WP.29/1151, para. 69) for consideration and vote by WP.29 at its June 2020 session.

* In accordance with the programme of work of the Inland Transport Committee for 2020 as outlined in proposed programme budget for 2020 (A/74/6 (part V sect. 20) para 20.37), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

Introduction, amend to read:

"The text hereafter updates the recommendations of the Consolidated Resolution on the Construction of Vehicles and provides information on the legal texts under the framework of the 1958 Agreement (UN Regulations, Rules and specific requirements) applicable in the vehicle design, aiming the improvement of safety and the protection of the environment. Paragraphs 1. and 2. contain general definitions and the classification used in the documents referred. Paragraph 3. indicates the scope of the UN Regulation(s) and Rule(s). Tables of paragraphs 4. to 7. contain the main requirements for the construction of vehicles so far established and already included into UN Regulation(s) and Rule(s) by the World Forum. Similar requirements are grouped. For any requirement or group of requirements, references are made to the relevant UN Regulations, identified by the number allocated to them by the 1958 Agreement, to the still valid recommendations reproduced in paragraph 8. and to the standard annexes to UN Regulations reproduced in annexes to this Resolution. Annex 3 includes, as complementary information, an updated list of the distinguishing numbers allocated to Contracting Parties by the 1958 Agreement. Annex 4 includes the recommendation on market fuel quality, Annex 5 contains the design principles for control systems of Advanced Driver Assistance Systems (ADAS), Annex 6 contains the guideline on cybersecurity and data protection and Annex 7 contains provisions on software identification numbers."

Insert a new Annex 7, to read:

"Annex 7

Provisions on Software Identification Numbers

I. Introduction

UN Regulation No. [15...] on uniform provisions concerning the approval of vehicles with regards to software update and software updates management system is defining "*RX Software Identification Number (RXSWIN)*" that means a dedicated identifier, defined by the vehicle manufacturer, representing information about the type approval relevant software of the Electronic Control System contributing to the Regulation No. X type approval relevant characteristics of the vehicle.

In order to make use of RXWIN, relevant UN Regulations can refer, by incorporation, to this annex to introduce relevant definitions and provisions as follow:

II. Definitions

For the purpose of this Consolidated Resolution and the UN Regulations referring to this annex:

- 2.1. "*Rx Software Identification Number (RXSWIN)*" means a dedicated identifier, defined by the vehicle manufacturer, representing information about the type approval relevant software of the Electronic Control System contributing to the UN Regulation No. X type approval relevant characteristics of the vehicle.
- 2.2. "*Electronic Control System*" means a combination of units, designed to cooperate in the production of the stated vehicle control function by electronic data processing. Such systems, often controlled by software, are built from discrete functional components such as sensors, electronic control units and actuators and connected by transmission links. They may include mechanical, electro-pneumatic or electro-hydraulic elements. "The System", referred to herein, is the one for which type approval is being sought.

- 2.3. "Software" means the part of an Electronic Control System that consists of digital data and instructions.

III. Requirements for software identification

For the purpose of this Consolidated Resolution and the UN Regulations referring to this annex:

- 3.1. For the purpose of ensuring the software of the System can be identified, an RXSWIN may be implemented by the vehicle manufacturer.
- 3.2. If the manufacturer implements an RXSWIN, the following shall apply:
- 3.2.1. The vehicle manufacturer shall have a valid approval according to UN Regulation No. XXX [Software Update Process Regulation].
- 3.2.2. The vehicle manufacturer shall provide the following information in the communication form of this Regulation (the Regulation referring to this annex):
- (a) The RXSWIN;
 - (b) How to read the RXSWIN or software version(s) in case the RXSWIN is not held on the vehicle.
- 3.2.3. The vehicle manufacturer may provide in the communication form of the related Regulation a list of the relevant parameters that will allow the identification of those vehicles that can be updated with the software represented by the RXSWIN. The information provided shall be declared by the vehicle manufacturer and may not be verified by an Approval Authority.
- 3.2.4. The vehicle manufacturer may obtain a new vehicle approval for the purpose of differentiating software versions intended to be used on vehicles already registered in the market from the software versions that are used on new vehicles. This may cover the situations where type approval regulations are updated or hardware changes are made to vehicles in series production. In agreement with the testing agency duplication of tests shall be avoided where possible.

IV. Production definitely discontinued and RxSWIN

- 4.1. If the holder of the approval completely ceases to manufacture a type of vehicle approved in accordance with this Regulation (the related Regulation referring to this annex), he shall so inform the authority which granted the approval. Upon receiving the relevant communication that authority shall inform thereof the other Contracting Parties to the 1958 Agreement applying this Regulation (the related Regulation referring to this annex) by means of a communication form conforming to the model in Annex [Communication form] to this the related Regulation.
- 4.2. The production is not considered definitely discontinued if the vehicle manufacturer intends to obtain further approvals for software updates for vehicles already registered in the market.

V. Necessary insertion in the Communication Form relevant to RxSWIN

Note: The communication form of the related Regulation referring to this annex shall include the mention Production definitely discontinued for such a case and shall include additional information regarding RXSWIN as follow (and marked in bold):

"Communication form

Communication

(Maximum format: A4 (210 x 297 mm))

issued by: Name of administration:

.....
.....
.....



- Concerning:² Approval granted
- Approval extended
- Approval withdrawn with effect from dd/mm/yyyy
- Approval refused
- Production definitively discontinued**

of a vehicle type, pursuant to UN Regulation No. [*this Regulation*]

Approval No.:

Extension No.:

Reason for extension:

(...)

(...)

Additional information regarding RXSWIN:

Information on how to read the RXSWIN or software version(s) in case the RXSWIN is not held on the vehicle:

If applicable, list the relevant parameters that will allow the identification of those vehicles that can be updated with the software represented by the RXSWIN under the item above:

..

¹ Distinguishing number of the country which has granted/extended/refused/withdrawn approval (see approval provisions in the Regulation).

² Strike out what does not apply.