

# List of relevant GRSG Regulations for software updates

This document was prepared by the expert from France. It proposes a list of the relevant UN Regulations and Global Technical Regulations (GTRs) under the purview of GRSG, for the purposes of software updates.

## I. List of relevant UN Regulations and GTRs

Regulation	Title	Relevant (Yes/No)
UN Regulation No. 18	Anti-theft of motor vehicles	Yes <sup>1</sup>
UN Regulation No. 26	External projections of passenger cars	No
UN Regulation No. 34	Prevention of fire risks	No
UN Regulation No. 35	Foot controls	No
UN Regulation No. 36	General construction of large buses and coaches	Yes <sup>3</sup>
UN Regulation No. 39	Speedometer and odometer	Yes <sup>1</sup>
UN Regulation No. 43	Safety glazing	No
UN Regulation No. 46	Devices for indirect vision	Yes <sup>1</sup>
UN Regulation No. 52	General construction of small buses and coaches	Yes <sup>3</sup>
UN Regulation No. 55	Mechanical coupling	Yes <sup>4</sup>
UN Regulation No. 58	Rear underrun protective devices (RUPD)	Yes <sup>5</sup>
UN Regulation No. 60	Driver operated controls (mopeds/motorcycles)	Yes <sup>2, 9</sup>
UN Regulation No. 61	External projections of commercial vehicles	No
UN Regulation No. 62	Protection against unauthorised use (vehicles with handlebars)	Yes <sup>1, 9</sup>
UN Regulation No. 66	Strength of superstructure (buses)	No
UN Regulation No. 67	LPG vehicles	Yes <sup>1</sup>
UN Regulation No. 71	Drivers field of vision (agricultural tractors)	No
UN Regulation No. 73	Lateral protection devices	Yes <sup>5</sup>
UN Regulation No. 81	Rear-view mirrors (motorcycles/mopeds)	No
UN Regulation No. 93	Front underrun protective devices	Yes <sup>5</sup>
UN Regulation No. 97	Vehicle Alarm Systems (VAS)	Yes <sup>1</sup>
UN Regulation No. 102	Close coupling devices (CCD)	Yes <sup>4</sup>
UN Regulation No. 105	Vehicles for the carriage of dangerous goods	Yes <sup>6</sup>
UN Regulation No. 107	General construction of buses and coaches	Yes <sup>3</sup>
UN Regulation No. 110	CNG and LNG vehicles	Yes <sup>1</sup>
UN Regulation No. 116	Anti-theft and alarm systems	Yes <sup>1</sup>
UN Regulation No. 118	Fire resistance of interior materials	No
UN Regulation No. 121	Identification of controls, tell-tales and indicators	Yes <sup>2</sup>
UN Regulation No. 122	Heating system	Yes <sup>1</sup>
UN Regulation No. 125	Forward field of vision of drivers	Yes <sup>1</sup>
UN Regulation No. 144	Accident Emergency Call Systems (AECS)	Yes <sup>1</sup>
UN Regulation No. 147	Mechanical coupling components of combinations of agricultural vehicles	Yes <sup>4</sup>
UN Regulation No. 151	Blind Spot Information System for the Detection of Bicycles (BSIS)	Yes <sup>1</sup>
UN Regulation No. 158	Devices for means of rear visibility or detection	Yes <sup>1</sup>
UN Regulation No. 159	Moving Off Information System (MOIS)	Yes <sup>1</sup>
UN Regulation No. 160	Event Data Recorder (EDR)	Yes <sup>1</sup>
UN Regulation No. 161	Devices against Unauthorized Use	Yes <sup>1</sup>
UN Regulation No. 162	Immobilizers	Yes <sup>1</sup>
UN Regulation No. 163	Vehicle Alarm systems	Yes <sup>1</sup>
UN Regulation No. 166	Vulnerable Road Users in Front and Side Close Proximity	Yes <sup>1</sup>
UN Regulation No. 167	Approval of Motor Vehicles with Regard to Their Direct Vision	No
UN Regulation No. 169	Event Data Recorder (heavy-duty vehicles)	Yes <sup>1</sup>
Global Technical Regulation No. 6	Safety glazing	No
Global Technical Regulation No. 12	Motorcycle Controls, Tell-tales and Indicators	Yes <sup>8</sup>

## II. Justification

During the 191<sup>st</sup> session of WP.29, the expert from France proposed that all subsidiary Working Parties of WP.29 consider the list of the Regulations under their respective purview which may be relevant for the purposes of software updates (see ECE/TRANS/WP.29/1175, para. 37). This identification of relevant Regulations is necessary to introduce the provisions on identification and update of software in each affected Regulation, using the guidance provided in Annex 7 of the Consolidated Resolution on the Construction of Vehicles (R.E.3).

This document proposed a list of the UN Regulations and GTRs under the purview of GRSG which may be relevant for the purposes of software updates. In particular, the annotated Regulations in the table above correspond to the following comments:

1. All Regulations containing provisions for electronic systems, even if they are not mandatory (e.g., UN Regulation No. 46) nor necessarily affected by software updates, are relevant for the purposes of software updates;
2. All Regulations containing provisions for tell-tales, optical or acoustic signals are relevant for the purposes of software updates, as many vehicles manage tell-tales and signals *via* in-vehicle infotainment systems;
3. UN Regulations No. 36, 52 and 107 (general construction of buses and coaches) are relevant due to the presence of provisions on automatically-operated service doors (in addition to tell-tales as mentioned above);
4. UN Regulations No. 55, 102 and 147 (mechanical coupling) are relevant due to the presence of provisions on remote-operated and/or automatic coupling;
5. UN Regulations No. 58, 73, and 93 (rear, lateral and front protection devices) are relevant due to the presence of provisions on devices for automatic levelling;
6. UN Regulation No. 105 is relevant due to the presence of references to Regulations for which software updates are relevant (R55, R89, R100, etc.)
7. UN Regulation No. 125 is relevant due to the presence of provisions on field of vision assistants (see 1.); this is not the case for UN Regulation No. 71.
8. While Global Technical Regulation No. 12 is not relevant in the context of R.E.3, it is relevant for the purposes of software updates in general.
9. Some of the Regulations above only apply to vehicles of Category L, which are not currently included in the scope of UN Regulation No. 156 on software updates. However, they remain relevant for the purposes of software updates.

Furthermore, some of the Regulations are not currently relevant for the purposes of software updates, but could become relevant if new provisions are introduced.

Lastly, only Regulations applied to vehicles are relevant for the purposes of software updates. Regulations applied to devices, components, etc., are outside of the scope of this document.

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