**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 | Yes1 |
| 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 | Yes3 |
| UN Regulation No. 39 | Speedometer and odometer | Yes1 |
| UN Regulation No. 43 | Safety glazing | No |
| UN Regulation No. 46 | Devices for indirect vision | Yes1 |
| UN Regulation No. 52 | General construction of small buses and coaches | Yes3 |
| UN Regulation No. 55 | Mechanical coupling | Yes4 |
| UN Regulation No. 58 | Rear underrun protective devices (RUPD) | Yes5 |
| UN Regulation No. 60 | Driver operated controls (mopeds/motorcycles) | Yes2, 9  |
| UN Regulation No. 61 | External projections of commercial vehicles | No |
| UN Regulation No. 62 | Protection against unauthorised use (vehicles with handlebars) | Yes1, 9 |
| UN Regulation No. 66 | Strength of superstructure (buses) | No |
| UN Regulation No. 67 | LPG vehicles | Yes1 |
| UN Regulation No. 71 | Drivers field of vision (agricultural tractors) | No |
| UN Regulation No. 73 | Lateral protection devices | Yes5 |
| UN Regulation No. 81 | Rear-view mirrors (motorcycles/mopeds) | No |
| UN Regulation No. 93 | Front underrun protective devices | Yes5 |
| UN Regulation No. 97 | Vehicle Alarm Systems (VAS) | Yes1 |
| UN Regulation No. 102 | Close coupling devices (CCD) | Yes4 |
| UN Regulation No. 105 | Vehicles for the carriage of dangerous goods | Yes6 |
| UN Regulation No. 107 | General construction of buses and coaches | Yes3 |
| UN Regulation No. 110 | CNG and LNG vehicles | Yes1 |
| UN Regulation No. 116 | Anti-theft and alarm systems | Yes1 |
| UN Regulation No. 118 | Fire resistance of interior materials | No |
| UN Regulation No. 121 | Identification of controls, tell-tales and indicators | Yes2 |
| UN Regulation No. 122 | Heating system | Yes1 |
| UN Regulation No. 125 | Forward field of vision of drivers | Yes1 |
| UN Regulation No. 144 | Accident Emergency Call Systems (AECS) | Yes1 |
| UN Regulation No. 147 | Mechanical coupling components of combinations of agricultural vehicles | Yes4 |
| UN Regulation No. 151 | Blind Spot Information System for the Detection of Bicycles (BSIS) | Yes1 |
| UN Regulation No. 158 | Devices for means of rear visibility or detection | Yes1 |
| UN Regulation No. 159 | Moving Off Information System (MOIS) | Yes1 |
| UN Regulation No. 160 | Event Data Recorder (EDR) | Yes1 |
| UN Regulation No. 161 | Devices against Unauthorized Use | Yes1 |
| UN Regulation No. 162 | Immobilizers | Yes1 |
| UN Regulation No. 163 | Vehicle Alarm systems | Yes1 |
| UN Regulation No. 166 | Vulnerable Road Users in Front and Side Close Proximity | Yes1 |
| 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) | Yes1 |
| Global Technical Regulation No. 6 | Safety glazing | No |
| Global Technical Regulation No. 12 | Motorcycle Controls, Tell-tales and Indicators | Yes8 |

 II. Justification

 During the 191st 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 to 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.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_