

# List of relevant GRSP 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 GRSP, for the purposes of software updates.

## I. List of relevant UN Regulations and GTRs

Regulation	Title	Relevant (Yes/No)
UN Regulation No. 11	Door latches and door retention components	Yes <sup>1</sup>
UN Regulation No. 12	Protection of the driver against the steering mechanism in the event of impact	Yes <sup>3</sup>
UN Regulation No. 14	Safety-belt anchorages	No
UN Regulation No. 16	Safety belts, etc.	Yes <sup>1</sup>
UN Regulation No. 17	Seats, their anchorages and head restraints	Yes <sup>2</sup>
UN Regulation No. 21	Interior fittings	Yes <sup>2</sup>
UN Regulation No. 22	Protective helmets and their visors	No <sup>5</sup>
UN Regulation No. 25	Head restraints (headrests)	No <sup>5</sup>
UN Regulation No. 29	Protection of the occupants of the cab of a commercial vehicle	No
UN Regulation No. 32	Rear-end collision	Yes <sup>3</sup>
UN Regulation No. 33	Head-on collision	Yes <sup>3</sup>
UN Regulation No. 42	Front and rear protective devices (bumpers, etc.)	No
UN Regulation No. 44	Restraining devices for child occupants ("Child Restraint Systems")	No <sup>5</sup>
UN Regulation No. 80	Strength of the seats and their anchorages (large passenger vehicles)	No
UN Regulation No. 94	Frontal collision	Yes <sup>3</sup>
UN Regulation No. 95	Lateral collision	Yes <sup>3</sup>
UN Regulation No. 100	Electric powertrain	Yes
UN Regulation No. 111	Rollover stability of tank vehicles	No
UN Regulation No. 114	Replacement airbag systems	No <sup>5</sup>
UN Regulation No. 126	Partitioning systems	No
UN Regulation No. 127	Pedestrian safety	Yes <sup>3</sup>
UN Regulation No. 129	Enhanced Child Restraint Systems	No <sup>5</sup>
UN Regulation No. 134	Safety-related performance of hydrogen-fuelled vehicles	Yes
UN Regulation No. 135	Pole Side Impact performance	Yes <sup>3</sup>
UN Regulation No. 136	Electric powertrain (vehicles of Category L)	Yes <sup>4</sup>
UN Regulation No. 137	Frontal collision with focus on the restraint system	Yes <sup>3</sup>
UN Regulation No. 145	ISOFIX anchorages systems, etc.	No
UN Regulation No. 146	Hydrogen-fuelled vehicles of Category L	Yes <sup>4</sup>
UN Regulation No. 153	Fuel system integrity and safety of electric power train in the event of a rear-end collision	Yes <sup>3</sup>
UN Regulation No. 170	Child Restraint Systems for Safer Transport of Children in Buses and Coaches	No <sup>5</sup>
UN Global Technical Regulation No. 1	Door locks and door retention components	Yes <sup>1</sup>
UN Global Technical Regulation No. 7	Head restraints	Yes <sup>2</sup>
UN Global Technical Regulation No. 9	Pedestrian safety	Yes <sup>3</sup>
UN Global Technical Regulation No. 13	Hydrogen and fuel cell vehicles	Yes
UN Global Technical Regulation No. 14	Pole side impact	Yes <sup>3</sup>
UN Global Technical Regulation No. 20	Electric vehicle safety	Yes

## II. Justification

During the 191<sup>st</sup> session of WP.29, the World Forum requested that all subsidiary Working Parties consider the list of Regulations under their respective purview that 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 the identification and update of software in each relevant Regulation, using the guidance provided in Annex 7 of the Consolidated Resolution on the Construction of Vehicles (R.E.3).

This document proposes a list of the UN Regulations and GTRs under the purview of GRSP that may be relevant for the purposes of software updates. In particular, the annotations in the table above correspond to the following comments:

1. Regulations that implement requirements on warnings, visual information or acoustic signals are relevant for software updates. Examples include R11 (door closure warning systems), R16 (safety belt reminders), etc.
2. Regulations that implement requirements on automatic systems are relevant for software updates, even if such systems are not needed to comply with the requirements of the Regulations. Examples include R17 (automatic adjustment systems) and GTR7 (automatic mechanisms).
3. All Regulations on collisions, for which a manufacturer may use airbags, active devices for pedestrian protection (in R127 and GTR9), etc. are relevant for software updates. It is unclear yet whether this also applies to GTR No. 9.
4. UN Regulations No. 136 and 146 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 in general.
5. Only Regulations that apply to vehicles are relevant for the purposes of software updates. Regulations that only apply to devices, components or systems are not relevant in the context of the Annex 7 of R.E.3.

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

Finally, while Global Technical Regulations are not relevant in the context of R.E.3, they may be relevant for the purposes of software updates in general.

---