

## Proposal for amendments to UN Regulation No. 140

The text reproduced below is based on that of the original version of UN Regulation No.140. The modifications to that text are indicated in **bold** for new characters and ~~strike through~~ for deleted characters. Modifications to GRVA-22-39 have been denoted in red.

### I. Proposal for supplement to the original version of UN Regulation No. 140

*Paragraph 7.4.1.2. amend to read:*

- "7.4.1.2. Except as provided in paragraph 7.4.1.3., the ESC malfunction tell-tale shall illuminate when a malfunction exists and shall remain continuously illuminated under the conditions specified in paragraph 7.4. for as long as the malfunction exists, ~~whenever the ignition locking system is in the "On" ("Run") position~~ **at the initiation of the powertrain whenever the powertrain<sup>6</sup> is initiated;**"

*Insert new footnote 6, to read:*

- "<sup>6</sup> As defined in Mutual Resolution No. 2 (M.R.2) of the 1958 and the 1998 Agreements containing vehicle propulsion system definitions, see document ECE/TRANS/WP.29/1121."

*Renumber subsequent footnotes as appropriate.*

*Paragraph 7.4.1.3. amend to read:*

- "7.4.1.3. Except as provided in paragraph 7.4.2., each ESC malfunction tell-tale shall be activated as a check of lamp function ~~either when the ignition locking system is turned to the "On" ("Run") position when the engine is not running, or when the ignition locking system is in a position between "On" ("Run") and "Start" that is designated by the manufacturer as a check position~~ **on each initiation of the powertrain either at each initiation of the powertrain or in a condition that is designated by the manufacturer as a check condition.**

**A new engine start/run cycle (or run cycle) which is performed automatically, e.g. by the operation of a stop/start system, shall not be considered an "initiation of the powertrain" wherever that term is used in this Regulation; "**

*Paragraph 7.4.1.4. amend to read:*

- "7.4.1.4. Shall extinguish at the next ~~ignition cycle~~ **initiation of the powertrain** after the malfunction has been corrected in accordance with paragraph 9.10.4.;"

*Paragraph 7.5.1. amend to read:*

- "7.5.1. The vehicle's ESC system shall always return to the manufacturer's original default mode that satisfies the requirements of paragraphs 6. and 7. ~~at the~~ **each** initiation of ~~each new ignition cycle the powertrain~~, regardless of what mode the driver had previously selected. However, the vehicle's ESC system need not return to a mode that satisfies the requirements of paragraphs 7. through 7.3. ~~at the each initiation of each new ignition cycle the powertrain~~ if:  
..."

*Paragraph 7.6.2.3. amend to read:*

- "7.6.2.3. Except as provided in paragraphs 7.6.3. and 7.6.4. each "ESC Off" tell-tale shall be activated as a check of lamp function either when ~~the ignition locking system is turned to the "On" ("Run") position when the engine is not running, or when the ignition locking system is in a position between "On" ("Run") and "Start"~~ **powertrain is initiated or whatever method** that is designated by the manufacturer as a check position."

*Paragraph 9.2. amend to read:*

- "9.2. Tell-tale bulb check. With the vehicle stationary and ~~the ignition locking system in the "Lock" or "Off" position, switch the ignition to the "On" ("Run") position~~ **powertrain deactivated, initiate the powertrain** or, where applicable, the appropriate ~~position~~ **method condition** for the lamp check. The ESC malfunction tell-tale shall be illuminated as a check of lamp function, as specified in paragraph 7.4.1.3., and if equipped, the "ESC Off" tell-tale shall also be illuminated as a check of lamp function, as specified in paragraph 7.6.2.3. The tell-tale bulb check is not required for a tell-tale shown in a common space as specified in paragraphs 7.4.3. and 7.6.4."

*Paragraph 9.3. amend to read:*

- "9.3. "ESC Off" control check. For vehicles equipped with an "ESC Off" control, with the vehicle stationary and the ~~ignition locking system in the "Lock" or "Off" position~~ **powertrain deactivated, switch the ignition locking system to the "On" ("Run") position initiate the powertrain.** Activate the "ESC Off" control and verify that the "ESC Off" telltale is illuminated, as specified in paragraph 7.6.2. ~~Turn the ignition locking system to the "Lock" or "Off" position. Deactivate the powertrain, then again, switch the ignition locking system to the "On" ("Run") position initiate the powertrain~~ and verify that the "ESC Off" tell-tale has extinguished indicating that the ESC system has been restored as specified in paragraph 7.5.1."

*Paragraph 9.10.2. amend to read:*

- "9.10.2. With the vehicle initially stationary ~~and the ignition locking system in the "Lock" or "Off" position, switch the ignition locking system to the "Start" position and start the engine.~~ **and the powertrain deactivated, initiate the powertrain.** Drive the vehicle forward to obtain a vehicle speed of  $48 \pm 8$  km/h. 30 seconds, at the latest, after the ~~engine has been started~~ **initiation of**

**the powertrain** and within the next two minutes at this speed, conduct at least one left and one right smooth turning manoeuvre without losing directional stability and one brake application. Verify that the ESC malfunction indicator illuminates in accordance with paragraph 7.4. by the end of these manoeuvres."

*Paragraph 9.10.3. amend to read:*

"9.10.3. Stop the vehicle, ~~switch the ignition locking system to the "Off" or "Lock" position and deactivate the powertrain.~~ After a five-minute period, ~~switch the vehicle's ignition locking system to the "Start" position and start the engine initiate the powertrain.~~ Verify that the ESC malfunction indicator again illuminates to signal a malfunction and remains illuminated as long as ~~the engine is running~~ **the powertrain is initiated** or until the fault is corrected."

*Paragraph 9.10.4. amend to read:*

"9.10.4. ~~Switch the ignition locking system to the "Off" or "Lock" position~~ **Deactivate the powertrain.** Restore the ESC system to normal operation, ~~switch the ignition system to the "Start" position and start the engine initiate the powertrain.~~ Re-perform the manoeuvre described in paragraph 9.10.2. and verify that the tell-tale has extinguished within this time or immediately afterwards."

## II. Justification

The proposed modifications align the text with that already agreed, as contained in working documents ECE/TRANS/WP.29/2025/87 and ECE/TRANS/WP.29/2025/90, which were adopted at the June 2025 session of WP.29.

This aligns with the intention previously notified in GRVA that other Regulations would also be updated to reflect this terminology. The approach ensures consistency across UN Regulations managed by GRVA and supports a clear and harmonised understanding across all propulsion types, including electric and alternative powertrains.

M.R.2 provides harmonised definitions for vehicle propulsion systems that are independent of the fuel type or technology used. Referring to "powertrain", as defined in M.R.2, enables provisions that are technology neutral and avoids outdated terminology implying combustion engine cycles.

"Powertrain" means the total combination in a vehicle, of propulsion energy storage system(s), propulsion energy converter(s), the drivetrain(s), providing the mechanical energy at the wheels for the purpose of vehicle propulsion, plus peripheral devices.

By adopting this definition, the proposal simplifies the text, improves clarity, and ensures consistency across current and future vehicle technologies.

Further revisions have been made following dialogue with the industry to ensure that the provisions are suitable for manufacturers, in particular for the bulb check requirements.