

## Proposal for amendments to .../GRVA/2024/16

The text reproduced below is based on the document ECE/TRANS/WP.29/GRVA/2024/16.

The modifications to that text are indicated in **red bold** for new characters and ~~red strikethrough~~ for deleted characters.

(Note by the secretariat: the modifications highlighted in yellow in GRVA-19-20 will be incorporated in this document.)

### I. Proposal for amendments to UN Regulation No. 79

*Paragraph 5.6.4.2.1.*, amend to read:

“5.6.4.2.1. The default status of the system shall be off at the initiation of **the powertrain<sup>[x]</sup>** ~~each new engine start/run cycle (or run cycle, as relevant). This requirement does not apply when a~~ **A** new engine start/run cycle ~~(or run cycle, as relevant)~~ **which** is performed automatically, e.g. the operation of a stop/start system, **is not considered an initiation of the powertrain.**”

Insert new *footnote*, to read:

“<sup>[x]</sup> **As defined in Mutual Resolution Mutual Resolution No. 2 (M.R.2) of the 1958 and the 1998 Agreements containing vehicle propulsion system definitions, document ECE/TRANS/WP.29/1121.**”

*Footnote number to be entered as appropriate for the series of amendments and subsequent footnotes renumbered accordingly.*

*Paragraph 5.6.4.8.3.*, amend to read:

“5.6.4.8.3. After each **initiation of the powertrain** ~~vehicle new engine start /run cycle (or run cycle, as relevant, other than when performed automatically, e.g. the operation of a stop/start systems)~~, the ACSF of Category C function shall be prevented from performing a lane change manoeuvre until the system has detected, at least once, a moving object at a distance greater than the minimum distance  $S_{\text{rear}}$  declared by the manufacturer in paragraph 5.6.4.8.1. above.”

*Annex 8, Paragraph 3.5.6.1.*, amend to read:

“3.5.6.1. The test vehicle shall be driven in a lane of a straight test track, which has at least two lanes in the same direction of travel, with road markings on each side of the lanes.

The vehicle speed shall be:  $V_{\text{min}} + 10\text{km/h}$ .

The ACSF of Category C shall be activated (standby mode) and another vehicle shall approach from the rear in order to enable the system as specified in paragraph 5.6.4.8.3. above.

The approaching vehicle shall then pass the vehicle under test entirely.

The rear sensor(s) shall be made blind, with means agreed between the vehicle manufacturer and the Technical Service, which shall be recorded in the test report. This operation may be carried out at standstill, provided no new **initiation of the powertrain engine start/run cycle (or run cycle, as relevant)** is performed.

The vehicle shall be driven to a speed of  $V_{\text{min}} + 10\text{km/h}$ , and a lane change procedure shall be initiated by the driver.”

*Annex 8, Paragraph 3.5.7.1.1., amend to read:*

“3.5.7.1.1. Following a new **initiation of the powertrain engine start / run cycle (or run cycle, as relevant)** performed by the driver, the test vehicle shall be driven in a lane of a straight test track, which has at least two lanes in the same direction of travel, with road markings on each side of the lanes.

The ACSF of Category C shall not be activated (off mode) and another vehicle shall approach from the rear and the approaching vehicle shall pass the vehicle entirely.

The direction indicator used to initiate a lane change procedure shall be activated by the driver for a period greater than 5 seconds.”

*Annex 8, Paragraph 3.5.7.2.1., amend to read:*

“3.5.7.2.1. Following a new **initiation of the powertrain engine start / run cycle (or run cycle, as relevant)** performed by the driver, the test vehicle shall be driven in a lane of a straight test track, which has at least two lanes in the same direction of travel, with road markings on each side of the lanes.

The ACSF of Category C shall be manually activated (standby mode).

A lane change procedure shall then be initiated by the driver.”

## II. Proposal for amendments to UN Regulation No. 157

*Paragraph 5.5.5., amend to read:*

“5.5.5. Reactivation of the system after the end of any minimum risk manoeuvre shall only be possible after each **initiation of the powertrain<sup>[x]</sup> new engine start/run cycle (or run cycle, as relevant)**.”

Insert new *footnote*, to read:

“<sup>[x]</sup> **As defined in Mutual Resolution Mutual Resolution No. 2 (M.R.2) of the 1958 and the 1998 Agreements containing vehicle propulsion system definitions, document ECE/TRANS/WP.29/1121.**”

*Footnote number to be entered as appropriate for the series of amendments and subsequent footnotes renumbered accordingly.*

*Paragraph 6.2.2., amend to read:*

“6.2.2. The default status of the system shall be the off mode at the initiation of **the powertrain each new engine start/run cycle (or run cycle, as relevant)**. ~~This requirement does not apply when a~~ **A new engine start/run cycle (or run cycle, as relevant) which** is performed automatically, e.g. by the operation of a stop/start system, **is not considered an initiation of the powertrain.**”

### III. Justification

Mutual Resolution No.2 (M.R.2) was specifically created to establish uniform definitions for vehicle propulsion systems and created generic terms for components and aspects of propulsion systems that are independent of fuel type or technology used. It therefore gives the basis for establishing provisions that can be technology neutral. Continuing to refer to 'engine' or 'run cycle' is still implying a technology type and therefore may retain a level of ambiguity.

Using the definition of 'powertrain' from M.R.2 provides a generic term that sufficiently covers the aspect of a vehicle which needs to be referred to when considering the default state of systems following initialisation. Also using the term 'powertrain' simplifies the respective provisions. The M.R.2 definition of powertrain is as follows:

"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.

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