

Proposal by the ‘Task Force on UN Regulation No. 39 covering mileage values’ amending document ECE/TRANS/WP.29/GRSG/2024/36 to improve the text and resolve any open issues. The modifications to the text of document ECE/TRANS/WP.29/GRSG/2024/36 are marked in bold for new or strikethrough for deleted characters.

Rev1: amendments proposed during GRSG-128 by France and TF Chair to address the request by industry for a later introduction of the mandatory malfunction indication provisions.

Rev2: amendments proposed during GRSG-128 by TF Chair to address the request for a two years gap between the dates for new and existing types.

I. Proposal

Paragraph 2.4., amend to read:

"2.4. "Normal running pressure" means the cold inflation pressure specified by the vehicle manufacturer increased by ~~0.2 bar~~ **200 hPa**"

Paragraph 2.5.1., amend to read:

"2.5.1. "Tolerances of the speedometer's measuring mechanism" ~~shall~~ means the accuracy of the speedometer instrument itself, expressed as the upper and the lower speed indication limits for a range of speed inputs;"

Paragraph 2.5.2., amend to read:

"2.5.2. "Technical constant of the speedometer" ~~shall~~ means the relationship between the input revolutions or pulses per minute and a specified displayed speed;"

Paragraph 2.6.4., amend to read:

"2.6.4. "Total distance value" means ~~any~~ mileage values ~~stored on board the vehicle~~ for the purpose of being made available ~~off board the vehicle~~ **and** related to the total distance driven by the vehicle."

Paragraph 5.8., amend to read:

"5.8. The total distance indicated shall not deviate by more than [~~±5.0~~ ±4.0 / ~~±2.5~~] per cent from the true distance travelled as determined in paragraph 5.7."

Paragraph 5.9., amend to read:

"5.9. When total distance values are provided by the serial data port on the standardised data link connector, as specified in paragraph 6.5.3 of Appendix 1 of Annex C5 to UN Regulation No. 154 or as specified in paragraph 4.7.3. of Annex 9B to UN Regulation No. 49, these values shall not deviate from the (rounded) total distance indicated. **However, this does not apply to the total distance travelled (lifetime) as defined in UN Regulation No. 154.**"

Paragraph 5.11., amend to read:

“5.11. {In the case of an electrically detectable failure preventing the **odometer** requirements of this Regulation from being met, a malfunction indication shall be provided to the driver, if not already covered by other failure warnings and/or other failure conditions.}”

Paragraph 5.11.1., amend to read:

“5.11.1. {The malfunction indication shall be active when the malfunction occurs and shall remain active as long as the malfunction persists. It may be temporarily cancelled, but shall be repeated each time the ignition or the vehicle master control switch is activated.}”

Paragraph 5.12., amend to read:

“5.12. Odometer – Anti-Tampering and Security Management

The total distance indicated and total distance values shall be protected against manipulation.

~~This shall be demonstrated by fulfilling the relevant technical requirements of the original or any later series of amendments of UN Regulation No. 155.~~ This shall be deemed to be complied with when:

(a) {the manufacturer’s management system encompassing cyber security is complying with the {relevant} requirements of UN Regulation No. 155, the original or any later series of amendments, with regard to total distance indicated and total distance values}

and

(b) proportionate mitigations are implemented, including, or equivalent to, mitigation 7 referred to in Annex 5, Part B, Table B5 of UN Regulation No. 155.”

Paragraph 10.6., amend to read:

“10.6. As from 1 September [2028], Contracting Parties applying this Regulation shall not be obliged to accept type approvals to **any of** the preceding series of amendments, first issued after 1 September [2028].”

Paragraph 10.7., amend to read:

“10.7. Until 1 September [20282030], Contracting Parties applying this Regulation shall accept type approvals to **any of** the preceding **01** series of amendments, first issued before 1 September [2028].”

Paragraph 10.8., amend to read:

“10.8. As from 1 September [20282030], Contracting Parties applying this Regulation shall not be obliged to accept type approvals issued to **any of** the preceding series of amendments to this Regulation.”

Paragraph 10.9., amend to read:

10.9. The malfunction indication as specified in paragraph 5.11. is not compulsory for the purpose of granting type-approval to the 02 series of amendment, until 1 September 2030. These exemptions shall remain applicable in the case of extensions of approvals first granted before 1 September 2030.

Insert new paragraph 10.10.:

“10.10. Contracting Parties applying this Regulation may grant type approvals according to any preceding series of amendments to this Regulation.”

Insert new paragraph 10.11.:

“10.11. Contracting Parties applying this Regulation shall continue to grant extensions of existing approvals to any preceding series of amendments to this Regulation.”

Annex 1, insert new item 6.3.:

“6.3. Malfunction indication (pursuant to paragraph 5.11.): yes/no”

Annex 4, Paragraph 1.1.2., amend to read:

“1.1.2. The test shall be carried out with the vehicle at its unladen weight. An additional weight can be carried for purposes of measurement. The weight of the vehicle and its distribution between the axles shall be indicated in the approval communication (see Annex 1, item 78.)”

II. Justification

1. Paragraph 2.4.: Converted to SI unit.
2. Paragraphs 2.5.1. and 2.5.2.: Editorial amendments for consistency with the other definitions.
3. Paragraph 2.6.4.: The definition “total distance value” is amended to better explain the intention that this concerns, according to current and common practice, the various kinds of distance values that are generated by and/or stored in the vehicle for various purposes on- and off-board the vehicle.
4. Paragraph 5.8.: The TF again considered an appropriate tolerance value for the allowed deviation of the mileage value as displayed by the odometer with the true distance driven by the vehicle during the Annex 4 type-approval test procedure. No consensus was reached. While one Contracting Party was asking for $\pm 2.5\%$ and one for $\pm 5.0\%$, others favoured $\pm 2.5\%$ but were willing to compromise at $\pm 4.0\%$. The Contracting Parties in the TF then decided putting forward $\pm 4.0\%$, leaving it between square brackets for further consideration by GRSG. This was due to the position from OICA and IMMA claiming $\pm 5.0\%$ would be appropriate, mainly due to tyre tolerances.
5. Paragraph 5.9.: While it was agreed by the TF that ‘total distance values’ shall be consistent with the mileage value displayed by the odometer, it was noted that UN Regulation No. 154 includes specific provisions for “total distance travelled (lifetime)” values as part of the OBFCM (‘On-board fuel and/or energy consumption monitoring’) requirements which shall, due to its specific application within UN Regulation No. 154, not be considered being total distance values for the purpose of this UN Regulation No. 39.

6. Paragraphs 5.11. and 5.11.1.: The word “odometer” is added to clarify that the malfunction indication concerns only the electrically detectable failure of the odometer and not of the speedometer.

The remaining text was agreed by the Task Force and the square brackets deleted accordingly.

7. Paragraph 5.12.: One sentence is removed as it is considered redundant and confusing. The remaining text was agreed by the Task Force and the square brackets deleted accordingly.

The remaining text ensures the protection of mileage values against tampering. This is deemed to be complied with when the manufacturer’s management system encompassing cyber security is complying with the relevant requirements of UN Regulation No. 155 with regard to total distance indicated and total distance values, and, proportionate mitigations are implemented.

This reference to UN Regulation No. 155 is similar to the general references to UN Regulation No. 10 as used in many other UN Regulations. It is referring to compliance with the ‘relevant requirements’ rather than to ‘approval’, and therefore allows for alternatives for vehicles not certified in accordance with UN Regulation No. 155 and contracting parties not applying it.

The language was drafted with help of experts involved in the GRVA cyber security work.

8. Paragraphs 10.6.-10.8.: “any of” added to paragraphs 10.6. and 10.8. (and under consideration for 10.7.) to ensure it is understood that this concerns all previous series of amendments. This is in line with the ‘General Guidelines for United Nations regulatory procedures and transitional provisions in UN Regulations’ (ECE/TRANS/WP29/1044/Rev.3), as last amended by ECE/TRANS/WP.29/2024/76.

The dates remain bracketed. While some Contracting Parties favour a swift introduction due to national applications or for being able to refer from their national law (e.g. emission requirements) to this UN Regulation No. 39 Amendment 2, industry is of the position that a later introduction time is needed for technical implementation (2030 vs. 2027 and 2033 vs. 2028). Especially the malfunction indication for existing vehicle types needs more time, according to industry. This is now (partly) accommodated by the revisions proposed above.

Paragraph 10.9. introduced to allow for a longer introduction time for the malfunction indication pursuant to paragraph 5.11. The text is similar as in Regulation No. 16 paragraph 15.4.2.

In addition, a new item 6.3. is introduced in the Annex 1 Communication form to be able to identify whether the vehicle is already approved with or without the malfunction indication.

9. Paragraphs 10.910, and 10.1011.: Two additional transitional provisions had been added in line with the ‘General Guidelines for United Nations regulatory procedures and transitional provisions in UN Regulations’ (ECE/TRANS/WP29/1044/Rev.3), as last amended by ECE/TRANS/WP.29/2024/76.

10. Annex 4 1.1.2. Correction to the reference.

11. In addition to justification no. 7 included in document ECE/TRANS/WP.29/GRSG/2024/36, it needs to be clarified that it is mainly a lack of data on the proportionality for introducing a high level of accuracy and security requirements for vehicles fitted with “purely mechanical odometer”, that is justifying this exemption.

In future it may be considered, based on data, whether introducing accuracy and security requirements for vehicles fitted with 'purely mechanical odometer', is proportionate.
