Transmitted by the Chair of the TF-R39MV

Informal document GRSG-127-35
GRSG 127th session, 15-19 April 2024
Agenda Item 7

GRSG Task Force on UN Regulation No. R39 covering mileage values

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Status Report

April 2024

Background Task Force

GRSG-125: based on informal document GRSG-125-05, GRSG agreed on establishing a Task Force exploring the development of uniform provisions on accuracy and anti-tampering of odometers and mileage values stored in vehicles.

GRSG-126: GRSG endorsed the details of work of the Task Force by its proposed Terms of Reference (Report ECE/TRANS/WP.29/ GRSG/105, paragraph 16 and Annex V).

Organisation Task Force

Chair:
The Netherlands, Mr. Tim Guiting
Secretariat:
OICA, Mr. Olivier Fontaine

TF wiki page available.

Activities since GRSG-126:
3 hybrid sessions,

participated by representatives from Contracting Parties, OICA, CLEPA, IMMA, FIA and the IWG on PTI.

Activities Task Force

- Presentations & collecting information on relevant existing technologies, mileage fraud data and research, pre-existing standards and legislation.

- Drafting of a working document with potential new odometer requirements: informal document GRSG-127-12r1e.

informal document GRSG-127-12r1e - 1/5

Accuracy

"*Total distance indicated*“: the distance as displayed by the odometer.
"*True distance travelled*“: the true distance driven by the vehicle for the purpose of the test under Annex 4.
"*Total distance value*“: any mileage value stored on-board the vehicle related to the total distance driven by the vehicle.

Requirements:
The *total distance indicated* shall not deviate by more than **±[5.0/4.0/2.5]%** from the *true distance travelled*.

Total distance values (made available through the serial data port on the standardised data link connector) shall not deviate from the *total distance indicated.*

informal document GRSG-127-12r1e - 2/5

Accuracy

Annex 4: type-approval test for establishing odometer accuracy

1. The vehicle is driven until the odometer switches to the next integer. At this point, the instrumentation is set to 0 m.
2. The vehicle is driven for 10 kilometres and the true value is read from the instrumentation at the point were the odometer switches to the 10 km integer.
3. The accuracy is calculated as follows:

   Accuracy [%] =(10,000 m-Tdt)/(Tdt) * 100

   With Tdt = True distance travelled (m)

Example:
odometer switches from 3,529 to 3,530 km, instrumentation set to 0 m.
odometer switches from 3,539 to 3,540 km, instrumentation reads 10,260 m.

Accuracy [%] =(10,000-10,260)/(10,260) * 100 = -2.5 %

informal document GRSG-127-12r1e - 3/5

Accuracy

Annex 4: type-approval test for establishing odometer accuracy

- Simple and effective procedure which can be performed on a test track or roller dynamometer and can potentially be combined with the speedometer testing.
- Allows alternative test procedures (in agreement with the Technical Service and Type Approval Authority), provided it ensures at least the same level of testing accuracy.

informal document GRSG-127-12r1e - 4/5

Anti-tampering and security management

The *total distance indicated* and *total distance value* shall be protected against tampering which is deemed to be complied with when:

(a) the manufacturer's cyber security management system complies with the relevant requirements of UN R155, and

(b) the vehicle type complies with the technical requirements of UN R155, and when:

- tampering with total distance indicated and total distance values are identified as risks in the vehicle manufacturer's risk assessment, and
- [proportionate mitigations are implemented, including or equivalent to, mitigation 7 of UN R155 Ann. 5, Part B, Table B5.]

informal document GRSG-127-12r1e - 5/5

General

- Several (editorial) amendments and new definitions introduced in line with the new provisions and for consistency reasons.
- Introduction of an information document template applicable to speedometers and odometers.
- Exemptions for vehicles fitted with ‘recording equipment’ (e.g. tachograph) or with a ‘purely mechanical odometer’.

Under consideration:

- the appropriateness of requirements for mileage values transmitted off-board the vehicle,
- including requirements for a warning signal in case of internal malfunction, for e.g. PTI purposes,
- proper wording on anti tampering requirement to be consistent with other UN regulations (IWG CS/OTA / GRVA).

Next steps

- Hybrid meeting in June and virtual meeting in July.
- Complete the amendments to UN R39 by improving, amending and complementing informal document GRSG-127-12r1e.
- Transpose this into an official document for consideration and potentially endorsement by GRSG-128 in October 2024.

Request to GRSG

GRSG is invited to consider informal document GRSG-127-12r1e, and to provide guidance on:

1. the appropriate accuracy value: **± 5.0/4.0/2.5/other %**.
   - some CPs from the Task Force recommend ±2.5 or 4.0%,
   - OICA recommends a state-of-the-art ±5.0% (document TF-R39MV-06-04) aligned on speedometer tolerance range.
   Parties are asked for their substantiated positions,
2. whether the accuracy requirements apply also to the L category of vehicles,
3. the appropriateness of requirements for mileage values transmitted off-board the vehicle.

GRSG delegations may wish to consider joining the upcoming Task Force sessions.

Thank you for your attention!