Draft report of the 5th meeting of the GRSG Task-force on UN Regulation No. R39 covering mileage values TF-R39MV

Date: Wednesday 7 February 13:00-17:30
Thursday 8 February 9:30-12:30
Venue: RDW, offices – Brussels
Virtual: MS TEAMS link
Chairman: Tim Guiting, NL (tguiting@rdw.nl)
Secretariat: Mrs. Katja Jürss, OICA (katja.jurss@volvocars.com)
Documents: Task-force dedicated wikipage
Attendance:

Name	Organization
Jürss, Katja	OICA – Volvo Cars - Secretary
TOSHIHIKO KANAZAWA	OICA - Honda
CLAUSE, Philippe	OICA - Renault
Herveleu, Fabrice	France
Athanasopoulo, Chrysoula	OICA - MAN
Lammers, Hans	The Netherlands
Macdonald, Donald	The UK
Sales, Rachel	The UK
Guiting, Tim	The Netherlands - Chair
Shima Hiroyuki	OICA - Suzuki
Lohage Arne	OICA - Scania
Mueller, Joachim (J.)	OICA – Ford
Rijmenants, Ken	OICA - Honda
Konings, Geert	The Netherlands - IWG on PTI
Bart Drieghe (TME)	OICA - Toyota
Grain, Paul	OICA - Nissan
Bastiaensen, Edwin	IMMA
Olivier Fontaine	OICA
Tom Livernois	SAE
William Gouse	SAE
Juerg Reinhard	FIA - TCS
Mark Zar	SAE
Florian Savona	France

1. Welcome and Introduction.

The chair introduced the meeting by summarizing the state of work and organized a roll call of the attendees to the meeting.

2. **Approval of the provisional agenda.**
Document: TF-39MV-05-01e.
Approved.

Item 6 is out of the scope of this TF and is for information only.
The issue is related to the speedometer which is regulated in R39. Representatives from the UK will join for this item.

3. **Approval of the draft minutes of the TF-R39MV 4th session.**
Document: TF-39MV-04-05.

The minutes of the previous meeting were adopted without any change.

4. **Collecting relevant existing data, research and documentation available in the contracting parties. (**wiki page)

The chair referred to the supporting documents available on the wiki-page. The chair further stated that the supporting documents includes links and references to other documents that could contain data backing the task-force activities, the chair has to date not scrutinized this links or references and invited everyone to look into the documents.

FRANCE stated that the level of milage fraud in France, based on PTI data, is 5% of the vehicle fleet. Added that the actual number could be higher but there is no data to support. The 5% is based on the deviation from previous PTI.

OICA mentioned the report from the Swedish authority Transportstyrelsen on Odometer manipulation, where vehicle mileage data had been evaluated for vehicles between 2010-2018. Swedish authorities found that no more than 20-30 vehicles per year had failed at PTI due to faulty mileage values and whence removed the noting of mileage from the PTI protocol in 2018. The report from the Swedish Transportstyrelsen will be uploaded to the wiki page. OICA also mentioned that there are other CPs that share the view that Odometer tampering is not a big problem.

The chair by contrast stated that there are CPs and organisations that previously stressed in the TF that it is important to address the problem with anti-tampering.

Mr Tom Livernois from SAE J2976 presented TF-39MV-05-04 Odometer summary on the odometer accuracy and the SAE J2976 standard.
He stated that there are examples of handbooks as well as Australian standard showing a +/- 4% accuracy for the speedometer.
He further stated that tires are the main source of variation in the odometer e.g., under/over inflation, tread wear/reduction and variation related to the tire manufacturer.
The J2976 committee agreed that the +- 2,5 % tolerance was the lowest tolerance that could be accepted.

OICA stressed the difference between a standard and a regulation. A standard sets a recommendation, but in a regulation when we a tolerance is set we cannot sell a car with a wider tolerance.
The odometer tolerance in SAE J2976 is fully based on the tire, not taking into account other sources that could affect, like the rim or the sensors. With this tolerance it is only the tire manufacturers that can affect the accuracy of the odometer. The variation of the tires for different tire manufacturers must be taken into account There is no international standard for tires.

TL agreed but added that in his mind it is mainly the tires that contribute/affect the odometer value. If you have a specified tire size any variation between tire manufacturers falls within the 2.5% tolerance. No huge variation due to weather conditions.

Mr Juerg Reinhard from TCS (Touring Club Switzerland) on behalf of FIA presented an ADAC report on mileage tampering of old vehicles. He also mentioned that odometer tampering is a problem for leasing vehicles with a lot of mileage. He continued with pointing out that this mileage fraud was well organized.

NL presented TF-R39MV-05-05 Mileage values in UN Regs. The document includes a table showing in which and where the odometer is mentioned in the UN ECE regulations.
NL proposed that the current definition of the odometer should be discussed in the TF.
NL moved on to say that the NL cyber security Regulation expert, stated that UN R155 does provide guidance, but does not mandate anti-tampering provisions per se, unless otherwise regulated.

OICA is of the understanding that the presentation concluded that the anti-tampering measures provided in R155 is adequate.

5. Revision of draft working document

Document:

- TF-R39MV-03-03-r2 (Chair)

The document TF-R39MV-03-03-r2 contains the outcomes of the 4th meeting of the task-force.

Scope:

Discussion on the scope continued.

Conclusion: After a discussion whether the paragraph providing exemption for vehicles equipped with Tacograph or similar should be placed in the scope or in the paragraph 5, it was agreed that this paragraph, with some editorial changes should be moved from the scope to Section 5.

Paragraphs 2.6.2. to 2.6.4. (new definitions dedicated to the odometer)

The definitions were reviewed and agreed.

Paragraph 2.6.5 "recording equipment":

OICA explained that the definition of "recording equipment" might need to be reviewed.
to include other type of equipment than those presently included. OICA will have more information in the next TF meeting.

Conclusion: Agreed with slight changes. OICA will come back with a proposal including TSUs.

Paragraphs 2.6.5.1 and 2.6.5.2

The paragraphs as reviewed and agreed.

Paragraph 2.6.

NL proposed to change the original definition of "odometer" and change "recorded" to "travelled".

Conclusion: The group decided to take the proposal into consideration for the next meeting.

Paragraph 2.8

There are presently three different proposals for the definition of "Tampering".
OICA explained that tampering is the activity leading to inaccurate odometer data being displayed, not the result of such activity.

Conclusion: A revised definition was preliminary agreed but will be revisited next session.

Paragraph 5.7

OICA stated that the accuracy of +/- 2,5% as proposed by SAE J2976 (TF R39MV-05-04) is not possible to achieve. OICA continued to point out that the +/- 2.5 % tolerance is in all related to tires

which the vehicle manufacturers have little influence over and in fact leaves the OEMs with a 0 tolerance in relation to the odometer itself. Also the ABS sensor is regarded 'weak' for accuracy. OICA also mentioned that there is no international standard for tire dimensions.

NL clarified that Type Approval testing should be made under ideal condition with a new tire with the correct pressure and the tolerance should only be fulfilled at TA.

France stated that it would be good to have some data related to equipment that is relevant for the odometer accuracy e.g the sensors and asked if OICA could provide such data.

Conclusion: - OICA will try to provide data related to equipment that is relevant for the odometer accuracy for the next TF meeting.
- The CPs are expected to have a clear expectation of odometer accuracy for the next meeting.

Paragraph 5.8. Total distance values

Chair: The same tolerance value should be applied in this paragraph.

NL: The value that is stored or available via the serial port should be the same as that displayed.
Chair: There has been examples where there have been components fraudulently installed that have different values stored.

OICA asked if the intention is that the OEMs would be obliged to reveal all locations where the data is stored.

Conclusion: Discussion will continue in the next session.

Paragraph 5.6 Test procedure

OICA is working on a proposal for test procedure and are looking at different complexity of test procedures, but what test procedure to use also depends on the expected accuracy.

NL introduced a proposal for a test procedure for the accuracy with the speedometer test in R39 as basis, document TF-R39MV-05-06. The distance covered is changed.
Open for the possibility to combine with other test such as RDE. The TP has not been tested.
+- 0.5% accuracy of the measuring instrumentation.

OICA asked if other test conditions than the described would be possible?
NL: Yes, if the OEM can demonstrate that it is fulling the same level of satisfaction.
Will be referenced in Annex 4.

Conclusion: NL will try out the TP till the next TF meeting and come back with the result, using also the OBD data as comparison.

Paragraph 5.9. (odometer – general)

Chair: Is there an agreement on removing paragraph 5.9 in full?

Conclusion: Agreed to delete paragraph 5.9.

Paragraph 5.10

Conclusion: To be reviewed next meeting.

Paragraph 5.11 repair and replacement

Discussion on whether this paragraph is needed or should be deleted.

Conclusion: Decision whether to delete will be revisited next TF session.

Paragraph 5.12

Discussion on if the paragraph should remain in the doc.
Total distance values "stored" changed to "*transmitted*".
The value transmitted should be the value displayed.
OICA: The stored values should comply with Regulation 155. An off storage of data is the safest way to store data. There is a limit to which extent the OEMs can protect the data stored aboard the vehicle.

Conclusion: Changes are within brackets and will be revisited next meeting.

Paragraph 5.13

According to the Chair this paragraph was requested by the PTI group and in accordance with the ToR.

OICA asked what was intended as a warning signal and questioned the relevance as a sensor problem will be indicated by other systems before it will become a problem for the odometer. It was also pointed out that it would be relatively easy to manipulate. And finally, that compared to the consequences of manipulation of the data the importance of this warning is neglectable.

Conclusion: The group is to review this item and how it could be addressed at the next meeting.

The Chair ended the discussions on the working document and stated that the discussion on anti-tampering will continue the next TF-meeting. The cybersecurity expert from NL will be invited to contribute to the discussions.

The Chair proposed to present a status report at the next GRSG, deeming it premature to present a working document.

France proposed that a working document should be filed as an informal doc which could be done after the next TF meeting in March.

Conclusion: Decision will be taken at the next TF meeting.

6. TAAM discussions on odometer display

The chair is expected to forward and explain a request for input from the TAAM ('Type Approval Authorities Meeting') on additional speedometer displays.

Mr. Donald Macdonald from the UK joined the meeting to inform the TF of a case brought to TAAM related to speedometer displays. He stated that if the speedometer is displayed on more than one display this could be confusing to the driver. And how would the driver know which of the speed indicator is type approved and hence correct? If there are more than one display, they should all be in line with R39.

NL said they shared the UK opinion that if there are multiple display they all should be comply with R39 but other CPs that took part in the TAAM meeting had the opinion that only the "main" display need to fulfill the requirements.

France agreed with NL and UK.

In some vehicles there is both an analogue and a digital speedometer, both speedometer cannot meet R39 (km or miles)

OF: There is difference between an indicator and a digital display. An indicator, typically an arrow, only give an indication.

The UK thanked the Task-Force members for their input and informed that there will be an informal posted from the UK for the next GRSG.

7. AOB.

There was no other business to discuss.

8. Next meetings.

Hybrid sessions.

- ➔ TF-R39MV-06: 25-26 March (OICA offices)
  Monday 25 March 13:00-17:30
  Tuesday 26 March 9:30-12:30