Comments on document ECE/TRANS/ WP.29/GRSG/2015/16 on Regulation No. 39 (Speedometer)

Submitted by the expert from the International Organization of Motor Vehicle Manufacturers

The text reproduced below was prepared by the expert from the International Organization of Motor Vehicle Manufacturers (OICA), to express their comments to the proposal from FIA and to highlight some key factors that should be debated.

I. Clarifications on the problem that the proposal addresses

According to the justifications of document GRSG/2015/16, FIA aims at addressing a mileage fraud problem on European 2nd hand car market.

The European Commission already worked on the subject and issued several documents referenced below:

  http://www.google.fr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=0CDUQFjAC&url=http%3A%2F%2Fwww.car-pass.be%2Fen%2Fdocs%2FCARS%25202010%2520closing%2520statement.docx&ei=1Ls8VcroEobCOZKMgegK&usg=AFQjCNGLG0h0y90JY02GhDTXWCXnNKLYF+iQ

- Roadworthiness package impact assessment No EAHC/FWC/2013 85 01 (2012)


Although these studies and assessment are much documented on consumer money losses, the safety impact of mileage fraud, when mentioned, is always considered as being “potential” and is never evaluated in occurrence or gravity. No evidence of a real quantifiable customer safety issue is demonstrated in the above EC documents and ECE/TRANS/ WP.29/GRSG/2015/16 does not provide any additional
figures or statistics demonstrating any safety concern; it only gives a general statement.

Today’s vehicles are all equipped with On Board Diagnostic (OBD) for alerting any critical loss of performance in terms of safety and pollutant emissions. In addition to the above, Periodic Technical Inspection (PTI) is a safeguard in case the vehicle owner does not react according to the OBD alerts.

II. The proposal will not solve the problem it addresses

The proposal will not solve this issue of mileage fraud on European 2nd hand car market.

1. The conclusions of the EU documents mentioned above diverge from those of FIA:

DG SANCO report in page 418: “make odometer fraud impossible” is considered by the report, but then discarded as this solution would become an endless chasing story to the benefits of the hacker. The hacking technology will always chase the manufacturers’ solutions.

On the contrary to the FIA recommended anti-tampering odometer measures, the directions that are recommended since the CARS 2010 conferences, because considered as “cost effective to eradicate mileage fraud” are:

- Greater transparency through systematic recording of mileage at every PTI, servicing or repair.
- PTI frequency increase, so that safety and environmental issues are considered whatever the age of the vehicle.
- PTI, servicing and repair centers data collection with data consolidation at state level.
- Cross border data exchanges

2. The FIA proposal, as an amendment to a Type Approval regulation, would only apply to new vehicles, while the application of the EC reports recommendation would directly apply to the whole existing fleet.

3. By introducing regulation changes in UN R39, the proposal includes L and heavy truck (N2 N3 M2 M3) categories for which the context is very different from European 2nd hand car market. No demonstration is provided in EU studies or the FIA proposal justifications on the necessity to include these categories. Heavy trucks already have to fulfill other requirements (PTI increased frequency, Chrono tachograph installation, professional users, etc) that drastically diverge from car market context.
4. Reactivity is a key factor in protection against hacking, while regulation update is a very slow process. By the time UN-ECE adopts, publishes and enforces any regulation its content will probably be obsolete.

5. Considering life time of a vehicle type (6 to 12 years) and considering the duration between a type approval and the period after which it is worth starting odometer tampering (about 1 year), hackers have in practice the time to find out a solution even for a “perfect” anti-tampering system at type approval.

6. The diversity between the OEM technical solutions is an asset against fraud, and even a competitive factor within industry, where regulation tends to harmonise.

III. Proposal is complicated and not adapted to automobile

1. Referring to ISO 15408, and its sister ISO standards, would bring a new bunch of private standards into UN-ECE automotive regulations, leading all type approval authorities and laboratories to buy these and get their people trained to using them.

2. ISO 15408 is designed for the certification of electronic cash systems or similar IT products, not for the automotive context. An odometer is not that critical to the user.

3. There are conflicting performances in the requirements:
   - Paragraph 5.5.2 requests absolute protection against writing and changing values
   - Paragraph 5.5.3: in case of repair/replacement, the odometer shall display the same mileage as before repair
   - This understates that the new part must have its content modified, hence conflicts with paragraph 5.5.2 requirement. And this implicitly admits that a “back door” access is needed into the odometer management software, hence a potential tampering way.

4. This paragraph 5.5.3. requirement also conflicts with existing national regulations on odometer replacement where value adjustment is banned.

5. Development costs, product costs, repair costs and spare parts costs will significantly increase if industry has to achieve targets such as “making manipulation no longer cost-efficient versus the sales price that can be achieved during the complete life time of the vehicle” (paragraph 5.5.2., page 4, in document GRSG/2015/16). Which honest customer would be ready to pay that price to get the odometer information chain repaired in case of internal failure? It could even happen that very high spare parts price leads to an increase of aggressive car jacking.
IV. Proposal does not fulfil WP.29 guidelines

1. The proposal described in Annex 5 is a process, and this cannot be type approved.

2. The proposal does not define performance criteria within the regulation.

3. The proposed updating process described in Annex 5 paragraph 1.3 does not refer to the UNECE procedures.

4. The tampering cost targets that are described cannot be evaluated so cannot be considered, unless knowing at any time and for each vehicle the prices in the European 2nd hand car market of the next few years.

V. Conclusion

OICA opposes the proposal as it will not solve the problem it addresses; it gives unrealistic and inapplicable orientations where EU studies on the subject lead to other, cost effective and with demonstrated efficiency orientations.