Subject: Commission position paper on gear shifting

Background

In the last meeting of the GRPE the expert from OICA presented an informal document intended to adapt Regulation ECE n° 83 to technical progress by allowing manufacturers to use specific gear shift points for vehicles with manual gearboxes, when those vehicles are provided with a gear shift indicator.

Relating to the same issue, the representative of Germany presented an informal document stating that vehicles provided with a technical gear shift instrument should be driven, along the test cycle, according to the manufacturer’s instructions.

Member States and the European Commission appreciated the presentation of those documents but it was stated that a more detailed study of them would be necessary in order to know the influence of the proposed changes in other pieces of legislation and in vehicle performances. The representative of the Commission stated that he would present the comments on those documents in the next GRPE meeting.

Commission position

Industry is obviously free to install gear shift indicators as they see fit.

But, it is an entirely different matter whether the EU or UN/ECE legislation should be modified. This issue was raised at the meeting of the Motor Vehicle Emissions Group in Brussels, last July, and the Commission was not convinced of the usefulness of such an initiative. The reasons for that position are set out hereafter:

1. The European Commission recognises that fuel efficient driver behaviour, assisted by an appropriate in-car instrument has a “theoretical” potential for reducing the emissions of CO₂ and fuel consumption.

2. However, one concern is that it is not known whether these devices would have any impact in real-world driving. To our knowledge, no systematic studies have been carried out about whether drivers would accept these instruments, whether and to which extent they would be trying to follow their instructions, and to which extent they would succeed in reducing their fuel consumption and CO₂ emissions.

If drivers are not fully following the indications on the dashboard, the result would be a decrease of the official CO₂ figure in the type-approval test without any real
improvement for the environment. It is foreseeable that there would immediately be a discussion – if not a dispute - on whether or not the figures obtained from the new test cycle should be used for calculating whether the industry fulfils its commitment under the CO₂ agreement. That should be avoided, the more so as the available data from programmes such as instrument-assisted bus driver training in Sweden show only small improvements in fuel economy that were decreasing over time.

3. Another concern refers to the fact that changing gears at a lower speed could influence the driveability of the car, with the corresponding risk in real traffic conditions.

This question was put on the table, in the last MVEG in July, by the EC-JRC according to their experience with the tested vehicles. Some Member States also referred to this issue during that meeting.

4. The effect of the use of the Gear Shift Indicator (GSI) in the emissions of regulated pollutants has not yet been sufficiently studied. Only a very limited set of data from a few cars has been provided.

5. Member States have been consulted, via e-mail, in relation to this issue and all those who responded expressed doubts with regard to the proposal from Germany.

In the absence of well-founded knowledge about the impact of such devices, and in view of the additional issues outlined above, the European Commission considers it premature to change the current test cycle. We are thus not in the position, at this stage, of supporting the current draft proposals for amendments to Regulation ECE n° 83. Additionally, we fear that a modification of the test cycle could be used to circumvent the self-commitment of the car industry on CO₂ emissions.

If ever a modification of Regulation ECE n° 83 were envisaged, the Commission would seek modifications that ensure that the test cycle represents more closely real driving conditions, e.g. in the area of acceleration rates.