

OICA PROPOSAL FOR WORLDWIDE HARMONISATION OF FUEL QUALITY

1. Background and recommendation

The outcome of the recent WP29 Fuels Round Table was positive and it was shown that there is a close link between market fuel quality and the control of emissions from motor vehicles. It was recognised that further reductions in emissions through more stringent emission regulations requires more advanced emission control technologies, which drives the crucial need for improved market fuel quality.

Under existing UN-ECE Agreements WP29 appears not to have a mandate to set fuel regulations. The conclusion of the recent Fuels Round Table was that GRPE is requested to develop a recommendation for fuel quality relating to "emission level / technology type".

The development of fuels and the introduction of engine technology has to go hand-in-hand. In the past the EU and the US conducted lengthy and expensive "Auto-Oil" programs linking emission standards with fuel quality. Similar results are available from Japan, China and India. Such programs demonstrated the link between fuel Quality and engine technology. They do not need to be repeated in world regions/areas since a common approach based on experience can be developed.

The basis of a recommendation to WP29 should therefore be the World Wide Fuel Charter (WWFC) and/or international standards (e.g. CEN, ASTM). For example the CEN fuel standards have been developed from the emission technology-fuel specifications driven by EU legislation and these standards provide European fuels that are fit for purpose. The WWFC already sets 4 categories of petrol and 4 categories of diesel fuel characteristics that are appropriate for various emission control technology mixes.

It is therefore recommended that GRPE develop:

- (a) a review of the fuel characteristics laid down in the WWFC and international standards (e.g. CEN, ASTM) to justify the setting of the various fuel characteristics;
- (b) a simple matrix that would link the level of emission standards (UN-ECE) / emission control technology to fuel quality, and
- (c) a recommendation that covers all kinds of road vehicles.

Additionally,

- specifications for pure and blended biofuels should be developed. A first step would be a review of existing international standards for Exx and Bxx and current standardisation / legislative activities on biofuels plus any other developments. OICA stresses that future biofuels should take into account second-generation technology.
- specifications for gaseous fuels should be developed.

2. Administrative Approach

OICA proposes two parallel (simultaneous) work-streams:

A: – Investigate the possibility to amend the 1998 and/or 1958 Agreements to include Market Fuels.

Questions to be answered:

- Could a gtr under the 1998 Agreement be created and applied?
- Does the 1998 Agreement permit the development of such a gtr on the basis that Fuel may be considered to be “equipment...which can be...used on wheeled vehicles”
- Is it possible and sensible to apply type approval requirements to market fuel?
- If not possible, can the 1958 Agreement be adapted to allow development and adoption of a Fuel Regulation without requiring Type Approval of Fuels and mutual recognition of approvals?

B: Step 1 – Publish agreed Fuel Specifications (see 1., above) as a WP29 Guideline.

B: Step 2 – Adopt Fuel Specifications as a “reference annex” to Regulations 83 and 49 (and any emissions gtr with limit values, when adopted).

B: Step 3 – Develop Regulation(s) under the 1998 and/or 1958 Agreement – subject to outcome of work-stream A.


