

The World Forum for Harmonization of Vehicle Regulations: Working Group on Fuel Quality

Dennis Leaf
U.S. Environmental Protection Agency



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Vehicles in Beijing 10-11 April 2008

Activities on Pollution & Energy 2

The World Forum's Round Table on Fuel Quality (15 November 2007):

The Round Table clearly showed that there is a close link between the market fuel quality and the emissions of pollutants from motor vehicles. A further reduction of emissions through more stringent emission regulations requires more advanced emission control technologies, which drives the crucial need for improved fuel quality. The World Forum concluded to set up a new GRPE working group on Fuel Quality. (www.unece.org/trans/main/wp29/wp29wgs/wp29gen/RoundTable.html)

1st meeting of the GRPE working group on Fuel Quality (FQ):

The working group shall develop recommendations on market fuel quality to enable that vehicles, which were tested according to UN regulations or other equivalent regulations and using specific reference fuels for the tests, use in their daily service fuels with specific characteristics relating to the vehicle emission levels and technology type. (www.unece.org/trans/main/wp29/wp29wgs/wp29grpe/fq01.html)

Roundtable agenda: 11/15/2007

- ◆ Date and place During the WP29 session, in Geneva – Thursday 15 November 2007, in the afternoon.
- ◆ Auto Industry: Ms. Susan M. Cischke (Ford Motor Company
- ◆ Oil Industry (Mr. Daniel Sullenbarger) – Marathon Oil Company/IPIECA; Mr. Rob Cox)* – IPIECA
- ◆ EU Commission: Dr. Reinhardt Schulte-Braucks (DG-ENTR
- ◆ Japan: Representative from MLIT and/or Environment Ministry
- ◆ US EPA: Mr. Karl Simon EPA
- ◆ China:
- ◆ India: Mr Saroj K. Dash, *MoT* and Dr K.S. Balaraman, *MoP&NG*
- ◆ IEA:
- ◆ UNEP: Mr. Rob de Jong)

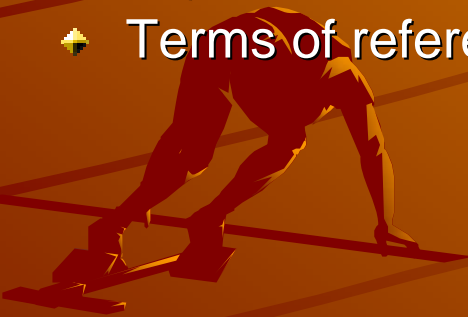
Draft Terms of reference

- ◆ **Proposal for the Terms of Reference for the informal group on fuel quality**
- ◆ The informal group shall develop new requirements and/or recommendations on market fuel quality to ensure that vehicles, which were type approved according to the UNECE Regulations and using specific reference fuels for the tests, use in their daily service fuels with specific characteristics relating to the vehicle emission levels and technology type.
- ◆ These requirements and/or recommendations should ensure that vehicles in use fulfill during its lifetime the same performance level as during their type approval procedure with regard to the emission of gaseous pollutants and particles.
- ◆ The basis of the discussion will be informal document No. GRPE-55-14.
- ◆ The mandate for the informal group shall be limited, in a first step, to 2 years period (until March 2010).

First Meeting of Fuel Quality Group

Agenda for the 1st meeting of the GRPE informal group on Fuel Quality (FQ)

- ◆ Welcome and adoption of the agenda
- ◆ WP.29 Round Table on Fuel Quality
- ◆ OICA proposal for worldwide harmonisation of fuel quality (FQ-01-01)
- ◆ Terms of reference and rules of procedure (FQ-01-02)



OICA Proposal

It is therefore recommended (by OICA) that GRPE develop:

- ◆ 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;
- ◆ a simple matrix that would link the level of emission standards (UN-ECE) / emission control technology to fuel quality, and
- ◆ a recommendation that covers all kinds of road vehicles.
- ◆ Additionally,
- ◆ specifications for pure and blended biofuels should be developed.

“Auto Industry Fuel Quality Needs”

(OICA: Sue Cischke, Ford Motor Company at Roundtable

11/15/2007)

Gasoline

- ✦ Eliminate metal additives (No Pb, Mn, Fe)
- ✦ Eliminate Silicon
- ✦ Improve Octane
- ✦ Reduce Sulphur
- ✦ Control Vapour Pressure
- ✦ Control Volatility
- ✦ Reduce Benzene
- ✦ Improve Detergency
- ✦ Control Aromatics and Olefins

Diesel

- ✦ Improve Cetane Number and Index
- ✦ Control Density, Viscosity, Distillation
- ✦ Improve Lubricity
- ✦ Reduce Sulphur
- ✦ Control Ash
- ✦ Improve Cold Flow
- ✦ Include Detergency
- ✦ Eliminate ethanol in diesel

Conclusions of first meeting

Following the discussion, the informal group agreed on the following roadmap:

✦ (a) to start, in a first step, with the development of technical specifications for market fuel quality taking into account the emission control technologies;

✦ (b) on the basis of these specifications, GRPE and WP.29 should, in a second step, investigate the most appropriate administrative procedure for publishing them.

Role for PCFV?

- ◆ Should PCFV continue to participate?
- ◆ In what fashion?
- ◆ What contributions beyond lead and sulfur?
- ◆ Does it facilitate or slow down PCFV goals?

Conclusion

WP.29 is the unique World Forum for the world-wide harmonization of regulations related to the construction of vehicles.

The World Forum set up an GRPE working group to develop recommendations on market fuel quality.

All documentation are available at the WP.29 website:
www.unece.org/trans/main/welcwp29.htm

Please address questions to: romain.hubert@unece.org

