



EUROPEAN COMMISSION  
ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL  
Consumer goods  
**Automotive industry**

Brussels, 18 November 2009  
ENTR.F1/KS D(2009)

**Test procedure for establishing vehicle emissions due to the use of mobile air-conditioning**

**1. CONTEXT/GENERAL INFORMATION AND OBJECTIVE**

According to the Communication of the Commission<sup>1</sup> on the review of the Community Strategy to reduce CO<sub>2</sub> emissions from passenger cars and light-commercial vehicles adopted in February 2007

*“[t]he Commission will propose a legislative framework, if possible in 2007 and at the latest by mid 2008, to achieve the EU objective of 120 g CO<sub>2</sub>/km, focusing on mandatory reductions of the emissions of CO<sub>2</sub> to reach the objective of 130 g CO<sub>2</sub>/km for the average new car fleet by means of improvements in vehicle motor technology, and a further reduction of 10 g CO<sub>2</sub>/km, or equivalent if technically necessary, by other technological improvements and by an increased use of bio-fuels, specifically:*

*a) setting minimum efficiency requirements for air-conditioning systems ...*

*...*

*d) the use of gear shift indicators, taking into account the extent to which such devices are used by consumers in real driving conditions;”*

Consequently the Commission has to prepare a proposal for legislation on MAC efficiency in due course. The central part of such legislation will be a test procedure for establishing vehicle emissions due to the use of mobile air-conditioning (MAC).

This task could not be included in the first phase (to be finalised until 2014) of the work for a new GTR of the World Light duty Test Procedure (WLTP) group established under the 1998 UNECE agreement due to conflicting international views on priorities. Consequently the Commission decided to launch the development of a suitable MAC test procedure on an EU level. The work will be

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<sup>1</sup> [Communication from the Commission to the Council and the European Parliament 6 Results of the review of the Community Strategy to reduce CO<sub>2</sub> emissions from passenger cars and light-commercial vehicles](#); /\* COM/2007/0019 final \*/; 2 February 2007.

lead by a consortium of contractors (TNO and University of Graz) and involve all stakeholders, such as vehicle manufacturers and suppliers of MAC systems and other vehicle parts relevant for the MAC performance in a vehicle, e.g. glassing.

The Commission continues to put emphasis on international standardisation without impeding the objective of having a MAC test procedure to be implemented in European legislation in the period 2012 – 2014. Therefore UNECE Regulation 101 (measurement of vehicle CO<sub>2</sub> emissions and fuel consumptions) and Annex 4 of Regulation 83 (Type 1), which are both established under the 1958 UNECE agreement, should be complemented by the MAC test procedure as soon as possible.

## **2. STEPS AT UNECE**

The European Commission suggests establishing an informal MAC working group reporting to GRPE, which should end its work by end of 2011. This informal working group should accompany the development of a MAC test procedure at the EU level as an active stakeholder. It would offer in particular non-EU signatories of the 1958 UNECE agreement a platform for participation in the work and ensure the exchange of information with other UNECE signatories, such as US, India and China.

After completion of the draft MAC test procedure, presumably by August 2010, the informal MAC working group should prepare its integration into UNECE Regulation 101 and Annex 4 of Regulation 83, taking into account the state of the work for a WLTP GTR at the time being.

The European Commission requests GRPE to recommend to WP.29 the establishment of such informal MAC working group.