

**PROPOSAL FOR A CHARTER FOR THE WORKING GROUP ON OFF-CYCLE EMISSIONS**

Transmitted by the Expert from the United States of America

At the 42<sup>nd</sup> session of the GRPE, the Chairman asked the expert from the United States to chair an informal effort to explore what would be needed to address off-cycle emissions in relation to a world-wide heavy-duty certification procedure. An inaugural meeting of the work group was held in Ann Arbor, Michigan on December 3, 2001, to discuss possible approaches. Government representatives from the U.S., Canada, European Commission, Japan, and Germany were present as well as members of industry associations and engine and equipment manufacturers.

The simple term "off-cycle" means engine speed and torque combinations, which are not covered in the official test procedure as well as ambient conditions of altitude and temperature outside of the range specified for laboratory testing. With the advent of electronic controls, the possibility grows that many parameters of a particular test cycle may be recognized and engines adjusted for higher emissions outside of the test cycle.

Regulations from the United States, Europe and Japan each address the concepts of auxiliary emission control devices (AECDS) and defeat devices (i.e., AECDS which reduce the effectiveness of the emission controls in conditions which are encountered in normal vehicle operation). The definitions are similar but not identical, especially in their definitions of conditions where AECDS might be allowed for the purpose of engine start-up or protection from damage.

Certification or type-approval regulations have recently been amended to address off-cycle emissions by requiring testing with both steady-state and transient procedures. Government representatives at the informal work group meeting agreed that the ultimate goal is to have an in-use measurement approach which addresses off-cycle emissions.

**Proposed Terms of Reference**

It is requested that GRPE provide a mandate for the work-group to continue its work to pursue the development of a global regulatory structure for addressing off-cycle emissions which will include:

- \$ A common view of the goal of a global technical regulation for off-cycle emissions
  - \$ Common definitions for AECDS and similar language for defeat device identification
  - \$ A common view regarding test cycles, control areas, and ambient conditions
-