Off-cycle Emissions GTR – Draft Defeat Strategy and Related Definitions from 11th OCE Meeting

OCE Plenary Meeting

18 January 2006

Overview

- 11th OCE Plenary Meeting included a renewed discussion of the definitions of "Defeat Strategy" and related terms
- While the Group did not agree on all aspects of the definitions, we did reach agreement upon working drafts definitions which are now included in the draft GTR
- Current working definitions are included for;
 - Element of Design
 - Emission Control Strategy
 - Base Emission Control Strategy
 - Auxiliary Emission Control Strategy
 - Engine System
 - Defeat Strategy

Element of Design

 means in respect of a vehicle or engine system, any control system, including computer software, electronic control systems and computer logic; any control system calibrations; the result of systems interaction; or any hardware items.

Emission Control Strategy

 means an element or set of elements of design that is incorporated into the overall design of an engine system or vehicle and used in controlling emissions.

Base Emission Control Strategy

 means an emission control strategy that is active throughout the speed and load operating range of the engine unless an AECS is activated.

Auxiliary Emission Control Strategy

 means an emission control strategy that becomes active and replaces or modifies the base emission control strategy for a specific purpose or purposes and in response to a specific set of ambient and/or operating conditions, e.g. vehicle speed, engine speed, gear used, intake temperature, or intake pressure.

Engine System

 means the engine, the emission control system and the communication interface (hardware and messages) between the engine system electronic control unit(s) and any other powertrain or vehicle control unit;

Defeat Strategy

- means an AECS that reduces the effectiveness of the emission control relative to the BECS under conditions that may reasonably be expected to be encountered in normal vehicle operation and use, unless:
 - the operation of the AECS is substantially included in the applicable type approval or certification test procedures; or
 - the AECS is activated for the purposes of protecting the engine and/or vehicle from damage or accident; or
 - the AECS is only activated during engine starting or warm up; or
 - the AECS is used to trade-off the control of one set of emission constituents in order to maintain control of another set of emission constituents under specific ambient or operating conditions not
- o substantially included in the type approval or certification test procedures. The overall affect of such an AECS is to compensate for naturally occurring phenomena and do so in a manner that provides acceptable control of all emission constituents;
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 A BECS that discriminates between operation on an applicable type approval or certification test and other operations and provides a lesser level of emission control under conditions not substantially included in the applicable type approval or certification test procedures.