

Informal document No. WP.29-146-23
146th WP.29, 11-14 November 2008,
agenda item 17.6.)

On-road Heavy-duty Engine Off-cycle Emissions gtr (OCE gtr)

Status Report for AC.3

Report from the United States
24th Session of Executive Committee AC.3
13 November 2008



Overview

- Background
- Key Elements
- Performance Requirements
- Remaining Issues
- Acknowledgements
- Next Steps

OCE gtr: Background

- Informal group of technical experts under GRPE
 - Regular meetings since 2002
 - 21 Plenary sessions
 - 6 Editorial sessions
- June 2008
 - The gtr was submitted as an Informal Document to GRPE
 - (ECE-TRANS-WP29-GRPE-56-inf14e)

OCE gtr: Key Elements

- The OCE gtr complements the WHDC gtr
 - On-cycle control
 - Off-cycle control
- World-harmonized Not-to-Exceed (WNTe) “Control Area”
 - Large operating zone within which the WNTe emission limits apply
 - WNTe emission limits are stated as a function of the WHDC emission limits
 - WNTe emission limits are slightly higher than the corresponding WHDC emission limits
- Statement of OCE Compliance
 - The manufacturer must provide a statement that attests to compliance with the provisions of the OCE gtr
- OCE Laboratory Test Procedure
 - An optional laboratory test procedure is included
 - Contracting Parties may choose to require testing to verify OCE compliance prior to type approval
- The gtr does not include specifications for in-use vehicle testing or on-vehicle emission measurement equipment
 - But, the WNTe was developed to allow for testing of compliance during in-use, on the road operation of the engine
 - Individual countries and regional authorities may specify their own in-use testing requirements to enforce WNTe

OCE gtr: Performance Requirements

- Emission strategies shall be designed to enable compliance with the gtr
 - A “base emission strategy” shall not discriminate between test cycle operation and other operation and provide lesser emission control during operation not included on the test cycle
 - An “auxiliary emission strategy” shall not reduce emission control unless
 - It operates on test cycles, including the WNTE
 - It provides protection to the engine
 - It operates only on starting or warming up
 - It trades control of one pollutant for another while maintaining acceptable emission control
- An emission strategy that fails to meet the performance requirements is a “Defeat Strategy”
 - Defeat strategies are prohibited by the gtr



OCE gtr: Remaining Issues

- There remain no outstanding issues with the current gtr
- The absence of in-use testing procedures may represent an opportunity for future gtr action.



OCE gtr: Acknowledgements

- As sponsoring country, the United States wishes to thank all those that have contributed to development of the OCE gtr.
- Particular thanks to the following for continued support and hosting of meetings
 - European Commission
 - The Netherlands
 - The German government
 - The Japanese government and JASIC
 - The UK government
 - Environment Canada
 - Engine Manufacturers Association

OCE gtr: Acknowledgements

- The United States wishes to recognize the valuable contributions made by representatives of the following organisations
 - Environment Canada
 - European Commission DG Enterprise
 - Joint Research Centre
 - Federal Ministry of Transport, Germany
 - Federal Environmental Agency, Germany
 - RWTUEV Fahrzeug GmbH, Institute for Vehicle Technology, Germany
 - TÜV NORD Straßenverkehr GmbH, Germany
 - Institute for Transport Sciences, Hungary
 - International Organization of Motor Vehicle Manufacturers
 - International Organization for Standardization
 - Ministry of Land, Infrastructure and Transport, Japan
 - Ministry of the Environment, Japan
 - National Traffic Safety and Environment Laboratory, Japan
 - Japan Automobile Research Institute
 - Japan Automobile Standards Internationalization Center
 - Japan Automobile Manufacturers Association
 - Netherlands Ministry of the Environment
 - Korea Automobile Testing & Research Institute
 - Swedish Environmental Protection Agency
 - Department for Transport, United Kingdom
 - Engine Manufacturers Association

OCE gtr: Next Steps

- January 2009
 - The OCE gtr will be submitted on 15 January to the 57th GRPE
- March 2009
 - The US is optimistic that the OCE gtr will be submitted as an Informal Document to the 25th AC.3