PROGRESS REPORT ON THE
DRAFT GLOBAL TECHNICAL REGULATION (gtr):

UNIFORM PROVISIONS CONCERNING THE TEST PROCEDURE FOR
COMPRESSION-IGNITION (C.I.) AND POSITIVE-IGNITION (P.I.) ENGINES
FUELLED WITH NATURAL GAS (NG) OR LIQUEFIED PETROLEUM GAS (LPG)
WITH REGARD TO THE EMISSION OF POLLUTANTS

Draft gtr on world-wide harmonized heavy-duty certification (WHDC)

The technical report of the WHDC test cycle work program is laid down in document
TRANS/WP.29/GRPE/2001/2 and was approved by GRPE at its 42nd session. The WHDC/ISO
work program is laid down in the standards ISO 16183 (measurement equipment), approved in 2002,
and ISO 16185 (engine family), approved in 2001. Following the approval, a comprehensive
validation study was conducted at several test facilities, which finally led to slight modifications to
the test cycles and to the measurement equipment specifications. This is summarized in informal
document GRPE-46-4. Following a request by the USA, GRPE approved inclusion of cold start
requirements at the 49th GRPE in January 2005.

Based on the above agreements and additional discussions within the WHDC working group, the
draft gtr was presented as document ECE/TRANS/WP.29/GRPE/2006/9 for discussion at the 51st
session of GRPE. Since it was not possible to solve all open issues by the 51st session, GRPE did not
vote, and the WHDC chairman proposed an additional WHDC meeting. At the 18th WHDC
meeting, complete harmonization of the gtr could not be reached. Therefore, document
ECE/TRANS/WP.29/GRPE/2006/17 contains several options, whose selection is left to the
discretion of the Contracting Parties:

- engine power determination
- reference fuel
- hot soak period (5 or 20 minutes)
- cold start weighting (10% or 14%)
- PM filter material (PTFE coated glass fiber or PTFE membrane) and size (47 or 70 mm)

As regards transposition of the WHDC gtr into the 1958 agreement, the EU Commission proposes
an amendment to ECE Regulation No. 49 (new annex 10), which is laid down in document
ECE/TRANS/WP.29/GRPE/2006/15. The following options are suggested: ECE Regulation No. 85
for engine power, Euro V reference fuel, 5 minutes hot soak, 10% cold start weighting and 70 mm
PTFE coated glass fiber filter.

A presentation of the final gtr and the options will be given at the 19th WHDC meeting on 7th June
2006.

WHDC chairman and secretary would like to propose GRPE to approve the two documents
ECE/TRANS/WP.29/GRPE/2006/17 and ECE/TRANS/WP.29/GRPE/2006/15 so that they can be
transmitted for the WP.29 session in November 2006.