ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations (WP.29)

Working Party on Pollution and Energy (GRPE)
(Forty-sixth session, 19-23 May 2003,
agenda item 5.2.)

PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 96
(Off-road engines)

Transmitted by the expert from the Italy

Note: The text reproduced below was prepared by the expert from Italy in order to align the definition of "net power" in Regulation No. 96 with the definition specified in the new draft Regulation on the measurement of the net power, net torque and specific fuel consumption of internal combustion engines for agricultural and forestry tractors and non-road mobile machinery. The proposal is based on a document distributed without a symbol (informal document No. 5) during the forty-fifth session of GRPE (TRANS/WP.29/GRPE/45, para. 62). The suggested amendments to the Regulation are marked in bold characters.

Note: This document is distributed to the Experts on Pollution and Energy only.
A. PROPOSAL

Paragraph 2.8., amend to read:

"2.8. "Net power" means the power in "ECE kW" obtained on the test bench at the end of the crankshaft, or its equivalent, measured in accordance with the ECE method described in Regulation No. XXX."

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B. JUSTIFICATION

The Italian delegation believes that, after the adoption by GRPE of the proposal for a draft Regulation No. XXX on: “UNIFORM PROVISIONS CONCERNING THE APPROVAL OF INTERNAL COMBUSTION ENGINES TO BE INSTALLED IN AGRICULTURAL AND FORESTRY TRACTORS AND IN NON-ROAD MOBILE MACHINERY WITH REGARD TO THE MEASUREMENT OF THE NET POWER, NET TORQUE AND SPECIFIC FUEL CONSUMPTION.”, the definition of "net power" in Regulation No. 96 should be aligned with the definition of the aforementioned new draft ECE Regulation No. XXX and that this amendment would not need transitional provisions, even though it will enter into force after the implementation of Regulation No. 96-01.

The Italian position is justified on the basis of the following issues:

1) The new Regulation No. XXX improves the situation offered by the old definition, based on Regulation No. 85, as it defines test conditions, installed accessories and test fuel coherent with the general requirements of exhaust emission legislation in general, Regulation No. 96-01 in particular. This update reflects the gradual differentiation between vehicle engines, as considered by Regulation No. 85, and the different situation of engines intended to be installed on NRMM. In particular, the philosophy defined initially by Regulation No. 96 and further implemented by Regulation No. XXX reflects the fact that vehicle engines are mostly designed and type approved for a single and well defined use, while the producer of NRMM engines normally does not even know the exact type of machine where his engine is going to be installed and the engine power definition must reflect this situation.

2) The net power value measured according to the Regulation No. 85 as adapted by Regulation No. 96 does not substantially differ from the value measured according to Regulation No. XXX.

3) On the technical update aspect the Regulation No. XXX follows the most recent developments of the European legislation on exhaust emissions, thus integrating technical progress that is not present in Regulation No. 85.

4) As more legislation (noise emissions, safety, road circulation taxes, insurance etc.) is developed on NRMM, where the engine power is a critical factor with various juridical and commercial implications, Regulation No. XXX is a harmonized method for all this legislation, in line with the exhaust emission one, and applicable to all engine technologies.