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

Working Party on Pollution and Energy (GRPE)

(Forty-seventh session, 12-16 January 2004,
agenda item 5.1.)

PROPOSAL FOR DRAFT SUPPLEMENT 3 TO THE 01 SERIES OF
AMENDMENTS TO REGULATION No. 67

UNIFORM PROVISIONS CONCERNING:

- I. APPROVAL OF SPECIFIC EQUIPMENT OF MOTOR VEHICLES
USING LIQUEFIED PETROLEUM GASES IN THEIR PROPULSION SYSTEM
- II. APPROVAL OF A VEHICLE FITTED WITH SPECIFIC EQUIPMENT
FOR THE USE OF LIQUEFIED PETROLEUM GASES IN ITS PROPULSION SYSTEM
WITH REGARD TO THE INSTALLATION OF SUCH EQUIPMENT

Transmitted by the expert from Germany

Note: The text reproduced below has been prepared by the expert from Germany on the basis of document E/ECE/TRANS/505/Rev.1/Add.66/Rev.1/Amend.2 in order to modify the requirements of Regulation No. 67 due to technical reasons. The modification to the existing text is marked in bold characters.

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

A. PROPOSAL

Existing text of Regulation No. 67, PART II:

- "17.7. Gas tubes and gas hoses
- 17.7.1. Gas tubes shall be made of seamless material: either copper or stainless steel or steel with corrosion-resistant coating.
- 17.7.2. If seamless copper is used the tube shall be protected by a rubber or plastic sleeve.
- 17.7.3. The outer diameter of the gas tube shall not exceed 12 mm and the wall thickness of the gas tube shall be at least 0.8 mm."

Proposed text of Regulation No. 67:

Paragraph 17.7.3., amend to read:

- "17.7.3. The outer diameter of the gas tube shall not exceed **25 mm** and the wall thickness of the gas tube shall be at least 0.8 mm."

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B. JUSTIFICATION

Buses intended for transport in dense city areas should be low emission or EEV vehicles (Enhanced Environmentally Friendly Vehicle). At the present state of the art only alternative energies reach this goal.

A city bus equipped with a LPG engine has a container volume of approximately 540 l to cover a distance of 300 km before refilling. The time needed to refill the gas container shall not be longer than the time needed to refill a common fuel tank. The current allowed outer diameter of the gas tube is 12 mm.

For technical reasons an outer diameter of 25 mm for the above-mentioned gas tube is necessary. The refilling of the gas containers of this volume would otherwise take a very long time.

It has been seen from several practical tests and from the experience of TÜV – Süddeutschland in this field that a diameter of 25 mm is sufficient for this purpose.
