Proposal for amendments to Regulations Nos. 9, 41, 63 and 92

I. Proposal

A. Regulation No.41 "Noise emissions of motorcycles"

Annex5, Paragraph 1., amend to read:

"1. Fibrous absorbent material shall be asbestos-free and may be used in the construction of the exhaust or silencing system only if suitable devices ensure that the fibrous material is kept in place for the whole time that the exhaust or silencing system is being used and the exhaust or silencing system meets the requirements of any one of paragraphs 1.1., 1.2., and 1.3. or 1.4.:"

Annex5, Paragraph 1.4. (new), read:

"1.4. Exhaust gases are not in contact with fibrous materials and fibrous materials are not under the influence of pressure variations."

B. Regulation No.9 "Noise emissions of three-wheeled vehicles" & No.63 "Noise emissions of mopeds"

Annex3, Paragraph 5.1.1., amend to read:

"5.1.1. Fibrous absorbent material shall be asbestos-free and may be used in the construction of silencers only if suitable devices ensure that the fibrous absorbent material is kept in place for the whole time that the silencer is being used and the exhaust or silencing system meets the requirements of any one of paragraphs 5.1.2., 5.1.3., *or* 5.1.4. *or* 5.1.5. below."

Annex3, Paragraph 5.1.5. (new), read:

"5.1.5. Exhaust gases are not in contact with fibrous materials and fibrous materials are not under the influence of pressure variations."

C. Regulation No.92 "Noise emissions of non-original replacement exhaust silencing systems (RESS) for motorcycles, mopeds and three-wheeled vehicles"

Annex5, Paragraph 1., amend to read:

"1. Fibrous absorbent material shall be asbestos-free and may be used in the construction of silencers only if suitable devices ensure that the fibrous absorbent material is kept in place for the whole time that the silencer is being used and it meets the requirements of any one of sections 2, 3, or 4 or 5 according to the manufacturer's choice."

Annex5, Paragraph 5. (new), read:

"5. Exhaust gases are not in contact with fibrous materials and fibrous materials are not under the influence of pressure variations."

II. Justification

R51 annex5 specifies that

"1. General

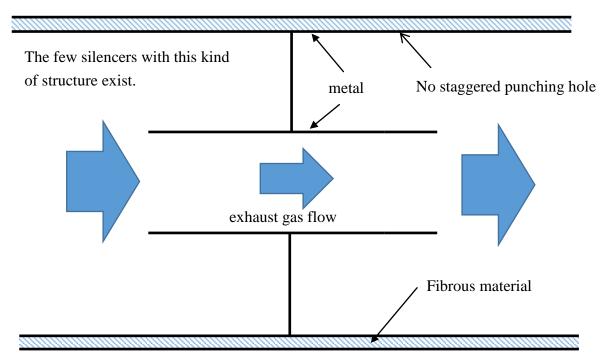
Sound absorbing fibrous materials may be used in silencing systems or components thereof only if

- (a) The exhaust gas is not in contact with the fibrous materials; or if
- (b) The silencing system or components thereof are of the same design family as systems or components for which it has been proven, in the course of type approval process in accordance with the requirements of this regulation for another vehicle-type, that they are not subject to deterioration.

Unless one of these conditions is fulfilled, the complete silencing system or components thereof shall be submitted to a conventional conditioning using one of three installations and procedures described below."

In other words, conditioning is not necessary in case that the exhaust gas is not in contact with the fibrous materials. The same concept should be specified in L category regulations.

The structure in where the exhaust gas is not in contact with the fibrous material is as below figure. In this structure, the fibrous material is not at all in contact with exhaust gases (nor in direct contact, nor in contact through punching holes).



In this case, the fibrous materials are mainly used for the purpose of thermal insulation.