

## **Euromot & EMA proposal for REC regulation**

### **1. Par. 9.5.1: PM Number requirements:**

The proposed 97% reduction level for PM Number was inserted in the new draft. EMA and EUROMOT do not support this proposal for several reasons:

- worldwide there are no PM Number requirements other than those in Switzerland
- at this time there is no need to implement requirements for PM Number since most of the DPF's designed to reduce PM Mass will simultaneously reduce PM Number results as well
- Overly complex requirements are counter-productive since less countries may adopt very complicated retrofit regulations
- Retrofit regulations should not be more stringent than the applicable emission regulations for the certifications of new engines

### **2. Acceptance of alternate test procedures and test records**

- Testing of particulates is costly and requires considerable capacity, therefore we should insert provisions for acceptance of available test records from other testing agencies
- We should check whether there is any cost information for the compliance with the proposed REC requirements.

### **3. Par 8: NOx control for Stage IV engines**

The engine or engine system shall meet at least the next higher emission stage with respect to the limits of Regulation No. 49 and No. 96 based on the engine baseline emissions. This would require meeting the provisions for NOx control as well. In Par.11 it is stated: "The performance of any On-Board Diagnostics (OBD) system and NOx control system of the original engine system shall not be compromised by the REC". We have to consider the transition from Stage IIIB to Stage IV, that means configurations , where a NOx control system didn't exist but will be required in the next emission stage. We have some doubts whether it is feasible to install the entire NOx control system as requested by R-96 Par. 5.3.3 "Requirements to ensure correct operation of NOx control measures". Therefore, we should discuss the NOx requirements regarding this conflict.

### **4. Customer information**

Retrofit systems are developed and sold for one or several engine families only. The customer should be aware of this prior to the purchase of the retrofit. We should discuss how we forward this message