



**EFRA 1:8 IC track section Chairman:**

Sander de Graaf  
Beekmansbos 53  
1971 BX IJmuiden  
Netherlands

**Phone (Priv):** +31 255 515720, **(Fax):** +31 255 515720  
**Mobile:** +31 6 53178658, **Email:** eight.track@efra.se

**EUROPEAN FEDERATION OF RADIO OPERATED MODEL AUTOMOBILES**

Sander de Graaf, Beekmansbos 53, 1971 BX IJmuiden, Netherlands

IJmuiden, Sept 1<sup>st</sup> 2008.

Dear Manufacturer,

During the European Championship in Valencia and the worlds in Portugal EFRA had 2 meetings with the present motor manufacturers.

Hot item was the noise level and the present situation with the new mufflers.

After these 2 meetings we came to the following conclusion.

- The noise level with the new mufflers is less, but not as much as expected.
- The bottom power which was a little bit less has been compensated by adjusting the clutch systems.
- The fuel problem has not been solved, power and consumption is still the same as 2007, or even higher.
- Checking of the internal dimensions is difficult for technical inspection and out of a batch of 20 pipes sometimes one does work better.
- The adjustment window for adjusting the carburetor has become very small, and causes problems for inexperienced drivers.
- Today's professional model cars are so good and have such a superb traction that you can now run almost everywhere full throttle. That means that fuel consumption is very critical for 5 minutes and is the main reason of overheating as people try to lean up the engine too much. This was already the problem with the 2007 mufflers, but the new muffler has not solved this
- The Off-Road Class has for the moment no problems with the new muffler, since they do not rev-up the engines as much as in On-Road.

With the first meeting in Valencia and the second in Portugal a few manufacturers had the possibility to do some research on an alternative solution asked by EFRA.

The old design of 2007 did not create a small window for adjustment, so focusing on that we asked them to concentrate on the tailpipe and try to make an extra silencing unit for that. You can see silencing units based on this on "guns", but also in some touring car classes and motorsports.

A first sample was shown in Portugal and seems to work (noise level – 5/6 dB's). But there are more possibilities. We asked all the manufacturers to concentrate on such a solution. It has to comply with the following rules; it must limit the noise for a single car for the next 2 years at least around 84-85 dB's and it must be removable to control it inside. Finally the goal for January 1<sup>st</sup> 2011 will be 82 dB's.

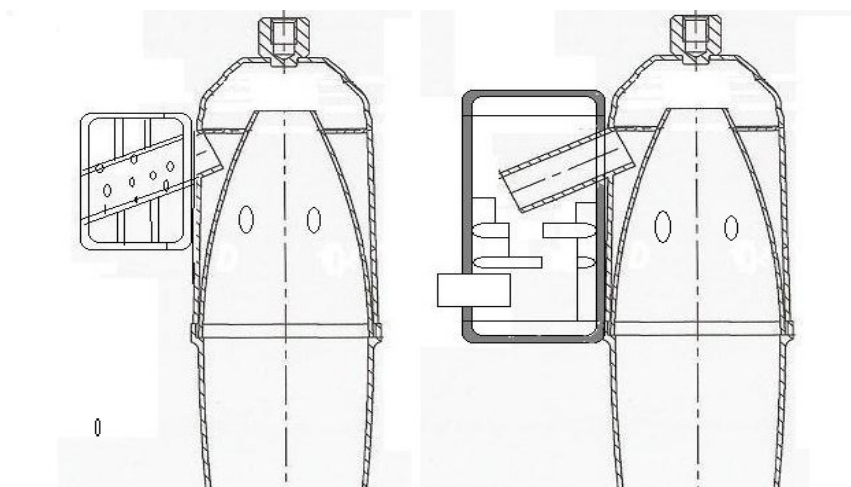
Due to this adjustment of the current muffler rule for 1:8<sup>th</sup>, the 1/10<sup>th</sup> section chairman has already told the manufacturers to postpone the proposed 1/10<sup>th</sup> muffler rule for at least one year. INS boxes will be mandatory for next year in the 1/10<sup>th</sup> class, so manufacturers were asked to concentrate on that subject.

[www.efra.se](http://www.efra.se)

EFRA, General Secretary  
Willy Wuyts,  
Herentalsesteenweg 20,  
2220 Heist op den Berg, Belgium

Fax: +32 15241470  
Mobile: +32 477947109  
E-mail: [secretary@efra.se](mailto:secretary@efra.se)

International Bank Account Number  
IBAN: SE 21 6000 0000 0000 43 202 799  
Handelsbanken, Norrköping, Sweden  
Swift-Code: HANDSESS



Sample of possible solutions, both must be removable and opened for inspection.

By adding an extra silencer like this the actual performance of the engine does not change. It will be possible to use a big part of the old mufflers together with such a solution.



We must not forget that there is an amount of new mufflers in the market. Not all is totally lost, since they can be used for Off-Road. They still work in On-Road, but you need to be careful in adjusting. Going back to the 2007 mufflers is not a good option, because some of them are far too loud. That has also to do with the performance in motor evolutions and the fact that some homologations of the last 2 years were done during the winter periods, which is not always the good opportunity to test mufflers and motors.

So the goal for 2009 will be to make the rule more flexible and step away from the formatted design of a 3 chamber muffler. Use part of the 2007 mufflers (still 3-chamber, but flexible)) in combination with an extra silencing unit, as described here above. As regards manifolds, they will be free again, as long as the noise limit does not go over the maximum.

As for homologation fees EFRA will be flexible for all those manufacturers that had a muffler homologated in 2008 and who will come up with a new pipe for 2009.

I am not going to discuss who will be blamed for this, the matter for a less noisy muffler was first discussed in Sweden, July 2006 and the formatted design was already on paper in 2007. However testing has started very late and when the decision was made in November 2007 no big races had been run with the new pipe. So you can blame EFRA on pushing to accept the rule, but the manufacturers also have to take some responsibility, since they were quit late with their designs. After all EFRA is not a muffler manufacturer and has no skills to make mufflers and test them under all circumstances and look for motor performance and/or side effects. EFRA needs to be focused on the environmental consequences of our hobby. In a lot of countries tracks are closing down because of too much noise.

Furthermore EFRA will invest what it can do to make the traction lower on the cars.



Another muffler design with less noise will not solve the problem of fuel consumption.

We think about lowering the height of the cars (rear side dams and gurney flap), make the rear and front tires smaller. Less nitro in a few steps (first 16% and then 10%), perhaps even 0% of nitro or other kind of fuels. Finally, also within a few years less ports in the engine.

It all must help to lower the noise level, make it not so expensive and still keep it a sport where skills are needed.

IFMAR will be informed, and we will start discussing this with the blocs to get the noise level down world wide. Perhaps some countries have no problems, but the majority of countries have to apply to rules. 82 Db's is a level common for a lot of activities, including for work circumstances and above this limit people are advised to use ear protection if you are to long in an area with such a noise level. Perhaps you don't mind now as a driver, but if you are 60 years and your ears are not working properly anymore you might realize that your hobby was part of this problem.

Regards,

Sander de Graaf

EFRA 1:8 Track Section Chairman and homologation officer.