The European Association of Internal Combustion Engine Manufacturers



EUROMOT POSITION

13 February 2015



Amendment proposals regarding the scope of the *"Proposal for a Directive of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion plants"* (COM(2013)919 final) as of 18 Dec 2013

The legislative proposal covers a number of instances where sectorial regulation of internal combustion engines has been specifically developed to meet the needs and constraints of that sector. These should be clearly excluded from the MCP to avoid double regulation.

Concerning the exclusion of emergency use in internal combustion engines, including engines for the use in nuclear power plants, from the proposed emission limits, it is stated in the explanatory memorandum of the Commission proposal COM(2013) 919 final that "the emission limit values should be mainly based on the application of primary emission abatement measures".

EUROMOT would like to point out that with current technology secondary abatement will be required for internal combustion engines, except some type fuelled with good quality gas, to meet the limit values in Annex II (and Annex III).

It is furthermore noted that existing and new medium combustion plant that operates less than 500 hours/year may be exempted from the requirements of Annex II. Emergency engines might in case of emergency operate for longer times and need also to be tested at regular

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intervals. In IED 2010/75/EU engines for emergency use are excluded from set emission limits. A similar provision need to be inserted in MCP.

EUROMOT believes that setting emission limits for research, development and testing of new technologies would substantially hamper growth, thus we propose an amendment proposal for these activities.

(Amendment proposals continued on next page)

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Article 2, Scope

Text proposed by the Commission

This Directive shall not apply to the following:

(a) ...

•••

(e) any technical apparatus used in the propulsion of a vehicle, ship or aircraft;

(f) ...

Amendment

This Directive shall not apply to the following:

(a) ...

•••

(e) any technical apparatus used in the propulsion or provision of auxiliary power of a vehicle, ship or other watercraft, offshore installation or aircraft;

(f) ...

(g) liquid fuel fired engines, gas turbines and gas engines used on offshore platforms;

(h) combustion plants meeting the definition of Non-Road Mobile Machinery given in Directive 97/68/EC of the European Parliament and of the Council on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery;

(i) emergency internal combustion engines;

(j) any internal combustion engines complying with the ATEX Directive 94/9/EC or 2014/34EU, temperature class T3 or higher, installed in a location requiring equipment of category 2 or 3 where a potentially explosive atmosphere may exist.

(k) Research, Development and Testing activities

Article 3, Definitions

Text proposed by the Commission

For the purposes of this Directive the following definitions shall apply:

•••

Amendment

For the purposes of this Directive the following definitions shall apply:

•••

(20) Emergency internal combustion engine means any internal combustion engine whose operation is limited to emergency

situations and required testing. A nonexhaustive list of examples include [stationary] internal combustion engine used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility is interrupted, or [stationary] internal combustion engines used to pump water in the case of fire or flood, etc.

Justifications

For Art.2 (e, g): Engines on ships and offshore facilities

There are many engines in the 1MW to 50 MW thermal input range that are used on ships for propulsion and auxiliary purposes. Oil fuelled and dual fuel engines are currently regulated by annex VI of the IMO protocol of 1997 (MARPOL). A proposal to regulate single fuel gas engines in a similar way was accepted at the 66th meeting of the IMO Marine Environment Protection Committee (MEPC). This regulation has been developed to meet the constraints of the marine environment. The current exception in article 2 section 2(e) only applies to propulsion engines on ships.

Engines on off-shore platforms are similarly regulated by annex VI of the IMO protocol of 1997 (MARPOL) and should also be excluded.

For Art.2 (h): Exclusion of internal combustion engines powering non-road mobile equipment

The placing on the market of non-road mobile equipment engines is regulated by directive 97/68/EC as amended. This directive has been specifically developed to match the needs and constraints of mobile equipment.

The current exclusion in article 2 (q) of the MCP proposal does not clearly exclude this type of equipment and leaves room for interpretation that they are included.

Directive 97/68/EC as amended currently includes any mobile machine, transportable industrial equipment or vehicle with or without body work, not intended for the use of passenger or goods transport on the road, including secondary engines on road vehicles. Some of these have a thermal input of greater than 1MW. There is a major amendment underway which will extend the applicable power range without upper limit.

For Art.2 (i) and Art.3: Emergency use

Many retail and commercial buildings are protected against power outage by diesel generators that can operate in an emergency. Almost all essential buildings like hospitals, nuclear power stations, datacentres etc. are so protected. There are also many buildings installed with emergency fire pumps driven by diesel engines. Some data sources suggest that in the 1-50 MW thermal power range there would be approximately 100,000 existing emergency installations in Europe with about 6000 new installations each year. Most emergency installations have a size of less than 5 MW thermal input per unit. These units generally run very low annual hours, typically less than 50 hours per year for routine safety testing and maintenance. It is essential that these engines can get on line (in use) very quickly, often in less than 10 seconds. The diesel generator can be part of an uninterruptible power (UPS system) where energy storage such as a flywheel or batteries fill in the time-gap between failure of electrical grid and connection of the emergency generator in order to provide continuous power. Combustion engine secondary abatement systems take time to reach the temperature required to be effective and often require sustained periods of operation at significant load to maintain performance and operational safety. Additionally, the reagent used for many NOx secondary abatement systems has a limited storage life.

In order to maintain reliability the engines used in these emergency applications should not be overly complex and should avoid the unnecessary cost of secondary abatement techniques that, based on the low running hours, would not be cost effective to society.

Engines and gensets used in these emergency applications are generally serially-produced goods and are not developed on a site-by-site basis. In order for manufacturers to develop serially-produced goods for this market it is essential to have consistent design requirements across the EU.

A further benefit of the Euromot proposal is a substantial reduction of administrative burden. If these engines were exempt from compliance with the proposed emission limit values via the proposed amendment to Art. 2 and 3, no further registration efforts would be required from operators or authorities. We estimate, see above, that this would be applicable to approx. 100000 emergency installations.

Concerning engines for nuclear power plants, they should supply energy to the security systems to allow a safe shut down of the reactor even under emergency situations. These engines are subject to the highest national standards on availability and operational security and require an extensive certification procedure in each member state. Any additional complexity, e.g. secondary emission abatement, would result in additional error risk and should be prevented.

For Art.2 (j): Engines for use in potentially explosive atmospheres (ATEX)

Engines may be used in potentially explosive atmospheres such as may be found in oil and gas exploration & processing plants. These engines are designed to comply with the ATEX directives 2014/34/EU which requires low exhaust system temperatures in order to avoid igniting an explosive atmosphere. In consequence such engines, particularly those of temperature class T3 or higher, cannot use aftertreatment systems as the flue gas temperature is too low to activate the catalyst. Because aftertreatment systems will be required to comply with the emission limit values these engines need to be exempted from the scope of the MCP Directive.

For Art.2 (k) Research, Development and Testing activities

Setting emission limits on research, development & testing activities hampers growth. The research and development of new products as well as the testing of products during the manufacturing process may involve the running of combustion plant to achieve that aim. An exemption for research and development activities as well as for testing of new products and processes is common practice in the EU and has also been in implemented in the Industrial Emissions Directive (2010/75/EU). It is necessary to exclude research, development and testing facilities from the scope of the proposed MCP Directive

EUROMOT is the European Association of Internal Combustion Engine Manufacturers. It is committed to promoting the central role of the IC engine in modern society, reflects the importance of advanced technologies to sustain economic growth without endangering the global environment and communicates the assets of IC engine power to regulators worldwide. For more than 20 years we have been supporting our members - the leading manufacturers of internal combustion engines in Europe, USA and Japan - by providing expertise and up-to-date information and by campaigning on their behalf for internationally aligned legislation. The EUROMOT member companies employ all over the world about 200,000 highly skilled and motivated men and women. The European market turnover for the business represented exceeds 25 bn euros.

Our EU Transparency Register identification number is 6284937371-73.

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