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# HOW DOES EUROPEAN NOISE LEGISLATION INFLUENCE THE GLOBAL MARKET?

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# ABSTRACT

European noise legislation since the 1970ies consisted of directives on the approximation of the laws of the Member States in order to ensure the smooth functioning of the internal European market. In the late 90 ies, the protection of human health and well-being started to play a more important role; consistently the Amsterdam Treaty reaffirms: "the Commission, the European Parliament and the Council, within their respective powers, will take as a base for legislation a high level of protection, taking account in particular any new development based on scientific facts." The new EU directive on noise emission from equipment for use outdoors lays down provisions concerning noise limits and noise marking for about 55 types of equipment, for some types noise limits are reduced compared to earlier legislation. Noise limits are demanding but the current state of the art of noise reduction allows to meet them without excessive additional costs. The impact on internal combustion engine emissions has been taken into consideration for setting these noise limits. The directive being in force only equipment complying with these provisions may be placed on the European market, as demanded by its 375 Million citizens. Most of the European manufacturers are prepared to comply with the new directive. However, only few manufacturers of other continents are aware of this new legislation and for them it could be a big challenge to meet the legal provisions. In the future, a better cooperation between European and non-European manufacturers is urgently needed to minimize problems arising due to further European legislation.

#### **1 - INTRODUCTION**

Activities concerning noise emission limitation of construction machines became necessary in the late 1970ies because some Member States in the European Community had national legislation on noise emission from construction machines or wanted to prepare such legislation and therefore European harmonization of national legislation was needed. Six product related Directives on the approximation of the laws of the Member States relating to the noise emission of construction plant and equipment have been adopted by the European Council (later on additional by the European Parliament) covering

- compressors
- tower cranes
- welding generators
- power generators
- hand-held concrete breakers and picks
- hydraulic excavators, rope-operated excavators, dozers, loaders, and excavator-loaders

All this European legislation had the principal aim to contribute to the smooth functioning of the internal market, environmental issues had a lower priority than market issues. Noise limits were set in such a way, that most of the products in the market were able to meet them and only some products were excluded from the market.

## 2 - THE "OUTDOOR – DIRECTIVE"

In May 2000, the European Parliament and the Council replacing the existing legislation passed a Directive on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors (Outdoor-Directive).

The directive lays down obligations concerning the marking of about 60 types of equipment with their guaranteed noise level and noise emission limits for about 20 of these types of equipment when they are placed on the market or for the first time put into service in the EU.

The directive has been discussed for more than three years (1995 - 1997) in the working group "Noise from construction plant and equipment" of the Directorate- General XI (Environment) of the European Commission. Members of this working group were experts of the Member States (some of them representing the Environmental Ministries of their country, others representing the Ministries of Trade and Industry) as well as experts from European manufacturer's associations and from manufacturers. All interested parties in addition had the opportunity – and some of them took it – to make their point of view clear in bilateral meetings with the Commission. Thus industry was involved of the process of legislation making from the very beginning.

During "Interservice Consultation" within the Commission all Directorates-General affected (e.g. "Industry" and "Small and Medium Enterprises") had to be consulted. The result of this consultation was the "Proposal of the Commission to the European Parliament and the Council" dated 18 February 1998. It took another two years to pass the proposal through the European Parliament and the Council. The European Parliament approved the proposal without any amendments. The Council, however, in its "Working party on economic questions" discussed the proposal from July 1998 to July 1999 in several meetings in detail and amended it in several points (especially concerning conformity assessment procedures). Member States were represented in this group mainly by the Ministers of Trade and Industry, only a few members represented the Ministers of Environment. The directive has in the first reading been adopted by the Council on 24 January 2000.

After all this, second reading in European Parliament and Council was only a formality: as the Environment Committee of the European Parliament made no comments, Parliament agreed without discussion and no further Council approval was needed.

The directive has to be transposed in national legislation of the Member States within 12 months after its entry into force, and the provisions of the directive shall be applied from 18 months after the entry in force.

The directive is based on Article 95 of the Treaty on European Union (amending the Treaty establishing the European Community) giving a higher priority to environmental issues. Article 95 states that preparing legislation concerning the approximation of the laws of the Member States

"the Commission in its proposal.... concerning health, safety, environmental protection and consumer protection will take as a base a high level of protection taking account in particular of any development based on scientific facts. Within the respective powers, the Parliament and the Council will also seek to achieve this objective.".

Whether this has really been reached by the directive will be a question to be answered in the next future.

### **3 - CONSEQUENCES FOR EUROPEAN INDUSTRY**

Manufacturers covered by the directive will have to meet the provisions of the new directive from about June 2001. That means that they will have to

- put a mark on their products containing the guaranteed sound power level
- meet noise emission levels for machines that are covered by limit values laid down in the directive.

As regards point 1, manufacturers under the European Machinery Directive since 1995 have to give an information on the sound pressure level at the workstation and - if this exceeds 85 dB(A) - also on the sound power level of the product in the instructions. The new directive obliges manufacturers to visibly, legibly and indelibly affix the "CE marking accompanied by the indication of the guaranteed sound power level" on each product covered by the directive. That means that manufacturers have only

to put the information that they have to give anyway in the instruction on the product, too. This will enable the customer to get an information on the noise emission very easily and fast and to base his buying decision on this information – if he wants. So the marking is a tool to give information to the public and the citizen. The aim of this provision is that customers will prefer products with a low noise labelling and in this way will induce all manufacturers to produce equipment with lower noise emission values in order to enlarge sales numbers. This will not affect manufacturers from the first day of the application of the directive, it will take some time since the market will react on the marking provision. As regards point 2, manufacturers will have to meet the noise limits in that moment when the directive in the Member States is applied this date being not very far. From this date onwards it will not be possible to place equipment on the market or put it into service if the noise limits are exceeded. This means that some of the products on the market today will need redesign for being saleable under the requirements of the new directive.

Legislation does not necessarily give noise limits characterized by the state of the art of noise reduction. Noise limits are mostly fixed in such a way that only a small part of very noisy equipment is excluded and that the predominant part of equipment in the market is able to meet this limit without greater effort. This is also true looking at the first step limits of the new directive although it is based on Article 95 of the Treaty demanding a high level of protection based on scientific facts.

On the other hand there may arise difficulties concerning the tier II noise limit values coming into force 48 months after tier I as there also will be a reduction of engine air emission (tier III of the non road directive) approximately at the same time. The influence of these additional requirements on the possibilities to reduce noise levels should be examined and the time for coming into force of both requirements should be aligned. In the directive a committee is set up that has the tasks to observe the implementation of the directive and the development of the market, to report to the European Parliament and the Council, and if needed recommend necessary amendments of the directive. This committee should start working as soon as possible.

Manufacturers will have to look whether their products meet the limit or not. For those manufacturers who today sell products already meeting the noise limits there will be no problem in the near future. For those manufacturers, however, who today sell products that do not meet the provisions, it will be necessary to develop and produce new products meeting the noise limits. This is very demanding because time is very short for a new development. But this cannot be an excuse for those manufacturers who have not started to reduce the noise emission of their products now. The discussion concerning the directive and its provisions started in 1995 and - at least European - industry was involved in this discussion all the time. Therefore manufacturers knew about the process and its likely result. So they had a lead time of 5 - 6 year, enough to be prepared for the new directive and its provisions.

## 4 - GLOBAL CONSEQUENCES

The provisions of the new directive lays down provision that have to be followed putting equipment on the European market. The European market with its 375 Million citizens is a very big and interesting one, and is not only served by European industry. The provisions of the directive have to be met also by manufacturers from other continents. However, only a few of these manufacturers are aware of the new European legislation, most of the others did not care about the legal development in Europe in the past and are now surprised to be confronted with legal requirements that ask them to meet certain noise limits. For them these requirements may be a big challenge because of the very short time they have to develop equipment which meets the limits.

The European Commission will continue in its progressive noise legislation. Problems may in the future be avoided if manufacturers from outside Europe will from the very beginning observe European noise legislation and will actively and constructively take part in the discussions. In the future a better cooperation between European and non-European manufacturers and the institutions of the European Commission is urgently needed to minimize problems arising due to further European legislation.