



Noise Research Strategies
for a Quieter Europe

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Hot Topics of Environmental Noise

Outdoor Equipment

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Outdoor Equipment Specific Situation

- A specific Directive is in force since 2000
- The Directive sets detailed requirements in terms of
 - measurement methods
 - permissible sound power levels
- When the Directive was published the noise reduction technologies were considered well established

Priorities Discussed During CALM

- The main issues discussed were presented and discussed during a Workshop organised within CALM
- Authorities, Stakeholders and Standards experts took part in the discussion
- A contract was issued to examine in detail one of the issues

Global Noise Reduction Target

- Reduce by 50 % the noise annoyance caused by outdoor equipment.

Common Approach of the Proposals

- The issues considered aim at
 - solving specific themes opened by the Directive in view of its application
 - define a method to assess the environmental impact of future developments of the Directive
 - create the link between the emission Directive and the Environmental Noise Directive to achieve the overall goal

Research Priority Issues

- Define the most suitable noise related parameter for various types of equipment
 - the parameters are missing from equipment types listed under Article 13 of the Directive and are necessary to enable the data collection preliminary to any development of the Directive itself.

Research Priority Issues

- Correlation between measured noise and actual performance noise
 - For a vast part of the equipment covered by the directive operation noise represents a major part of the reception. It is necessary to define a good correlation so that a noise reduction in terms of permissible noise level corresponds to an equivalent benefit for the environment when the equipment is actually operating.

Research Priority Issues

- Effect of single and multiple noise sources on noise perception
 - Equipment never operates in an “ideal” situation, multiple sources often operate at the same time and some less than others at a single site: annoyance shall take it into consideration
- In-use compliance
 - The benefits of noise reduction must be durable to give a real reduction of annoyance

Outlook for CALM II

- As new equipment may come in the scope of the Directive, or more stringent permissible levels are set
 - new technologies for individual sources and components of equipment need consideration
 - the availability of these technologies must be ensured as an important part of the impact analysis necessary for any new amendment of the Directive