

From noisy to quiet



GORILLA/FRED BJÖRNSTÉN

One in six Finns lives in an area where the daily noise level exceeds the recommended target value of 55 decibels.

The noise levels in the environment and exposure to noise must be significantly reduced by 2020. All areas of society have to participate in the fight against noise. Responsibility for abatement measures lies with those that cause it and the authorities — especially the traffic authorities and municipalities. Abatement measures will begin where the noise problems are the worst.

These guidelines are included in the Government's resolution on noise abatement. The resolution does not cover those noise issues that fall within the scope of health protection and occupational health and safety legislation.

The choices made by each individual also influence the sound world we live in and whether areas remain quiet.

The aim of noise abatement is a healthy, pleasant low-noise living environment. In order to achieve this target by 2020:

- In comparison with 2003, at least 20% fewer people will live in areas where the daytime noise level exceeds 55 decibels.
- Noise abatement measures will initially focus on residential areas in which the average daytime noise level exceeds 65 decibels and areas in which large numbers of people are exposed to noise.

A further requirement is to avoid exceeding the general guideline values set by the Government:

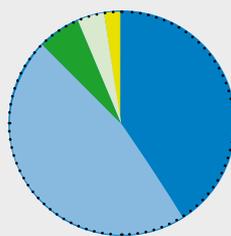
- in indoor spaces at any time of the day
- in courtyard areas intended for relaxation. If these values have to be compromised in already built areas, the noise level may not exceed 60 decibels during the daytime or 55 decibels at night.
- in the vicinity of educational and care institutions and in recreational areas.

There should also be quiet areas in Finland.

Legislation and decisions concerning noise:

- Environmental Protection Act (86/2000) and its amendment (459/2004)
- Government Decree on Noise Mapping and Action Plans for Noise Abatement Required by the EC (801/2004)
- Government Decree on Noise Emissions Levels from Equipment for Outdoor Use (621/2001)
- Government Decision on the Noise Level Guide Values (993/1992)
- Government Decision on the Guide Values for Noise Levels Caused by Shooting Ranges (53/1997)
- Government Resolution on Noise Abatement (2006)

What noise are people exposed to?



- Public roads
- Streets
- Rail transport
- Air transport
- Other sources of noise

High goals – low noise

The best means of reducing noise is to attack it at source. Additional important methods include land use and traffic planning. Other key factors include how dwellings are built and repaired.

Noise prevention already begins in the product-design phase. It is important to consider how vehicles and equipment are designed and what kind of noise they produce. A growing supply of low-noise equipment is available to consumers.

Zoning plays a key role

Zoning determines where various functions are located. Good zoning places functions where their noise level causes as little annoyance as possible. Sites exposed to noise will be sufficiently protected.

Good land use planning reduces the need for transport. It is possible to decrease the volume of motorised vehicle traffic in centres and residential areas by developing low-traffic or completely vehicle-free zones. Driving speeds can



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be limited and heavy traffic directed away from sites that are sensitive to noise.

The noise from road traffic will be reduced when quiet road surfaces and low-noise tyres are taken into use. The condition of train equipment and rails will be improved in rail transport. If necessary, noise barriers will also be built. Sufficiently quiet areas close to residential neighbourhoods are required for outdoor recreation and exercise. Quiet areas that

are farther away are also needed for recreation and tourism, to say nothing of natural diversity.

Controlling construction noise

Construction and maintenance work occasionally cause loud noise that disturbs neighbouring areas. These functions will never be altogether silent. However, the noise level can be reduced by utilising quieter

Responsibility lies with those causing noise and with the authorities

- **Municipalities monitor the state of the environment in the area and act to reduce noise problems.**
- **Business operators must understand the environmental impacts caused by their activities.**
- **The Finnish Road Administration, Finnish Rail Administration and Finavia (the former Civil Aviation Administration) will draft an action plan for noise abatement.**
- **The Finnish Defence Forces will study noise from shooting and practice ranges and implement noise abatement solutions in its activities.**

machines and work methods. The municipality can issue environmental protection regulations concerning noise abatement for construction and maintenance work.

Monitoring of regulations must be improved. When dwellings are built or repaired, noise levels inside the building must not exceed the guideline values set by the Government.

Further examination is required on the opportunities to use various forms of financial aid for noise abatement.

New steps in noise abatement

The European Union is currently preparing to conduct the first noise reports in accordance with the Directive on Environmental Noise. Member States have to report on these to the Commission at the end of 2007. The objective of the noise reports is to map noise problems on traffic routes in the largest cities and other major roads, and to use this information as the basis for drafting

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action plans to prevent and reduce noise. EU regulations are also aimed at limiting noise emissions from vehicles and equipment intended for outdoor use.

Bodies responsible for public procurement must set an example for others by favouring quiet vehicles and equipment.

Noise levels can also be effectively reduced when modernising industrial production technology by applying the principles of best available techniques and best practices for the environment.

Demand for know-how

The environmental authorities are currently preparing an information system for noise abatement. It will serve as a collection point for nation-wide information on the noise caused by various sources, noise areas, exposure to noise and noise reports.

Guidance and research in the field of noise abatement will also be required to reduce noise problems. Additional basic and continuing education will be needed in order to increase the level of know-how regarding noise.

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