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## AWARENESS FOR NOISE CONTROL

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### LIMITATIONS OF TODAY'S NOISE CONTROL POLICY

The main activity in the noise control business sets up for an after-the-fact activity. Cover up noise control was common practice in the past and probably it will be the same in the future, unless we are able to change our attitude towards noise and noise pollution. In that respect it is hopeful to see a growing strive for noise control at the source and for noise reduction by design. [1, 2, 3] However, this is only one aspect of the problem. Another aspect of the problem is, do we really want to ban noise pollution out of our society? This question does not ask for a technical solution, it needs a political solution.

We certainly cannot do without cover up and add-on noise control techniques. The experience proofs that these techniques can be successful. Many case studies exist, showing the successful results from after-the-fact noise control. However, the case studies also illustrate the strong limitations that are inherent in after-the-fact noise control. These limitations can be summarised as follows: restriction of the noise reduction (5 to 10 dB); in most cases a compromise solution has to be found between noise reduction, reduced operating convenience and reduced maintenance convenience; from an economical point of view noise reduction is expensive and does not yield a profit. [4, 5, 6] A good example of high cost and low effect noise control is the absorptive treatment at the boundary of a room. The result in the reverberant field is at the utmost 10 dB, however 5 dB is a more realistic figure; in the direct field the reduction is

insignificant.

#### NOISE CONTROL AT THE SOURCE IN THE DESIGN STAGE

A better solution is the reduction of the noise emission at the source. Barriers, enclosures, vibration isolation, lagging, are some of the commonly used means to screen the direct noise emitted by the source, and to prevent the spreading of the noise. This solution, probably with a more advantageous cost-effect ratio than an absorptive room boundary treatment, still suffers from drawbacks like reduced operating convenience and reduced maintenance convenience, not to mention the zero return investment.

On the other hand, the principle that we have to keep in mind is that of prevention of excessive noise. For the best way to handle the noise problem is to prevent that excessive noise ever comes into being. This requires intervention at a very early stage of the project, so that noise control at the source, rather than "noise trapping" after the fact, becomes common practice.

#### NOISE CONTROL IS A COVER UP BUSINESS BY NATURE

Noise must be present before people become conscious of it and complain about. Complaints come and go with the presence or the absence of the noise. In that respect, noise is like pain or, like illness. Pain is the sign that makes people aware of an illness; the next step is to care about. This is identical with noise: first comes the noise, then the complaints and in the end, cover up. By nature, noise control is a cover up business.

It is unusual that healthy people go and see a doctor and why should they, if there is no need! Being under the doctor is for most people the proof of their illness and who likes the idea of being sick. To some extent, physicians and noise consultants are in the same boat. An important difference is that in normal circumstances no one is to blame for some one's sickness; if on the contrary some one is to blame, then we call it a crime. On the other hand, most noise is man-made and generally we know who to blame for excessive noise. The question arises, why don't we call this a crime!

#### MISCONCEPTION ABOUT NOISE CONTROL AS A NEED

Is it because we are all committed with noise pollution that we are tolerant to other people, so that we have not to feel guilty about our own attitude? Or is noise pollution such a small offence that we tolerate it? But, we do not tolerate it when it is annoying; we certainly

cannot tolerate it when it is injurious. When it is annoying and injurious, and we know who to blame, noise pollution is a crime. The fact that we are not aware of noise pollution being a crime is a lack of civic sense.

Noise pollution is a crime and it is nonsense to make people believe, or hope that people believe that noise control means joy, comfort and luxury, and therefore believe that people need noise control, like they need food, and are willing to pay for. This is a mistake; quiet does not sell for several reasons. For instance, who will notice you on your silent motor bicycle; noise is synonym with power and thus attractive. On the other hand, noises that hinder are man-made and do not come to us naturally. Put in another way, quiet is no such thing that we have to earn; we get it free from nature. Bringing quiet back in our to-day's world is returning something that belonged to mankind. Returning what was taken away is justice, not a favour. Therefore, bringing quiet back is justice, not a favour. Moreover, destroying what belongs by natural means to people is a crime, and that is why noise pollution is a crime.

### CHANGING OUR ATTITUDE TOWARDS NOISE POLLUTION

If we stick to the principle that noise pollution is a crime, it is easy to understand that it is our duty to prevent that excessive noise comes into being. Preventing excessive noise by noise control at the source in the design stage of the project is therefore everyone's concern. However, as we found that noise control is an after-the-fact business by nature, it is obvious that the natural force that drives people to a cover up attitude is conflicting with the duty of prevention. The elimination of this natural slowing down force requires a strong commitment that is able in the first place to change people's attitude towards noise pollution. In the second place, we need incentives to keep the new attitude alive. It requires education of the population on a wide scale; it requires effective legislation on an international basis.

It would be unfair to deny that nothing has been done in the past on information, education and legislation. It would be even unfair to accept that what has been done, was successful. However there is no space here to make an evaluation about the past, neither about what some nations did and others did not. The point is that in our to-day's world noise pollution is a fact. We are facing it, not because nothing has been done to stop it;

it is there because our action against it is baseless and our call for noise control sounds empty. The driving force of our action is unfounded. We delude ourselves into the belief that noise control is a duty and we see noise control as a gift to mankind. That is where it goes wrong. The truth is that rendering quiet is a duty, not noise control; noise control is a means. Prevention of noise pollution is a duty, while failing to prevent noise pollution and causing noise pollution is a crime.

#### CONCLUSION

The basic thing is to accept and make people stick to the principle of prevention; infringement of this principle is a crime. It requires education and implementation. If we can take this step, the rest will follow. If we are not able to correct our attitude, we will always run behind our dream of the quiet world.

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