



ENVIRONMENTAL NOISE REGULATION: NEW TRENDS IN ITALIAN LEGISLATION

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INTRODUCTION

Till now, italian legislation doesn't state noise limits, both in the environment and at the workplace, through in a law dated '78 we read that the Cabinet President must state these limits.

In this situation of lack of any legal instrument, low limits at workplace are claimed by trade unions, while manufacturing trusts are tending to more favourable values: unfortunately, the problem is seen more from an economical than from an health point of view. However, the European Community Council has now an Act /1/ from which one can derive clear indication about what one must do, at least at the level of hearing conservation program.

The reference point is more weakly defined in living areas, where noise doesn't directly cause hearing diseases.

Furthermore, even at a regional level it is not possible to state limits, because this authority is taken upon the central power: regional council can only "suggest" limits to local police who, alone, can state regulations in its own district; regional councils can also enact local regulations devoted to improve the building defenses against noise /2/, but this is not enough because it is possible, for instance, that, just a few time later, the traffic noise levels change strongly in the relevant area.

In '88, the European Community Council enacted an Act devoted to the evaluation of the impact of works that involve remarkables environmental falls down /3/: like in

all european countries, the italian legislators must take decision on the way to apply the European Act.

In the meanwhile, a new Ministry has been established in Italy, devoted to environmental problems: any law draft on environment must start from this Ministry and, among the different problems of an environmental conservation program, surely the noise control in living areas is a remarkable one.

The Ministry for the Environment is now working at different drafts, two of which are of particular interest for noise problems: one concerns a frame-law on environmental noise; the other is a complete and complex guide for the Evaluation of Environmental Impact (V.I.A.) of national interest new works.

The second one claims the first one for the evaluation of the impact of any noisy work, like a motorway or a turbogas engine plant for electric energy production.

THE ENVIRONMENTAL IMPACT ASSESSMENT GUIDE

The first step scheduled in the guide is an exact, physical description of the proposed project, with any necessary element for clearly understand how the planned work will be inserted in the environment: a comprehensive description of the orography of the ground and of the meteo-climatic conditions is of particular interest for the following analysis of the propagation of air pollutants and of noise.

The second step claims for a detailed description of the actual environmental situation, seen from different points of view, like air quality, water resources, ground and underground, animals and plants living in the area, noise and vibration pollution, welfare and health, natural scenery, sociological and economical entails.

At this point, the study of environmental impact must analyse the reasons for which a new work is required, in terms of needs towards a better land use (for instance, a new railway may be required to speed up transport of goods from an enlarging industrial activity, a new airport may be necessary for improving a turistic activity, and so on).

From this analysis it is then possible to justify the opportunity of build up the planned work, at least in terms of human activities and business: but these reasons are not enough to support the decision of carrying out the plan.

To obtain an environmental agreement it is necessary to foresee any change that the new work will cause on each of the first mentioned relevant environmental factors. Related to noise, this means that it will be necessary to build up a noise map of the relevant area, taking into account the contributions (+ or -) deriving from the planned work (for instance, a new railway will add noise in some places, but others will see a decrease in heavy traffic, so a decrease in traffic noise).

Furthermore, it is necessary to foresee the evaluation of the environmental parameters if the planned structure will not build up: again, a noise map will show the related situation (continuing the preceding example, don't build up a railway may induce an increase in heavy traffic, then an increase in traffic noise).

Only from a critical comparison of the environmental consequences for each parameter in the two opposite situations, that we can call "zero" and "towards a new structure", it is possible to derive a statement of environmental compliance or not.

If the proposal of realizing the planned work is accepted, a further step is now needed for improving the environmental situation: related to noise, this means to try different solutions allowing, as a result, a decrease in noise pollution level.

At the end of this procedure, the planned work must complain with every relevant policy act: it is at this point that the draft on environmental noise levels becomes necessary.

THE FRAME-LAW ON NOISE POLLUTION

The draft actually in progress is a legal instrument whose purpose is to cover any aspect related to the noise pollution problem.

In the mind of the lawmaker, this draft will face first the problem of the noise measurement, taking the A-weighted equivalent continuous sound pressure level as the unique descriptor of any physiological and psychological consequence of exposure to noise.

The second remarkable statement is that two criteria exist for the compliance of noisy activities with human welfare.

The first criterion must be utilized for land use: the land will be divided in several zones, with specified reference to the main activities here developed.

For each zone, two levels are then stated, one for

day-time and the other for night-time, spanning from 40 dB(A) night-time in quiet areas to 70 dB(A), every time, in industrial areas where continuous processes are developed.

The second criterion applies inside homes, to settle specific neighbourhood problems, on the basis of a comparison between specific noise level and residual noise level, as defined by I.S.O. /4/: also in this case, different increases are stated for the various zones and periods of time, spanning from 3 to 7 dB. When the specific noise level is under 30 dB(A), the criterion doesn't apply and the noisy situation must be accepted.

Furthermore, the draft foresees that all sources of noise, both stationary and movable, must be submitted to a noise labelling procedure, so preparing (far in the future?) a more quiet life environmental for everybody.

With the same aim also financial aids are foreseen for those local authorities making actions tending to decrease noise pollution in the relevant areas.

CONCLUSIONS

Till now in Italy we don't have any statement for noise control in the environmental both indoor and outdoor: the adoption of the European Act for the environment protection is the right opportunity to overcome the situation of "stall" that has already been going on for too many years, paralysing any action in favour of a better quality of our noisy life.

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- /1/ E.C.C. Directive 86/188 - On the Protection of Workers from the Risk related to Exposure to Noise at Work. - 16 May 1986.
 - /2/ A. Cocchi, R. Pompoli - "National and Regional Legislation - How Local Can Overcome the Lack of National Laws" - Proc. 4 th FASE Congress, Sandefjord, August 1984.
 - /3/ E.C.C. Directive 85/337 - On the Evaluation of Environmental Impact of Some Public and Private Projects - 27 June 1985.
 - /4/ Acoustics - Description and measurement of environmental noise - Basic quantities and procedures" - I.S.O. I.S. 1996/1.