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EXISTING NOISE ABATEMENT LEGISLATION IN GREECE AND PROPOSED LEGAL FRAMEWORK TOWARDS A REHABILITATION AND MANAGEMENT OF THE ACOUSTIC LANDSCAPE

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ABSTRACT

Noise is an important environmental factor affecting all problems related to the degradation of the urban environment and the quality of life. In Greece, quality of life has been established as a legal conception protected by the Constitution (Article 24: "The Protection of the natural and cultural environment is an obligation of the state and examined by the judge"). Quality of life is characterized by the sound environment, which contributes to the spaces' aesthetic determination. The existing Greek legislation deals with noise in a basis of a quantitative approach i.e. max. permissible levels per source, and does not take into account a wider conception of the acoustic environment. Regulations regarding urban planning, do not implement noise as a design parameter, except certain cases (i.e. protection of special buildings). This is mainly due to the fact, that some necessary administrative decrees and directives, for which the relevant legal authorization already exists, are still not implemented. Therefore, important administrative actions remain inactive and noise protection ineffective.

1 - INTRODUCTION

The realization of the need for legal cover of environmental protection has led to the creation of an autonomous branch of law, that of environmental law, whose primary purpose is the all-encompassing legal approach of the environmental problem. The basic characteristics of this type of law are its intense pragmatic and empirical character, its great dependence on E.U. legislation and on jurisprudence and its close relationship with economic growth and technology. Environmental protection is part of the concept of public interest and, as far as its systematic classification is concerned, it belongs to the field of the manifestation of government intervention. In Greece, environmental protection is constitutionally established with article 24 par.1 of the Constitution, which states: "Environmental protection is a State obligation. The State is obligated to take special preventative or rehabilitation measures for its preservation." The environment that requires protection is the natural, cultural and constructed one, for which two stages of design are predicted, physical and urban planning and organization. Hence, the primary recipient of the environmental right is the State and all of its authorities: legislative, administrative and judicial ones, which should not act in a way that *mistreats* the environment or its protection, while protecting it, either preventative or curatively. As the Constitution authorizes, laws and regulatory administrative decisions have been published which deal with the protection of the natural environment, with physical and urban planning, and with the protection of architectural heritage.

2 - BASIC GREEK LEGISLATION

The principal law dealing with the natural environment is law 1650/86 "on environmental protection", which classifies projects and activities under three categories:

- Projects with a high environmental annoyance factor, for the execution of which a physical planning license and an Environmental Impact Assessment study is required.

- Projects with a medium annoyance factor which do not have such grave consequences on the environment.
- Projects with a low annoyance factor.

For projects of a lower importance (as b and c above) an approval of environmental protection conditions by submission of basic documents is sufficient. Additionally, this law calls for Special Environmental Studies for objects of special protection, like forests. The content of each EIA is specified by the Joint Ministerial Decision (69269/1990), which has been published according to the corresponding EU directive 85/337/EEC. The topics of these studies are the consequences from the realization of the project or activity on the environment (direct-indirect, long-term – short-term, positive-negative, rectifiable or not). This law considers noise as a component of environmental pollution production (article 14) and rules that with an administrative act it is possible to determine:

- Limiting values of noise levels in private and public spaces and buffer zones around existing or new areas of industrial installations, roads, ports, airports, archeological or historical areas & landscapes and residential areas, as well as the limits of the noise levels at them.
- The limiting values of noise and vibration levels for all types of vehicles, machines and instrumentation that are produced, introduced and circulated in the market or are used and create a noise annoyance.
- The prohibition of the circulation of materials and components that are directed towards the prevention of noise and vibrations, when they do not meet certain conditions.

Furthermore, all noise producing projects and activities are identified i.e industry, factories, quarries etc and classified according to the noise annoyance that they causes, under one of the previously mentioned categories. EIA's contain special articles dealing with noise and, more specifically, with whether the construction of a particular project contributes to the increase of the existing noise level or with whether people are exposed to higher noise levels. In these studies the following have to be assessed:

- The expected noise levels during the installation's operation, day and night.
- The noise characteristics (whether it is continuous or not, and its duration).
- The projected measures of noise control.
- Secondary causes of possible noise levels increase.

It is important to underline that environmental noise is a factor which affects and is affected by urban planning. Therefore, urban planning stipulations, town plans, land uses, terms and manner of building construction as well as building materials, significantly contribute to noise combating. Hence, the lattice of all these stipulations is in short the general institutional framework for noise combating. Furthermore, a significant contribution to environmental protection is made by the jurisprudence of the Supreme Administrative Court, based on which the State Council controls the administration and interprets comprehensively the relevant provisions. Additionally, in noise protection, administrative authorities, their responsibilities and law enforcement procedures, hold an important role. In Greece the general responsibility in matters of environmental noise protection and urban planning is held by the Central Government and, more specifically, by the Ministry of the Environment, Physical Planning and Public Works and by its decentralized regional services. Recently, with the restructuring of the Regional & Local Government, several responsibilities were given to its Departments; however, the complete and effective organization, for the implementation of these responsibilities have not yet been created. At the same time, an overlay of responsibilities is observed between various Ministries and Authorities, resulting in the creation of confusion and in incomplete implementation of the existing directives and decrees.

3 - NOISE SOURCES

The main noise sources that affect considerably the acoustic environment are:

- Noise from social activities i.e. recreation, tourism, night life & entertainment etc...
- Road traffic noise.
- Aircraft – Airport noise.

- Noise from worksites, construction machinery & from industrial and mechanic installations.

3.1 - Noise from social activities

For numerous decades entertainment and social life have held a significant place in the life of Greeks. Today, entertainment sites and especially clubs, bars & discos in Greece, as well as in most of the Mediterranean countries, are outdoors because of climatological conditions, and are therefore sources of environmental noise pollution. Enclosed entertainment sites are usually in residential areas, on the ground floor or basement of houses, resulting in a need for an adequate noise insulation. Finally, night entertainment activities are the cause of annoyance not only because of the noise produced within them, but also because of the secondary noise of traffic around them during the hours of their operation. Regulations concerning entertainment activities refer mainly to the conditions for a license approval regarding the activity's creation, operation and control; for instance, full noise insulation of an enclosed disco. Enclosed or open activities, have to be at least at a 300 meter distance from residences which are part of the town plan, furthermore they have also to comply with certain health standards, and they have to keep strictly the approved operation schedule, while complying with "public quiet" regulations. The problem is the incomplete application of this legislation, primarily because a mixture of land uses exists, since urban planning and application is not satisfactory enough. Also, an overlay of responsibilities exists, between the authorities of local government that provide the licenses and the police authorities that inspect them. Recently, the inspection responsibilities have been transferred to the Municipality Police; its structure is nonetheless still elementary.

3.2 - Road traffic noise and vehicle noise

Greece, as an E.U. member state, is obligated to follow and to adapt itself according to European legislation. Hence, imported vehicles, given that Greece does not have any vehicle industry, must have a "type approval" according to the ISO R 362 international standard. At any rate, ministerial decisions and decrees have been published in accordance with EU directives, which deal with permissible noise levels caused by cars, motorcycles, motorbikes, and with the appropriate type of noise measurement. For the application of these stipulations a full technical inspection of vehicles by the "Center of Technical Inspection for Vehicles" has been established, which nonetheless is primarily concerned with the examination of exhaust fumes and to a lesser extent with that of noise emission. Also, a ministerial decree has been issued for the "Setting of indices and maximum permissible noise levels from road traffic and road transportation projects". At the same time, a noise affected zone and, more generally, the setting of buffer zones, was established in planning road traffic axes.

3.3 - Aircraft noise

Airport noise is tackled quite satisfactorily by Greek legislation, given that it is based on the relevant US legislation as well as on E.U. directives. In general, it is specified that the Civil Aviation has to elaborate a noise impact study "before and after" the construction or the improvement of an airport, a noise certificate for each aircraft is issued, the mapping out of annoyance zones is required, as is the inspection of land uses in the broader airport area according to the expected NEF contours, aiming at the minimization of annoyance. The major problem with Greek airports is that most of them are relatively old, built without meeting the necessary environmental standards and that they were at that time located near the limits of nearby cities or communities. Nevertheless, with the development of neighboring residential areas, as well as with their expansion, they found themselves within the limits of residential areas or within the urban web and therefore the noise annoyance was increased, as did the complaints of the residents.

4 - LEGAL REGULATION PROBLEMS IN GREECE – PROPOSAL & RECOMMENDATIONS

Despite the fact that the legislative framework is sufficient enough, its application presents shortcomings, primarily for the following reasons:

- The principal law for environmental protection and, specifically, its regulations for noise are insufficiently applied, because the necessary relevant regulatory acts have not yet been issued.
- The acoustic scenery, either in the form of 'sound', in which case it has to be protected, or in the form of 'noise', in which case it is a pollution parameter, is not taken into account during the process of urban planning and in the determination of land uses.
- The stipulations are distributed across various laws and have non-coherent characteristics, furthermore, an overlay of duties exists between various authorities, leading to the creation of confusion.

- The Local Government Authorities, to which many responsibilities have recently been transferred, especially as far as noise from bars & discos is concerned, have no specialized personnel, or the appropriate material and technical infrastructure.

For the comprehensive investigation of the acoustic landscape, but also for other goals derived from urban planning, it is essential for environmental impact studies to precede the two phases of urban planning i.e. "*General Urban Plans*" and "*Specific Urban Studies*" (Urban Plans, Local Plans) and before their approval, in order to identify, assess and propose measures for dealing with environmental impacts which will be brought upon by these plans on the impacted area, as well as on neighboring areas. In this environmental control, primarily at the level of General Urban Plans and Urban planning studies, where a land use distribution is made, where building regulations are imposed etc., the protection of the acoustic environment, has to be taken into account. More specifically, as far as an area is concerned, it is necessary to decree max. permissible noise levels (per noise source and per land use), to foresee buffer zones by using as a standard the reduction of annoyance and the residents' health protection as well as the protection of the acoustic landscape, to correlate land uses according to annoyers and annoyed from a noise viewpoint, to regulate maximum noise levels for annoying uses according to the current legislation and to introduce rules, if necessary, of temporal noise management using the reduction of noise pollution as the principal standard.