

ACOUSTICS2008/3359

Perspectives for a strategical mapping of soundscapes

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The transposition of the European Noise Directive by Member States gives a new way to action plans of urban areas, underlying (article 6 and Annex III) that dose-effect relations should be used to assess the effect of noise on populations. Particular interest, in this sense, has the relationship between annoyance and perceived soundscape: it is now almost accepted that a higher annoyance isn't always proportional to higher noise levels. This paper will demonstrate that a way to move from mapping noise exposure to a map of annoyance passes through the characterization of the soundscapes present on the territory. A numerical indicator ("slope"), derived from the time history of the measured sound/noise, will in fact be used to characterize the evolution along the day of the soundscapes present in the city of Pisa (I). In particular, "slope" (correlated to annoyance in previous studies) will be used to prepare a map of the annoyance in selected areas of Pisa: predicted annoyance will be compared with the one extrapolated by noise levels. Differences, similarities and their effects on action plans will be discussed.