Internoise 2012, New York

SS: Quiet zones in cities (K. Genuit, G. Brambilla)

Title:

Creation of quiet zones in an increasingly noisy world – How to tackle this issue?

Authors:

André Fiebig, Roland Sottek

Abstract:

In the European research project CityHush, measures and actions are developed which should allow for protecting existing and creating new quiet zones in urban areas.

Quiet areas make a beneficial contribution to public health, particularly for people living in noisy city areas, as the European Commission stated. However, the objective that all persons have easy and quick access to quiet, restorative zones in built-up areas, is still unreached and efficient measures must be introduced.

With respect to the successful preservation and creation of quiet zones it is imperative to consider more criteria than only a sound pressure level limit.

In this context, based on a developed auralization tool, the psychoacoustic contributions of different road traffic sources are investigated in detail. This includes for example different powertrains for passenger cars and powered two-wheelers.

The road traffic synthesis tool for auralization is applied for studying the perceptual relevance of various measures intending to reduce noise annoyance and to improve environmental noise quality.

The paper will discuss the physical and perceptual benefits of special developments and measures, such as the partial or complete substitution of combustion engines by electric drives for passenger cars and scooters.

Find more event abstracts in our >> abstracts archive <<