

# SUMMARY

## Slow Sound Art - a model for sustainable sound installations

This project examines issues related to sound installations in public spaces in the urban environment. The problem today is that we have very limited knowledge as regards the effects of sound installations on humans and the environment. The installations referred to in this context are those that are intended as permanent features of the urban environment.

Three questions are central to the project:

- How should we orchestrate an individual sound experience in the urban environment?
- In what way can sound via loudspeakers affect our perception of the audible environment in public spaces?
- What forms of listening are involved when we interpret sound installations in urban contexts?

The project adopts an interdisciplinary starting-point in order to tackle these questions. This is a necessary prerequisite in order not only to gain greater understanding of how sound affects us in different situations, but also to improve our knowledge of how we can design effective urban sound environments. The participants in the project are experts in the arts, urban planning, architecture, music, acoustics and psychology.

The project involves *artistic experiments*, with the emphasis on site-specific questions. It examines sound as the conveyor of qualitative information, which could be spatial, temporal, aesthetic or social in nature. The project should also be seen from an *acoustic design and sustainable urban development* perspective. Urban noise pollution is a growing problem and represents a significant threat to our health and recreational opportunities.

A major case study was conducted as part of the project. The study took place at Mariatorget, a popular square and city park on the island of Södermalm in Stockholm. Two permanent sound works have been erected in four different places. The aim has been to develop a model for sustainable sound installations in noisy city parks and squares. This has been staged in the form of additional sounds being produced through loudspeakers. The model has a dual function: to reinforce existing sounds, mainly from business activities and nature; and to move the listener's focus from traffic noise and to the sound works.

The case study is divided into five phases:

1. *Inventory* - both in the form of site analysis, with an inventory of sound-generating activities and functions at Mariatorget; and in the form of a psycho-acoustic analysis in which 400 people answered questions about how they experienced the sound environment at Mariatorget;

2. *Simulation* - laboratory sound experiments, with subsequent pilot studies on site;
3. *Composition* - design of two sound installations for Mariatorget;
4. *Installation* - technical installation of the sound works at the location;
5. *Analysis* - analysis of the effects of the sound works on site, both linked to the way the works interact with the context of the square (the people there, functions, business activities, etc.), and in the form of a psycho-acoustic evaluation with the emphasis on masking effects (examining whether the focus of the listener is transferred from the traffic noise to the sound works).

In conclusion: The aim of the case study model is to generate qualitative questions about sound in relation to the environment, architecture, aesthetics and sustainability.