



Project LIFE 09 ENV/IT/102 "NADIA"

***Noise Abatement Demonstrative and Innovative
Actions and information to the public***





NADIA

- ❑ ***NADIA is the acronym of Noise Abatement Demonstrative and Innovative Actions and information to the public***
- ❑ **NADIA focuses on the reduction of the noise from traffic. The activities are foreseen from 2010-2014**



Location: Italy

Budget:

Total costs: 2.110.608,00 €

32% granted by the European Commission

Coordinator: Province of Genova

**Partners: Province of Savona, City of Vicenza,
CIRIAF and since Autumn 2011 City of Prato**

The City of Prato has formalized its request to join the project. The application was submitted to the EC and pending for approval

The preliminary activities in Prato began with the month of October 2011



BACKGROUND and GOALS

Provinces and Cities are the managing bodies of the local roads.

Legislative Decree 194/2005 and 2002/49/CE "END" foresee a specific path for the actions of acoustic improvement of the territory

NADIA focusses on the reduction of the noise from traffic. The activities are foreseen from 2010-2014





Expected results:

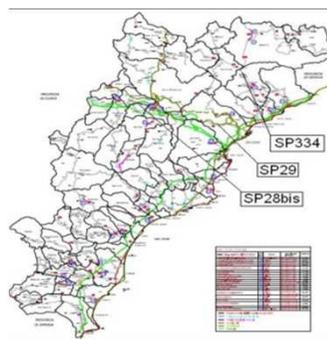
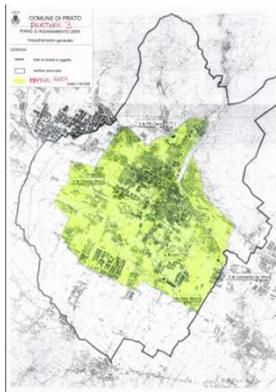
- ✓ Pilot interventions for noise reduction
- ✓ Seminars and awareness in the territory

NADIA wants to demonstrate:

- ❑ technical and economical feasibility as well as effectiveness of best practices for reducing the noise caused by road traffic
- ❑ importance of stakeholder involvement and proper communication with the public



Project Areas





Project territories - physical features

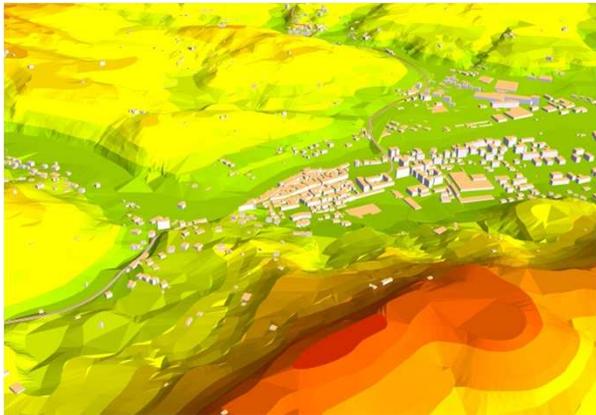
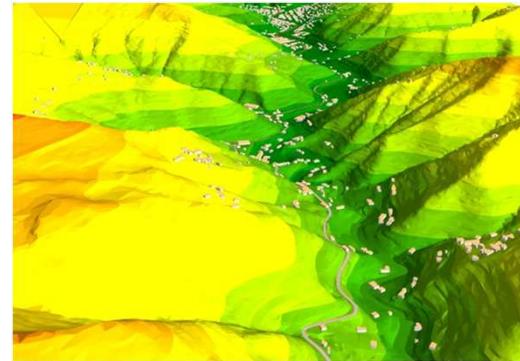
Valleys and mountains, roads crossing small towns and villages or near rural houses (roads in Provinces of Genova and Savona – Liguria)

Plains, urban roads (City of Vicenza – Veneto)

Hills, urban roads (City of Prato – Tuscany)



Examples: Project areas in Provinces of Savona and Genova





Images of suburban roads in Liguria





technical project actions



Action 2: Data surveys

- Data collection (noise measurements, population, meteorological data, traffic flows, territory characteristics)
- Studies of noise annoyance carried out on the basis of questionnaires distributed to population;
- Carrying on new noise measurements (when necessary);
- Study of state of the art about noise abatement techniques (barriers, asphalts, windows).

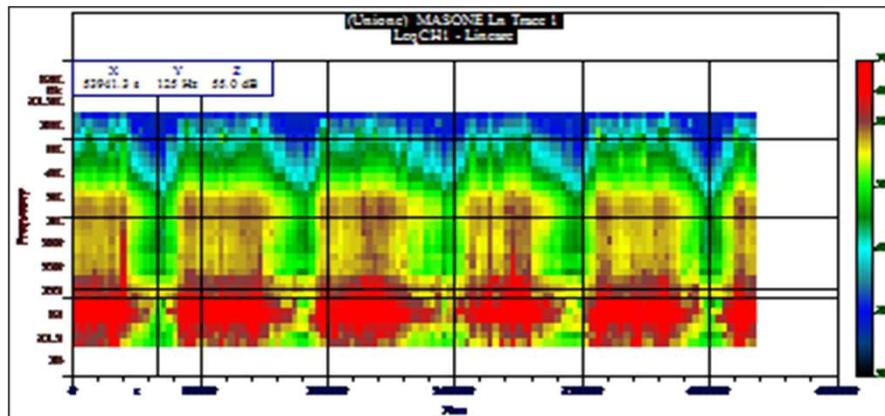
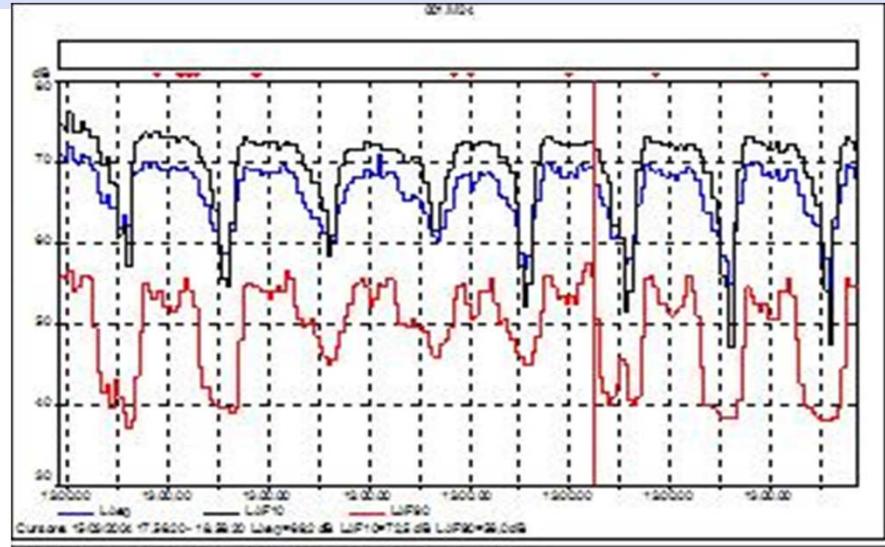


Images of noise measurements (long term and spot measures)



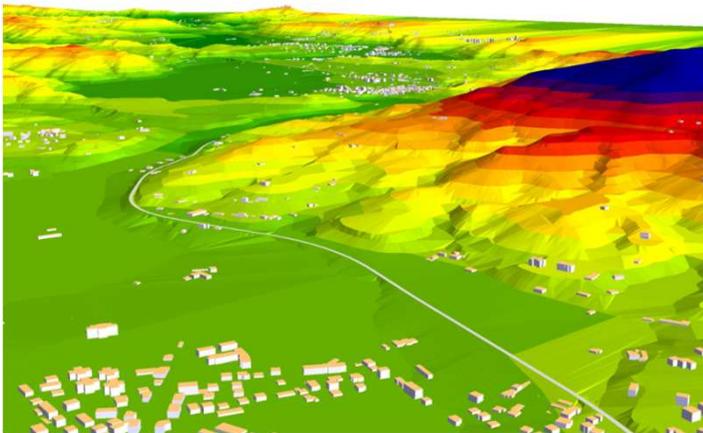


Examples of long term monitoring (sound energy equivalent level or percentiles)





First result: specifications for data collection useful to apply NMPB model



MILESTONE 1

"Data quality and quantity with regard to models specifications"

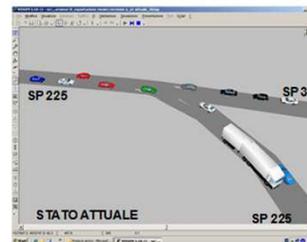
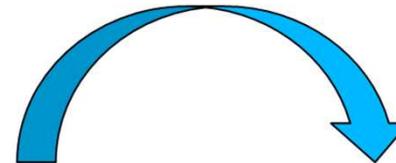
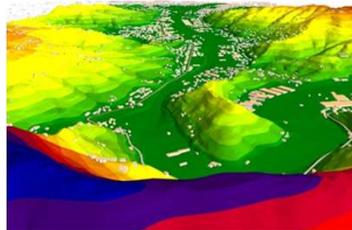


Progetto LIFE 09 ENV/IT/102
"NADIA" (obser-Abatement Demonstrative and Innovative Actions and Information to the public)



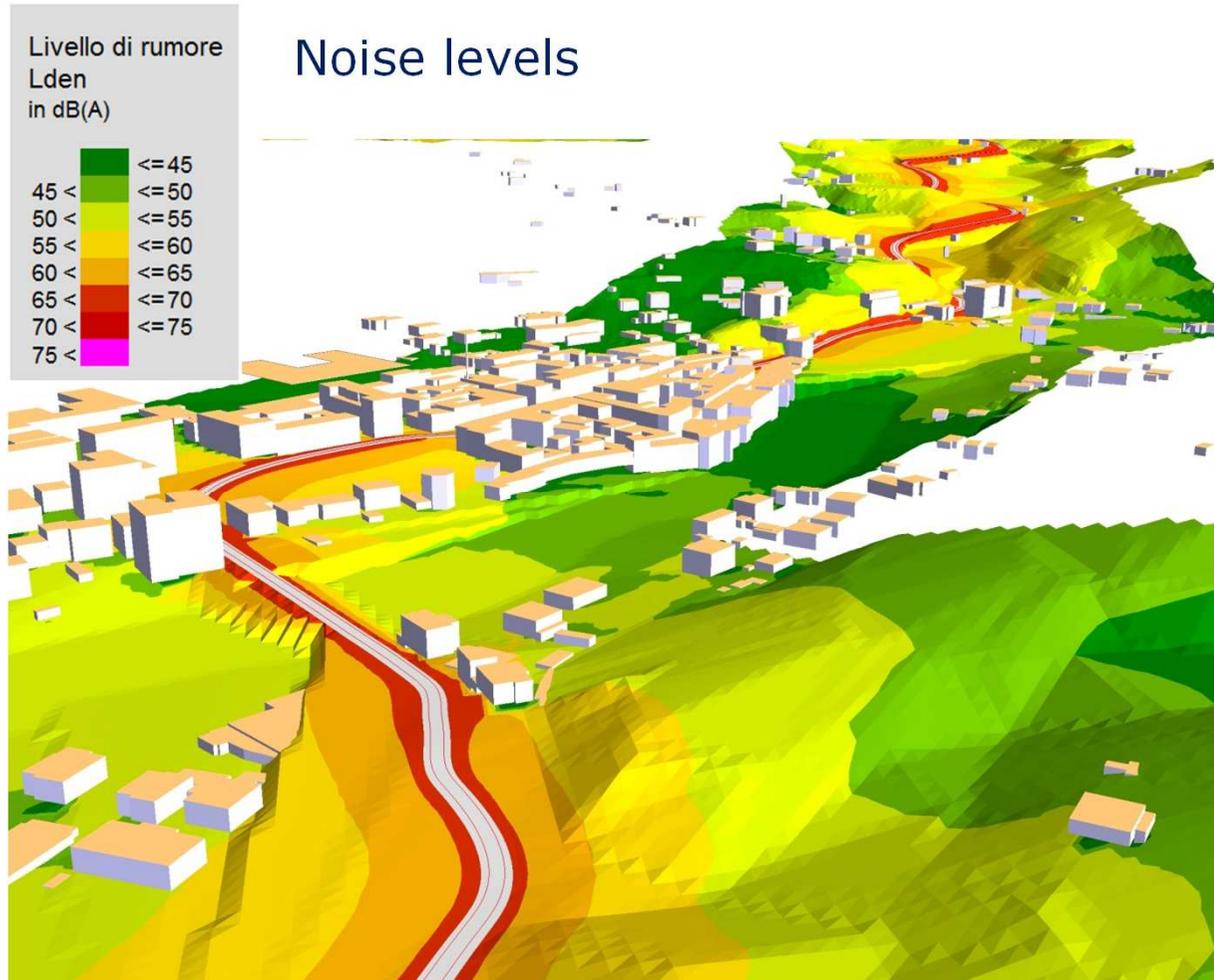
Action 3: Noise Mapping

- Numerical evaluation (NMPB model) of noise levels starting from data collection (Survey) and estimation of the exposed population
- Identification of critical areas (noise level over legal limit)
- Areas simulated: 5 roads in province of Genova, 3 roads in province of Savona, urban areas in Vicenza and Prato
- Noise mapping performed in compliance with "*Good Practice Guide*" (2007) and Legislative Decree n. 194/2005 (END enforcement in Italy)





Noise levels



Exposed population

Lden	Pop.
>75	0
70-75	3
65-70	90
60-65	228
55-60	388
<55	2102



Action 4: Action Plans

- In the current year using the noise mapping results will be performed the Action Plans for all the partners
- Guidelines: END, Italian laws in acoustics, AEN WG position paper (Presenting Noise Mapping Information to the Public), UNI 11327:2009 and other technical references
- Agenda 21 principles (not less than 20 stakeholders are foreseen)



Defining the Action Plan:

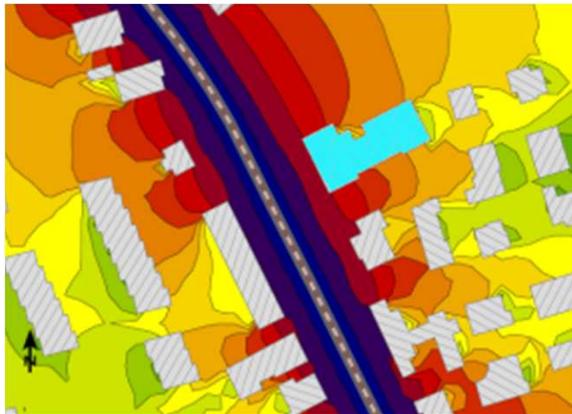
- identification of interventions
- cost evaluation
- time schedule

The plan implementation also involves the activation of a participatory process and the organization of seminars





Identification of critical areas with particular attention to the "sensitive" sites: schools, nursing homes and retirement homes, etc..





Action 5: Demonstrative actions for the noise reduction

- A few Pilot Cases will be selected on the basis of Action Plans developed
- Asphalts, Barriers and silent windows installations are foreseen for the Pilot Cases
- Pilot cases will be used for student and pupil lessons (contacts with school in project areas are in progress)





Action 6: Dissemination

www.nadia-noise.eu

A screenshot of the NADIA website homepage. The header includes the NADIA logo and navigation links: THE PROJECT, PARTNERS, CONTACTS, EVENTS, NEWS, and a search bar. The main content area features a large blue banner with the heading "WHY NADIA" and a photograph of a waterfall. Below the banner are three columns: "Latest News" with a photo of a street scene and a microphone, "Actions" with a photo of a street scene and a microphone, and "Objectives" with a photo of a green field. The footer includes logos for the European Commission and various partners, a navigation menu, and a small NADIA logo with a disclaimer: "NADIA Report: Assessment, Demonstration and Innovative Actions and Information for the public - Life 09 ENV IT 000102. It is a project funded by the European Commission Directorate General 'Environment' as part of the announcement Life - 2009".



Main events:

- ✓ Workshop - Perugia (CIRIAF Conference in April 2011).
- ✓ Workshop – Genova (Study Day in Env. Acoustics - October 2011)



Conference CIRIAF in April 2012 (Perugia)

Study Day in October 2012 (Genova)

Conference CIRIAF April 2013 (Perugia)

FINAL EVENT (Spring 2014 – Genova)



NADIA project presentation (Life 09 ENV IT 102)





Summing up

TARGETS:

- ✓ Implementation of pilot interventions (i.e.: barriers, laying of asphalt soundproofing, soundproof windows, high-performance school buildings)
- ✓ Information moments: technical seminars, lessons in schools



Summing up

INNOVATIVE ASPECTS:

- ✓ Integration of the NMPB model (weather data, population density, territory features, traffic data, ...)
- ✓ Reference documents like AEN WG Position paper in addition to Recommendations of the Law
- ✓ Implementation of demonstrative solutions
- ✓ Involvement of schools
- ✓ National Working group (local authorities + public and private technicians)



The Working Group wants to be an opportunity for:

- ✓ confrontation of experiences on the ideas of the main phases of the project
- ✓ identification of possible critical phases
- ✓ analysis of positive cases
- ✓ selection of Best Practices to be proposed outside of the partnership
- ✓ stimulate the dissemination of project results at public events



This document has been prepared by the Province of Genova

Directorate Environment, Transport and Natural Areas
Energy, Air and Noise Service



Provincia di Genova



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The sole responsibility for the content of this publication lies with the authors. It does not necessarily reflect the opinion of the European Union. The European Commission is not responsible for any use that may be made of the information contained therein.



Thank You !

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