



The 33rd International Congress and Exposition
on Noise Control Engineering

GlpSyNOISE :

a GIS tool adapted to the European Directive on Assessment and Management of Environmental Noise : operational aspects

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FORTH IACM



The aims of the GlpSyNOISE project

- European Directive on Assessment and Management of Environmental Noise 2002/49/CE (DAMEN) :
 - to implement noise maps with an urban noise monitoring approach.
 - to inform a large public
 - to define action plans for every “black spot”
 - to feed the European database
- Noise : a main preoccupation of citizens
 - more than 30 % of people is disturbed and/or stressed by noise
 - 80 millions of people in European Union (22%) are exposed on noise level exceeding 65dB(A)

GlpSyNOISE 2002-2005 : a European LIFE Environment program

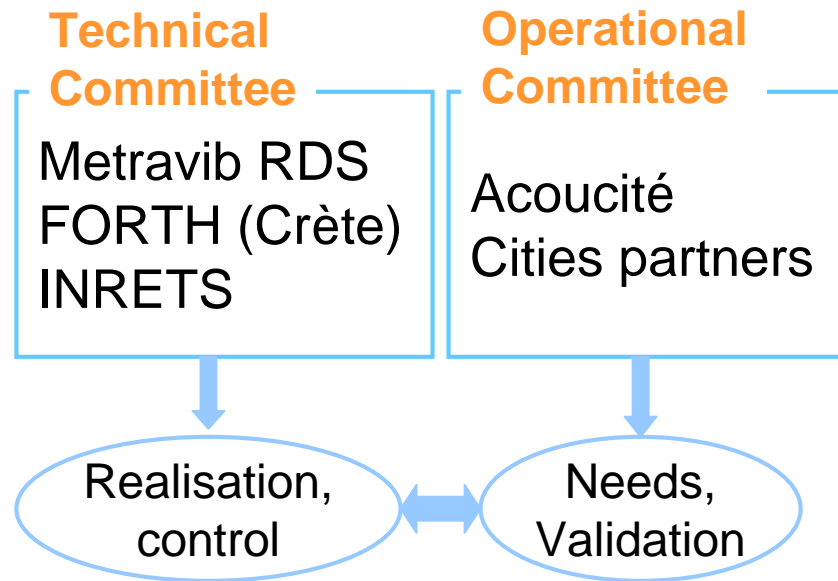
- What does GlpSyNOISE means?
 - The project is aimed to develop an efficient **GIS** tool,
 - including **psy**chological and demographic aspects
 - and **noise** levels.
- What are the aims of the project ?

Noise maps according to the main 3 requirements from the Directive :

 - Evaluation of noise indicators
 - Noise mapping
 - People exposed
 - Preparing communication toward a large public..
 - Simulation of future situations
 - Decision-making aid (action plans)
 - Improving of nuisance models

What methods to meet the requirements of the directive and the urban managers' needs?

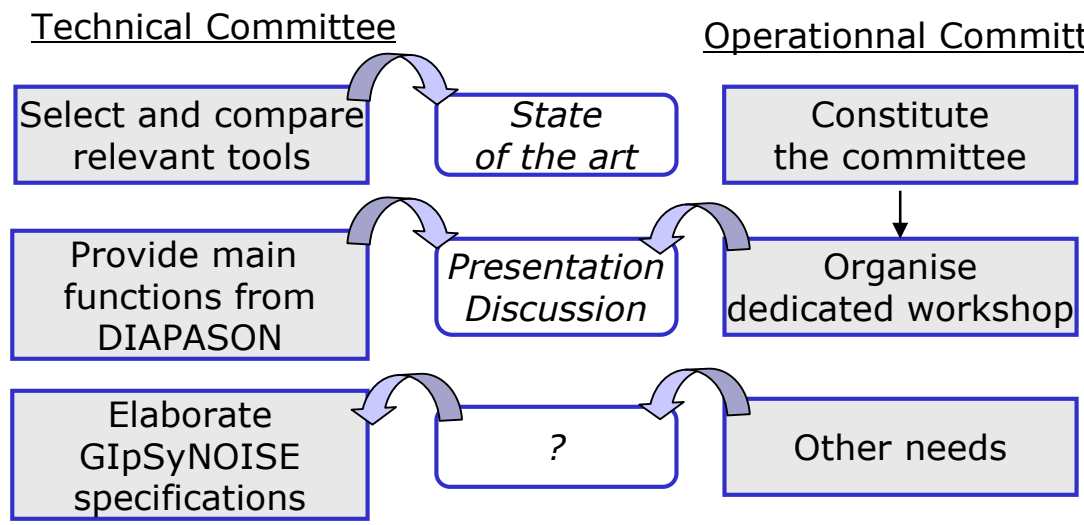
Organisation and close relations between the two committees :



GlpSyNOISE program is divided into 6 tasks

- **Project management & relations to the LIFE Commission** (2002 to 2005)
kick off, mid term and final meetings – progress reports
- **Communication & Results Dissemination** (2002 to 2005)
Continuous information activities, public events, web site ...
- **Task ① : Critical review of existing tools** with respect to the Directive requirements - **End-users needs** and operational aspects (December 2002 to Sept 2003)
- **Task ② : Overall Concept** of the GlpSyNOISE tool and **data collection** (Sept 2003 to Oct 2004)
- **Task ③ : Software operational assessment** (June 2004 to March 2005)
- **Task ④ : Diffusion** of GlpSyNOISE release 1.0 (April to October 2005)

Phase 1 : critical review of available software packages and identification of end users needs

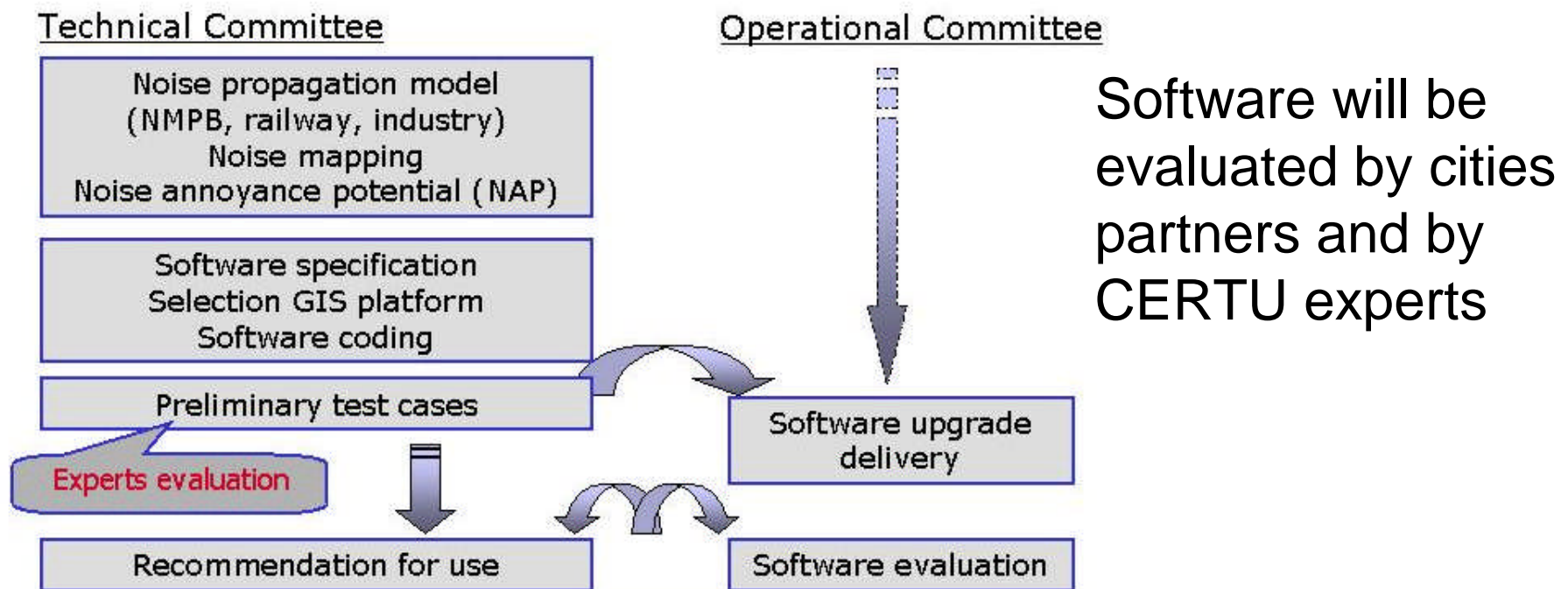


Cities partners have been questioned 4 times

Rate of return : varying from 60 to 100%.

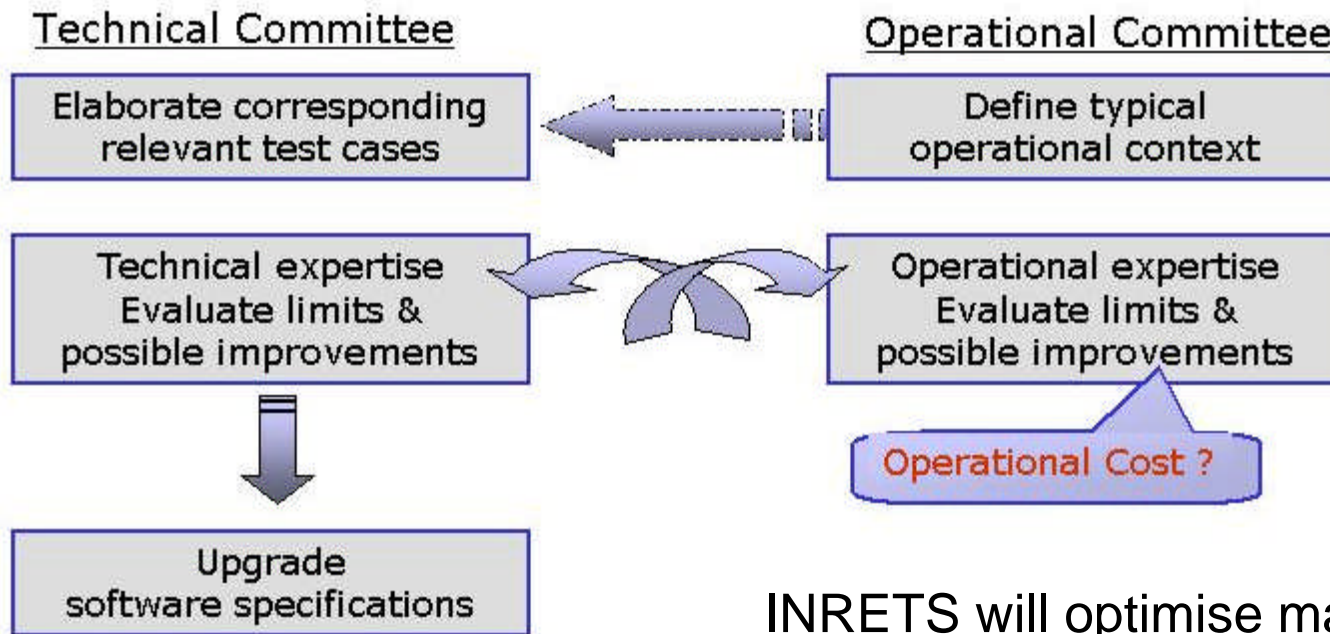
The greater difficulty : when the themes of the survey implicate a technical knowledge from different services

Phase 2 : O1dB-METRAVIB RDS and FORTH develop the software



Software will be evaluated by cities partners and by CERTU experts

Phase 3 : operational tests of GlpSyNOISE, in a real case, and by each city partner



INRETS will optimise maps to communicate toward a large public.

Phase 4 : upgrading the GIS tool in a GlpSyNOISE release 1.00

Technical Committee

Upgrade
Software tool

Operational Committee

Evaluate efficient modes
for
diffusion/communication

Technical Committee Operational Committee

Define exploitation mode

Indication to widen
the diffusion process

Diffusion of software tool

Communication of
main project outcomes

CONCLUSION

Interest of a technical and an operational committee, and their tight relations :

- the two kind of tasks are equilibrate or complementary .
- This enforces our observations with regard to the city's work.
- The implementation of the directive needs cooperation between several offices in a same town that have distinct capacities.
- Transverse working may certainly be a real difficulty.

Cities Partners

- **French agglomerations**

- Communautés urbaines : Grand Lyon : 1 164 000 inhabitants
- Lille : 1 083 000 inhabitants Bordeaux : 660 000 inhabitants
- Nantes : 549 000 inhabitants Nice : 491 479 inhabitants

- **Communautés d'agglomérations :**

- Angers : 256 000 inhabitants
- Montbéliard : 123 000 inhabitants

- **French Cities :**

- Saint Etienne : 375 000 inhabitants
- Boulogne-Billancourt : 107 000 inhabitants

- **European agglomerations**

- Barcelone : 1 600 000 inhabitants
- Huelva : 140 000 inhabitants
- Porto : 372 000 inhabitants
- Prague : 1 200 000 inhabitants
- Szeged : 180 000 inhabitants