The case of the Ile de France region
Presentation of Bruitparif
Agenda

- Presentation of Bruitparif and context of the Ile-de-France region (Paris region)
- First results of noise assessment in Ile-de-France region in application of the END
- Actions in Ile-de-France region to fight road traffic noise
- Questions about the different ways to reduce noise at the source: example of the Paris action plan
The Ile-de-France region

~ 11 million inhabitants = 19 % of the French population, 
~ 30 % of the GNP
~ 12 000 km²

characterised by the population density of the Paris agglomeration:

87 % of inhabitants (9,75 millions) live in 23 % of the region’s area

area directly concerned by the END
The Ile-de-France region

- Characterised by the number and density of infrastructures:
  - More than 40,000 km of roads
  - More than 1800 km of railways
  - A unique aircraft system in Europe based on two international airports (Roissy CDG 544 000 mvts and Orly 233 000 mvts in 2007) + civil airfield of Le Bourget (58 000 mvts in 2005) and heliport of Issy-les-Mx + ~20 small airfields
What is Bruitparif?

- **A regional agency** for assessing and monitoring noise in the Ile-de-France Region
- **Created in October 2004**
- Coming into force at the end of year 2005

**Reasons for creation:**
- Noise = one of the major concerns for inhabitants of the Ile-de-France region
- Multiplicity of actors involved in noise management
- Lots of noise data but no common database
- Lack of information and accessibility to data for the public
What is Bruitparif?

Bruitparif is a non-profit private structure whose board is made up of representatives of the different organisms involved in noise issues:

- Representatives of **State** at the regional scale
- Representatives of **economical activities** generating noise (Aéroports de Paris, RFF, SNCF, RATP, CCFA, CRCI)
- Representatives of **local authorities** (City of Paris for example)
- Representatives of **acousticians or experts** in noise issues
- Representatives of **community and consumer groups** defending the environment

Representatives of **Regional Council**
The 3 orientations of Bruitparif

www.bruitparif.fr/en

Noise in Ile-de-France

Noise is a very significant source of annoyance in Ile-de-France due to the high concentration of housing and the exceptional density of transportation infrastructures.

Measurements

Awareness actions

Support to public policies
Example: Measurement campaign around the Paris ring road (2010)

8 permanent stations recorded 24/7
Laboratory vehicle, 1 measurement site every 700 metres

Between 100 and 1600 events a day above the background noise by 10 dB(A)
Significant emergences by up to 25 dB(A) two-wheelers

Permanent high noise levels
For Local residents exposed, there is never any respite (day vs night, week vs weekend, school holidays, etc...)
Only, an average decrease of 1 dB(A)

Not necessarily a temporal correlation between sound and air pollutions
Example Awareness actions: “Listen to your High School!”

- Acoustic measurement and individual exposure measurement campaigns
- A perception survey aimed at the students and the staff
- A workshop to test the sound levels of MP3 players
- A debate conference and an exhibition
- An educational concert, “Peace and Lobe”
Missions of Bruitparif
Measurements, awareness actions and support to public policies

- To assess noise exposure of the Ile-de-France inhabitants
- To improve evaluation of annoyance due to noise
- To develop a database noise information
- To conduct studies
- To develop a decision-support-system able to help local authorities to take appropriate actions
- To inform general public and authorities
- To help authorities in implementing the END
Application of the END: Paris agglomeration context

- Problem: Paris agglomeration is not an administrative entity…
  But is made of 396 cities!

In France, an agglomeration is defined by INSEE like “an area where any distance between two buildings is less than 200 meters and where there are more than 2000 inhabitants”

In the Paris agglomeration, the organisms responsible for the production of noise maps and action plans in framework of the END are the mayors or the chairmans of the intercommunality structures when they are competent for noise.
Map of the authorities which are in charge of realising the noise maps within the Paris agglomeration

237 authorities in charge of the END application within the Paris agglomeration
Progress of the strategic noise map on the agglomeration of Paris  
December 2010

Sources: Bruitparif, collectivités locales  
Réalisé par: Bruitparif, décembre 2010
First results of noise assessment in Ile-de-France in the context of END

2 million inhabitants are potentially exposed to noise levels on the front of their buildings considered excessive in regard to national regulatory values.

Road noise: the main source
16% of the agglomeration inhabitants are subjected to road nuisances above 68 dB(A) according to the daily indicator Lden (Level day-evening-night).
9% are above the 62 dB(A) threshold of road noise at night (10 pm - 6 am).
Actions in Ile-de-France region to fight road traffic noise

Curative action for critical situation (Hotspot):
Protect people from road traffic noise with

- noise walls,
- facade insulation of the building exposed
- co-funded by the Region, the State, the infrastructure managers and the local authorities impacted

With the Grenelle of the Environment 2009-2010, the policy to reduce noise hotspots has been revived and funds have been made available at the national level to accelerate the process.

Preventive actions in urban planning and construction

- Take account of noise like another pollution from the start of the project
- Use of legal tools: local urban plan (PLU), “classements sonores des infrastructures”
Example of noise walls in Charenton-le-Pont

Noise barrier from 6 to 8 meters ...

...A total project of 20 million €

fully completed in 10 years!
Covering of the Highway A3 inside city (2008)

70 million €
The project exists since 1969
Covering of the Highway A6 inside city (2011)

120 million €
More than 40 years after the Highway creations
Facade insulation of building exposed

Acoustic and thermal
Example of preventive actions: Friche Renault La Courneuve Plaine Commune
Actions in Ile-de-France region to reduce at source road traffic noise

Indirect measure, but possible impact
Plan tools, like mobility plan at the regional or local scale in order to:
- Reduce the use of the personal car
- Promote the use of train
- Develop public transport
- Traffic calming, like 30 km/h Speed limit inside city...

Direct measure
Low noise pavement
Limitation of the use of “noisy” vehicles
Map of the road noise in Paris

Population exposure to road noise, indicator Lden

Buildings
Road
Empriœa forroviaux
Reduce noise at source is the best way but how to do it?

- Questions in elaboration of the Paris action plans
- Traffic calming
- Low noise pavement
- 2 wheelers
- Commercial vehicles
Thank you for your attention!

See our website: www.bruitparif.fr
English version: www.bruitparif.fr/en