

Inovações aplicáveis ao enfrentamento da poluição sonora urbana

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Consciência

Contraste

**International Noise
Awareness Day**



INAD[SP]

**Dia mundial de conscientização
sobre o ruído 2017**





1ª Conferência Municipal sobre Ruído, Vibração e Perturbação Sonora

28, 29 e 30 de Abril de 2014
São Paulo, SP - Brasil



2ª Conferência Municipal sobre Ruído, Vibração e Perturbação Sonora

27 e 29 de Abril de 2015
São Paulo, SP - Brasil



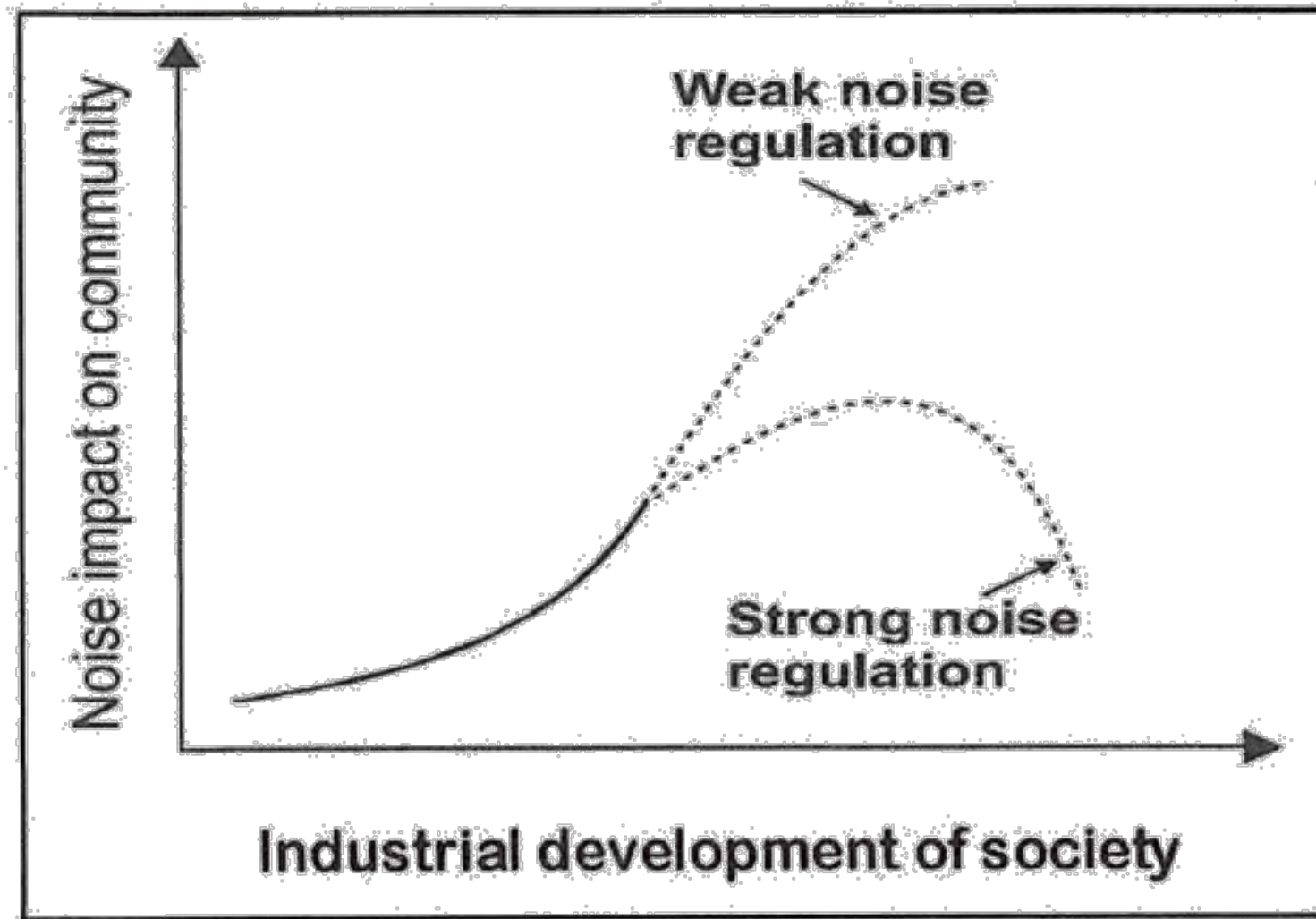
3ª Conferência Municipal sobre Ruído, Vibração e Perturbação Sonora

27 e 28 de Abril de 2016
São Paulo, SP - Brasil



Planejamento urbano x políticas de ruído

Relação desenvolvimento e impacto da poluição sonora





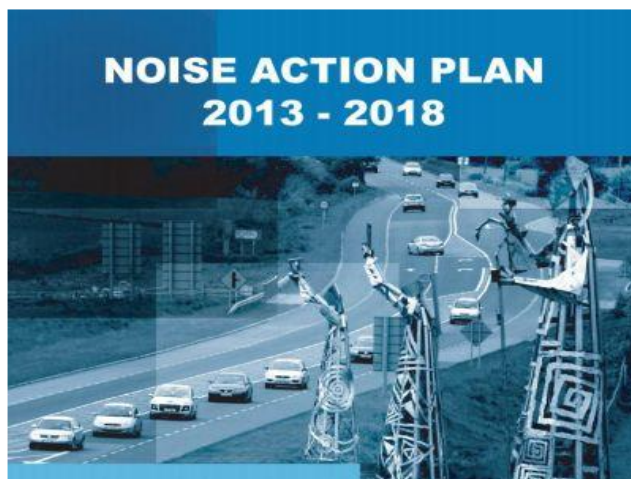
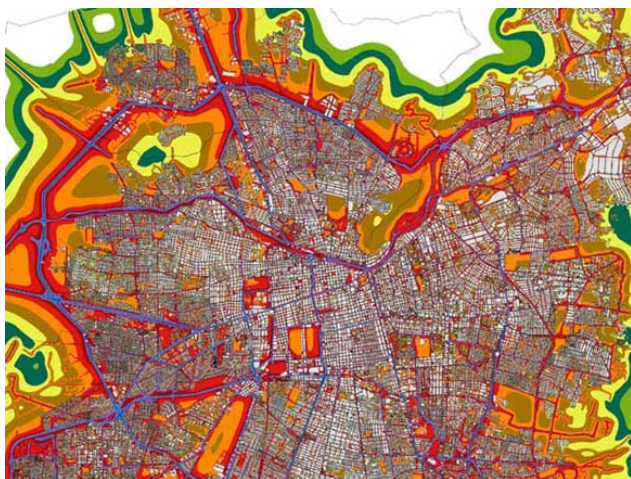
Diagnóstico



Intervenção



Cura

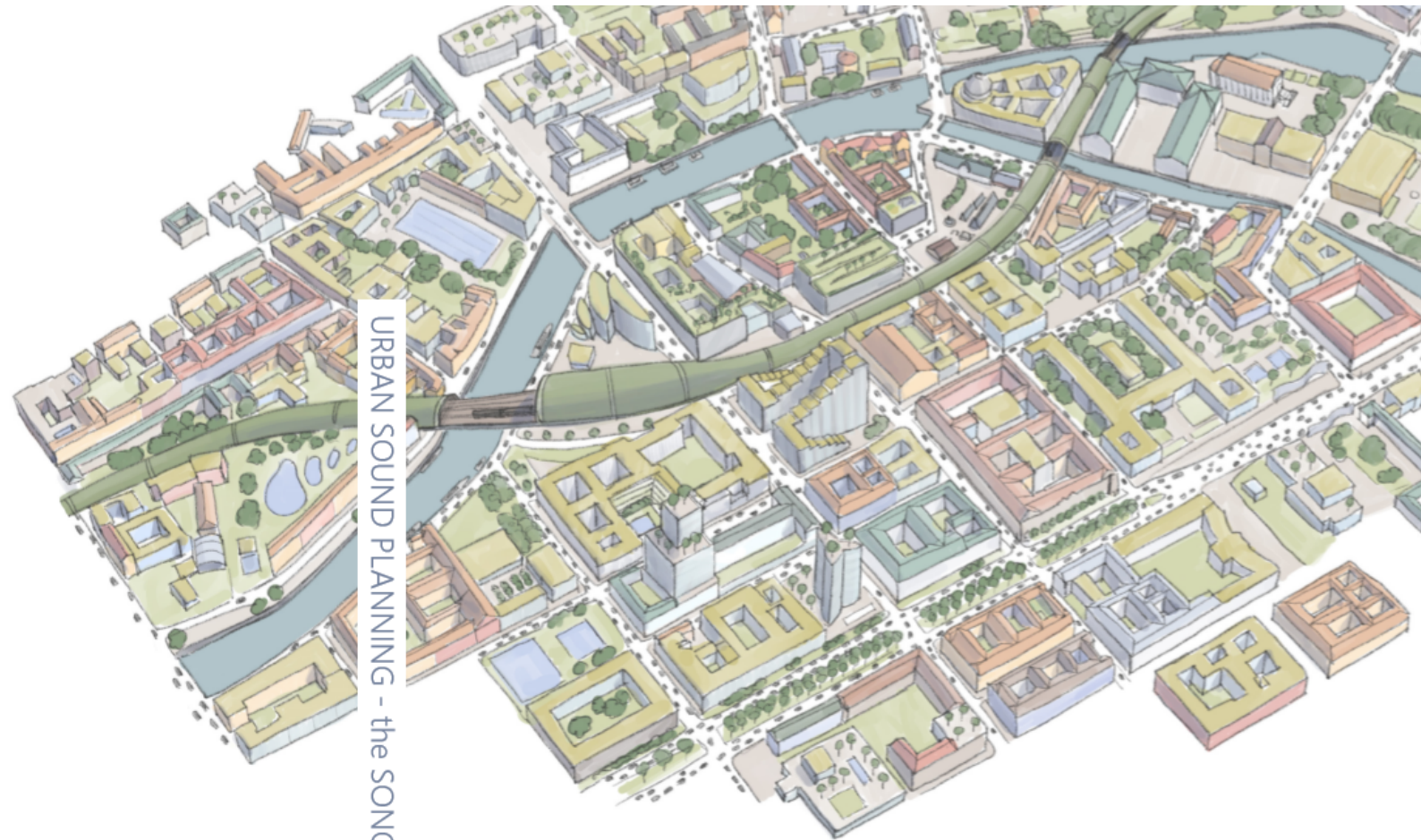


Algo pode ser feito?

Política de despoluição sonora

Vamos a alguns exemplos

Planejamento urbano sonoro

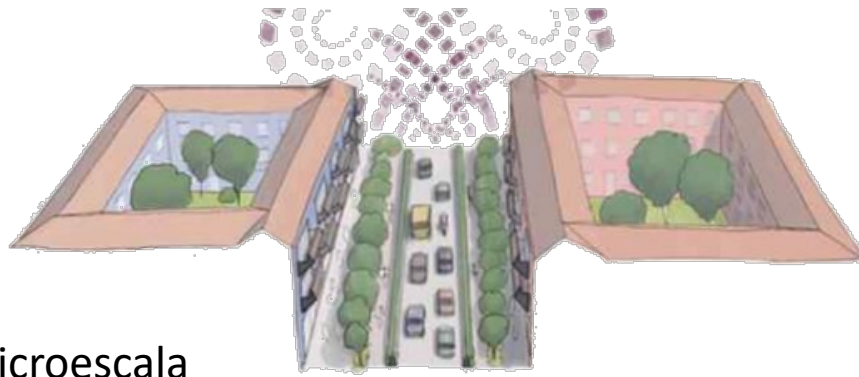


URBAN SOUND PLANNING - the SONORUS project

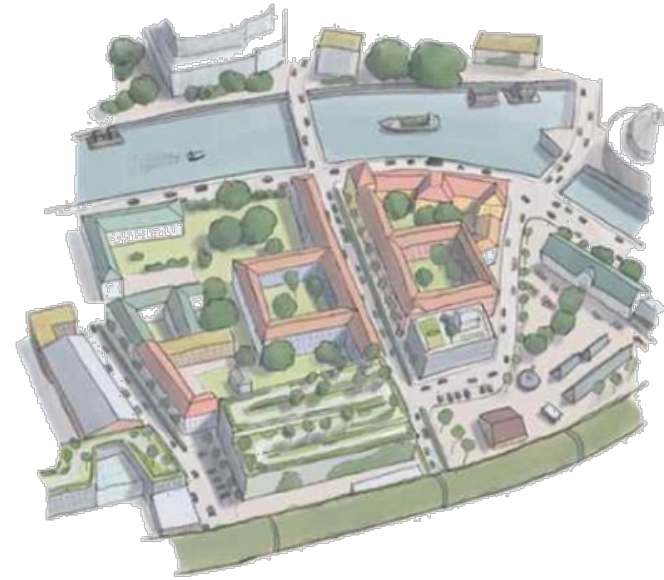


URBAN SOUND PLANNING
- the SONORUS project

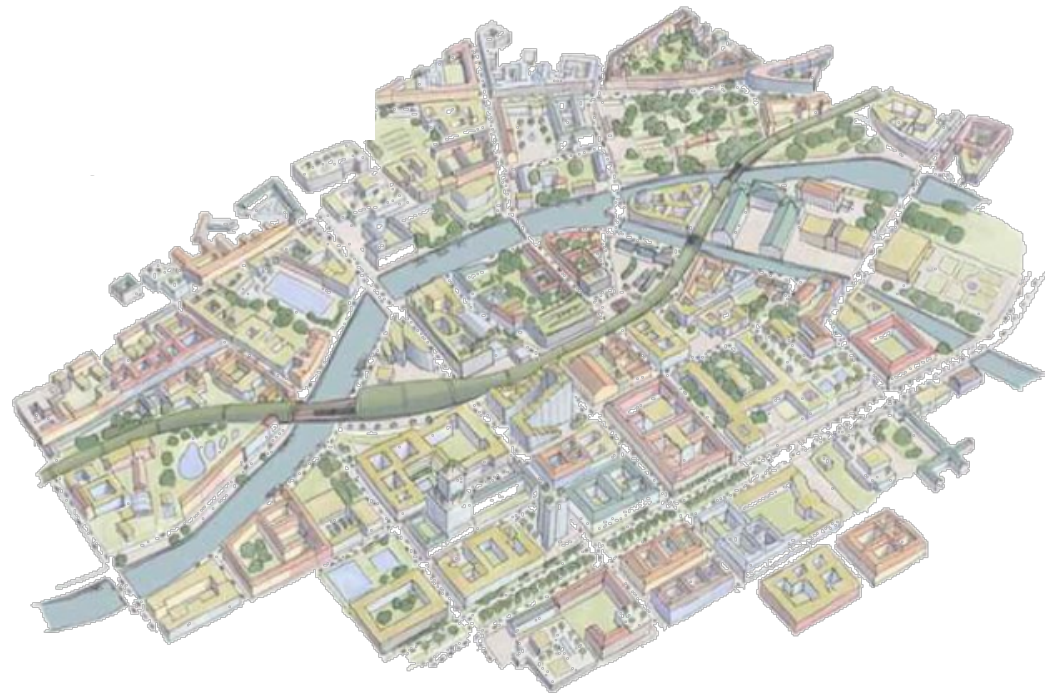
microescala



mesoescala



macroescala





Uso e
ocupação do solo

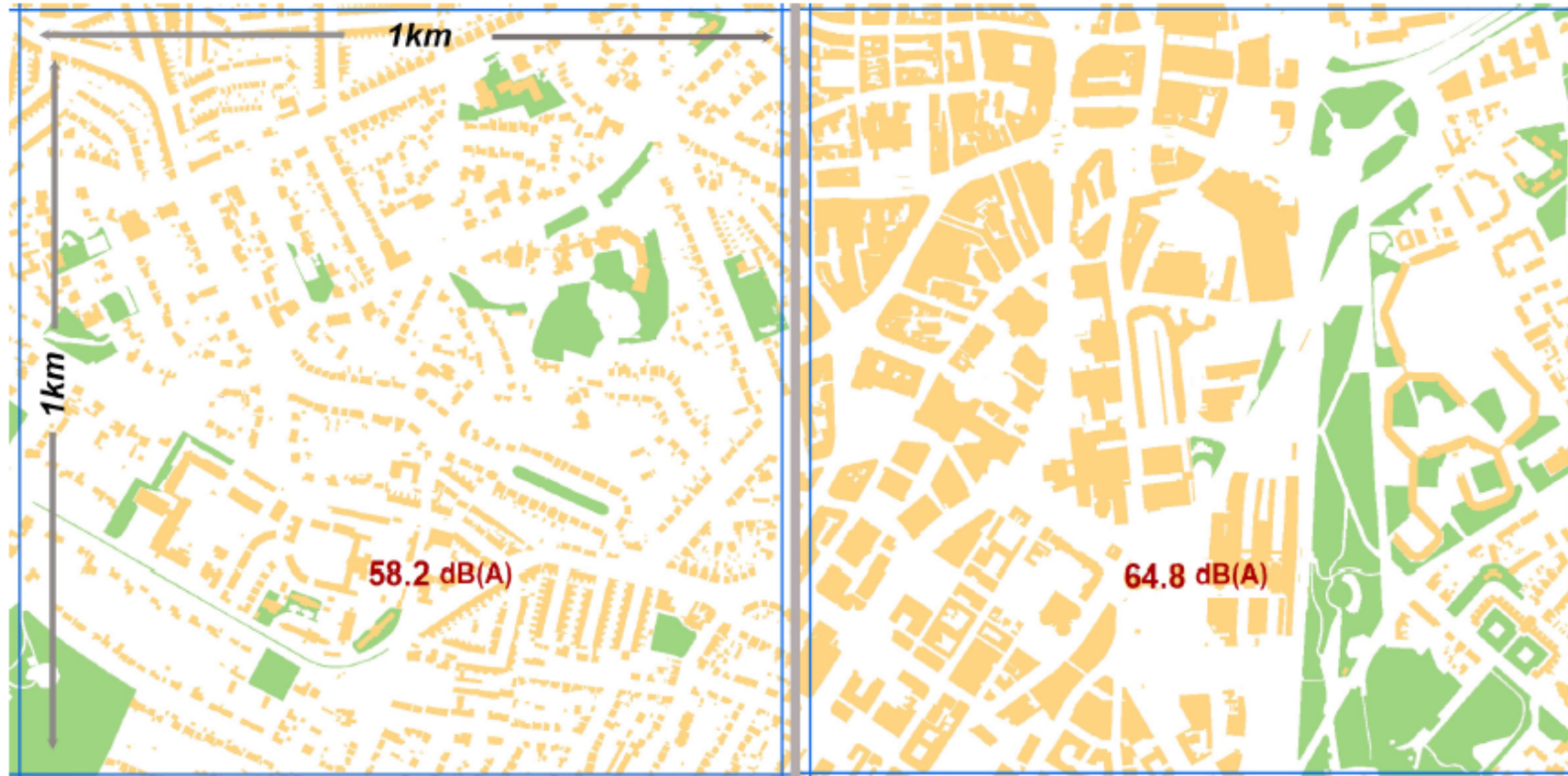
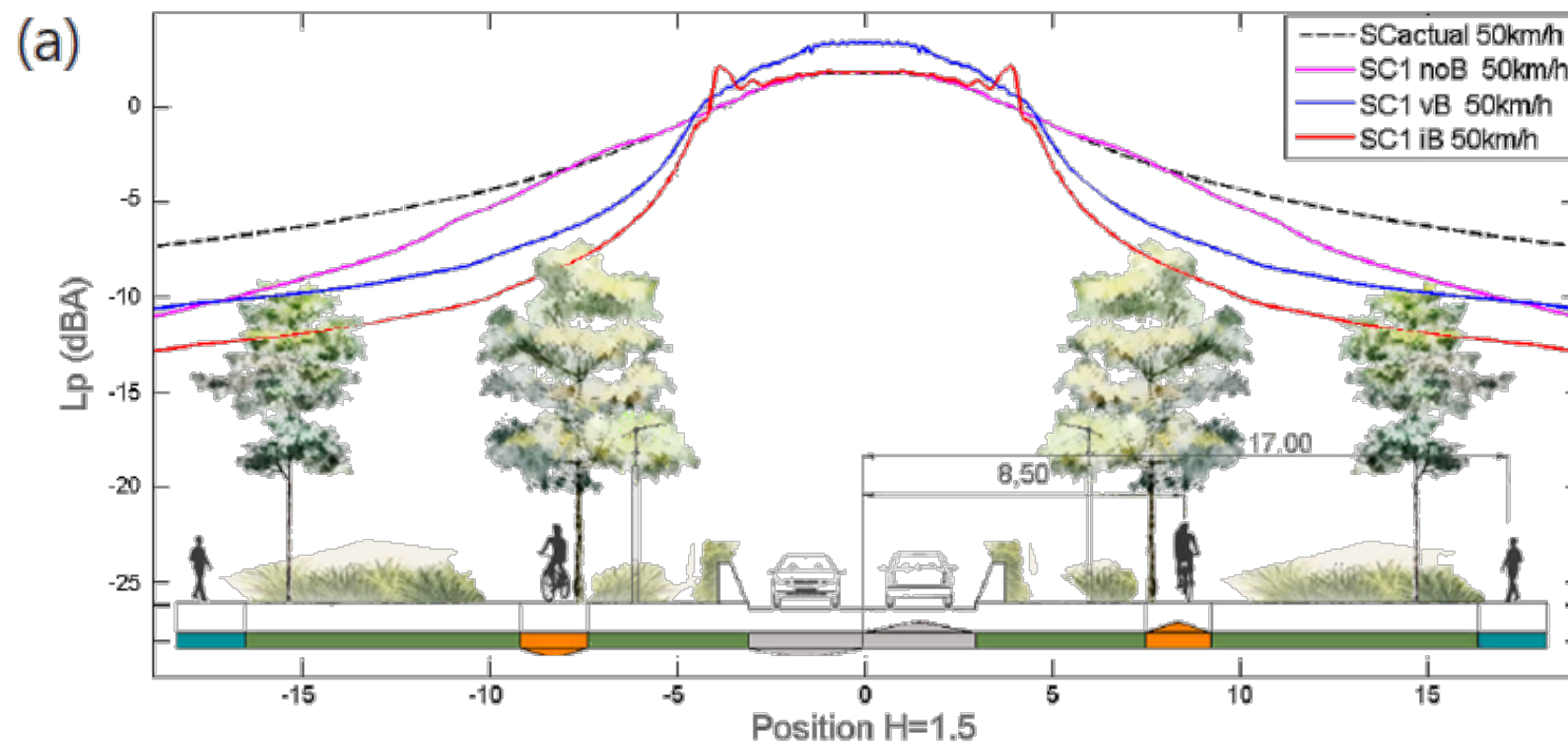
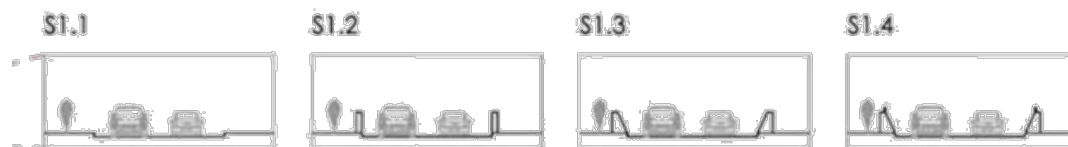


Figure 12 - (a) Case with dispersed green space pattern (left) (ANN=0.79),
(b) case with clustered green space pattern (right) (ANN=0.84).



Propagação





Gerenciamento
de tráfego



Onda verde

-3dB



Gerenciamento
de tráfego



Rotatória

-4dB



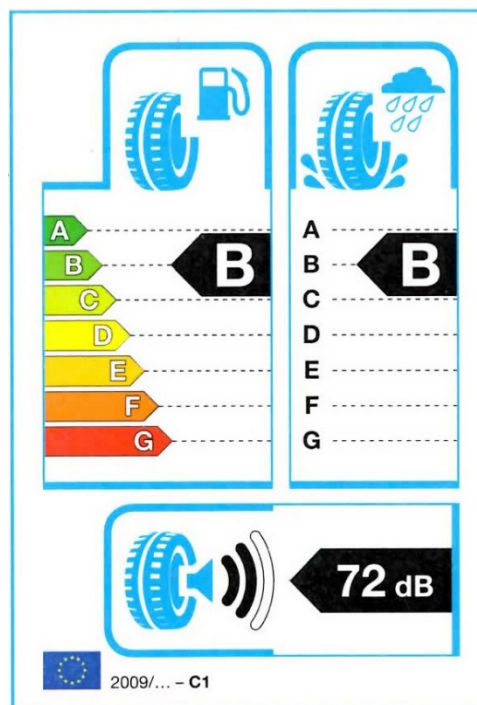
Gerenciamento
de tráfego



EU TYRE LABELLING

BUYING BETTER TYRES

BETTER TYRES ARE ENERGY EFFICIENT,
LOW NOISE AND SAFE





Conscientização,
Transporte público,
Bicicleta / a pé



Monitoramento sonoro contínuo

Monitoramento



[Passengers](#)
[Cargo](#)
[B2B](#)
[Environment](#)

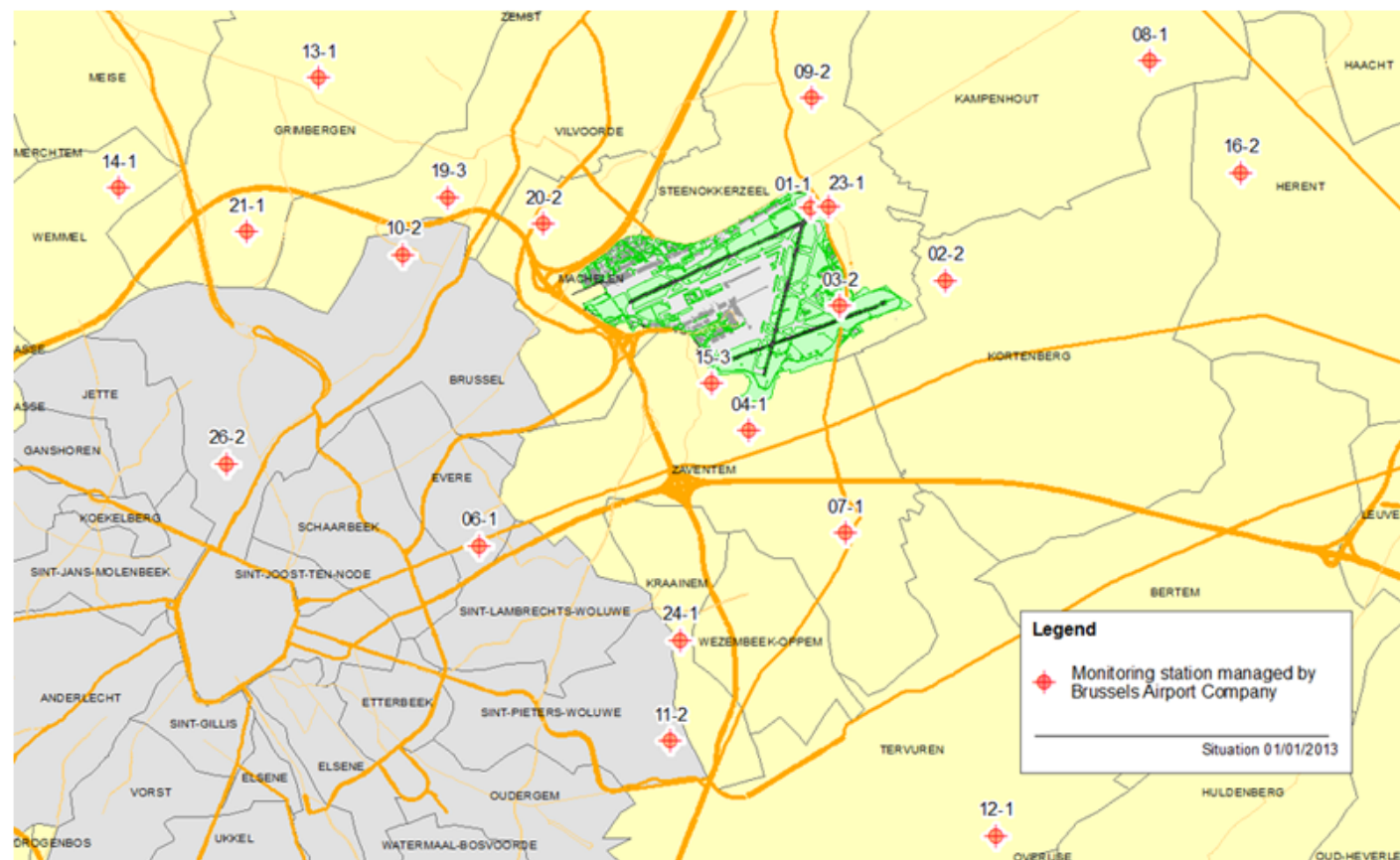
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Noise reporting

Brussels Airport manages 21 noise monitoring terminals (NMT) at and in the vicinity of the airport which constantly measure the noise as it is perceived on the ground.

The map shows the location of the various noise monitoring terminals.



Limitadores de som

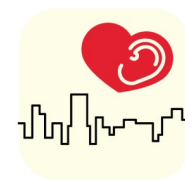


- Horários
- Limitadores de som
- Licenciamento



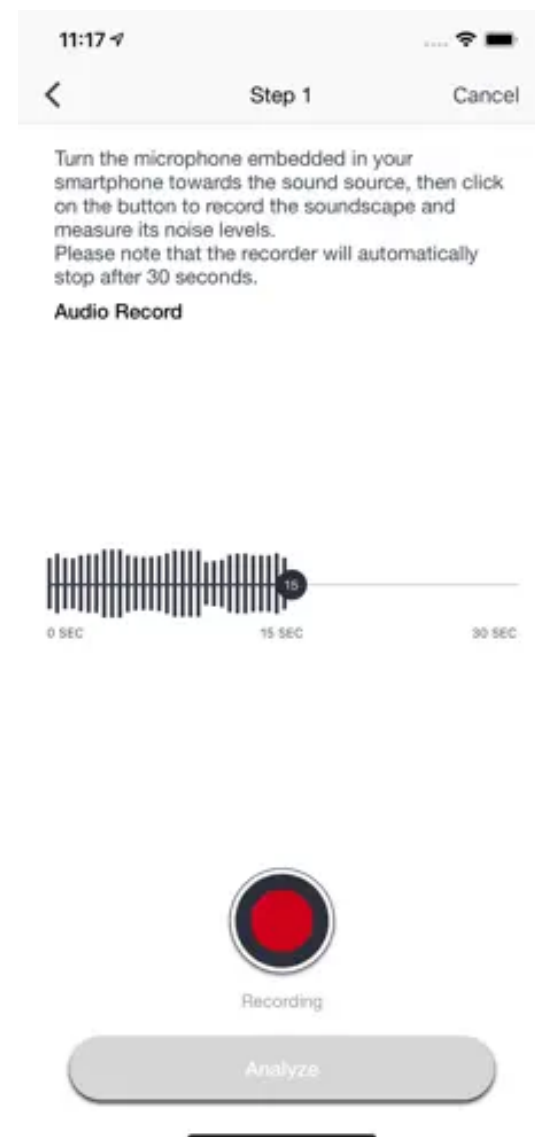
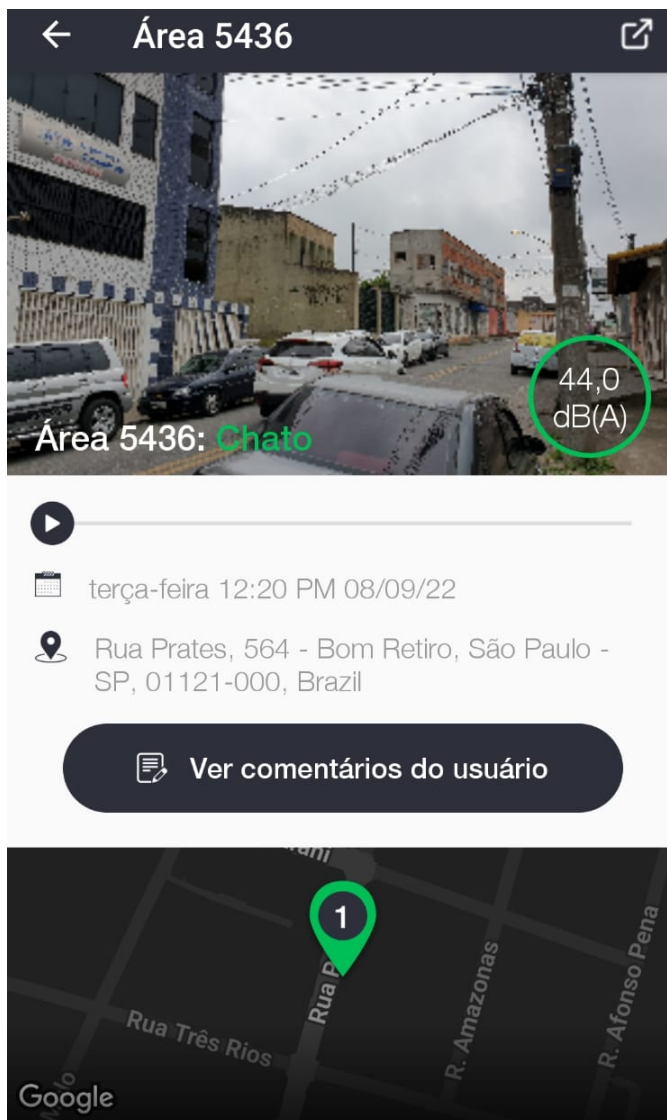
Ferramentas digitais | Smartphones

Aplicativo Hush City



Hush City!





28.set. 2019

09h30 concentração

10h00 início caminhada

Ponto de Encontro

Instituto Moreira Salles IMS

Av. Paulista, nº 2.424

Ponto final

Casa das Rosas



28

SETEMBRO

RESERVE

ESTA DATA



1º HUSH CITY SOUNDWALK











Calibration methods



Manual with a reference



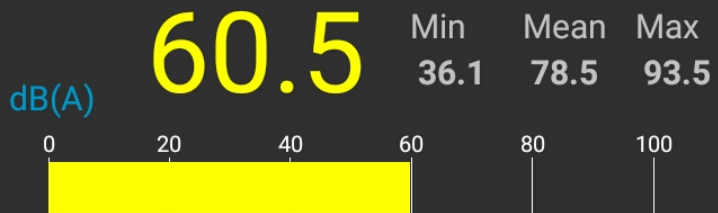
Manual with a calibrator



Auto with a calibrated smartphone



Measurement



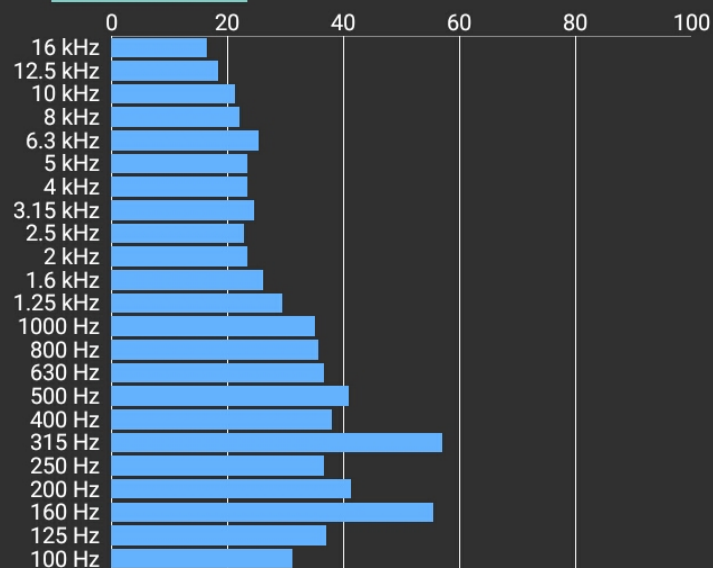
00:32

30 m

SPECTRUM

SPECTROGRAM

MAP



Description



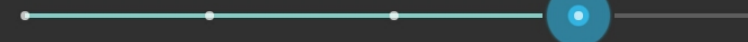
Tap here to set a description



NoiseCapture Party code

Unpleasant

Pleasant



Measurement conditions

TEST

INDOOR

RAIN

WIND

Predominant sources

VOICE

ROAD

WATER

WORKS

CHILDREN

RAIL

ANIMALS

ALARMS

FOOTSTEPS

AIR T.

VEGETATION

INDUSTRIAL

MUSIC

MARINE

DELETE

VALID