# Ambient noise measurements

Are you in the process of constructing new installations? Have you thought of the possible noise solutions so as to reduce costs in the future? Are you aware of the general laws relating to ambient noise? Do you know that there are various options available to limit your ambient noise, which also simultaneously take the environment into account? Vinçotte can act as an ideal partner to help you with these issues.

## Your tailor-made solution

Vinçotte has wide experience in conducting measurements and studies on ambient noise.
Our expertise in this field comprise a wide range of services:

- immission measurements of the ambient noise using autonomous measurement chains
- comprehensive acoustic survey as per Vlarem II (Flemish Environmental Regulations part II)
- intensity measurements for source identification
- emission measurements to determine the sound power level (pressure, intensity, vibrations)
- drawing up noise maps of companies
- determining the immision-relevant sound power level of enterprises
- creating acoustic transmission models using IMMI software
- predictions and advice on the noise impact of new installations
- investigating the implementation of the Best Available Techniques (BAT-studies)
- drafting EIA (Environmental Impact Assessments) reports for enterprises and infrastructures
- drawing up a remediation plan as per Vlarem II
- estimating the cost of noise reduction measures
- measurements and advice relating to the maximum noise level of music devices
- drawing up calculated noise maps for traffic and industry, and determining the number of people annoyed, as per the European Directives

Vinçotte has experience in the field of ambient noise. It has a team of 10 experienced specialists working in the acoustics department. We have a wide range of recognitions relating to ambient noise:

- 3 persons have recognitions from the Flemish Government as environmental experts for the discipline Sound and Vibrations (Vlarem II expert)
- 3 persons have recognitions from the Flemish Government as an MER-expert in the assessment of the environmental impact for the discipline Sound and Vibrations
- recognition as a laboratory for the discipline Sound via a Ministerial Decree of the Brussels Capital Region
- recognition from the Walloon Government via a Ministerial Decree to inspect appliances and devices in the fight to counteract noise nuisance

Due to our experience and wide range of recognitions in all 3 Regions, several bodies and authorities will accept our results, and you can regard Vinçotte Environment as a neutral and objective partner.

## Your result

You have a clear and comprehensive report regarding the impact on your surroundings of the noise generated by you, recognised by various agencies and governments. For example, this report can help you in the design phase of new installations in assessing possible noise issues, so that you can avoid costs in the future. Furthermore, by drawing up a noise propagation model based on an inventory of relevant noise sources, you will be able to compare the cost versus the environmental improvement resulting from specific measures.

## Please note

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### Legislations

The services of Vinçotte take into account the following parts of the legislation and regulation, along with the existing standards:

- Flemish Environmental Regulations concerning Nuisance Establishments (Vlarem II).
- Decision of the Brussels Capital Government in connection with counteracting noise and vibration nuisance produced by classified establishments (November 2002).
- Decree of the Walloon Government concerning the general operating conditions of establishments with an environmental licence (July 2002).
- Ministerial Decree of 17th February 2012 relating to the maximum noise level of music in establishments
- Directive 2002/49 of the European Parliament and of the Council relating dated 25th June 2002 concerning the assessment and management of ambient noise (transposed into law via Ministerial Decisions in the different regions of our country).

EMOLA method: Determination of the immission-specific sound power level, of sound sources or source areas in open air, by means of noise contours (Ministry of Flemish Community) – Department General Environmental and Nature Policy – 2000.

### Norms and Standards

- ISO 3740 – 3746 series: Determination of sound power levels using sound pressure measurement.
- ISO 9614 –1 & 2: Determination of sound power levels based on sound intensity measurements.
- ISO 9613: Attenuation of Sound during propagation outdoors.
- DIN 4150 – 2 & 3: Vibrations in buildings.
- SRM II - Dutch Standard Calculation Method for Traffic Noise.

## In which situation?

These services are available for just about everyone:

- industries
- SMEs
- hotel and catering industry
- Government Services and local authorities.
- private individuals

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