

## Brussels Commission on noise

27 May

### **Why is noise an issue and why is it important to address noise pollution?**

Environmental noise is the second biggest environmental cause of health problems after air pollution (the fine particulate matter in air), according to the World Health Organisation (WHO)<sup>1</sup>. Road transport is the main source of noise pollution with at least 20% of people living in urban areas exposed to levels considered harmful to health<sup>2</sup>. In many cities, this percentage can reach 50% of the urban population. High level of noise and prolonged exposure can cause high annoyance and sleep disturbance, causing cognitive impairment in younger people, tinnitus and increasing the risk of cardiovascular disease<sup>3</sup>.

### **What is the European Commission doing to address noise pollution?**

The main EU law on noise pollution is the [Environmental Noise Directive](#) (END) which aims to identify noise levels and act on it. It focuses on four key aspects:

- Determining percentage of people exposed to noise
- Ensuring information on noise exposure is public
- Preventing and reducing environmental noise
- Protecting those areas with good noise quality

The law does not set limit values or targets to reduce noise pollution, nor does it recommend measures to be included in the action plans. This is for national governments to decide.

The law requires EU countries to prepare and publish noise maps and noise management action plans every 5 years for:

- agglomerations (cities) with more than 100 000 inhabitants
- major roads (more than 3 million vehicles a year)
- major railways (more than 30 000 trains a year)
- major airports (more than 50 000 take-offs or landings a year, including small aircrafts and helicopters)

When developing noise management action plans, national authorities must consult the concerned public. The plans are [available here](#). The law also requires national governments to protect quiet areas in cities and the countryside from noise pollution.

While the END doesn't set individual targets for national governments to reduce noise, a recent EU level target was set to reduce by 30% by 2030 the overall number of people exposed to noise from transport. The target was included in the [Zero Pollution Action Plan](#) published in 2021.

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<sup>1</sup>

[https://environment.ec.europa.eu/topics/noise\\_en#:~:text=EU%20noise%20policy%20aims%20to,underwater%20noise%20affecting%20sea%20animals](https://environment.ec.europa.eu/topics/noise_en#:~:text=EU%20noise%20policy%20aims%20to,underwater%20noise%20affecting%20sea%20animals).

<sup>2</sup> <https://www.eea.europa.eu/en/topics/in-depth/noise>

<sup>3</sup> <https://www.who.int/tools/compendium-on-health-and-environment/environmental-noise>

## So what is required from cities exactly?

Cities are responsible for those above-mentioned noise mapping and action plan requirements. Medium and large sized cities with more than 100,000 inhabitants, as well as smaller cities where roads have more than 3 million vehicles passing through a year, must map the population exposed to high levels of noise, defined as above 55dB in the daytime, and 45dB in the nighttime. This mapping is usually done through modelling, for which the European Commission has developed a standardised calculation method. Essentially, this means calculating the number of roads, frequency and number of cars, and population to understand percentage of people exposed to high levels of noise. Not many cities have the technology to monitor noise in real time.

After mapping, which must be done every 5 years, cities need to develop a noise action plan to describe how they will manage and reduce noise pollution. This can be to address nightlife noise coming from cafes, bars and restaurants, festival and event noise, and noise from transport including roads, trams and trains, and quiet or 'calm' areas.

Cities must also protect quiet areas, but there is no European definition for what a quiet area is. Many define it as an area with a noise level below 55dB, but it is very challenging to find areas that are lower than this noise level within densely built cities. Many cities stress the need to speak then of 'calm' areas or soundscapes that are defined through other (or additional) factors. Perception can play an important role as an area with a high noise level could still be perceived as pleasant if that sound is, for example, children's laughter or nature sounds.

## Examples of city actions on noise

**Ghent on calm areas:** Ghent started work on peaceful areas in 2017 with a survey which received over 300 responses and identified more than 100 favourite places. Respondents particularly did not like transit areas or areas that were dirty. Ghent published the report with key findings but not the location of the peaceful places so as to ensure local tour guides wouldn't bring tourists to these areas. Ghent aims to protect these areas, with the green department responsible for such action. As is the case for many cities, Ghent is facing severe budget constraints so focusing on 'win-wins' i.e. combining action to address greening, noise and climate.

Ghent has recently experimented with local policies to [tackle loud vehicles](#) with the ability to impounding cars and motorbikes that are deemed too loud.

**Antwerp on connected urban sound planning:** The city of Antwerp is working to connect calm areas by focusing on win-wins; this means designing calm areas with other departments considering greening, cooling, permeability (limited concrete sealed surfaces), meeting spots for people, and inclusion. The city is working on 7 pilot projects; these are projects that already existed in city, initiated by other departments, that noise experts are adding the sound perspective to. This saves on budget and time. The pilot projects are focused on improving sound quality; how sound is perceived; raising awareness of sound; setting up learning network within the city administration; and creating guidance tools for planners. Pilots work across departments, with citizens, religious groups, experts from universities, architects, and landscape planners. The process involves putting out a tender to subcontract experts; setting up field visits and then developing a set of possible interventions.

## Lisbon on nightlife noise:

The increasing number of establishments, with the dynamism of the "Cais do Sodré" and "Bairro Alto", has increased the tourism in that area, becoming the most attractive poles for night tourism.

Between 2015 and 2019, the Municipality of Lisbon, has received about 1200 complaints about noise pollution from the establishments.

To reduce these complaints, the municipality has created instruments such as a New Regulation for opening/closing hours of the establishments, which establishes the maximum working hours of each establishment type, reducing the daily operation of some areas of the city and creating by the riverside an operating zone with unlimited opening/closing hours.

Specific operating rules have been created for establishments that operate after 11:00 pm and have live or amplified music, which must meet a series of requirements, such as: acoustic insulation and installation of a sound limiter linked to an online platform.

By the end of 2022, 377 limiters have been installed, which have led to a decrease in noise complaints.

There is a daily monitoring by the municipal police and the municipality technical services. Since the new regulation was published in 2017, there were 9230 inspections of establishments ; 498 noncompliance procedures for opening/closing hours; 237 unlimited music and/or operation with doors and windows open to the outside ; 225 temporary restrictions ; 49 Definitive restrictions.

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