

What is environmental noise?

Environmental noise is 'unwanted or harmful outdoor sound' arising from all areas of human activity. Noise is caused by many everyday activities, the most common sources of environmental noise exposure in Ireland are from the various forms of transport including road traffic, railways, and aircraft.

COMPARATIVE NOISE LEVELS (DBA)

COMMON OUTDOOR SOUND LEVELS



COMMON INDOOR SOUND LEVELS



Can long-term exposure to environmental noise be harmful?

In 2018, the World Health Organization (WHO) published the Environmental Noise Guidelines for the European Region. The guidelines set out how noise pollution in urban areas is increasing and how excessive noise, particularly from transport, is adversely affecting sleep, as well as cardiovascular and metabolic function, and is therefore having a negative impact on human health and wellbeing. According to the WHO, long-term exposure to environmental noise from road traffic, railways, aircraft and industry contributes to about 48,000 new cases of heart disease and 12,000 premature deaths every year in Europe.

In Ireland, road transport, particularly in urban areas, is the main source of transport noise. Strategic noise maps are used to predict noise exposure levels. According to the 2017 noise maps, approximately 45% of the total population living in the two urban areas of Dublin and Cork were exposed to a noise level of ≥ 55 dB L_{den} from road transport noise. For those people living outside these urban areas, the exposure levels are much lower. The WHO recommends measures to reduce average noise exposure levels produced by road traffic noise to below 53 dB L_{den} and 45 dB L_{night} ¹.

What is known about noise and health in Ireland?

The EPA has commissioned a research project called 'Noise and Health Evidence from Ireland' to find out more about the relationship between environmental noise and health/wellbeing for Ireland. The results of this 3 year project should be available by 2022. The project will combine noise modelling and health data to examine contributory relationships between noise exposure, and health and wellbeing outcomes. Find out more at; <https://www.noise-health.com/>



¹ L_{den} is the day-evening-night long-term average noise indicator. It is 'weighted' to account for extra annoyance in the evening and night-time periods. L_{night} is the night-time long-term average noise indicator and is used in the assessment of sleep disturbance.

Is there any legislation covering environmental noise in Ireland?

The European Union's (EU) Environmental Noise Directive (END; 2002/49/EC) deals with environmental noise from major transport infrastructure including roads, railways and airports (EC, 2002). The END requires EU Member States, including Ireland to:

- ▶ establish the scale of the noise problem by preparing 'strategic noise maps' for major roads, railways, airports, agglomerations and industry and
- ▶ develop action plans to reduce the level of noise where necessary and to maintain environmental noise quality where it is good.

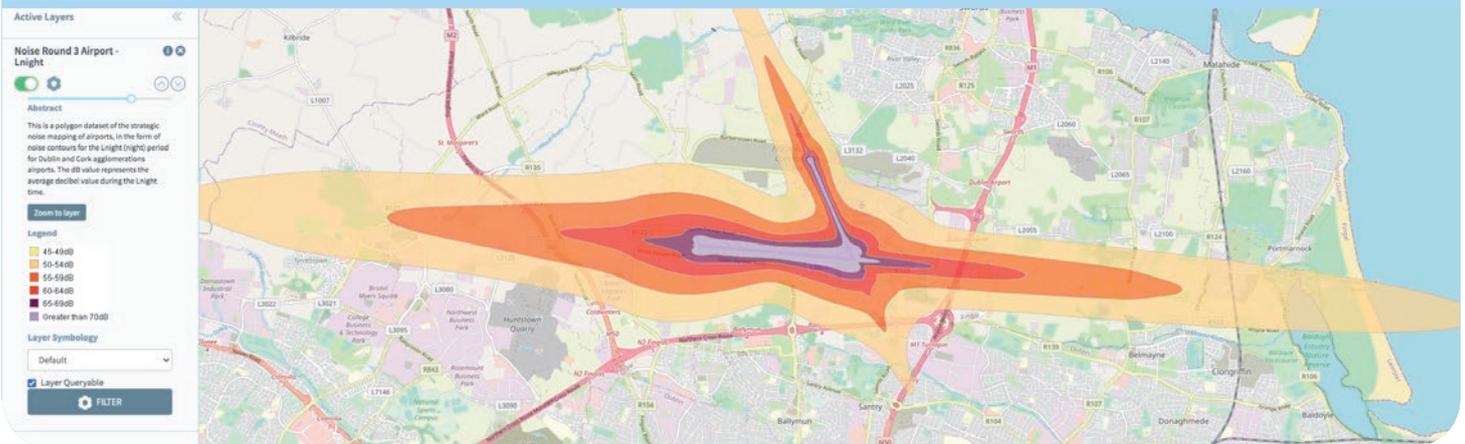
This noise legislation is implemented by the Environmental Noise Regulations 2018. Find out more at; <http://www.irishstatutebook.ie/eli/2018/si/549/made/en/print>



What is a strategic noise map?

A strategic noise map sets out the noise exposure in a given area resulting from noise sources, including major roads (>3 million vehicle movements/annum), major rail (>30,000 rail passages/annum), major airports (>50,000 air movements/annum) and major agglomerations (>100,000 inhabitants).

These maps are prepared using computer modelling techniques. All noise maps are presented in terms of two noise indicators: L_{den} and L_{night} (see above). The Strategic Noise Maps can be viewed on EPA Maps under "Environment & Wellbeing - Noise".



What is a Noise Action Plan?

Following the preparation of the noise maps, the Action Planning Authorities (APAs) are required to prepare noise action plans where the average noise exposure levels have exceeded 55 dB L_{den} and 50 dB L_{night} . These action plans are designed to manage noise issues and effects, and it involves the prevention and reduction of environmental noise. Each APA will need to identify their noise sensitive locations which will involve drawing up a short list of potential areas for action, both above the onset values for noise mitigation measures, and below the level for preservation, to help identify Quiet Areas. Find out more at; <http://www.epa.ie/pubs/advice/noisemapping/>

POLICY
HEALTH **IRISH** **MAPPING**
HARM **DATA** **RECOMMENDATIONS** **TRAFFIC**
NOISE **LOUD** **LIFE**
DISTURBANCE
MACHINES **ENVIRONMENTAL**
REDUCE **HIGH**
BARRIERS **LEVEL** **CAUSE** **RISK**
DUBLIN **SOUND** **EFFECT**

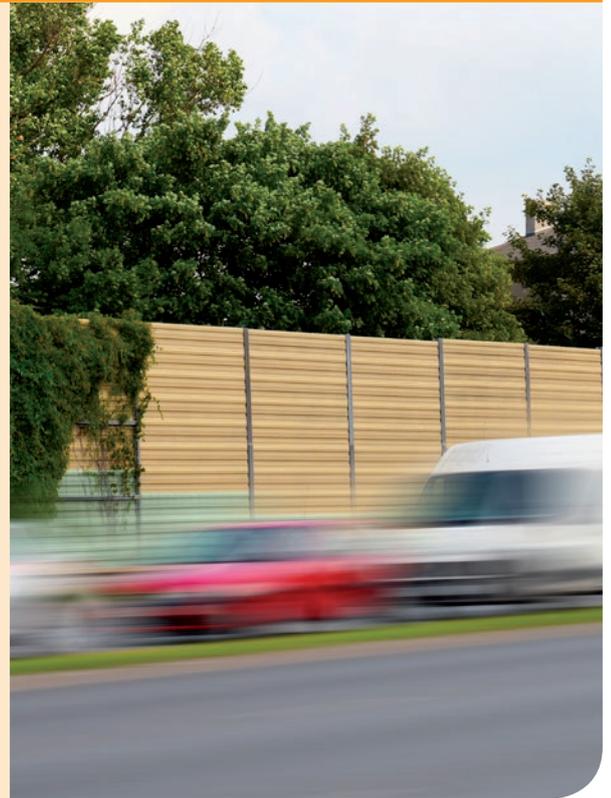
Is environmental noise considered in the planning process?

The National Planning Framework for Ireland Project Ireland 2040 contains a specific policy objective highlighting the need for future planning guidance to consider measures to reduce the impact of environmental noise.

Policy Objective 65 requires the following:

Promote the pro-active management of noise where it is likely to have significant adverse impacts on health and quality of life and support the aims of the Environmental Noise Regulations through national planning guidance and Noise Action Plans.

For larger urban areas, the extra value placed on 'quiet areas' is also highlighted as a key priority. There is also a need for national noise planning guidance for local authorities, to ensure better consistency in the assessment and conditioning of noise issues in planning applications across the country. Planning guidance is of utmost importance in mitigating the current and future health impacts of noise pollution and helping to promote the government policy of improved building standards and 'ensuring that the right development takes place in the right locations'. Find out more at; <https://npl.ie/>



How is noise from wind farm developments regulated?

The Wind Energy Development Guidelines (2006) sets out the planning framework under which wind farms are developed. These Guidelines are separate from the END regulations mentioned above. A review of the 2006 Guidelines has been underway for some time and draft Revised Wind Energy Development Guidelines have been made available for public consultation. The draft guidelines include new guidance that aims to take account of technological advancements for the purpose of protecting residents and communities living beside new wind energy developments. The revised Wind Energy Development Guidelines are expected to be finalised in 2021.

Find out more at; https://www.housing.gov.ie/sites/default/files/public-consultation/files/draft_revised_wind_energy_development_guidelines_december_2019.pdf



How can I make a noise complaint?



In Ireland, noise complaints normally fall under four main categories; entertainment, domestic/ neighbourhood noise, industrial/commercial activities and transport related noise. Local Authorities would typically record around 1,500 – 2,000 noise complaints each year. [A Guide to the Noise Regulations](#) set out the steps that you can take if you experience nuisance caused by noise.

Find out more about making a noise nuisance complaint at; <https://www.gov.ie/en/service/make-a-noise-nuisance-complaint/>