
Prime Minister

Minister for the Environment, Sustainable Development and
Climate Change

Chairperson, Environment and Resources Authority

L.N. XX of 2018

**ENVIRONMENT PROTECTION ACT
(CAP. 549)**

Assessment and Management of Environment Noise (Amendment) Regulations, 2018

By virtue of the powers conferred by articles 54 and 55 of the Environment Protection Act, the Minister for Environment, Sustainable Development and Climate Change, in consultation with the Environment and Resources Authority, has made the following regulations :-

Citation

- SL 549.37
1. The title of these regulations is the Assessment and Management of Environment Noise (Amendment) Regulations, 2018 and these regulations shall be read and construed as one with the Assessment and Management of Environment Noise Regulations, hereinafter referred to as "the principal regulations".

General amendment of the principal regulations

2. In the principal regulations, the words "Annex I of Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment

and management of environmental noise” shall be substituted by the words “Schedule I of these regulations” wherever they occur.

Amends regulation 3 of the principal regulations

3. Regulation 3 of the principal regulations shall be amended as follows:

(a) in regulation 3 thereof there shall be added a new sub-regulation (3) as follows:

Scope

(3) These regulations bring into effect the provisions of Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise as amended by Commission Directive (EU) 2015/996 of 19 May 2015 establishing common noise assessment methods, according to Directive 2002/49/EC of the European Parliament and of the Council, as from 31 December 2018.

Amends regulation 7 of the principal regulations

4. Regulation 7 of the principal regulations shall be amended as follows:

(a) in sub-regulation (1), the words “Annex II of Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise” shall be substituted by the words “Schedule II of these regulations”;

(b) in sub-regulation (3), the words “Annex III of Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise” shall be substituted by the words “Schedule III of these regulations”;

(c) sub-regulation (2) thereof shall be deleted;

(d) sub-regulation (3) thereof shall be renumbered as (2).

Amends regulation 8 of the principal regulations

5. Regulation 8 of the principal regulations shall be amended as follows:

(a) in sub-regulation (3), the words “Annex IV of Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise” shall be substituted by the words “Schedule IV of these regulations”.

Amends regulation 9 of the principal regulations

6. Regulation 9 of the principal regulations shall be amended as follows:

(a) in sub-regulation (3), the words “Annex V of Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise” shall be substituted by the words “Schedule V of these regulations”.

Amends regulation 10 of the principal regulations

7. Regulation 10 of the principal regulations shall be amended as follows:

(a) in sub-regulation (1), the words “Annexes IV and V of Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise” shall be substituted by the words “Schedules IV and V of these regulations”.

Amends regulation 11 of the principal regulations

8. Regulation 11 of the principal regulations shall be replaced by the following:

“In order to satisfy its reporting requirements under Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise, the competent authority shall submit to the European Commission the information in Schedule VI, together with the strategic noise maps referred to in regulation 8 and the action plans referred to in regulation 9.”

Addition of new Schedules

9. Immediately after regulation 15, the following new Schedules shall be added:

“SCHEDULE I

NOISE INDICATORS REFERRED TO IN REGULATION 6

1. Definition of the day-evening-night level L_{den}

The day-evening-night level L_{den} in decibels (dB) is defined by the following formula:

$$L_{den} = 10 \log_{10} \frac{1}{24} \left[\left(12 \times 10^{\frac{L_{day}}{10}} \right) + \left(4 \times 10^{\frac{L_{evening}+5}{10}} \right) + \left(8 \times 10^{\frac{L_{night}+10}{10}} \right) \right]$$

in which:

- L_{day} is the A-weighted long-term average sound level as defined in ISO 1996-2: 1987, determined over all the day periods of a year,
- $L_{evening}$ is the A-weighted long-term average sound level as defined in ISO 1996-2: 1987, determined over all the evening periods of a year,
- L_{night} is the A-weighted long-term average sound level as defined in ISO 1996-2: 1987, determined over all the night periods of a year;

in which:

- the day is 12 hours, the evening four hours and the night eight hours. The competent authority may shorten the evening period by one or two hours and the day and/or night period may be accordingly lengthened, provided that this choice is the same for all the sources and provided further that any systematic difference from the default option shall be reported to the European Commission,
- the start of the day (and consequently the start of the evening and the start of the night) shall be appropriately chosen by the competent authority (this choice shall be the same for noise from all sources); the default values are 07.00 to 19.00, 19.00 to 23.00 and 23.00 to 07.00 local time,
- a year is a relevant year as regards the emission of sound and an average year as regards the meteorological circumstances;

and in which:

- the incident sound is considered, which means that no account is taken of the sound that is reflected at the façade of the dwelling under consideration (as a general rule, this implies a 3 dB correction in case of measurement).

The height of the L_{den} assessment point depends on the application:

- in the case of computation for the purpose of strategic noise mapping in relation to noise exposure in and near buildings, the assessment points must be $4,0 \pm 0,2$ m (3,8 to 4,2 m) above the ground and at the most exposed façade; for this purpose, the most exposed façade will be the external wall facing onto and nearest to the specific noise source; for other purposes other choices may be made,
- in the case of measurement for the purpose of strategic noise mapping in relation to noise exposure in and near buildings, other heights may be chosen, but they must never be less than 1,5 m above the ground, and results should be corrected in accordance with an equivalent height of 4 m,
- for other purposes such as acoustical planning and noise zoning other heights may be chosen, but they must never be less than 1,5 m above the ground, for example for:
 - rural areas with one-storey houses,
 - the design of local measures meant to reduce the noise impact on specific dwellings,
 - the detailed noise mapping of a limited area, showing the noise exposure of individual dwellings.

2. Definition of the night-time noise indicator

The night-time noise indicator L_{night} is the A-weighted long-term average sound level as defined in ISO 1996-2: 1987, determined over all the night periods of a year;

in which:

- the night is eight hours as defined in paragraph 1,
- a year is a relevant year as regards the emission of sound and an average year as regards the meteorological circumstances, as defined in paragraph 1,
- the incident sound is considered, as laid down in paragraph 1,
- the assessment point is the same as for L_{den} .

3. Supplementary noise indicators

In some cases, in addition to L_{den} and L_{night} , and where appropriate L_{day} and $L_{evening}$, it may be advantageous to use special noise indicators and related limit values. Some examples are given below:

- the noise source under consideration operates only for a small proportion of the time (for example, less than 20 % of the time over the total of the day periods in a year, the total of the evening periods in a year, or the total of the night periods in a year),
- the average number of noise events in one or more of the periods is very low (for example, less than one noise event an hour; a noise event could be defined as a noise that lasts less than five minutes; examples are the noise from a passing train or a passing aircraft),
- the low-frequency content of the noise is strong,
- L_{Amax} , or SEL (sound exposure level) for night period protection in the case of noise peaks,
- extra protection at the weekend or a specific part of the year,
- extra protection of the day period,
- extra protection of the evening period,
- a combination of noises from different sources,
- quiet areas in open country,
- the noise contains strong tonal components,
- the noise has an impulsive character.

SCHEDULE II

ASSESSMENT METHODS FOR THE NOISE INDICATORS REFERRED TO IN SUB-REGULATION 1 OF REGULATION 7

See Annex to Commission Directive (EU) 2015/996 of 19 May 2015 establishing common noise assessment methods according to Directive 2002/49/EC of the European Parliament and of the Council.

SCHEDULE III

ASSESSMENT METHODS FOR HARMFUL EFFECTS REFERRED TO IN SUB-REGULATION 3 OF REGULATION 7

Dose-effect relations should be used to assess the effect of noise on populations. The dose-effect relations introduced by future revisions of this Schedule carried out in accordance with the regulatory procedure with scrutiny referred to in Article 13(3) of Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to assessment and management of environmental noise, will concern in particular:

- the relation between annoyance and L_{den} for road, rail and air traffic noise, and for industrial noise,
- the relation between sleep disturbance and L_{night} for road, rail and air traffic noise, and for industrial noise.

If necessary, specific dose-effect relations could be presented for:

- dwellings with special insulation against noise as defined in Schedule VI,
- dwellings with a quiet façade as defined in Schedule VI,
- different climates/different cultures,
- vulnerable groups of the population,
- tonal industrial noise,
- impulsive industrial noise and other special cases.

SCHEDULE IV

MINIMUM REQUIREMENTS FOR STRATEGIC NOISE MAPPING REFERRED TO IN SUB-REGULATION 3 OF REGULATION 8

1. A strategic noise map is the presentation of data on one of the following aspects:
 - an existing, a previous or a predicted noise situation in terms of a noise indicator,
 - the exceeding of a limit value,
 - the estimated number of dwellings, schools and hospitals in a certain area that are exposed to specific values of a noise indicator,
 - the estimated number of people located in an area exposed to noise.
2. Strategic noise maps may be presented to the public as:
 - graphical plots,
 - numerical data in tables,
 - numerical data in electronic form.
3. Strategic noise maps for agglomerations shall put a special emphasis on the noise emitted by:
 - road traffic,
 - rail traffic,
 - airports,
 - industrial activity sites, including ports.
4. Strategic noise mapping will be used for the following purposes:
 - compliance with Malta's reporting obligations under Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to assessment and management of environmental noise,
 - a source of information for citizens in accordance with regulation 10,
 - a basis for action plans in accordance with regulation 9.

Each of those applications requires a different type of strategic noise map.

5. Minimum requirements for the strategic noise maps concerning the data to be sent to the European Commission are set out in paragraphs 1.5, 1.6, 2.5, 2.6 and 2.7 of Schedule VI.
6. For the purposes of informing the citizen in accordance with regulation 10 and the development of action plans in accordance with regulation 9, additional and more detailed information must be given, such as:
 - a graphical presentation,
 - maps disclosing the exceeding of a limit value,

- difference maps, in which the existing situation is compared with various possible future situations,
- maps showing the value of a noise indicator at a height other than 4 m where appropriate.

The competent authority may lay down rules on the types and formats of these noise maps.

7. Strategic noise maps for local or national application must be made for an assessment height of 4 m and the 5 dB ranges of L_{den} and L_{night} as defined in Schedule VI.
8. For agglomerations separate strategic noise maps must be made for road-traffic noise, rail-traffic noise, aircraft noise and industrial noise. Maps for other sources may be added.

SCHEDULE V

MINIMUM REQUIREMENTS FOR ACTION PLANS REFERRED TO IN REGULATION 9

1. An action plan must at least include the following elements:
 - a description of the agglomeration, the major roads, the major railways or major airports and other noise sources taken into account,
 - the authority responsible,
 - the legal context,
 - any limit values in place,
 - a summary of the results of the noise mapping,
 - an evaluation of the estimated number of people exposed to noise, identification of problems and situations that need to be improved,
 - a record of the public consultations organised in accordance with regulation 9(6),
 - any noise-reduction measures already in force and any projects in preparation,
 - actions which the competent authority intends to take in the next five years, including any measures to preserve quiet areas,
 - long-term strategy,
 - financial information (if available): budgets, cost-effectiveness assessment, cost-benefit assessment,
 - provisions envisaged for evaluating the implementation and the results of the action plan.
2. The actions which the competent authority intends to take in the fields within its competence may for example include:
 - traffic planning,
 - land-use planning,
 - technical measures at noise sources,
 - selection of quieter sources,
 - reduction of sound transmission,
 - regulatory or economic measures or incentives.
3. Each action plan should contain estimates in terms of the reduction of the number of people affected (annoyed, sleep disturbed, or other).

SCHEDULE VI

ADDITIONAL DATA REFERRED TO IN REGULATION 11

The data referred to in regulation 11, to be sent to the European Commission, are as follows:

1. For agglomerations

1.1. A concise description of the agglomeration: location, size, number of inhabitants.

1.2. The responsible authority.

1.3. Noise-control programmes that have been carried out in the past and noise-measures in place.

1.4. The computation or measurement methods that have been used.

1.5. The estimated number of people (in hundreds) living in dwellings that are exposed to each of the following bands of values of L_{den} in dB 4 m above the ground on the most exposed façade: 55-59, 60-64, 65-69, 70-74, > 75, separately for noise from road, rail and air traffic, and from industrial sources. The figures must be rounded to the nearest hundred (e.g. 5200 = between 5150 and 5249; 100 = between 50 and 149; 0 = less than 50).

In addition it should be stated, where appropriate and where such information is available, how many persons in the above categories live in dwellings that have:

- special insulation against the noise in question, meaning special insulation of a building against one or more types of environmental noise, combined with such ventilation or air conditioning facilities that high values of insulation against environmental noise can be maintained,
- a quiet façade, meaning the façade of a dwelling at which the value of L_{den} four metres above the ground and two metres in front of the façade, for the noise emitted from a specific source, is more than 20 dB lower than at the façade having the highest value of L_{den} .

An indication should also be given on how major roads, major railways and major airports as defined in regulation 4 contribute to the above.

1.6. The estimated total number of people (in hundreds) living in dwellings that are exposed to each of the following bands of values of L_{night} in dB 4 m above the ground on the most exposed façade: 50-54, 55-59, 60-64, 65-69, > 70, separately for road, rail and air traffic and for industrial sources.

In addition it should be stated, where appropriate and where such information is available, how many persons in the above categories live in dwellings that have:

- special insulation against the noise in question, as defined in paragraph 1.5,
- a quiet façade, as defined in paragraph 1.5.

It must also be indicated how major roads, major railways and major airports contribute to the above.

1.7. In case of graphical presentation, strategic maps must at least show the 60, 65, 70 and 75 dB contours.

1.8. A summary of the action plan covering all the important aspects referred to in Schedule V, not exceeding ten pages in length.

2. For major roads, major railways and major airports

2.1. A general description of the roads, railways or airports: location, size, and data on the traffic.

2.2. A characterisation of their surroundings: agglomerations, villages, countryside or otherwise, information on land use, other major noise sources.

2.3. Noise-control programmes that have been carried out in the past and noise-measures in place.

2.4. The computation or measurement methods that have been used.

2.5. The estimated total number of people (in hundreds) living outside agglomerations in dwellings that are exposed to each of the following bands of values of L_{den} in dB 4 m above the ground and on the most exposed façade: 55-59, 60-64, 65-69, 70-74, > 75.

In addition it should be stated, where appropriate and where such information is available, how many persons in the above categories live in dwellings that have:

- special insulation against the noise in question, as defined in paragraph 1.5,
- a quiet façade, as defined in paragraph 1.5.

2.6. The estimated total number of people (in hundreds) living outside agglomerations in dwellings that are exposed to each of the following bands of values of L_{night} in dB 4 m above the ground and on the most exposed façade: 50-54, 55-59, 60-64, 65-69, > 70.

In addition it should be stated, where appropriate and where such information is available, how many persons in the above categories live in dwellings that have:

- special insulation against the noise in question, as defined in paragraph 1.5,
- a quiet façade, as defined in paragraph 1.5.

2.7. The total area (in km^2) exposed to values of L_{den} higher than 55, 65 and 75 dB respectively. The estimated total number of dwellings (in hundreds) and the estimated total number of people (in hundreds) living in each of these areas must also be given. Those figures must include agglomerations.

The 55 and 65 dB contours must also be shown on one or more maps that give information on the location of villages, towns and agglomerations within those contours.

2.8. A summary of the action plan covering all the important aspects referred to in Schedule V, not exceeding ten pages in length.

3. Guidelines

The European Commission may develop guidelines to provide further guidance on the above provision of information, in accordance with Article 13(2) of Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to assessment and management of environmental noise.