

SUBSIDIARY LEGISLATION 549.37**ASSESSMENT AND MANAGEMENT OF
ENVIRONMENT NOISE REGULATIONS**

23rd April, 2004

LEGAL NOTICE 193 of 2004, as amended by Legal Notices 426 of 2007, 366 of 2018 and 35 of 2022.

1. The title of these regulations is the Assessment and Management of Environment Noise Regulations. Citation.

2. (1) The aim of these regulations is to define a common approach intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to the exposure to environmental noise. To that end the following actions shall be implemented progressively: Objectives.

- (a) the determination of exposure to environmental noise, through noise mapping, by methods of assessment common to the Agreement States;
- (b) ensuring that information on environmental noise and its effects are made available to the public;
- (c) the adoption of action plans by the Agreement States, based upon noise-mapping results, with a view to preventing and reducing environmental noise where necessary and particularly where exposure levels can induce harmful effects on human health and preserving environmental noise quality where it is good.

(2) These regulations shall also aim at providing a basis for developing measures to reduce noise emitted by the major sources, in particular road and rail vehicles and infrastructure, aircraft, outdoor and industrial equipment and mobile machinery.

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, Commission Directive (EU) 2020/367 of 4 March 2020 and Commission Delegated Directive (EU) 2021/1226 of 21 December 2020.

Scope.
Amended by:
L.N. 35 of 2022.

4. For the purposes of these regulations:

Definitions.

"acoustical planning" means controlling future noise by planned measures, such as land-use planning, systems engineering for traffic, traffic planning, abatement by sound-insulation measures and noise control of sources;

"action plans" means plans designed to manage noise issues and effects, including noise reduction if necessary;

"agglomeration" means part of a territory, delimited by the competent authority having a population in excess of 100,000 persons and a population density such that the competent authority

considers it to be an urbanised area;

"Agreement States" means an agreement, to which Malta is a party, entered into by a group of states reciprocally granting to citizens of such states or their dependants the right to enter, remain and reside in and leave the territory of such state, to move freely within such states for such period as may be established in the agreement and to work or establish provide or receive services therein; and "Agreement State" and "citizen of an Agreement State" shall be construed accordingly; and where a state is a party to such an Agreement subject to modifications and adaptations, a citizen of an Agreement State shall be subject to such modifications or adaptations as may be prescribed;

"annoyance" means the degree of community noise annoyance as determined by means of field surveys;

"assessment" means any method used to calculate, predict, estimate or measure the value of a noise indicator or its related harmful effects;

S.L. 549.19 "competent authority" means the Environment and Resources Authority as prescribed by the Nomination of the Competent Authority Order, and such other body or person as the Minister responsible for the environment may by order in the Gazette prescribe and different bodies or persons may by designated as the competent authority for different provisions and different purposes of these regulations;

"dose-effect relation" means the relationship between the value of a noise indicator and a harmful effect;

S.L. 549.77 "environmental noise" means unwanted or harmful outdoor sound created by human activities, including noise emitted by means of transport, road traffic, rail traffic, air traffic, and from sites of industrial activity such as those defined in Annex I of the Integrated Pollution Prevention and Control Regulations;

"harmful effects" means negative effects on human health;

"Lday Day-noise indicator" means the noise indicator for annoyance during the day period, as further defined in 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;

"Lden Day-evening-night noise indicator" means the noise indicator for overall annoyance, as further defined in First Schedule;

"Levening evening-noise indicator" means the noise indicator for annoyance during the evening period, as further defined in First Schedule;

"Limit value" means a value of Lden or Lnight, and where appropriate Lday and Levening, as determined by the competent authority, the exceeding of which causes the competent authority to consider or enforce mitigation measures; limit values may be different for different types of noise (road, rail, air-traffic noise, industrial noise, etc), different surroundings and different noise

sensitiveness of the populations; they may also be different for existing situations and for new situations (where there is a change in the situation regarding the noise source or the use of the surroundings);

"Night night-time noise indicator" means the noise indicator for sleep disturbance, as further defined in First Schedule;

"major airport" means a civil airport, designated by the competent authority, which has more than 50 000 movements per year (a movement being a take-off or a landing), excluding those purely for training purposes on light aircraft;

"major railway" means a railway, designated by the competent authority which has more than 30,000 train passages per year;

"major road" means a regional, national or international road, designated by the competent authority which has more than three million vehicle passages a year;

"noise indicator" means a physical scale for the description of environmental noise, which has a relationship with a harmful effect;

"noise mapping" means the presentation of data on an existing or predicted noise situation in terms of a noise indicator, indicating breaches of any relevant limit value in force, the number of people affected in a certain area, or the number of dwellings exposed to certain values of a noise indicator in a certain area;

"the public" means one or more natural or legal persons and, in accordance with national legislation or practice, their associations, organisations or groups;

"quiet area in an agglomeration" means an area, delimited by the competent authority, for instance which is not exposed to a value of L_{den} or of another appropriate noise indicator greater than a certain value set by the competent authority from any noise source;

"quiet area in open country" means an area, delimited by the competent authority, that is undisturbed by noise from traffic, industry or recreational activities;

"strategic noise map" means a map designed for the global assessment of noise exposure in a given area due to different noise sources or for overall predictions for such an area.

5. (1) The competent authority shall:

- (a) make and, where relevant, approve noise maps and action plans for agglomerations, major roads, major railways and major airports;
- (b) collect noise maps and action plans.

Implementation and responsibilities.

(2) The competent authority shall make the information referred to in sub-regulation (1) available to the public.

6. (1) The competent authority shall apply the noise indicators L_{den} and L_{night} as referred to in First Schedule for the preparation and revision of strategic noise mapping in accordance with regulation 8:

Noise indicators and their application.

Provided that until the use of common assessment methods for the determination of L_{den} and L_{night} is made obligatory, existing national noise indicators and related data may be used by the competent authority for this purpose and should be converted into the indicators mentioned above as long as this data is not more than three years old.

(2) The competent authority may use supplementary noise indicators for special cases such as those listed in paragraph 3 of First Schedule.

(3) For acoustical planning and noise zoning, the competent authority may use other noise indicators than L_{den} and L_{night} .

Assessment
methods.
Amended by:
L.N. 366 of 2018.

7. (1) The values of L_{den} and L_{night} shall be determined by means of the assessment methods in the Second Schedule and upon other methods laid down in any other regulations.

(2) Harmful effects may be assessed by means of the dose-effect relations referred to in the Third Schedule.

Strategic noise
mapping.
Amended by:
L.N. 366 of 2018.

8. (1) The competent authority shall ensure that no later than the 30th June, 2007 strategic noise maps showing the situation in the preceding calendar year have been made for all agglomerations with more than 250,000 inhabitants and for all major roads which have more than six million vehicle passages a year, major railways which have more than 60,000 train passages per year and major airports within their territories.

(2) The competent authority shall adopt the measures necessary to ensure that no later than the 30th June, 2012 and every five years thereafter, strategic noise maps showing the situation in the preceding calendar year have been made for all agglomerations and for all major roads and major railways within their territories.

(3) The strategic noise maps shall satisfy the minimum requirements laid down in the Fourth Schedule.

(4) Neighbouring Agreement States shall cooperate on strategic noise mapping near borders.

(5) The strategic noise maps shall be reviewed, and revised if necessary, at least every five years after the date of their preparation.

Action plans.
Amended by:
L.N. 366 of 2018.

9. (1) Not later than the 18th July, 2008 the competent authority has to draw up action plans designed to manage, within its territories, noise issues and effects, including noise reduction if necessary for:

- (a) places near the major roads which have more than six million vehicle passages a year, major railways which have more than 60,000 train passages per year and major airports;
- (b) agglomerations with more than 250,000 inhabitants. Such plans shall also aim to protect quiet areas against an increase in noise.

The measures within the plans are at the discretion of the

competent authority, but should notably address priorities which may be identified by exceeding of any relevant limit value or by other criteria chosen by the competent authority and apply in particular to the most important areas as established by strategic noise mapping.

(2) Not later than the 18th July, 2013, the competent authority has to draw up action plans notably to address priorities which may be identified by the exceeding of any relevant limit value or by other criteria chosen by the competent authority for the agglomerations and for the major roads as well as the major railways within their territories.

(3) The action plans shall meet the minimum requirements of the Fifth Schedule.

(4) The action plans shall be reviewed, and revised if necessary, when a major development occurs affecting the existing noise situation, and at least every five years after the date of their approval.

(5) Neighbouring Agreement States shall cooperate on the action plans for border regions.

(6) The competent authority shall ensure that the public is consulted about proposals for action plans, given early and effective opportunities to participate in the preparation and review of the action plans that the results of that participation are taken into account and that the public is informed on the decisions taken. Reasonable time-frames shall be provided allowing sufficient time for each state of public participation.

10. (1) The competent authority shall ensure that the strategic noise maps they have made, and where appropriate adopted, and the action plans they have drawn up are made available and disseminated to the public in accordance with the Freedom of Access to Information on the Environment Regulations, and in conformity with the Fourth and Fifth Schedules, including by means of available information technologies.

Information to the public.
Amended by:
L.N. 366 of 2018.

S.L. 549.39

(2) This information shall be clear, comprehensible and accessible. A summary setting out the most important points shall be provided.

11. 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 the Sixth Schedule, together with the strategic noise maps referred to in regulation 8 and the action plans referred to in regulation 9.

Reporting Requirement.
Substituted by:
L.N. 366 of 2018.

12. Any person shall be guilty of an offence under these regulations if:

Offences under these regulations.
Renumbered by:
L.N. 366 of 2018.

- (a) he fails to comply with any provision of these regulations or fails to comply with permit conditions or with any order lawfully given in terms of any provision of these regulations;

- (b) he contravenes any restriction, prohibitions or requirement imposed by or under these regulations; or
- (c) he acts in contravention of any of the provisions of these regulations; or
- (d) he conspires or attempts, or aids, or abets, any other person by whatever means, including advertising, counselling or procurement to contravene the provisions of these regulations or to fail to comply with any such provisions, including any order lawfully given in terms of any of the provision of these regulations, or to contravene any restriction, prohibition or requirement imposed by or under the said regulations.

Penalties.
Amended by:
L.N. 426 of 2007.
Renumbered by:
L.N. 366 of 2018.

13. Any person who commits an offence against these regulations shall, on conviction, be liable:

- (a) on a first conviction to a fine (*multa*) of not less than one thousand and one hundred and sixty-four euro and sixty-nine cents (€1,164.69) but not exceeding two thousand and three hundred and twenty-nine euro and thirty-seven cents (€2,329.37);
- (b) on a second or subsequent conviction, to a fine (*multa*) of not less than two thousand and three hundred and twenty-nine euro and thirty-seven cents (€2,329.37), but not exceeding four thousand and six hundred and fifty-eight euro and seventy-five cents (€4,658.75) or to imprisonment for a term not exceeding two years, or to both such fine and imprisonment:

Provided that the court shall order any person who has been found guilty of committing an offence against these regulations to pay for the expenses incurred by the competent authority as a result of the said offence, the revocation of the permit issued by the competent authority and the confiscation of the *corpus delicti*.

Applicability of the
Criminal Code.
Cap. 9.
Renumbered by:
L.N. 366 of 2018.

14. (1) The provisions of articles 23 and 30 of the Criminal Code shall, *mutatis mutandis*, apply to proceedings in respect of offences against these regulations, so however that the disqualification from holding or obtaining a licence, permit or authority shall in no case be for less than one year.

Cap. 9.

(2) Notwithstanding the provisions of article 370 of the Criminal Code, proceedings for an offence against these regulations shall be held before the Court of Magistrates (Malta) or the Court of Magistrates (Gozo), as the case may be, and shall be in accordance with the provisions of the Criminal Code regulating the procedure before the said courts as courts of criminal judicature.

Cap. 9.

(3) Notwithstanding the provisions of the Criminal Code, the Attorney General shall always have a right of appeal to the Court of Criminal Appeal from any judgement given by the Court of Magistrates (Malta) or the court of Magistrates (Gozo) in respect of proceedings for any offence against these regulations.

15. The First Schedule to the Sixth Schedule to these regulations are being published in the English language in the English text of these regulations in accordance with article 54(3) of the Act.

Language of
Schedules.
Added by:
L.N. 366 of 2018.

FIRST SCHEDULE

Added by:
L.N. 366 of 2018.

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 twelve 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 $4,0 \pm 0,2\text{m}$ (3,8 to 4,2m) 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 1,5m above the ground, and results should be corrected in accordance with an equivalent height of 4m,
- for other purposes such as acoustical planning and noise zoning other heights may be chosen, but they must never be less than 1,5m 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.
-

Substituted by:
L.N. 35 of 2022.

SECOND SCHEDULE

ASSESSMENT METHODS FOR THE NOISE INDICATORS REFERRED TO IN REGULATION 7(1)

Refer to Annex II to Directive 2002/49/EC of the European Parliament and of the Council, as amended.

Substituted by:
L.N. 35 of 2022.

THIRD SCHEDULE

ASSESSMENT METHODS FOR HARMFUL EFFECTS REFERRED TO IN REGULATION 7(2)

1. Set of harmful effects

For the purposes of the assessment of harmful effects the following shall be considered:

— ischaemic heart disease (IHD) corresponding to codes BA40 to BA6Z of the international classification ICD-11 established by the World Health Organisation;

— high annoyance (HA);

— high sleep disturbance (HSD).

2. Calculation of harmful effects

The harmful effects shall be calculated by either of the following:

— the relative risk (RR) of a harmful effect defined as

(Formula 1)

$$RR = \left(\frac{\text{Probability of occurrence of the harmful effect in a population exposed to a specific level of environmental noise}}{\text{Probability of occurrence of the harmful effect in a population **non** exposed to environmental noise}} \right)$$

— the absolute risk (AR) of a harmful effect defined as

$$AR = \left(\begin{array}{c} \text{Occurrence of the harmful effect} \\ \text{in a population exposed} \\ \text{to a specific level of environmental noise} \end{array} \right)$$

(Formula 2)

2.1. IHD

For the calculation of the RR, with respect to the harmful effect of IHD and concerning the incidence rate (*i*), the following dose-effect relations shall be used:

(Formula 3) for road noise.

$$RR_{IHD,road} = \begin{cases} e^{\left[\frac{\ln(1.08)}{10} * (L_{den} - 53)\right]} & \text{for } L_{den} \text{ greater than } 53 \text{ dB} \\ 1 & \text{for } L_{den} \text{ equal or smaller than } 53 \text{ dB} \end{cases}$$

2.2. HA

For the calculation of the AR, with respect to the harmful effect of HA the following dose-effect relations shall be used:

for road noise;

$$AR_{HA,road} = (78.9270 - 3.1162 * L_{den} + 0.0342 * L_{den}^2) / 100$$

(Formula 4)

for railway noise;

$$AR_{HA,rail} = (38.1596 - 2.05538 * L_{den} + 0.0285 * L_{den}^2) / 100$$

(Formula 5)

for aircraft noise.

$$AR_{HA,air} = (-50.9693 + 1.0168 * L_{den} + 0.0072 * L_{den}^2) / 100$$

(Formula 6)

2.3. HSD

For the calculation of the AR, with respect to the harmful effect of HSD the following dose-effect relations shall be used:

for road noise;

$$AR_{HSD,road} = (19.4312 - 0.9336 * L_{night} + 0.0126 * L_{night}^2) / 100$$

(Formula 7)

for railway noise;

$$AR_{HSD,rail} = (67.5406 - 3.1852 * L_{night} + 0.0391 * L_{night}^2) / 100$$

(Formula 8)

for aircraft noise.

$$AR_{HSD,air} = (16.7885 - 0.9293 * L_{night} + 0.0198 * L_{night}^2) / 100 \quad (\text{Formula 9})$$

3. Assessment of harmful effects

3.1 The exposure of the population shall be assessed independently for each noise source and harmful effect. Where the same people are simultaneously exposed to different noise sources, the harmful effects may, in general, not be cumulated. However, those effects may be compared to assess the relative importance of each noise.

3.2 Assessment for IHD

3.2.1. For IHD in the case of railway and aircraft noise, the population exposed above adequate L_{den} levels is estimated as subject to an increased risk of IHD, while the exact number N of cases of IHD cannot be calculated.

3.2.2. For IHD in the case of road noise, the proportion of cases of the specific harmful effect in the population exposed to a RR that is calculated to be caused by environmental noise is derived, for the noise source x (road), harmful effect y (IHD) and for the incidence i by:

$$PAF_{x,y} = \left(\frac{\sum_j [p_j \cdot (RR_{j,x,y} - 1)]}{\sum_j [p_j \cdot (RR_{j,x,y} - 1)] + 1} \right)$$

(Formula 10)

Where:

- $PAF_{x,y}$ is the population attributable fraction,
- the set of j noise bands is made up of single bands spanning over a maximum of 5 dB (e.g.: 50-51 dB, 51-52 dB, 52-53 dB, etc. or 50-54 dB, 55-59 dB, 60-64 dB, etc.),
- p_j is the proportion of the overall population P in the area assessed that is exposed to the j -th exposure band, which is associated with a given RR of a specific harmful effect $RR_{j,x,y}$. The $RR_{j,x,y}$ is calculated using the formulas described in point 2 of this Schedule, calculated at the central value of each noise band (e.g.: depending on availability of data, at 50,5 dB for the noise band defined between 50-51 dB, or 52 dB for the noise band 50-54 dB).

3.2.3. For IHD in the case of road noise, the total number N of cases of IHD (people affected by the harmful effect y ; number of

attributable cases) due to the source x is then:

$$N_{x,y} = PAF_{x,y,i} * I_y * P \text{ (Formula 11)}$$

for road.

Where:

- $PAF_{x,y,i}$ is calculated for the incidence i ,
- I_y is the incidence rate of IHD in the area under assessment, that can be obtained from statistics on health for the region or country where the area is,
- P is the total population of the area under assessment (the sum of the population in the different noise bands).

3.3. For HA and HSD in the case of road, railway and aircraft noise, the total number N of people affected by the harmful effect y (number of attributable cases) due to the source x , for each combination of noise source x (road, railway or aircraft source) and harmful effect y (HA, HSD), is then:

$$= \sum_j [n_j * AR_{j,x,y}] \text{ (Formula 12)}$$

Where:

- $AR_{x,y}$ is the AR of the relevant harmful effect (HA, HSD), and is calculated using the formulas set out in point 2 of this Schedule, calculated at the central value of each noise band (e.g.: depending on availability of data, at 50,5 dB for the noise band defined between 50-51 dB, or 52 dB for the noise band 50-54 dB),
- n_j is the number of people that is exposed to the j -th exposure band.

4. Future revisions

The dose-effect relations introduced by future revisions of this Schedule will concern in particular:

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

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

- dwellings with special insulation against noise as defined

in the Sixth Schedule,

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

FOURTH SCHEDULE

MINIMUM REQUIREMENTS FOR STRATEGIC NOISE MAPPING REFERRED TO IN REGULATION 8(3)

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 the Sixth Schedule.

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 4m 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 4m and the 5dB ranges of L_{den} and L_{night} as defined in the Sixth Schedule.

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.

FIFTH SCHEDULE

MINIMUM REQUIREMENTS FOR ACTION PLANS

REFERRED TO IN REGULATION 9

1. An action plan must include at least 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).

SIXTH SCHEDULE

ADDITIONAL DATA REFERRED TO IN REGULATION 11

The following data is to be sent to the European Commission:

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 4m 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} 4m above the ground and 2m in front of the façade, for the noise emitted from a specific source, is more than 20dB 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 4m 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 75dB contours.

1.8. A summary of the action plan covering all the important aspects referred to in the Fifth Schedule, 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 4m 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 4m 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 75dB 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 65dB 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 the Fifth Schedule, 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.
