

**Guidance referring to Commission
Decision xxxx
Version 4.0**

**laying down a Questionnaire to be
used for reporting on
environmental noise under the
Directive 2002/49/EC**

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Summary

Commission Decision xxxx provides a Questionnaire to be used by the Member States for the reporting under the environmental noise Directive 2002/49/EC. This document gives a detailed guideline and recommendations to those responsible for completing the Questionnaire and discusses various issues for each Questionnaire form.

Together with the Guidance an example of a completed Questionnaire will be provided.

Revision list

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Contents

Summary	2
Introduction	5
The Reporting Mechanism	6
General comments and specifications	6
<i>Lay-out of the reporting forms</i>	6
Clarification of the reporting forms	8
<i>Front page Contact Address</i>	8
Form 0.1 geospatial data	8
Form 0.2 Meta data - background information	9
Form 0.3 Computation and measurement methods	10
Form 1.1 Delimitation of agglomerations	10
<i>Form 1.2 Agglomerations: Responsible Authorities</i>	11
<i>Forms 1.3 Agglomerations: Noise-control programmes and noise measures</i>	11
<i>Form 1.4 Computation or Measurement methods (not included, see introduction)</i>	12
<i>Form 1.5a Agglomerations: Total number of people exposed, L_{den}</i>	12
Form 1.5b <i>Agglomerations: Total number of people exposed, L_{den}, SI and QF</i>	12
<i>Form 1.5c Indication of major roads, railways and airports</i>	13
Form 1.6a <i>Agglomerations: Total number of people exposed, L_{night}</i>	13
Form 1.6b <i>Agglomerations: Total number of people exposed, L_{night}, SI and QF</i>	13
<i>Form 1.6c Indication of major roads, railways and airports</i>	14
<i>Form 1.7 Agglomerations: strategic noise maps</i>	14
Form 1.8 Summary of future Action Plans agglomerations	14
<i>Form 2.1 General description of roads</i>	15
Form 2.1 General description of Railways	16

Form 2.1 General description of Airports	17
Forms 2.1b Responsible authorities major roads, railways, airports	18
Forms 2.2 Characterization of surroundings major roads / railways /airports	18
Forms 2.3a Noise control programmes and noise measures	20
Form 2.4 Computation or Measurement methods (not included, see introduction)	24
Forms 2.5a Total number of people exposed outside agglomerations (L_{den})	24
Forms 2.5b Total number of people exposed outside agglomerations (L_{den}), Special Insulation and Quiet Façades	25
Forms 2.6a Total number of people exposed outside agglomerations (L_{night})	25
Forms 2.6b Total number of people exposed outside agglomerations (L_{night}), Special Insulation and Quiet Façades	26
Forms 2.7 Total area, dwellings and number of people exposed, (L_{den})	26
Forms 2.8 Summary of future Action Plans roads, railways and Airports	27
Literature	27
Annex 1 Country codes / Abbreviations for the names of Member States	29
Annex 2 Notation of location coordinates	31
Annex 3 Dates and Deadlines Relating to the Implementation of the DIRECTIVE 2002/49/EC	32
Annex 3 Dates and Deadlines Relating to the Implementation of the DIRECTIVE 2002/49/EC	32

Introduction

According to the Council Directive 2002/49/EC relating to the assessment and management of environmental noise the EU Member States must send reports on various issues related to their environmental noise situation to the Commission in accordance with the requirements of Annex VI.

Article 1.1 of the Directive 2002/49/EC states that *'The aim of this Directive shall be to define a common approach intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise. To that end the following actions shall be implemented progressively:*

- (a) the determination of exposure to environmental noise, through noise mapping, by methods of assessment common to the Member States;*
- (b) ensuring that information on environmental noise and its effects is made available to the public;*
- (c) adoption of action plans by the Member 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 to preserving environmental noise quality where it is good.'*

The Directive 2002/49/EC is aimed at controlling noise perceived by people in built-up areas, in public parks or other quiet areas in an agglomeration, in quiet areas in open country, near schools, hospitals and other noise-sensitive buildings and areas. It does not apply to noise that is caused by the exposed person himself, noise from domestic activities, noise created by neighbours, noise at work places or inside means of transport or noise due to military activities in military areas.

No later than 18 July 2009, the Commission must submit to the European Parliament and the Council a report on the implementation of this Directive. (Article 11.1).

The Reporting Mechanism, which consists of a Questionnaire, a Guidance and some reporting templates, is intended to give assistance to those responsible for reporting noise data to the Commission. The Questionnaire is based on Annex VI of the Directive 2002/49/EC both for its structure and for its contents. The Guidance gives assistance to complete the Questionnaire by giving clarifications and examples. It discusses how to fill in the Questionnaire, but not how to acquire the information needed for its completion. For guidance on data acquisition the WG-AEN Good Practice Guide on Noise Mapping provides a good background.

The Directive 2002/49/EC and related documents are available at:

<http://europa.eu.int/comm/environment/noise/>

The Directive 2002/49/EC indicates whether provision of information by the Member States is obligatory or voluntary for the Questionnaire items. As a consequence the data provision by the Member States in the Reporting Mechanism can be obligatory or voluntary. In the Questionnaire obligatory and voluntary items are indicated by different colours.

The Reporting Mechanism will be used for the first time in 2007, when the report on environmental noise has to be sent to the Commission (see Annex 3 of this Guidance for dates and deadlines).

The Reporting Mechanism

The Reporting Mechanism is the name of the ensemble of

- *The Questionnaire – written in Excel format. The number of the Excel forms correspond to the Annex VI of the Directive 2002/49/EC.*
- *This Guidance*
- *A completed example of the Questionnaire*
- *Templates for Action Plans, conform Annex VI 1.8 and 1.8.*

General comments and specifications

The information provided by this Guidance does not constitute any legal interpretation of the Directive for Environmental Noise 2002/49/EC, hereinafter referred to as 'the Directive 2002/49/EC', which remains the legal basis for compliance with the mandatory requirements for data reporting.

The Commission will make the Questionnaire available in electronic form as an Excel workbook, in all Community languages. Member States can download the file from <http://www.europa.eu.int/xxxxx>. The Member States must complete the Questionnaire and the attached templates and upload or send it to the Commission on a CD-ROM or diskette.

The final Excel file Questionnaire must comply with the following specification:

- Excel File Name: CC_reporting2007_D2002-49_vN.xls, where CC is the country code (see list in Annex I) and N is the number of the version sent out by the Member State
- Excel version: Microsoft® Excel 2002
- The template available at <http://...>

All additional files and documents referred to in the Excel Questionnaire need to be included in a compressed ZIP or SIT file which must comply with the following specification:

- File Name: CC_reporting2007_D2002-49_VN.zip or CC_reporting2007_D2002-49_vN.sit where CC is the country code (see list in the annex) and N is the number of the version sent out by the Member State. The version number is similar to the version number of the Excel file.

Lay-out of the reporting forms

The central page of the Questionnaire is the INDEX page. Navigation through the Questionnaire can be done by using the buttons in the INDEX page, and at each page the INDEX button can be used to jump back to the INDEX page. The INDEX page gives an overview of the completion of the forms.

The numbers of the forms correspond directly to the numbering of Annex VI of the Directive 2002/49/EC. Exceptions are the additional forms 0.1, 0.2 and 0.3.

- Form 0.1 asks for the used coordinate systems. This information is necessary for mapping and is needed for the data processing.
- Form 0.2 is needed for the data analysis by the EC.
- Form 0.3 is a combination of Annex VI point 1.4 and 2.4 of the Directive 2002/49/EC.

Some items in the forms of the Questionnaire are obligatory, some are voluntary. The obligatory and voluntary items are indicated by different colours. The colours of the cells mean:

- Green: required directly by the Directive 2002/49/EC;
- Blue: absolutely necessary, required directly by the Directive 2002/49/EC to understand and use the data;
- Orange: optional data (not absolutely necessary).

Clarification of the reporting forms

Front page Contact Address

According to the Directive 2002/49/EC Annex VI, section 1.2 the Member States have to describe 'the responsible authority'.

The purpose of the front page form is to provide the Commission with a single contact address at national level which can be approached in case of uncertainties or technical problems with the Questionnaire. In Member States where the competent authorities are at the national level, the contact body referred to in Form 1.2 or 2.1b can be expected to be one of these, in particular the national body responsible for the implementation of the Directive 2002/49/EC. For Member States where the competent bodies are at a regional or local level, the most suitable contact body are both the national body that coordinates the completion of the Questionnaire and the contact person at regional or local level.

Form 0.1 geospatial data

Geospatial data must be delivered in World Geodetic System 1984 (WGS84) or European Terrestrial Reference System 1989 (ETRS89) geographic coordinate reference systems. For definition of WGS84 consult homepage of US National Geospatial-intelligence Agency (http://earth-info.nga.mil/GandG/tr8350_2.html). For definition of ETRS89 consult homepage of Information and Service System for European Coordinate Reference Systems - CRS (<http://crs.bkg.bund.de/crs-eu/>). The selected coordinate reference system has to be noted.

If data conversion from the Member State's local Geographical Coordinate System (GCS) is not available in your software, a separate document with transformation formulae from your local GCS to ETRS89 or WGS84 must be provided with this Questionnaire. In this case the field [conversion formula GCS to ETRS89/WGS84] contains a reference to the specific document, and the document must be included in the attached compressed ZIP/SIT file.

Geospatial data can be delivered in either ESRI Shape file or MapInfo Exchange format. Specification of ESRI Shape file format (*.shp) is available at http://downloads.esri.com/support/whitepapers/mo_/shapefile.pdf).

Specification for MapInfo Exchange file format (*.mif) is available from http://resource.mapinfo.com/static/files/document/1074660800077/interchange_file.pdf.

Both file formats are open standards. The selected file format must be noted on specific sheets.

"shape files" always come as three related files:

- <name>.shp : the geometrical items
- <name>.shx : the index file
- <name>.bdf : the attribute tables

When providing a "data set" all three files must be sent. If the Excel table contains only one name (e.g. a reference to <name>.shp) then it is mandatory that the other files have the same name (but different extension) and are located in the same directory.

Similarly "mapinfo interchange files" comes as two files : a <name>.mif and a <name>.mid file for graphics and attributes.

Mapinfo MID files contain a header describing the coordinate system. When the coordinate system is specified as an "external reference", e.g. in the Excel file, it must be ensured that the same system is indicated in the header of the mif-file.

Give a rough value of accuracy of the dataset; e.g. 1:100.000 mean data has an accuracy and resolution suitable for use at mapping scale 1:100.000. Provide one value per agglomeration, road and rail sheet.

Geographic accuracy of location and geometries in metres must be provided per agglomeration, road and rail sheet. A minimum accuracy of 250 meters is required.

Form 0.2 Meta data - background information

This form aims at collecting information on the origin of the input data and the databases used to compute the sound exposure levels. For each road, rail, airport and agglomeration background information should be given for the datasets used.

Name	Description
[Source type]	The topic of the content of the resource. Choose one of the source types of the list (road, rail, air or industry).
[road/railway ID, airport /agglomeration name]	Metadata can be specified for each road element, railway element, agglomeration and airport separately. If the same metadata applies for all roads, the value of the field has to be "all".
[Title of resource database]	The name given to the resource. Typically, a Title will be a name by which the resource is formally known.
[Creator]	An entity primarily responsible for making the content of the resource. Examples of a Creator include a person, an organization, or a service.
[Publisher]	The entity responsible for making the resource available. Examples of a Publisher include a person, an organization, or a service.
[Contributors]	An entity responsible for making contributions to the content of the resource, e.g. the infra manager, the operators or a national or local authority. Examples of a Contributor include a person, an organization or a service.
[Geographical Coverage]	The extent or scope of the content of the resource; will typically include spatial location (a place name e.g. Hungary or geographic co-ordinates), temporal period (a period label, date, or date range).
[Temporal Coverage]	The extent or scope of the content of the resource; will typically include temporal period (a period label, date, or date range)
[Date last updated]	A date associated with an event in the life cycle of the resource. Typically, Date will be associated with the creation or availability of the resource.
[Geographic accuracy]	A minimum accuracy of 250 meters is required.
[Scale of dataset]	Give a rough value of accuracy of the dataset; e.g. 1:100.000 mean data has an accuracy and resolution suitable for use at mapping scale 1:100.000. Provide one value per agglomeration, road and rail sheet.
[Type]	The nature or genre of the content of the resource. Type includes terms describing

	general categories, functions, genres, or aggregation levels for content (e.g. report, dataset, document).
[Format]	The physical or digital manifestation of the resource. Typically, Format may include the media-type or dimensions of the resource. Format may be used to determine the software, hardware or other equipment needed to display or operate the resource (e.g. doc, xls, html, xml).
[Language]	A language of the intellectual content of the resource.
[Reference]	A reference to a related resource. Recommended best practice is to reference the resource by means of a string or number conforming to a formal identification system (e.g. URL).

Form 0.3 Computation and measurement methods

According to the Directive 2002/49/EC Annex VI, section 1.4 and 2.4 the Member States must indicate *'the computation or measurement methods that have been used'*.

The adaptation of national methods and description of interim measurement and computation methods to comply with the requirements of the Directive 2002/49/EC is provided by annex II of the Directive.

The Good Practice Guide on Noise Mapping WG-AEN recommends the use of computation methods wherever possible.

'The END permits the use of noise measurement for strategic noise mapping and it would be inappropriate for WG-AEN to recommend that noise measurement should not be used for this purpose. Nevertheless, WG-AEN encourages Member States and their competent authorities to undertake the first round of strategic noise mapping for the END using computation methods wherever possible. WG-AEN recognizes that some noise measurement is essential to the development and validation of computation methods. It also has a role to play in the verification of noise mapping results, in the development of the local elements of action plans and in the assessment of the effectiveness of implemented action plans.'

<http://forum.europa.eu.int/Public/irc/env/noisedir/library> > D 2002-49 > Noise mapping > List of noise computation methods and software.

This form is designed to enable the link between each calculation result and the method used. Therefore a unique coding, method ID, must be captured in this sheet. In Forms 1.5, 1.6, 2.5, 2.6 and 2.7 the method ID has to be recaptured for each result.

Identification of the used software and the software version number are requested.

Form 1.1 Delimitation of agglomerations

In accordance with Directive 2002/49/EC Annex VI, section 1.1 the Member States must give *'a concise description of the agglomeration: location, size, number of inhabitants'*.

The definition of the agglomerations is provided by article 3 (k) of the Directive 2002/49/EC.

This form aims at describing – in compliance with article 7 point 1 and 2 of the Directive 2002/49/EC – each agglomeration designated by Member States with more than 250,000 inhabitants.

The Nomenclature of Territorial Units for Statistics (NUTS) was established by Eurostat in order to provide a single uniform breakdown of territorial units for the production of regional statistics for the European Union. The NUTS3 description describes the regions of all Member States. A list of NUTS codes can be found at http://europa.eu.int/comm/eurostat/ramon/nuts/codelist_en.cfm?list=nuts

More information on the Statistical Regions can be obtained from http://europa.eu.int/comm/eurostat/ramon/nuts/statistical_regions_en.html

The form is also designed to describe the composition of each agglomeration in terms of Local Administrative Units - so called LAU - level 2 zones. The definition and the nomenclature of LAU level 2 zones can be found in: http://europa.eu.int/comm/eurostat/ramon/nuts/lau_en.html, as well as the Excel lists of LAU level 2 zones for each Member State.

To ensure unambiguous identification of the LAU level 2 zones comprising the agglomeration, 3 attributes must be captured together: the NUTS level 3 code, the LAU level 2 code, and the LAU level 2 national name (also called the national code), all of these can be extracted from the Excel sheets mentioned above.

The delivery of a unique geospatial data file (polygon geometry) associated to this form is particularly recommended in the case where the contour of the agglomeration does not coincide with the contours of LAU level 2 zones. The administrative border does not follow NUTS5-LAU2 definition). It must in this case be named in the fields and it must describe all the geospatial data that enabled the mapping of the agglomeration concerned to be carried out.

Topological rules are applied for agglomeration polygons. Polygons are not allowed to overlap each other.

Form 1.2 Agglomerations: Responsible Authorities

In accordance with Directive 2002/49/EC Annex VI, section 1.2 Member States must give *'the responsible authority'*.

This form aims at identifying the authorities and bodies - designated by the Member States in compliance with article 4 point 1 b) of the Directive 2002/49/EC – who are responsible making the noise maps and in particular for the related data that will have to be reported later to the Commission in compliance with article 10 point 2 and annex 6 of the Directive 2002/49/EC.

Each authority must be described in one record (row in the spreadsheet).

Forms 1.3 Agglomerations: Noise-control programmes and noise measures

In accordance with Directive 2002/49/EC Annex VI, section 1.3 the Member States must give *'Noise-control programmes that have been carried out in the past and noise-measures in place'*.

NOTICE: For a description of the data fields, see section 2.3.

For each agglomeration the Member States must indicate the noise control measures that have been taken since 2002 and until 2007.

The mitigation measures implemented on e.g. the infrastructure, vehicle fleet and the environment must be indicated.

Because of the complexity and difficulty in collecting data about noise control programmes and noise measures, the data for this sheet is entered on two levels. The competent body is free to choose the level of detail of Form 1.3a (level 1) or Form 1.3b (level 2).

- Level 1: requires data for main categories only, like 'general technical measures for road' ;
- Level 2: requires data for subcategories of the level 1 categories. More detail is asked here like 'low noise road surface' or 'maintenance'.

If 'yes' is reported in one of the columns an indication can be given of the average sound level reduction and the number of people who profit by this reduction.

In some cases (vehicle fleet, economic incentives) the measures are of national or international character. It is possible then that the infrastructure sections are not relevant. In this case fill in 'all' in the field [Agglomeration].

Form 1.4 Computation or Measurement methods (not included, see introduction)

The information requested for Annex VI, section 1.4 must be reported in Form 0.3.

Form 1.5a Agglomerations: Total number of people exposed, L_{den}

In accordance with Directive 2002/49/EC Annex VI, section 1.5 Member States must give '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. 5 200 = between 5 150 and 5 249; 100 = between 50 and 149; 0 = less than 50)'.

The legal definition of the L_{den} is provided by article 3 (f) of the Directive 2002/49/EC.

Each agglomeration has to be described in one record (row). The fields on calculation methods are linked to the calculation methods defined in Form 0.3 'Calculation methods'. For each subcategory (road, rail, air, Industrial noise) the calculation method ID has to be identified.

Form 1.5b Agglomerations: Total number of people exposed, L_{den} , SI and QF

In addition to the Forms 1.5a and in accordance with Directive 2002/49/EC Annex VI, section 1.5 'it should be stated where appropriate and where such information is available how many persons in the above categories (i.e. the numbers listed in the Forms 1.5a, red.) live in dwellings that have:

- *SI, 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,*
- *QF, 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} .*

The legal definition of the L_{den} is provided by article 3 (f) of the Directive 2002/49/EC.

Each agglomeration has to be described in one record (row). The fields on calculation methods are linked to the calculation methods defined in Form 0.3. For each subcategory (road, rail, air, Industrial noise) the calculation method ID has to be identified.

All fields in this sheet are voluntary.

Form 1.5c Indication of major roads, railways and airports

In accordance with the Directive 2002/49/EC Annex VI, section 1.5 ‘An indication should also be given on how major roads, major railways and major airports as defined in Article 3 contribute to the above.’

Make a selection of the major roads, railways and airports and indicate how they contribute to the numbers of exposed people.

Form 1.6a Agglomerations: Total number of people exposed, L_{night}

In accordance with Directive 2002/49/EC Annex VI, section 1.6 the Member States must give ‘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. These data may also be assessed for value band 45-49 before the date laid down in Article 11(1).’

The legal definition of the L_{night} is provided by article 3 (i) of the Directive 2002/49/EC.

Each agglomeration has to be described in one record (row). The fields on calculation methods are linked to the calculation methods defined in Form 0.3. For each subcategory (road, rail, air, Industrial noise) the calculation method ID has to be identified.

The data may also be assessed for value band 45-49 (marked with *) before the date laid down in Article 11(1) of the Directive 2002/49/EC.

Form 1.6b Agglomerations: Total number of people exposed, L_{night} , SI and QF

In addition to the Forms 1.6a and in accordance with Directive 2002/49/EC Annex VI, section 1.6 ‘it should be stated where appropriate and where such information is available how many persons in the above categories (i.e. the numbers listed in the Forms 1.6a, red.) 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.

The legal definition of the L_{night} is provided by article 3 (i) of the Directive 2002/49/EC.

Each agglomeration has to be described in one record (row). The fields on calculation methods are linked to the calculation methods defined in Form 0.3. For each subcategory (road, rail, air, Industrial noise) the calculation method ID has to be identified.

The data may also be assessed for value band 45-49 (marked with *) before the date laid down in Article 11(1) of the Directive 2002/49/EC.

All fields in this sheet are voluntary.

Form 1.6c Indication of major roads, railways and airports

In accordance with the Directive 2002/49/EC Annex VI, section 1.6 *'An indication should also be given on how major roads, major railways and major airports as defined in Article 3 contribute to the above.'*

Make a selection of the major roads, railways and airports and indicate how they contribute to the numbers of exposed people.

Form 1.7 Agglomerations: strategic noise maps

In accordance with Directive 2002/49/EC Annex VI, section 1.7 Member States must provide:
In case of graphical presentation, strategic maps must at least show the 60, 65, 70 and 75 dB contours.

The legal definition of the strategic noise maps is provided by article 3 (r) of the Directive 2002/49/EC.

The noise maps for §1.7 in Annex VI is "voluntary". This means that in addition to the minimum requirements in §1.1 to §1.6 of the annex it is also possible to complement the reporting with a graphical presentation and in that case 1.7 applies.

In addition it must be stated that the Member States cannot send a graphical map which complies with 1.7 **instead** of sending statistical data required by 1.5 and 1.6. They still must send to the EC the statistical data required by 1.1 to 1.6.

Form 1.8 Summary of future Action Plans agglomerations

According to Directive 2002/49/EC Annex VI, section 1.8, Member States are requested to give *'a summary of the action plan covering all the important aspects referred to in Annex V, not exceeding ten pages in length.'*

The legal definition of action plans is provided by article 3 (t) of the Directive 2002/49/EC: *'action plans' shall mean plans designed to manage noise issues and effects, including noise reduction if necessary;'*

[Point of discussion] This must be a summary of the actions plans as required in Annex V, to which is referred to in Article 8 of the Directive 2002/49/EC. A template for action plan summaries is provided with the Reporting Mechanism.

[point of discussion] The summary of action plans for agglomerations must be given separately for each Agglomeration. A link to the summary file must be made in the form.

Form 2.1 General description of roads

In accordance with the Directive 2002/49/EC Annex VI, section 2.1 Member States must give ‘a general description of the roads: location, size, and data on the traffic’.

The legal definition of the major roads is provided by article 3 (n) of the Directive 2002/49/EC.

This form describes, in compliance with article 7 point 1 and 2 of the Directive 2002/49/EC, each major road designated by the Member State and with an annual traffic volume greater than 6 millions vehicle passages. Member States have to identify each road by a Road ID. The Road ID’s can be regarded as the primary units for assessment and management of environmental noise under the Directive 2002/49/EC.

Each road section is uniquely identified by the couple ‘road ID’ + ‘road section ID’.

- The road ID is defined as CCxxxx, where CC is the abbreviation of the Member State’s name as given in [Annex 1](#) of this guideline and xxxx a serial number to be given to each road by the Member State. The Member State is entirely free in allocating serial numbers.
- The road section ID is also a serial number.

It is recommended to acquire data for each Road ID individually. If a road is not split up into sections, only one section must be defined: SectionID=1.

If only a single set of results for all roads is available (which is not recommended), the value RoadID = ‘all’ is allowed (and section ID is left blank). In this case only one record must be completed in the form.

The size of a road section depends on the importance of the road junctions which serve as starting or end point of the road section. The definition of such bounding road junctions is a junction at which the vehicle flow changes with more than 50%.

Geospatial file name

Please indicate the name of the geospatial file in this field. The delivery of a unique geospatial data file (polyline geometry) associated to this form is strongly requested to allow the mapping of the major roads concerned by this form for the whole EU. It must describe all the geospatial data enabling the mapping of the major roads sections concerned. For each section there may be many segments of polylines.

The unique combination of Road ID and Road Section ID are major key fields, and must be supplied in the attribute table of the geospatial data file with the column short names “Road ID” and “Road Section ID”.

Geospatial data must be delivered in World Geodetic System 1984 (WGS84) or European Terrestrial Reference System 1989 (ETRS89) geographic coordinate reference systems. Geospatial data can be delivered in either ESRI Shape file or MapInfo Exchange format. For more information about Geospatial data got to *Form 0.1 coordinate systems and geospatial data*.

Average annual traffic, Minimum annual traffic, Maximum annual traffic

In the columns about annual traffic the choice must be made to fill in the column 'Average annual traffic' or **both** the columns 'Minimum annual traffic' and 'Maximum annual traffic'.

Average annual traffic

It is recommended to calculate average annual traffic according to the following method:

$$\text{Average Annual Traffic} = (1/\text{length}_{\text{total}}) \sum^n (\text{AT}_n * \text{length}_n).$$

Where $\text{length}_{\text{total}}$ is the total length of the road section, AT_n is the Annual Traffic (in vehicles/year) on subsection n and length_n is the length of subsection n.

Minimum annual traffic, Maximum annual traffic

If the average annual traffic can not be estimated with sufficient accuracy, it is possible to give the minimum and maximum numbers between which the yearly average is expected to lie.

Form 2.1 General description of Railways

In accordance with the Directive 2002/49/EC Annex VI, section 2.1 the Member States must give 'a *general description of the railways: location, size, and data on the traffic*'.

The legal definition of the major railways is provided by article 3 (o) of the Directive 2002/49/EC.

This form describes, in compliance with article 7 point 1 § 2, each major railway designated by the Member States and with an annual traffic volume above 60,000 train passages. Member States have to identify each track by a track ID. The track ID's can be regarded as the primary units for assessment and management of environmental noise under the Directive 2002/49/EC.

Each railway section is uniquely identified by the couple 'Railway ID' + 'Railway section ID'.

- The railway ID is defined as CCxxxx, where CC is the abbreviation of the Member State's name as given in [Annex 1](#) of this guideline and xxxx a serial number to be given to each track by the Member State. The Member State is entirely free in allocating serial numbers.
- The railway section ID is also a serial number.

It is recommended to acquire data for each Railway ID individually. If a railway is not split up into sections, only one section must be defined: SectionID=1.

If only a single set of results for all railways is available (which is not recommended), the value RailwayID = 'all' is allowed (and section ID is left blank). In this case only one record must be completed in the form.

The size of the railway sections depends on the importance of the railway junctions which serve as starting or end point of the railway sections. The definition of such bounding railway junctions is a junction at which the vehicle flow changes with more than 50%.

Geospatial file name

Please indicate the name of the geospatial file in this field. The delivery of a unique geospatial data file (polyline geometry) associated to this form is strongly requested to allow the mapping of the major railways concerned by this sheet for the whole EU. It must describe all the geospatial data enabling the mapping of the major railways sections concerned. For each section there may be many segments of polylines.

The unique combination of Railway ID and Railway Section ID are called major key fields, and must be supplied in the attribute table of the geospatial data file with the column short names "Railway ID" and "Railway Section ID".

Geospatial data must be delivered in World Geodetic System 1984 (WGS84) or European Terrestrial Reference System 1989 (ETRS89) geographic coordinate reference systems. Geospatial data can be delivered in either ESRI Shape file or MapInfo Exchange format. For more information about Geospatial data got to *Form 0.1 coordinate systems and geospatial data*.

Geospatial data must be delivered in World Geodetic System 1984 (WGS84) or European Terrestrial Reference System 1989 (ETRS89) geographic coordinate reference systems. Geospatial data can be delivered in either ESRI Shape file or MapInfo Exchange format. For more information about Geospatial data got to *Form 0.1 coordinate systems and geospatial data*.

Average annual traffic, Minimum annual traffic, Maximum annual traffic

In the columns about annual traffic the choice must be made to fill in the column 'Average annual traffic' or both the columns 'Minimum annual traffic' and 'Maximum annual traffic'.

Average annual traffic

It is recommended to calculate average annual traffic according to the following method:

Average Annual Traffic = $(1/\text{length}_{\text{total}}) \sum^n (AT_n * \text{length}_n)$.

Where $\text{length}_{\text{total}}$ is the total length of the road section, AT_n is the Annual Traffic (in vehicles/year) on subsection n and length_n is the length of subsection n.

Minimum annual traffic, Maximum annual traffic

If the average annual traffic can not be estimated with sufficient accuracy, it is possible to give the minimum and maximum numbers between which the yearly average is expected to lie.

Form 2.1 General description of Airports

In accordance with the Directive 2002/49/EC Annex VI, section 2.1 the Member States must give a *general description of the airport: location, size, and data on traffic*.

The legal definition of a major airport is provided by article 3 (p) of the Directive 2002/49/EC.

This form describes – in compliance with article 7 point 1 § 2 of the Directive 2002/49/EC – each major airport designated by the Member State. Identifying the name, the ICAO code, the annual traffic, and the LAU level 2 zones composition of the territory where the airport is located ensures this.

The ICAO codes of airports can be found on website: <http://www.airport-technology.com/icao-codes/>

The definition and the nomenclature of LAU level 2 zones can be found on website: http://europa.eu.int/comm/eurostat/ramon/nuts/laeu_en.html, as well as the Excel lists of LAU level 2 zones for each Member State.

Annual traffic data must be provided in Annual Traffic Movements (ATM) according to article 3 (p) of the Directive 2002/49/EC.

Average annual traffic, Minimum annual traffic, Maximum annual traffic

In the columns about annual traffic the choice must be made to fill in the column 'Average annual traffic' **or both** the columns 'Minimum annual traffic' and 'Maximum annual traffic'.

Average annual traffic

Give an estimation of the total annual number of movements at the airport.

Minimum annual traffic, Maximum annual traffic

If the average annual traffic can not be estimated with sufficient accuracy, it is possible to give the minimum and maximum numbers between which the yearly average is expected to lie.

Forms 2.1b Responsible authorities major roads, railways, airports

This form identifies the authorities and bodies - designated by the Member States in compliance with Article 4.1b of the Directive 2002/49/EC – who are responsible for the collection of the strategic noise maps, in particular for the related data that will have to be reported later to the Commission in compliance with Article 10.2 and Annex VI of the Directive 2002/49/EC.

A separate form is to be used for road, railways and airports. To minimize the effort please fill in 'all' in the column 'Road ID' or 'Track ID' if the same authorities are responsible for all road or track IDs. The same applies for the columns 'Road section ID' and 'Railway section ID'.

It is also possible to link each of the road and railway sections and major airports with the related competent authorities and bodies responsible for collecting the data (to be reported to the Commission in compliance with Article 10.2 and Annex VI of the Directive 2002/49/EC), and making the strategic noise maps and noise action plans. This is enabled by recapturing the 'Road ID', 'Railway ID' and 'Name of Airport' in the Forms 2.1b *Responsible Authorities* and fill in the requested fields.

Forms 2.2 Characterization of surroundings major roads / railways /airports

According to the Directive 2002/49/EC Annex VI, section 2.2 the Member States must give a '*Characterization of the surroundings of major roads, major railways and airports: agglomerations, villages, countryside or otherwise, information on land use, other major noise*'.

It is strongly recommended to include a geospatial file with the location of the major road/railway in Form 2.1. If this file is included, the data can be crossed with the Corine Land cover database at EEA to get insight in the surroundings of the major road or railway.

If the geospatial file for roads and railways is included (and in case of airports the ICAO code), the data fields about the land cover do NOT have to be acquired.

Zones

The size of the area to be described will be called the zone of a road, railway or airport. The width of the zones is defined as the area where an Lden of 55 dB or an Lnight of 50 dB is exceeded.

Roads and railways

The zones at both sides of the roads or railways can be considered as a 1-dimensional line which can be described in terms of agglomerations (* see Question document), industrial area, quiet area, etc. The area types can be estimated in percentages of the total road or track length.

Airports

Within the airport zone the surroundings must be described in terms of agglomerations, industrial area, quiet area, etc. The areas can be estimated in percentages of the total described area.

Land Cover Units

According to the EEA Land Cover Project Corine, thematic mapping of the biophysical cover of the Earth's surface may be approached from two different angles:

- Land cover essentially concerns the nature of features (forests, crops, water bodies, bare rock, etc.).
- Land use is concerned with the socio-economic function (agriculture, habitat, environmental protection) of basic surfaces.

Land use is defined at the Corine website as: 'Land use corresponds to the socio-economic description (functional dimension) of areas: areas used for residential, industrial or commercial purposes, for farming or forestry, for recreational or conservation purposes, etc. Links with land cover are possible; it may be possible to infer land use from land cover and conversely'.

To assist the understanding and use of this unit, in Corine it is decided to define the unit by listing its main characteristics:

- It corresponds either to an area whose cover may be considered homogeneous (grass, water, forest, etc.) or to a combination of elementary areas (homogeneous as defined above) which, in its variations, represents characteristic land cover structures (covering large surfaces which can be considered to constitute a single type of land cover in the Member States of the Community);
- Given the scale, the unit must represent a significant area of land, it is clearly distinguishable from surrounding units, and its structure in terms of land cover is stable enough to serve as a unit for the collection of more precise information.

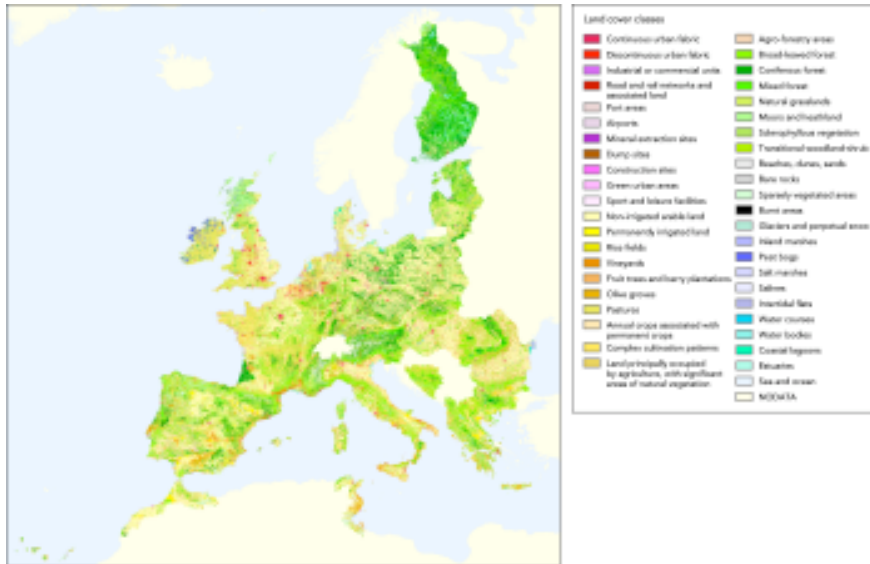


fig: Visualization of Corine land cover data

- **Agglomerations [Continuous, Urban Fabric (Urban Area)]**
In accordance with the Directive 2002/49/EC an ‘agglomeration’ shall mean part of a territory, delimited by the Member State, having a population in excess of 100 000 persons and a population density such that the Member State considers it to be an urbanized area’.
- **Villages [discontinuous Urban Fabric]**
All areas built up with dwellings that do not meet the agglomerations definition.
- **Agricultural Areas**
To be delimited by the competent authority.
- **Forest and semi natural areas**
To be delimited by the competent authority.
- **Wetlands**
To be delimited by the competent authority.
- **Water bodies**
To be delimited by the competent authority.

More information about the Corine Land Cover Database can be found at:
<http://dataservice.eea.eu.int/dataservice/>

A separate form is to be completed for road, railways and airports.

Forms 2.3a Noise control programmes and noise measures

According to the Directive 2002/49/EC Annex VI, section 2.3 the Member States have to report to the commission ‘the noise-control programmes that have been carried out in the past and noise-measures in place’.

Separate forms are required for road, railways and airports.

For each agglomeration the Member States must indicate the noise control measures that have been taken since 2002 and until 2007. The mitigation measures implemented on e.g. the infrastructure, vehicle fleet and the environment must be indicated.

Because of the complexity and difficulty in collecting data about noise control programmes and noise measures, the data for this sheet is entered on two levels. The competent body is free to choose the level of detail of Form 2.3a (level 1) or Form 2.3b (level 2).

- Level 1: requires data for main categories only, like 'general technical measures for road' ;
- Level 2: requires data for subcategories of the level 1 categories. More detail is asked here like 'low noise road surface' or 'maintenance'.

If 'yes' is reported in one of the columns please indicate the average sound level reduction and the number of people who profit by this reduction.

In some cases (vehicle fleet, economic incentives) the measures are of national or international character. It is possible then that the infrastructure sections are not relevant. In this case fill in 'all' in the field [Road ID], [Railway code] or [Name of airport].

Note that the below explanations for mitigation measures are partly extracted from the State-of-the-Art Report of the IMAGINE project which was *published in October 2004. This document can be found at www.imagine-project.com* (Deliverable 2, code *IMA10TR-040423-AEATNL32*).

Road ID/ Track ID/ Name of Airport

The ID's to be filled in can be copied from the Forms 2.1. In some cases (vehicle fleet, economic incentives) the measures are of national or international character. It is possible then that the infrastructure sections are not relevant. In this case fill in 'all' in the field [Road code], [Track code] or [Name of airport].

Road section ID/ Track section ID

The section ID's to be filled in can be copied from the Forms 2.1.

Name of noise control programme

Give the name of the programme which describes the noise reduction effect.

Fields with description of the measures

If 'yes' is reported in one of the columns please indicate the average sound level reduction and the number of people who profit by this reduction.

Technical measures road / track

Low noise infrastructure can be achieved by low noise construction of roads and tracks (low noise pavements, rail dampers, welded track, low noise bridges, etc.) or maintenance. Please fill in 'yes' if one of these programmes have been applied.

Reduction of sound transmission

Any measure which reduces the sound transmission from the source to the receiver, such as tunnels, barriers, coverings, etc

Traffic planning

Considering the vehicle flow a number of parameters can be changed to achieve a reduction in (total or collective) noise production:

- the traffic volume: the number of vehicles in a given time period, on a given stretch of road;
- the composition of traffic (the vehicle fleet – of which types of vehicles does the traffic consist);
- the traffic conditions (traffic dynamics – speeds, acceleration, deceleration, stops and starts);

Land use planning

A major road, motorway, or railway line generates high noise levels in its vicinity. When a new traffic route is planned through an existing urban area much of the existing built environment will remain. The layout and design of the route becomes crucial in minimizing the noise impact from traffic. If, however, a road or railway passes through an area that is undeveloped or scheduled for redevelopment, noise impact control by appropriate management of the adjoining land use can also be considered.

Economic measures / incentives

Economic measures form an important type of noise abatement methods. They include economic incentives to encourage noise abatement, special taxes and charges to raise funds for the abatement, and the payment of compensation to people who are affected by noise impacts. Other examples are the polluter pays principle, taxes on vehicles and aircraft, fuel pricing, road pricing, promotion of quiet vehicles, promotion of low-noise means of transport, reduction of the need for transport.

Comments

It is voluntary to describe the average sound level reduction and the number of people who profit by this reduction per noise measure.

Forms 2.3b

Technical measures road / track

Low noise road surfaces

For the classification of road surfaces in terms of their noise behaviour, there is presently no type approval procedure that applies across the whole of the European Community, but several recognized national procedures exist.

Road maintenance

Fill in 'yes' if maintenance of roads leads to noise reduction.

Rail grinding

A reduction in rolling noise will often be obtained by reducing rail head roughness. This can be achieved by grinding the rail head, especially when a very low roughness can be assured by some means, generically referred to as "acoustic grinding". The effect of acoustic grinding is greatest if the

roughness of wheel and rail are similar, which is normally the case for disc-braked or composite tread-braked rolling stock running on typical, well-maintained track.

Noise measures at vehicles

Disc brakes, Composite tread brakes (K-blocks, LL-blocks)

In the case of disc brakes or low noise composite blocks (e.g. K-blocks or LL blocks) fill in 'yes'.

Replacement of cast-iron brake blocks with composite blocks is only effective if the wheels are machined ("turned") to restore a smooth running surface before the composite blocks are installed

Low noise airplanes

Engine and airframe manufacturers are constantly looking for cost-effective ways of reducing source noise. A large part of this work is being performed in the context of major national and international initiatives, notably the European Union's SILENCE(R) project and X2-Noise thematic network, and the USA's Quiet Aircraft Technology (QAT) programme.

Low noise airframes

On approach and landing airframe and landing gear noise account for up to 60% of total aircraft noise. As an aircraft changes through different airframe configurations during the approach procedure, slats and flaps are progressively extended, at each step creating more drag and thereby more noise. Please fill in 'yes' if low noise airframes are used in stead of the older, noisier ones.

Measures at receiver

Façade insulation

Double-glazing, soundproof ventilation and insulation of light weight façade panels can result in a lower noise reception level inside the house.

Building design

Blind façade or intelligent lay-out of buildings can lead to lower noise levels inside the house, or to less annoyance. Note that the exposure level at the façade is not changed by these measures.

Traffic planning

Flow reduction

With regard to reducing the number of vehicles, there are many plans to reduce volumes in vulnerable areas and/or periods of the day (night time, mostly). Measures can influence:

- restrictions on traffic (e.g. ***alternative routes*** or restricted ***access zones***);
- the time when the trip is made (e.g. ***night time ban***);
- mode choice (measures to achieve modal shift, e.g. from road to rail or from private to public transport).

Traffic composition

The composition of traffic on a route can be influenced in such a way that noise levels are lower in sensitive areas and higher in areas where this is not a problem.

Speed reduction

Reduction of speeds can be achieved by:

- lowering the speed limit, through road signs (with or without enforcement) or in-vehicle systems (speed assistance/advisory systems);
- changes in road geometry.

Driving conditions

Reduction of dynamics in traffic can be achieved by:

- changing traffic lights to smooth out the flow of traffic and to eliminate the need for frequent stops and starts;
- smoothing (motorway) traffic flows in congested areas through Intelligent Transportation Systems (ITS);
- One-way roads to manage traffic (with the objective to reduce congestion or remove conflicts at junctions);
- Route guidance with the objective to reduce congestion;
- changes in road geometry.

Form 2.4 Computation or Measurement methods (not included, see introduction)

The information requested by the Directive 2002/49/EC Annex VI, section 2.4 must be reported in Form 0.3.

Forms 2.5a Total number of people exposed outside agglomerations (L_{den})

According to the Directive 2002/49/EC Annex VI, section 2.5 the Member States must indicate '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(A) 4 m above the ground and on the most exposed façade: 55/59, 60/64, 65/69, 70/74, >75 '.

The definition of L_{den} is provided by article 3 (f) of the Directive 2002/49/EC.

In the Good practice Guide on Noise Mapping methods are described to assign noise levels to grid cells, population to residential buildings, and to assign noise exposure levels to the population per residential area.

3 dB Correction

According to the Good Practice Guide for Noise Mapping ‘a correction of minus 3 dB should be applied to the noise levels attributed/allocated to residential buildings and subsequently to the residents of these buildings for the estimates of noise exposure’.

This correction should only be applied if the calculation includes the reflection effect of the façade being assessed since the Directive 2002/49/EC requires assessment of incident sound only. If the calculation assesses incident sound (even taking into account reflections from other buildings) no correction is required.

Most exposed façade

In the Good practice Guide on Noise Mapping the WG-AEN describes the most exposed façade as ‘the façade exposed to the highest noise level from the specific category of noise source under consideration (e.g. road traffic)’.

This means that the total noise level of every noise source (roads, railways or aircraft) can be applied to a different ‘most exposed façade’ of one building.

Separate forms are required for each noise source, road, railways and airports.

People living inside agglomerations as defined in Annex VI 1.1 of the Directive 2002/49/EC are excluded from these countings.

Forms 2.5b Total number of people exposed outside agglomerations (L_{den}), Special Insulation and Quiet Façades

According to the Directive 2002/49/EC Annex VI, section 2.5 the Member States must indicate ‘In addition to 2.5a, 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 § 1.5,
- a quiet façade, as defined in § 1.5’.

The definition of L_{den} is provided by article 3 (f) of the Directive 2002/49/EC.

Special insulation

Special insulation against noise. See Good Practice Guide.

Quiet façade

See Good Practice Guide.

Separate forms are required for exposure to road noise, railway noise and airport noise

Forms 2.6a Total number of people exposed outside agglomerations (L_{night})

See Form 2.5a.

The definition of L_{night} is provided by article 3 (i) of the Directive 2002/49/EC.

Separate forms are required for exposure to road noise, railway noise and airport noise.

Forms 2.6b Total number of people exposed outside agglomerations (L_{night}), Special Insulation and Quiet Façades

See Form 2.5b.

The definition of L_{night} is provided by article 3 (i) of the Directive 2002/49/EC.

Separate forms are required for exposure to road noise, railway noise and airport noise.

Forms 2.7 Total area, dwellings and number of people exposed, (L_{den})

According to the Directive 2002/49/EC Annex VI, section 2.7 the Member States must indicate *The total area (in km²), the estimated total number of dwellings (in hundreds) and the estimated total number of people (in hundreds) living in each of these areas exposed to values of L_{den} higher than 55, 65 and 75 dB respectively have to be given. The number of dwellings and the number of people must include agglomerations.*

It is mandatory to provide information on the 55 and 65 dB contours, which must be shown on one or more maps that give information on the location of villages, towns and agglomerations within those contours. It is recommended to give a web link to the appropriate digital maps.

The grid coordinates from the noise model may be used to make up the contour bands. An alternative possibility is the use of coordinates which make up the outline of the colour contours.

In practice there are several ways in which those maps can be provided:

- Maps printed on paper (**option not available in this Questionnaire**)

The main advantage of maps on paper is that they are easy to read. Consequently, comprehensive maps are preferred that encompass the entire Member State or a large part of a large Member State, instead of separate maps for each road or track. However, a major problem of paper maps sent by different Member States is that they will generally have different formats and consequently cannot be combined to give European overviews.

- Bitmaps (**option not available in this Questionnaire**)

Maps supplied electronically as bitmaps (format BMP, TIF, JPG etc.), showing drawn 55 and 65 dB(A) contours on a country or region map, can in principle be electronically processed. However, maps from different countries cannot be combined to give European overviews.

- 55 and 65 dB(A) contour coordinates in electronic form (**required for this Questionnaire**)

The most exact and flexible form of reporting is in the form of coordinates of noise contours (see Annex 2 for the notation of the coordinates). In view of the anticipated use, a very high resolution is not needed. A good balance between file size and spatial detail is a resolution of about 500m to 1 km.

Depending on the length of the railway track or road, one map usually will contain one or more tracks or roads.

Forms 2.8 Summary of future Action Plans roads, railways and Airports

According to the Directive 2002/49/EC Annex VI, section 2.8 the Member States are requested to give a *summary of the action plan covering all the important aspects referred to in Annex V, not exceeding ten pages in length.*

The legal definition of action plans is provided by article 3 (t) of the Directive 2002/49/EC: ‘ *action plans*’ shall mean *plans designed to manage noise issues and effects, including noise reduction if necessary;*’.

This part of the Questionnaire is partly pre-formatted; the pre-formatted fields are part of Form 2.8. For a description of the fields read section 2.3. For all open questions a template for action plan summaries is provided with this Questionnaire.

This should be a summary of the action plans as required in Annex V, to which is referred to in Article 8 of the Directive 2002/49/EC.

For the description of the fields please read Forms 2.3a and 2.3b.

Literature

Directive 2002/49/EC of the European Parliament and of the Council , relating to the assessment and management of environmental noise, 25 June 2002.

Good Practice Guide on Noise Mapping, version 1, December 2003, European Commission’s Working Group – Assessment of Exposure to Noise (WG-AEN).

State-of-the-Art Report, IMAGINE project, *October 2004*, www.imagine-project.com (Deliverable 2, code *IMA10TR-040423-AEATNL32*).

The Directive 2002/49/EC and related documents (GPG) are available at:
<http://europa.eu.int/scadplus/leg/en/lvb/l21180.htm>.

Member States can download the Questionnaire from <http://www.europa.eu.int/xxxxx>.

For definition of WGS84 consult homepage of US National Geospatial-intelligence Agency (http://earth-info.nga.mil/GandG/tr8350_2.html)

For definition of ETRS89 consult homepage of Information and Service System for European Coordinate Reference Systems - CRS (<http://crs.bkg.bund.de/crs-eu/>)

Specification of ESRI Shape file format (*.shp) is available at
http://downloads.esri.com/support/whitepapers/mo_shapefile.pdf)

Specification for MapInfo Exchange file format (*.mif) is available from
http://resource.mapinfo.com/static/files/document/1074660800077/interchange_file.pdf

The definition and the nomenclature of LAU level 2 zones can be found here:
http://europa.eu.int/comm/eurostat/ramon/nuts/la_en.html, as well as the Excel lists of LAU level 2 zones for each Member State

More information about the Corine Land Cover Database can be found at:
<http://dataservice.eea.eu.int/dataservice/>

Annex 1 Country codes / Abbreviations for the names of Member States

Short name in original language (geographical name)	Official title in original language (protocol name)	Short name in English (geographical name)	Official title in English (protocol name)	Country code [1]	Former abbreviation [1]
<i>Belgique/België</i>	<i>Royaume de Belgique/ Koninkrijk België</i>	<i>Belgium</i>	<i>Kingdom of Belgium</i>	<i>BE</i>	<i>B</i>
<i>Česká republika</i>	<i>Česká republika</i>	<i>Czech Republic</i>	<i>Czech Republic</i>	<i>CZ</i>	—
<i>Danmark</i>	<i>Kongeriget Danmark</i>	<i>Denmark</i>	<i>Kingdom of Denmark</i>	<i>DK</i>	<i>DK</i>
<i>Deutschland</i>	<i>Bundesrepublik Deutschland</i>	<i>Germany</i>	<i>Federal Republic of Germany</i>	<i>DE</i>	<i>D</i>
<i>Eesti</i>	<i>Eesti Vabariik</i>	<i>Estonia</i>	<i>Republic of Estonia</i>	<i>EE</i>	—
<i>Ελλάδα (Elláda)</i>	<i>Ελληνική Δημοκρατία</i>	<i>Greece</i>	<i>Hellenic Republic</i>	<i>EL</i>	<i>EL</i>
<i>España</i>	<i>Reino de España</i>	<i>Spain</i>	<i>Kingdom of Spain</i>	<i>ES</i>	<i>E</i>
<i>France</i>	<i>République française</i>	<i>France</i>	<i>French Republic</i>	<i>FR</i>	<i>F</i>
<i>Ireland</i>	<i>Ireland</i>	<i>Ireland</i>	<i>Ireland</i>	<i>IE</i>	<i>IRL</i>
<i>Italia</i>	<i>Repubblica italiana</i>	<i>Italy</i>	<i>Italian Republic</i>	<i>IT</i>	<i>I</i>
<i>Κύπρος (Kypros)/Kibris</i>	<i>Κυπριακή Δημοκρατία</i>	<i>Cyprus</i>	<i>Republic of Cyprus</i>	<i>CY</i>	—
<i>Latvija</i>	<i>Latvijas Republika</i>	<i>Latvia</i>	<i>Republic of Latvia</i>	<i>LV</i>	—
<i>Lietuva</i>	<i>Lietuvos Respublika</i>	<i>Lithuania</i>	<i>Republic of Lithuania</i>	<i>LT</i>	—
<i>Luxembourg</i>	<i>Grand-Duché de Luxembourg</i>	<i>Luxembourg</i>	<i>Grand Duchy of Luxembourg</i>	<i>LU</i>	<i>L</i>
<i>Magyarország</i>	<i>Magyar Köztársaság</i>	<i>Hungary</i>	<i>Republic of Hungary</i>	<i>HU</i>	—
<i>Malta</i>	<i>Repubblika Ta' Malta</i>	<i>Malta</i>	<i>Republic of Malta</i>	<i>MT</i>	—
<i>Nederland</i>	<i>Koninkrijk der</i>	<i>Netherlands</i>	<i>Kingdom of</i>	<i>NL</i>	<i>NL</i>

	Nederlanden		the Netherlands		
Österreich	Republik Österreich	Austria	Republic of Austria	AT	A
Polska	Rzeczpospolita Polska	Poland	Republic of Poland	PL	—
Portugal	República Portuguesa	Portugal	Portuguese Republic	PT	P
Slovenija	Republika Slovenija	Slovenia	Republic of Slovenia	SI	—
Slovensko	Slovenská republika	Slovakia	Slovak Republic	SK	—
Suomi/Finland	Suomen tasavalta/ Republiken Finland	Finland	Republic of Finland	FI	FIN
Sverige	Konungariket Sverige	Sweden	Kingdom of Sweden	SE	S
United Kingdom	United Kingdom of Great Britain and Northern Ireland	United Kingdom	United Kingdom of Great Britain and Northern Ireland	UK	UK

[1] The abbreviation to use = ISO code, except for Greece and the United Kingdom, for which EL and UK are recommended (instead of the ISO codes GR and GB). The former abbreviations (generally taken from the international code for automobiles) were used until the end of 2002.

NB: Ireland is the full name laid down in the Irish Constitution; ‘Eire’ (the name in Irish) and ‘Republic of Ireland/Irish Republic’ are incorrect in English.

Use ‘the Netherlands’ not Holland, which is only part of the Netherlands (the provinces of North and South Holland); a capital T is not necessary on ‘the’. In tables ‘Netherlands’ will suffice.

Use ‘United Kingdom’ for the Member State, not ‘Great Britain’, which comprises England, Scotland and Wales; these three together with Northern Ireland are the constituent parts of the United Kingdom. The purely geographical term ‘British Isles’ includes Ireland and the Crown Dependencies (the Isle of Man and the Channel Islands, which are not part of the United Kingdom).

Source: <http://publications.eu.int/code/en/en-370101.htm>

Annex 2 Notation of location coordinates

Geographic coordinates (longitude, latitude)

The International standard ISO 6709 of the International Organization for Standardization is the standard representation of latitude, longitude and altitude for geographic point locations. The order of the elements is the latitude, the longitude and the altitude.

For the notation of longitude and latitude, ISO 6709 uses a combination of the sexagesimal (0-60) system and the decimal (0-10) system. Fractions of degrees can be given in minutes or as decimal fractions. Fractions of minutes can be given in seconds (0-60) or as decimal fractions. It is recommended to use in the Questionnaire:

Degrees and minutes, followed by seconds as decimal fractions

This is denoted as: DDMSS.SS

The first two digits DD represent degrees; the third and fourth digits MM represent minutes; the subsequent digits SS.SS represent seconds and their decimal fraction including the decimal sign ".". The decimal fraction can be omitted.

Northern latitudes are preceded by a plus sign, southern latitudes do not occur in the EU. Longitudes east of Greenwich are preceded by a plus sign, longitudes west of Greenwich by a minus sign. This plus-or-minus sign must always be used.

For values less than ten, leading zeros must be used.

A location is represented by a single string in which the latitude is directly followed by the longitude. No separator between latitude and longitude is used, since the + or - minus sign for the longitude indicates where the longitude starts. The number of digits used for the decimal fraction should be sufficient to represent the location coordinates with sufficient accuracy, but should not exceed 4.

Example: the location (52° 10' 33.2" North; 4° 30' 52.5") is denoted as:

+521033.2+043052.5

or

+521033+043052.

Annex 3 Dates and Deadlines Relating to the Implementation of the DIRECTIVE 2002/49/EC

Source: Good Practice Guide

2002

Article 15

Entry into force

This Directive 2002/49/EC shall enter into force on the day of its publication in the Official Journal of the European Communities.

Note:

The Directive 2002/49/EC was published in the Official Journal of the European Communities (L 189/12) on the 18 July 2002

2003

Article 12

Adaptation

The Commission shall adapt Annex I, point 3, Annex II and Annex III hereto to technical and scientific progress in accordance with the procedure provided for in Article 13(2).

Annex II, section 2.2, last paragraph:

Those methods must be adapted to the definitions of L_{den} and L_{night} . No later than **1 July 2003**, the Commission will publish guidelines in accordance with Article 13(2) on the revised methods and provide emission data for aircraft noise, road traffic noise and railway noise on the basis of existing data.

2004

Article 10

Collection and publication of data by Member States and the Commission

1. No later than **18 January 2004**, the Commission will submit a report to the European Parliament and the Council containing a review of existing Community measures relating to sources of environmental noise.

Article 14

Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive no later than **18 July 2004**. They shall inform the Commission thereof.

2005

Article 7

Strategic noise mapping

1. Paragraph 2. No later than **30 June 2005**, and thereafter every five years, Member States shall inform the Commission of 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, major airports and the agglomerations with more than 250 000 inhabitants within their territories.

Article 5

Noise indicators and their application

4. No later than **18 July 2005**, Member States shall communicate information to the Commission on any relevant limit values in force within their territories or under preparation, expressed in terms of L_{den} and L_{night} and where appropriate, L_{day} and $L_{evening}$, for road-traffic noise, rail-traffic noise, aircraft noise around airports and noise on industrial activity sites,

together with explanations about the implementation of the limit values.

Article 4

Implementation and responsibilities

1. Member States shall designate at the appropriate levels the competent authorities and bodies responsible for implementing this Directive, including the authorities responsible for:
 - (a) making and, where relevant, approving noise maps and action plans for agglomerations, major roads, major railways and major airports;
 - (b) collecting noise maps and action plans.
2. The Member States shall make the information referred to in paragraph 1 available to the Commission and to the public no later than **18 July 2005**.

2006

Article 1

Objectives

2. This Directive shall also aim at providing a basis for developing Community 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. To this end, the Commission shall submit to the European Parliament and the Council, no later than **18 July 2006**, appropriate legislative proposals. Those proposals must take into account the results of the report referred to in Article 10(1).

2007

Article 7

Strategic noise mapping

1. Member States shall ensure that no later than **30 June 2007** strategic noise maps showing the situation in the preceding calendar year have been made and, where relevant, approved by the competent authorities, 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.

Article 10

Collection and publication of data by Member States and the Commission

2. The Member States shall ensure that the information from strategic noise maps and summaries of the action plans as referred to in Annex VI are sent to the Commission **within six months of the dates laid down in Articles 7 and 8** respectively.

*Note: This means data from strategic noise maps have to be sent to the Commission by **30 December 2007** at the latest.*

2008

Article 8

Action plans

1. Member States shall ensure that no later than **18 July 2008** the competent authorities have drawn up action plans designed to manage, within their 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.

Article 7

Strategic noise mapping

No later than **31 December 2008**, Member States shall inform the Commission of all the agglomerations and of all the major roads and major railways within their territories.

2009

Article 10

Collection and publication of data by Member States and the Commission

2. The Member States shall ensure that the information from strategic noise maps and summaries of the action plans as referred to in Annex VI are sent to the Commission **within six months of the dates laid down in Articles 7 and 8** respectively.

*Note: This means that summaries of the action plans have to be sent to the commission by **18 January 2009** at the latest.*

4. Every five years the Commission shall publish a summary report of data from strategic noise maps and action plans. The first report shall be submitted by **18 July 2009**.

Article 11

Review and reporting

1. No later than **18 July 2009**, the Commission shall submit to the European Parliament and the Council a report on the implementation of this Directive.

2012

Article 7

Strategic noise mapping

2. Member States shall adopt the measures necessary to ensure that no later than **30 June 2012**, and thereafter every five years, strategic noise maps showing the situation in the preceding calendar year have been made and, where relevant, approved by the competent authorities for all agglomerations and for all major roads and major railways within their territories.

Article 10

Collection and publication of data by Member States and the Commission

2. The Member States shall ensure that the information from strategic noise maps and summaries of the action plans as referred to in Annex VI are sent to the Commission **within six months of the dates laid down in Articles 7 and 8** respectively.

*Note: This means data from strategic noise maps have to be sent to the Commission by **30 December 2012** at the latest.*

2013

Article 8

Action plans

2. Member States shall ensure that, no later than **18 July 2013**, the competent authorities have drawn 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 Member States for the agglomerations and for the major roads as well as the major railways within their territories.

2014

Article 10

Collection and publication of data by Member States and the Commission

2. The Member States shall ensure that the information from strategic noise maps and summaries of the action plans as referred to in Annex VI are sent to the Commission **within six months of the dates laid down in Articles 7 and 8** respectively.

*Note: This means that summaries of the action plans have to be sent to the commission by **18 January 2014** at the latest.*