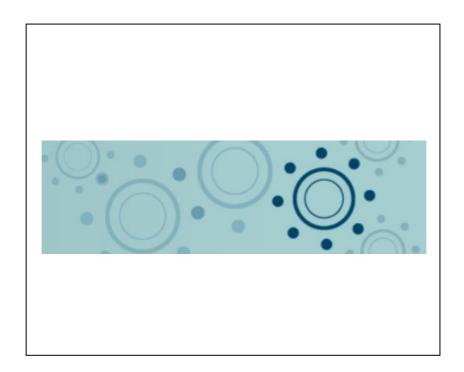
# **Delivery guide for Environmental Noise Data**

Submission of DF7\_DF10: Noise action plans for major roads, railways, airports and agglomerations



# ETC/ACM Technical Paper December 2018

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2.0	Núria Blanes, Maria José Ramos, Miquel Sáinz de la Maza, Jaume Fons, Roman Ortner, Colin Nugent, Martin Adams	20.11.2017	Update of the delivery guidelines for DF7_10, including the modifications introduced in 2017 in the ENDRM delivery system in Reportnet.
3.0	Núria Blanes, Eulàlia Peris	26.11.2018	Update of the delivery guidelines for DF7_10 according to updated QA/QC implemented in Reportnet, and inclusion of the delivery of quiet areas in spatial format.

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# 1 Outline of the delivery

This reporting obligation consists on the provision of action plans related data as listed in annex VI for major roads, railways, airports and agglomerations and any criteria used in drawing up action plans for:

- Agglomerations > 100,000 inhabitants.
- Major civil airport > 50,000 movements/year
- All major roads > 3 million vehicles/year
- All major railways > 30,000 trains/year

The first round of noise action planning, first implementation step of the END, only includes action plans for agglomerations > 250.000 inhabitants, major civil airports > 50.000 movements/year, major roads > 6 million vehicles/year and major railways > 60.000 trains/year. This information was made available in January 2009, and in January 2014 it was expected to receive the information on action plans concerning all noise sources. Subsequently to that date, every 5 years an update of the action plans should be made available to the EC.

Information on action plans consist on 4 main blocks of information:

- 1. Webform to be filled in with the summary information of the action plans (details can be found in section 4 of this annex)
- 2. Excel sheet detailing the unique identifier by which any action plan summary can be referred to a specific reporting entity. This information consists on the detailed information concerning coverage of the action plan summaries being reported, needed to ensure the exact correspondence between the reporting entities and the corresponding summaries of the adopted action plans.
- 3. Information related to quiet areas in spatial format: area and location
- 4. Supplementary information (as described in chapter 5) and metadata (constraints of the data provided as described in chapter 6)

It is expected that each subfolder created to deliver data concerning this reporting obligation will contain one webform filled in per each entity to be reported: one summary per each agglomeration, one summary per each airport, preferably one summary for all major roads and preferably one summary for all major railways. Although, in the case of major roads and major railways, Member States are also permitted to report noise action plan summaries referring to a part of the complete network or to a particular region. The methodology for reporting data through Reportnet is explained in a separate chapter in the main reporting handbook.

It is highly recommended that the data provided follow the templates that have been specially created for this purpose. There are specific quality check rules designed for helping the country to report the data in line with the specifications, thereby ensuring coherence of the data and at the same time, to facilitate the manual quality check developed by several EU institutions.

The analysis of the data quality and completeness will be only carried out upon the information requested as mandatory. This may be basis upon which the Commission assesses compliance with the END reporting obligations.

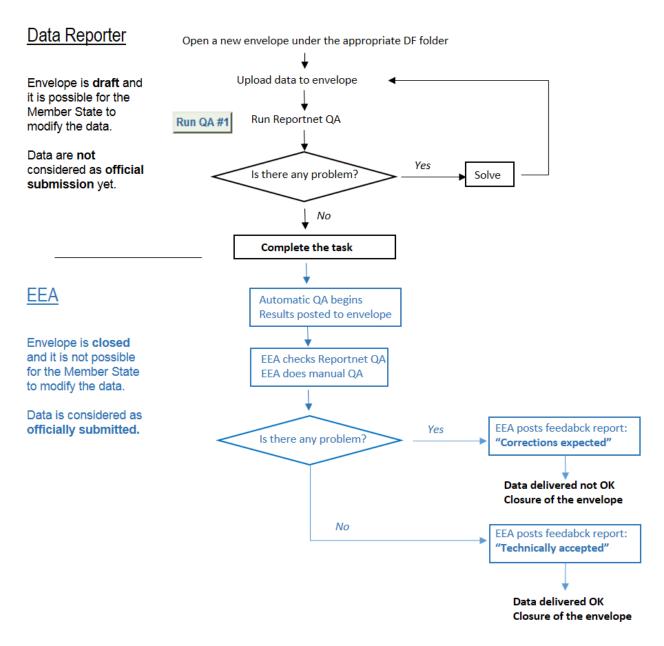
In this case, all the information to be reported in the webforms have been considered mandatory except the financial information, as well as the accompanying excel files and the supplementary information covering aspects related with the linkages with previous dataflows. Unique codes have also been considered mandatory and are highly relevant to ensure traceability as well as the linkage between different dataflows or different types of information in the same dataflow. The unique codes which are used to perform the quality check rules are available in Reportnet's Content Registry, at <a href="http://cr.eionet.europa.eu/folder.action?uri=http%3A%2F%2Fcr.eionet.europa.eu%2Fproject%2Fnoise">http://cr.eionet.europa.eu/folder.action?uri=http%3A%2F%2Fcr.eionet.europa.eu%2Fproject%2Fnoise</a>.

# 2 Data submission process

The process to submit the requested information is very simple:

- 1. Once you are in the corresponding folder, go into the webforms sections and click on "Add and edit a NoiseActionPlans\_DF\_7\_10" questionnaire.
- 2. In the following page, you need to "Edit" the action plan to be reported and "Accept changes"
- 3. This should be repeated as many times as necessary to report all the noise action plans requested, by "Adding a new Action Plan".
- 4. Once all the noise action plans have been added, "Save form" before "Close form"
- 5. Download the excel sheet for the provision of action plan's coverage from Eionet Data Dictionary (<a href="http://dd.eionet.europa.eu/datasets/3105">http://dd.eionet.europa.eu/datasets/3105</a>). Fill in the template in your personal computer and upload the file by using the "Add file" option.
- 6. Upload the requested spatial data as separate files or in a zip file using the "Add zip file" button.
- 7. Other files, such as the supplementary reports or metadata files, needs to be added in the corresponding folder by clicking on the "Add file".
- 8. "Complete the task" (equivalent to submit the information officially).

Figure 1. Overview of the Reporting process



In a situation where a Member State may need to have access to the webforms from outside of the Central data Repository (CDR), a webform system (<a href="http://webforms.eionet.europa.eu/">http://webforms.eionet.europa.eu/</a>) is available making possible to upload existing files or to create new ones.

Moreover, chapter 3 contains a check list of what needs to be done in order to fulfil the requests of the END for this specific deliverable, to ensure that the data provided is compliant with the minimum requirements specified in this Annex.

Chapter 4 presents instructions and explanation for the detailed data to be delivered, as specified in the END, through the use of webforms, excel files and spatial files..

Chapter 5 deals with the supplementary information to be provided, and chapter 6 details the content of the metadata files to be provided for each document delivered.

Finally, in chapter 7, details the naming conventions for the files that should be uploaded in Reportnet and chapter 8 outlines the quality check process followed for this dataflow.

# 3 Check list for the data reporters

This section contains a list to be checked by reporters to ensure that the data reported adheres to the minimum requirements specified in this annex.

#### **Data preparation:**

- Do you have access to the webform corresponding to DF7\_10 delivery?
- Are all the fields filled and where no data is be provided (due to unavailability or inapplicability), have the explanatory values "-1" or "-2" been used?
- Have you provided a metadata file and does this contain all necessary information, e.g. a description of the data?
- Have you provided a supplementary report highlighting the additional elements requested in Annex V of the END concerning action plans (authority responsible, legal context, noise reduction measures already in force and any projects in preparation)? Do these reports include a short summary in English?
- Have you completed all the metadata files concerning this deliverable?

#### **DF7 DF10 names:**

- Do the name of the files follow the naming convention proposed? Do the names also indicate the content of the file?

#### **Uploading process:**

- When using Reportnet, have you logged in, created a new envelope, entered the envelope and activated the task?
- Have you filled in the webform with the requested information?
- In the case of more than one noise action plan to be reported, have you repeated the exercise until the delivery is complete?
- Have you uploaded the excel sheet containing the coverage of the action plans summaries' being reported?
- Have you uploaded the spatial files corresponding to quiet areas location and delimitation?
- Have you uploaded the corresponding metadata file and the supplementary reports?
- Have you pressed the option "Complete task"?
- Please remember to logout from Reportnet.

# 4 Information expected to be reported

The following list contains the main items to be reported as a summary of the noise action plans for major roads, railways, airports and agglomerations and any criteria used in drawing up action plans for all geographical areas where noise maps indicate an exceedance of  $55dB\ L_{den}$  and  $50dB\ L_{night}$ :

EEA cannot take responsibility for the quality checking of data that is not reported in accordance with these guidelines.

The specifications detailed in this document will be adapted to the INSPIRE guidelines specifications for the reporting due in 2024.

#### 4.1 Webforms to summarize the information corresponding to noise action plans

- Identification of the noise action plan:
  - Code of DF\_7\_10: a unique and specific short name for each summary, containing at least the country code, or the regional code, and the noise source that is addressed in the action plan.
  - Full name of Noise Action Plan report
  - o Reporting entity unique code
- Identification of the reporting issue, which should be chosen from the following:
  - Agglomeration
  - Major roads
  - Major railways
  - Major airports
- Information concerning the measures taken:
  - o Cost (in €) of the noise action plan (if available)
  - Adoption date
  - Completion date
  - o Number of people experiencing noise reduction
  - $\circ$  Limit values in place at the time of adoption of the noise action plan (preferably converted where relevant in  $L_{den}$ ,  $L_{day}$ ,  $L_{evening}$ ,  $L_{night}$  as defined by Annex I of the Directive 2002/49/EC)
  - Summary of the results of noise mapping (problems identified and situations that need to be improved)
  - o Summary of the results of public consultations organised in relation to the action plan
  - Summary of noise management actions, including measures to preserve quiet areas, also including related budget and targets
  - Summary of the long-term strategy
  - Summary of provisions envisaged for evaluating the implementation and results of the action plan
  - Web links to the full noise action plan

Empty fields are not permitted in the webforms, so one of the following values should be provided where no information is available for a specific field:

Field value	Meaning	Description
-1	Data not applicable	<ul> <li>This may apply to the following cases:</li> <li>Table / field not to be reported because no agglomeration, or no major roads, or no major railways or no major airports fall in the scope of the Directive (meeting the minimum threshold specified by END).</li> <li>For the agglomerations case if a specific noise source is not present.</li> <li>A field value does not exist (e.g. EURoadID)</li> </ul>
-2	Data not available	This may apply to the following cases:  - Data not mandatory for reporting  - Data not yet available (mandatory data)  - Data not available (mandatory data)

#### 4.2 Excel sheet for the submission of the noise action plans' coverage

The DF\_7\_10\_APCoverage.xls file should contain all the list of action plans that are expected for each agglomeration, major roads, major railways and major airport, covering at least all the geographic locations were noise levels according to the noise maps are more than 55 dB L<sub>den</sub> or 50 dB L<sub>night..</sub>

It has been organised in 4 spreadsheets, one per each noise source: agglomerations, major roads, major railways and major airports. And the information to be provided in each spreadsheet is the one listed below:

- Identification of the Reporting Entity Unique code
- Identification of the noise source
  - o Agglomerations:
    - Use the UniqueAgglomerationId code provided in DF1\_5\_Aggl to identify the agglomerations reporting noise action plans summaries.
    - If more than one agglomeration has been summarized in the same action plan, include the different UniqueAgglomerationId codes separated by a comma.
  - Major roads:
    - Use the UniqueRoadId code provided in DF1\_5\_MRoad to identify the major roads' segments reporting noise action plans summaries.
    - If more than one road segment has been summarized in the same action plan, include the different UniqueRoadId codes separated by a comma.
  - Major railways:
    - Use the UniqueRailId code provided in DF1\_5\_MRail to identify the major railways' segments reporting noise action plans summaries.
    - If more than one railway segment has been summarized in the same action plan, include the different UniqueRailId codes separated by a comma.
  - Major airports:
    - Use the ICAO code provided in DF1\_5\_MAir to identify the major airports reporting noise action plans summaries.

- If more than one major airport has been summarized in the same action plan, include the different ICAO codes separated by a comma.
- Identification of the noise action plan reported
  - Use the "Code of DF\_7\_10" specified in each webform to establish the correspondence between the unique identifiers and the summary noise action plans being delivered. Please note that empty fields are not permitted in the DF\_7\_10\_APCoverage.xls file, so a "-2" value (Data not available) is expected if an action plan summary is not being delivered for a specific agglomeration, a specific road segment, a specific railway segment or a specific airport.

#### 4.3 Spatial files for the provision of quiet areas' location and delimitation

The Environmental Noise Directive deals with quiet areas in:

- Article 3: Definitions, where it is defined:
  - (l) "quiet area in an agglomeration" shall mean an area, delimited by the competent authority, for instance which is not exposed to a value of Lden or of another appropriate noise indicator greater than a certain value set by the Member State, from any noise source;
  - o (m) "quiet area in open country" shall mean an area, delimited by the competent authority, that is undisturbed by noise from traffic, industry or recreational activities;
- Article 11: Review and reporting, where in section 2 (C) is mentioned "the protection of quiet areas in open country"
- and in Annex V: Minimum requirements for action plans, where it is stated:
  - o actions which the competent authorities intend to take in the next five years, including any measures to preserve quiet areas,.

However, no clear demands on which data should be reported concerning quiet areas are provided and therefore, it is up to MS to report this information in following their preferred method, within this reporting obligation and / or within the reporting of noise action plans.

It is recommended that, for evaluation purposes and further analysis of the information provided, the delineation of the quiet areas (both, inside and outside agglomerations) would be delivered as:

- 1) Preferred format: **SHAPEFILES**<sup>1</sup>
- 2) Expected entities that will represent the noise contours: **POLYGONS** (limits of the polygon should correspond to the limits of the quiet area)
- 3) Coordinate system and projection: **ETRS89 LAEA52** (if another coordinate system is used, it should be specified in the metadata file in order to process the data provided).

Preferred format is shapefile because (1) major GIS software packages and all the open source desktop GIS support this format ant (2) if can be considered an open format and a de facto standard.

Most maps in EEA reports are presented in this Coordinate Reference System (CRS):

Coordinate reference system	EPSG code	Name and definition	Types of coordinates	Datum
ETRS-LAEA	3035	Lambert Azimuthal Equal Area 5210 Latitude of origin: 52 N Longitude of origin (central meridian): 10 E	Map projection in meters	ETRS89

For the purpose of streamline the information of the used CRS, the EEA QC team recommends to state the EPSG-code instead of writing the full name and definition of the used CRS where it is possible. Lookup EPSG-codes: <a href="http://www.epsg-registry.org/">http://www.epsg-registry.org/</a>.

4) Attribute table: it is only expected a provision of a "definition code", as all the necessary information to understand how the quiet area has been delimited, the reference year, who has done it, etc. should appear in the metadata file of the shapefile with the definition code that can be found in the attributes table.

It is expected to receive one shapefile containing all the quiet areas for a single agglomeration (so, depending on the number of agglomerations present in one country, it will be expected X number of shapefiles) and another shapefile reporting all quiet areas outside agglomerations, covering all the country (so it is expected that, all noise sources – Major roads, Major railways and Major airports – would be taken into account to delineate the quiet areas outside agglomerations reported). Partial reports could be provided, although the coverage should be specified in the metadata file accompanying the shapefiles.

Details of the shapefile that could be provided:

Name of the shapefile	[CountryCode]_[ReportingEntityUniqueCode]_QAREA.[extension]
Attribute table	- CountryCode (CTRYID)
	- ReportingEntityUniqueCode (RepEntUnCD)
	- TypQArea. Possible values:
	- OC: if the quiet area is in open country
	- IN: if the quiet area is in an agglomeration
	- UnAggID code. Possible values:
	- "-1": if the quiet area is in open country
	- If the quiet area is inside an agglomeration, then provide the UniqueAgglomerationID (UnAggID).

# 5 Supplementary information

There are two types of supplementary information to be provided:

- 1. Supplementary report highlighting the additional elements requested in Annex V of the END. This report should fulfill the following items, and could be provided as a letter or as any text file format:
  - The authority responsible, if not already communicated by 18 July 2008 following Art. 4(2). Note that the authority responsible for making and approving the action plan may be different from the reporting authority (DF2-Data Flow 2 should be updated accordingly)
    - You can also fulfill this request by providing the link to the Reportnet folder where (updated, if necessary) DF2 has been uploaded.
  - The legal context (though it may refer to the legal context reported under DF3 -Data Flow 3)
    - You can also fulfill this request by providing the link to the Reportnet folder where DF3 has been uploaded.
  - Any noise reduction measures already in force and any projects in preparation (though it may may refer to the legal context reported under DF6\_9 -Data Flow 6 and 9)
    - You can also fulfill this request by providing the link to the Reportnet folder where DF6\_9 has been uploaded.
- 2. Any other type of information that may be relevant for consultation purposes (letters, clarification documents, the complete noise action plan, etc.). This second type of supplementary report is optional and will only be stored in CDR for purposes of traceability of the reporting obligation.

It is requested to upload a short text file in English (e.g. Microsoft WORD, .txt files, etc.) in the same envelope, to be used as metadata for the above supplementary information documents provided, that need to contain:

- The title of the supplementary information
- Language used in the main report
- Short description of the information contained in this report (recommended length: up to one page).

The name of this file can follow the same specifications proposed in section 6.3 of this Annex.

### 6 Metadata

In order to be able to deal with the data provided, it is very important to provide some information about the data itself.

Therefore, several metadata files are requested to accompany the information reported. These files should be written in English, and be provided in a text file format, e.g. Microsoft WORD, .txt files, etc.

#### 6.1 Metadata for the webforms

The metadata file should contain the following information:

- Title of the file that the metadata is referring to
- Reference year: the year to which this information relates
- Responsible organisation: Name of the organisation creating the data
- Contact person: Name of the responsible person in the relevant organisation and the appropriate contact details
- Constraints of the information reported

The supplied metadata files could follow the naming convention specified below:

[Name]\_metadata.[extension]

Where:

- [Name] is the name of the file the metadata is referring to.

#### 6.2 Metadata for the shapefiles containing quiet areas

Metadata information proposed to be associated to each shapefile containing quiet areas:

- Name of data: title of the data
- Description of data: Which is the content of the data and purpose of its creation
- Coordinate reference system
- Source and methodology including version of specification on which the compilation is based: Description on how the quiet areas delineation has been done (based on acoustics, leisure parks, etc.) and which data has been used for its creation.
- Reference year: in which year this information has been created and delivered / published
- Coverage: Quiet areas inside a specific agglomeration, covering the whole country, covering part of the country...
- Responsible organisation: Name of the organisation creating the data
- Contact person: Name of the contact person in the responsible organisation and contact details
- Ownership: to whom the data belongs
- Use rights: if the data can be distributed worldwide, restrictions, possibility to use depending on the purpose,...

More information can be, nevertheless, provided if desired. If this is the case, it can be used the metadata standard for geodata developed by the EEA.

### 6.3 Metadata for the Supplementary information files

Please refer to the detailed information provided in section 5 of this Annex.

# 7 Naming conventions

The title of the DF7\_10 envelope where the webforms, excel templates, shapefiles corresponding to location and delimitation of quiet areas and supplementary reports should be stored, should follow the naming convention proposed below:

$$[CountryCode]\_DF7\_10\_[RefYear]\_ \left\{ \begin{array}{c} del \\ \\ \\ upd(date) \end{array} \right\}$$

#### Where:

- [CountryCode] corresponds to the ISO code for the country (2 digits)
- [RefYear] corresponds to the year when the deliverable should be done (four digits);
- "del" refers to "deliverable" and corresponds to the first time that a country provide information for this reporting obligation in a specific reference year;
- "upd" refers to "update" and corresponds to the updates of the information corresponding to the reporting obligation for a specific reference year of the END (i.e. when the information reported under del is not complete or does not contain the complete expected coverage);
- and (date) is the date when the update of information to the same reporting obligation is done. Date format is year (two digits), month (two digits) and day (two digits): yymmdd.

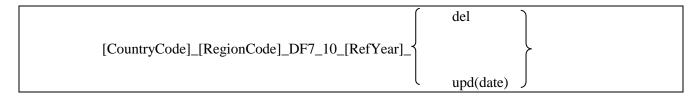
#### Examples:

LT DF7 10 2014 del.xls

LT\_DF7\_10\_2019\_upd190325.xls

#### 7.1 Naming conventions for countries reporting in regions

The naming convention of the DF7\_10 envelope for those countries reporting in regions, a region code has been established following the information provided in DF1\_5. This is the case for Great Britain, Belgium and Germany.



The following region codes' have been established:

Country	Region	Region code
Belgium	Brussels	В
	Flanders	F
	Wallonie	W
Great Britain	England	E
	Gibraltar	G
	Nothern Ireland	N
	Scotland	S
	Wales	W
Germany	Baden – Württemberg	a
	Bayern	b
	Berlin	С
	Brandenburg	d
	Bremen	e
	Hamburg	f
	Hessen	g
	Mecklenburg – Vorpommern	h
	Niedersachsen	i
	Nordrhein Westfalen	j
	Rheinland Pfalz	k
	Saarland	1
	Sachsen	m
	Sachsen - Anhalt	n
	Schleswig – Holstein	0
	Thüringen	p
	Eisenbahn Bundesamt	q

# 8 Quality check process

The items checked in the data reported are the following ones:

- Items checked:
  - data specifications data types: to ensure that data is within the range defined in the guidelines documents,
  - all the mandatory elements have been reported,
- Mandatory elements that have been filled in with a "-2" value, to keep track of the information that still needs to be reported.
- Correspondence of unique codes between different dataflow and/or updates of the same dataflow.
- Reporting coverage, to be sure that the information has been provided for all the expected reporting units.