# Technical Report

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| Title: | **IMAGINE –Report on input data preparation.** |
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## Introduction

ARPAT is the sub-task leader for task 1.3, input data collection. Within this sub task, it was decided that ARPAT has to deliver a frame on how to collect available input data for noise mapping.

Mainly, the desired output of this frame is meant to be a collection of information from all sub-task leaders partners and to be later on merged in only one document (deliverable 8). After this process, a list of available or suggested set of input data for general noise mapping will be available.

Giving a format for the GIS input data means that in the future, at the end of the IMAGINE project, the people who will do noise maps as well as the people who will prepare basic data for noise maps (e.g.: population distribution, terrain shape, buildings shape, traffic type,..) may use this format (or should use this format, if this will be adopted by the EU).

The present report collects contributions by several IMAGINE WP1 partners.

## Overview of the questionnaire

The present report presents the common format used by each partner to prepare and deliver a document about its specific set of data, based on its experience.

Our main target is to focus on the requirements for the 2012 noise mapping round; this survey aims to prove that required data for the future noise models (i.e. Harmonoise) is readily available or can be obtained with little extra effort starting from data already available for running nowadays models and to prove that it is possible, and probably it is easier and more efficient than using many different interim/national methods.

What we investigated was: what kind of external data can we get ? How useful is it ? How difficult is to transform it into data used internally by the model ? What if we use "simplified" / "deteriorated" input data?

## Frame structure

The questionnaire frame have been structured into the following layout:

- **PART 1:** topic field and participants

- **PART 2 – REQUIREMENTS:** *what I need for a specific noise mapping project*. This part includes required format of data, accuracy, expected error, default values to be used for a specific noise model and its implementation (i.e. software).

- **PART 3 - SOURCES:** *what I have at the moment*. This part reports the real/available/usable sources of data, their format and the required needed transformation to adapt them to the "PART 2" format.

There may be more answers for the same topic: the partner indicated his "required data" as described in part 2, according to one or more model/software implementation, and provided at least a "source of data" (part 3) for each of the stated requirements.

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Example: ground profile information.

The Model/Software X require input data as regular grid points of the elevation of the terrain (REQUIREMENT A). To provide those data:

- national digital cartographic information are used by interpolating not regular elevation point (SOURCE A.1), or

- national digital cartographic information are used by extrapolation of height profile lines (SOURCE A.2)

Meanwhile, the Model/Software Y require input data 2.5D vector data, where the height is an attribute for each 2D poly-line (REQUIREMENT B). To provide those data:

- national digital cartographic information are used by transformation of height profile lines (SOURCE B.1)

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## Remarks about filling the frame

If you like to contribute, you will find an empty frame to be filled and send to us[1]: in blue there is a description of what should be filled in.

Remember that the frame should be readable by a person who doesn't necessarily know the software you are using, but needs information on how to structure its data, which measurement units to use, how many data sets are needed, which are the available or wished alternatives.

Filling the questionnaire, please be as specific as possible; other people should be able to understand from your answers only how to deal with that aspect of noise mapping.

When filling in this document, **use your personal knowledge** to present available data formats, but **also use your experience to suggest possible other useful data formats.**

If some information is missing, leave the cell blank.

## Examples, samples, illustrations

If you have pictures showing features of the external data sets and/or their use in noise mapping software, and you think these pictures may clarify the text, do not hesitate to include them in annex to the frame document you fill in. Please make sure we are allowed to include the pictures in a public document; provide copyright information whenever needed.

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