

# **Deliverable D35 (D5.1)**

## **RI-URBANS Data management plan (preliminary)**



**RI-URBANS**

**Research Infrastructures Services Reinforcing Air  
Quality Monitoring Capacities in European Urban &  
Industrial AreaS (GA n. 101036245)**

**By**

**NILU**



***07<sup>th</sup> March 2022***

### Deliverable D35 (D5.1): RI-URBANS Data management plan (preliminary)

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<b>Work package (WP)</b>	WP5 / Strategic guidance for upscaling RIURBANS STs
<b>Deliverable</b>	D35 (D5.1)
<b>Lead beneficiary</b>	NILU
<b>Deliverable type</b>	<input checked="" type="checkbox"/> R (document, report) <input type="checkbox"/> DEC (websites, patent filings, videos,....) <input type="checkbox"/> Other: ORDP (open research data pilot)
<b>Dissemination level</b>	<input checked="" type="checkbox"/> PU (public) <input type="checkbox"/> CO (confidential, only members of consortium and European Commission)
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<b>Comments</b>	Report describing the Data Management Plan (DMP), the tools used and the process of creating the content of RI-URBANS

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## 1. About this document

This document describes the Data Management Plan (DMP), the tools used and the process of creating the content of RI-URBANS (Research Infrastructures Services Reinforcing Air Quality Monitoring Capacities in European Urban & Industrial Areas, Horizon-2020 GD project #101036245). This is a public document that will be distributed to all RI-URBANS partners for their use and submitted to European Commission as an RI-URBANS deliverable D35 (D5.1). This document can be downloaded at <https://riurbans.eu/work-package-5/#deliverables-wp5>.

## 2. Introduction

The RI-URBANS project is collecting data from several sources, covering observational data (nanoparticles and atmospheric particulate matter, their sizes, constituents, sources, and gaseous precursors) and secondary data products from epidemiological studies.

Due to the non-uniform character of the data, the DMP will describe a larger number of different datasets and repositories. These datasets and repositories all have different procedures for data management. The RI-URBANS DMP will describe how the data is managed during and after the project is ended. The DMP is considered a “living” document and will be continuously updated throughout the project. Deliverable D35 (D5.1) will be the first version of the DMP, and the content is expected to change throughout the project. Official versions of the DMP will be released also in M18 and M42.

The DMP was created on the ARGOS platform by OpenAIRE and EUDAT (<https://argos.openaire.eu>) using the Horizon 2020 template ([https://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/open-access-data-management/data-management\\_en.htm](https://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/open-access-data-management/data-management_en.htm)).

## 3. The RI-URBANS Landscape Analysis

Before creating the DMP, a Landscape Analysis was conducted to investigate the scope of the measurements and the epidemiological studies in the project. In addition, we were able to identify the people responsible for the different measurements and studies, so that they could contribute to describing the procedures for handling the data.

The Landscape analysis started with a questionnaire ([Appendix 1](#)) and a subsequent analysis of the results ([Appendix 2](#)).

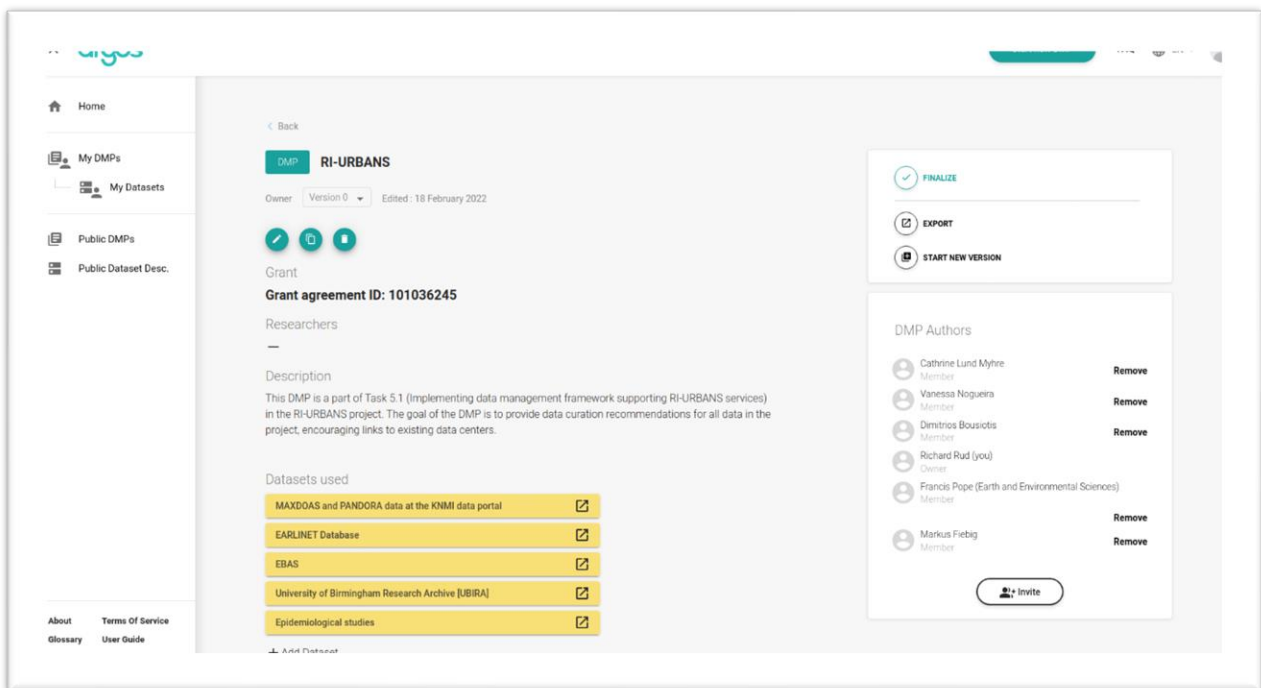
The Landscape Analysis was conducted during December 2021, and results were analysed in January 2022 as a starting point for finding out what types of data should be described in the DMP.

#### 4. The ARGOS platform

Argos is a platform for creating DMPs. It is open and free for everyone to use and created by OpenAIRE and EUDAT. The platform makes it possible to select a specific template for the DMP and then invite others in the project to describe how they plan to manage their data during the project.

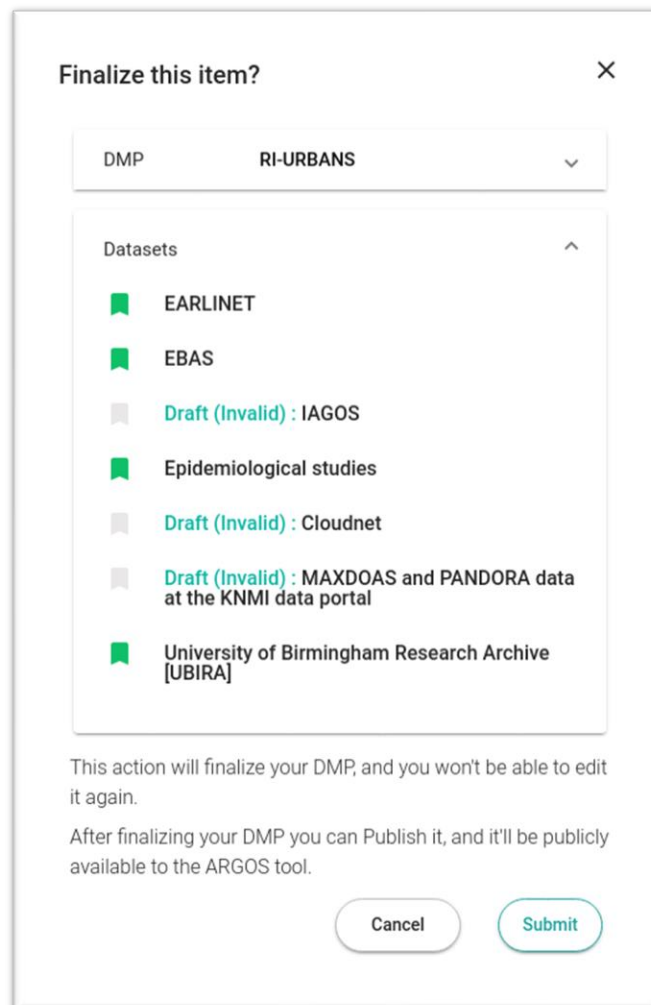
The content of the DMP can be published so that it is openly available to others.

The DMPs can also be exported in different formats including PDF, Word Document, XML and RDA JSON. Since the tool is using the DMP common standard (<https://github.com/RDA-DMP-Common/RDA-DMP-Common-Standard>), it allows for import and export of DMP's and migration between different tools that follow the same standard.



Landing-Page of the DMP


This deliverable contains the preliminary version of the RI-URBANS DMP. As illustrated below, multiple datasets are in “draft mode” since many of the technical details are not yet settled. Version 0 of the DMP is publicly available here: <https://argos.openaire.eu/explore-plans/publicOverview/ba44d55c-78d6-4e4d-b89c-4be616d149df>



*Datasets in “draft mode”*

## 5. Appendix

### 5.1 Appendix 1: Survey



## RI-URBANS Landscape Analysis

RI-URBANS Landscape analysis of variables and instruments, including mobile platforms and smart sensors. Input will be used in the RI-URBANS data management plan.

Contact Richard Rud ([ror@nilu.no](mailto:ror@nilu.no) (<mailto:ror@nilu.no>)) for any questions related to this form or the data management plan in general.

\* Required

1. Location (pick city for your pilot site or describe location if it is not a pilot site) \*

- Athens
- Barcelona
- Bucharest
- Birmingham
- Helsinki
- Po Valley
- Paris
- Rotterdam
- Zurich
- Marseille
- 

Other

2. Observed variable(s) \*

3. Platform type \*

Stationary

Mobile

Other

4. Observation geometry \*

Remote sensing from ground

In Situ

Microsensor

Other

5. Instrument type (The instrument type refers to the measurement principle, not an individual manufacturer or model) \*

6. Time period \*

Campaign

Continuous (Long term measurements at URBAN supersites)

7. Time resolution (E.g. 1hour, 1min, 1day) \*

8. Contact person (first name, last name) \*

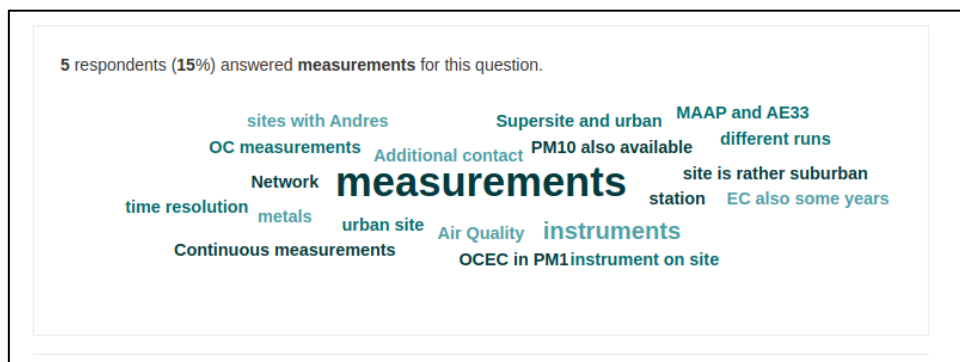
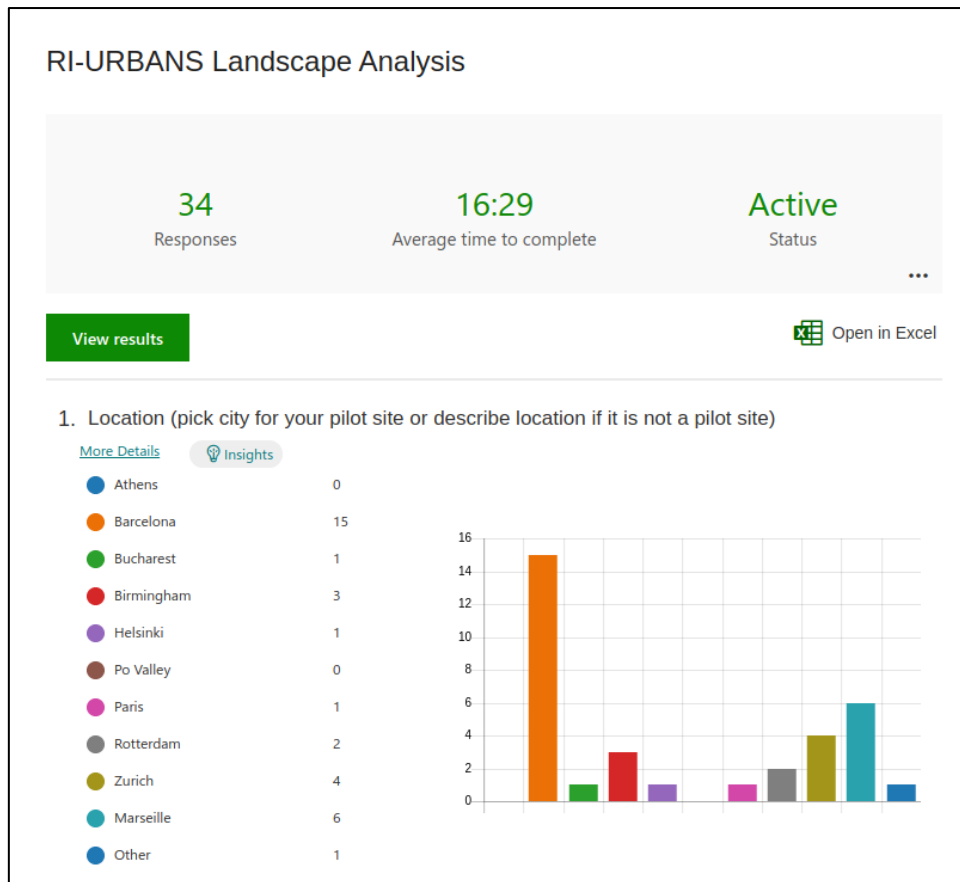
9. Affiliation \*

10. Email \*

11. Other relevant details \*



5.2 Appendix 2: Results



### 2. Observed variable(s)

[More Details](#) [Insights](#)

**34**  
Responses

Latest Responses  
 "Number of UFP >3 nm"  
 "eBC (in PM10 and PM1)"  
 "PMx mass concentration"

6 respondents (18%) answered **size distribution** for this question.

### 3. Platform type

[More Details](#)

Stationary	32
Mobile	1
Other	1

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### 4. Observation geometry

[More Details](#) [Insights](#)

Remote sensing from ground	2
In Situ	29
Microsensor	1
Other	2

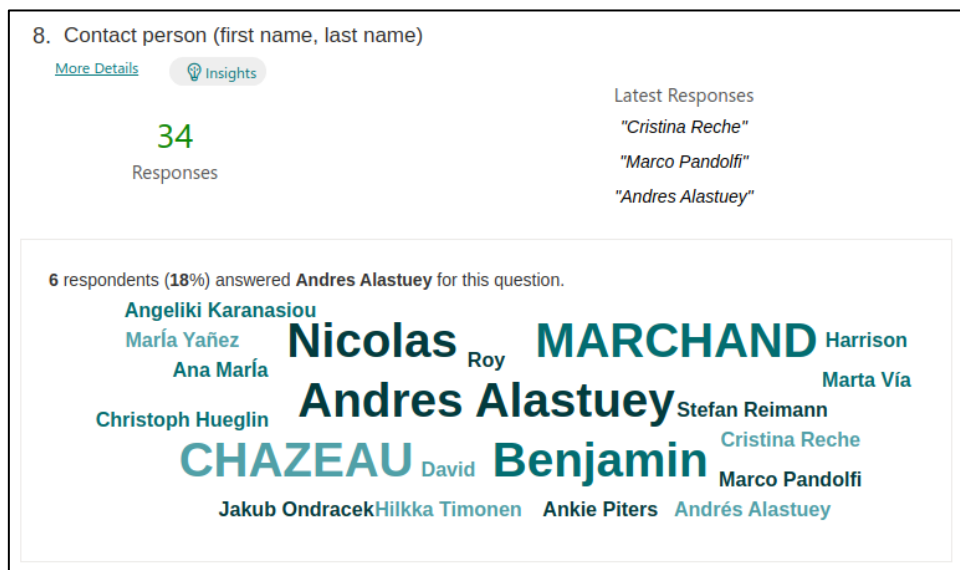
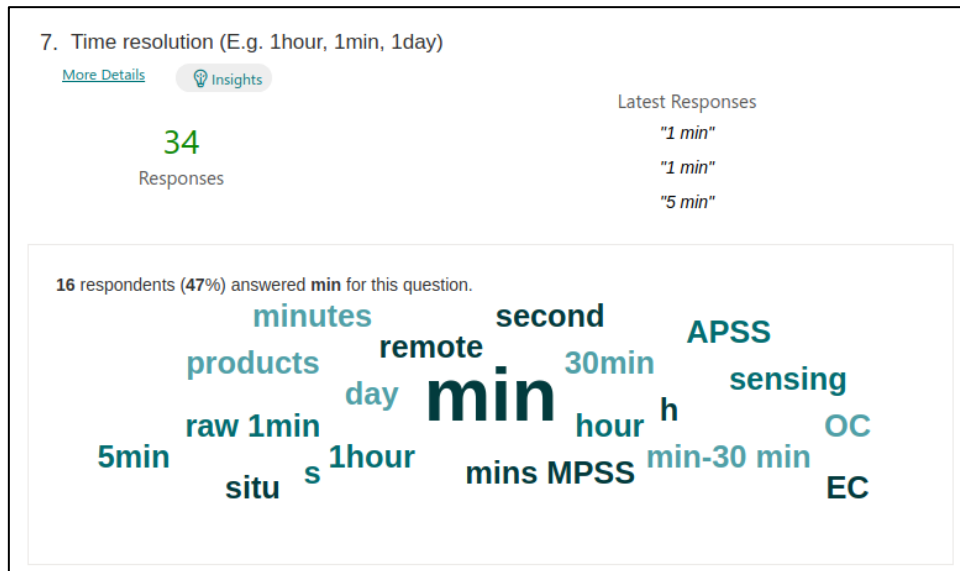
### 5. Instrument type (The instrument type refers to the measurement principle, not an individual manufacturer or model)

[More Details](#) [Insights](#)

**34**  
Responses

Latest Responses  
 "CPC"  
 "Absorption photometer: MAAP and AE33"  
 "OPC"

6 respondents (18%) answered **aethalometer** for this question.




9. Affiliation

[More Details](#) [Insights](#)

34  
Responses

Latest Responses  
"CSIC"  
"CSIC"  
"CSIC"

15 respondents (44%) answered CSIC for this question.



A word cloud showing various affiliations. The most prominent word is 'CSIC'. Other visible words include: Academy, Chemical Process, Sciences, Laboratory, University of Birmingham, EMPA, Czech, Univ, Marseille, Aerosol Chemistry, Institute, France, LCE, Aix, CNRS, Fundamentals, and Chemistry and Physics Finnish Meteorological Institute.

10. Email

[More Details](#) [Insights](#)

34  
Responses

11. Other relevant details

[More Details](#) [Insights](#)

33  
Responses

### 5.3 Appendix 3: RI-URBANS Data Management Plan (DMP)

<https://argos.openaire.eu/explore-plans/publicOverview/ba44d55c-78d6-4e4d-b89c-4be616d149df>

The screenshot shows the public overview page for the RI-URBANS DMP. The page is titled "DMP RI-URBANS" and is marked as "FINALIZED". It includes a navigation sidebar on the left with options like Home, Public DMPs, and Public Dataset Desc. The main content area displays the grant agreement ID (101036245), a list of researchers, a description of the DMP's purpose, and a list of datasets used: EBAS, Epidemiological studies, University of Birmingham Research Archive [UBIRA], and EARLINET. On the right side, there is an "EXPORT" button and a list of DMP Authors, including Cathrine Lund Myhre, Francis Pope, Vanessa Nogueira, Richard Rud, Markus Fiebig, Jan Theunis, Dimitrios Bousiotis, martine varpoppel@vito.be, and Lucia Mona.