SOS-ZEROPOL2030

D1.5 Data Management Plan

Author(s): Rondelez J., Sandra M., Devriese L.

Research Institute(s): Flanders Marine Institute

Document Information

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		Responsible	Authors	Reviewed by	Approved by
2.0	13/02/23	Rondelez Jelle	Rondelez Jelle, Sandra Matthias, Devriese Lisa	*UCC, WU, Univie, SINTEF Ocean, WR, BSNN, MIO-ECSDE, GRID-Arendal, RIFS*	Sandra Matthias, Lisa Devriese

Authors (alphabetical)	
Name	Organisation
Devriese Lisa	Flanders Marine Institute
Rondelez Jelle	Flanders Marine Institute
Sandra Matthias	Flanders Marine Institute

Acknowledgements/contributions (alphabetical)	
Name	Organisation
Booth Andy	SINTEF Ocean
Cowan Emily	SINTEF Ocean
Kopke Kathrin	UCC
Molenveld Karin	WR
Power Orla-Peach	UCC
van Leeuwen Judith	WU

Disclaimer

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Executive Summary

Throughout the project, several WP tasks will generate data that feeds different WPs and their deliverables. A well-structured data management plan (DMP) covers the description of data and metadata, their storage and long-term preservation, the designation of responsible persons, the handling of highly sensitive data, and the open access to and sharing of research data. The data generated will be reserved in an IODE and ICSU accredited database (e.g. Marine Data Archive; mda.vliz.be) on a dedicated server, managed by VLIZ. The secured database will keep the information stored at least 5 years after the end of the project, and move data requiring longer-term storage to a dedicated "safe" (online) storage medium. All data and will be quality controlled, secured, provided with metadata, and stored according to the FAIR principles (findable, accessible, interoperable, re-usable). Metadata that illustrates the existence of a dataset is always disclosed publicly unless there is an explicit request not to do so.

1. Introduction

The Data Management Plan (DMP) was created using the DMP Online tool. This platform is a web-based tool that supports researchers to develop data management plans. It contains the latest funder templates and best practice guidelines to support users to create good quality data management plans.

To create this DMP, the 'Horizon Europe DMP +' template was used. A first version, in which some questions were left unanswered, was sent to the project consortium. Based on the feedback received thereafter, a second version was completed. This version in DMP Online was used to establish this document, after approval by the full consortium.

The data management plan is included hereafter, formatted by the DMP Online tool:

SOS-ZEROPOL2030

A Data Management Plan created using DMPonline.be

Creator: Jelle Rondelez

Affiliation: Flanders Marine Institute

Funder: European Commission (Horizon)

Template: Horizon Europe DMP +

Data Manager: Jelle Rondelez

Grant number / URL: 101060213

ID: 175771

Start date: 01-09-2022

End date: 01-09-2026

Last modified: 16-02-2023

DPIA

- Not applicable

SOS-ZEROPOL2030
GDPR record

GDPR record

- Yes

Application has been made to the Norwegian Center for Research Data ([NSD](#)) to ensure full GDPR compliance on the data we collect.

SOS-ZEROPOL2030
Full DMP

Version information

101060213

SOS-ZEROPOL2030

Source to Seas - Zero Pollution 2030

v2.0

13/02/23

1. Data summary

The project will use existing data related to the emissions, environmental concentrations and toxicity of the case study pollutants. These datasets will support data generated by the project itself, in order to produce the necessary deliverables.

- Generate policy briefs in pdf-format.
- Generate transcripts of interviews
- Generate transcripts of living labs
- Generate output from living lab, such as flip overs and figures
- Reuse data related to the emissions, environmental concentrations and toxicity of the case study pollutants, in formats available

The data generation and gathering in WP2 and WP3 feeds the actions and objectives of WP4 and WP5. Data will also be generated in WP4 that feeds into the deliverables of WP3 and WP5.

Generated data will consist of small-size formats, such as pdf and csv. The size of the reused data depends on the availability of the necessary parameters.

- Generated data will originate from interviews conducted by the different project partners.
- Reused data will originate from a study of existing policy briefs and other documents available. Data portals might be utilized if needed.

- Policy makers
- Social scientists
- Projects conducting research on plastics in the marine environment
- Risk assessors
- Regulatory authorities

2.1 FAIR data: Making data findable, including provisions for metadata

- Yes: describe below

VLIZ and the use of the IMIS repository provides the opportunity to formally describe datasets by assigning a Digital Object Identifier (DOI) to it. A formal data publication procedure will help assure that the dataset is citable and traceable.

Following metadata is provided as much as possible / when available:

- Data provider
- Data creator
- Contact person and/or institute
- Dataset title
- Abstract
- Geographic reference
- Period
- Parameters
- Units
- More information on the measurement (type, interval, ...)
- Latitudinal and longitudinal coordinates and name of the measuring station or sampling location
- Sampling depth (with reference) and medium
- Sampling method

- Date (and time with reference) of sampling
- Citation
- Creative Commons license
- Website where data or metadata can be found or downloaded
- Publications that describe or use the data(set)
- Explanation of abbreviations
- Additional information on the data or dataset or project for which the data is collected.

VLIZ will apply existing metadata standards when creating the metadata templates per data type in the Marine Data Archive. In cases where no standard is publicly available, one will be set up by VLIZ according to FAIR best practices.

- Yes: describe below

The IMIS repository provides a search interface capable of searching on all metadata that is mentioned in question 2.1.3, as well as all keywords additionally provided and described in the title or abstract of the record.

- Yes: describe below

- IMIS provides an OAI-PMH interface for harvesting(*). The service-endpoint is at https://vliz.be/nl/imis?module=dataset
- IMIS provides a custom open (read-only) webservice(**) that can be used for harvesting purposes (list and download). A documentation of the API is available at https://vliz.be/nl/imis?module=webservices
- VLIZ is working towards a Linked-Open-Data publication of the IMIS content via https://marineinfo.org/ expected to be operational mid 2023

2.2 FAIR data: Making data accessible

- Yes: describe below

Results and linked datasets will be quality controlled, provided with metadata, and stored in the Marine Data Archive of VLIZ (http://mda.vliz.be/) according to the principles of FAIR (e.g.https://www.nature.com/articles/sdata201618).
The metadata provided in MDA is used to create the metadatarecord in the IMIS data system of VLIZ. The latter is an online information system developed by VLIZ to provide an overview of the marine scientific landscape in Flanders. Information on datasets, publications, persons and institutions is stored in a structured manner in this system.

- Yes

MDA is hosted by VLIZ, a partner in this project. The data provider or user is free to structure and manage files and folders at its discretion, making use of the functionalities offered by the system. All necessary information is described in the data policy information of the MDA.

VLIZ and the use of the IMIS repository provides the opportunity to formally describe datasets by assigning a Digital Object Identifier (DOI) to it. A formal data publication procedure will help assure that the dataset is citable and traceable.

- No, certain datasets cannot be shared openly for the following reasons:

Processed data will be made as open as possible, as closed as necessary. This will be revised per WP within this project. All data and output will be made findable, and a clear request-procedure will be in place for closed datasets. Raw data generated by the project will not be made available to be GDPR-compliant.

- No

No embargo will be applied.

- Yes: describe below

IMIS has several protocols in place, depending of the license/accessibility of the data through different repositories, that are free and standardized.

Metadata records in IMIS provide access points that direct users to a request form, depending on which repository holds the requested dataset. These forms generate helpdesk-issues that are handled by the VLIZ data center.

All requests are handled through a helpdesk that registers the identity of its users.

- Yes

A representative of each partner will be chosen as contact point for data requests on datasets related to the specific institute. These contact points will form the data access committee of the project.

- Yes

- Yes

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Metadata records in IMIS provide access points that direct users to a request form, depending on which repository holds the requested dataset. These forms generate helpdesk-issues that are handled by the VLIZ data center.

Metadata will be guaranteed to remain available, as VLIZ hosts the IMIS data system for an unlimited duration.

There is no documentation for specific software needed in this case.

2.3 FAIR data: Making data interoperable

The project will be doing semi-structured interviews, which means the interviews will be done using an interview guide with open questions. The interview guide will be developed based on a literature review and a conceptual framework that will also guide the data analysis at a later stage. This will allow for:

- Providing and following a structure within the interview.
- Ensure consistency between interviews
- Open questions will allow for inviting the respondent to share as much as information as possible.
- It provides room for asking follow up questions to probe for more information.
- It will ensure all information needs are covered
- It will facilitate analysing data of interviews.

At this point there is no known community-endorsed methodology that will be followed.

It is not the purpose of this project to generate specific ontologies or vocabularies.

- Yes

Metadata of generated datasets will contain references to existing scientific publications, policy briefs and open access reports, from which existing datasets will be used.

2.4 FAIR data: Increase data re-use

The project will be doing semi-structured interviews, which means the interviews will be done using an interview guide with open questions. The interview guide will be developed based on a literature review and a conceptual framework that will also guide the data analysis at a later stage. This will allow for:

- Providing and following a structure within the interview.
- Ensure consistency between interviews
- Open questions will allow for inviting the respondent to share as much as information as possible.
- It provides room for asking follow up questions to probe for more information.
- It will ensure all information needs are covered
- It will facilitate analysing data of interviews.

The methodology by which the interviews were conducted will be delineated in any resulting policy briefs. I case the policy briefs do not allow space for such description, a metadata package will be made available through the metadata records in the Integrated Marine Information System.

Outputs will be made available as open as possible, as closed as necessary. Metadata will be made available as CC0, while data will be made available under the CC-BY license.

- Yes

Data and output will be reuseable by third parties, with attribution required (CC-BY). In some cases, output will be only useable after revision of a request.

- Yes

The project will be doing semi-structured interviews, which means the interviews will be done using an interview guide with open questions. The interview guide will be developed based on a literature review and a conceptual framework that will also guide the data analysis at a later stage. This will allow for:

- Providing and following a structure within the interview.
- Ensure consistency between interviews
- Open questions will allow for inviting the respondent to share as much as information as possible.
- It provides room for asking follow up questions to probe for more information.
- It will ensure all information needs are covered
- It will facilitate analysing data of interviews.

3. Other research outputs

/

4. Allocation of resources

There are no costs for the project in using the IMIS and MDA data systems. VLIZ provides this platform freely to projects in the marine realm as a service. Any actions needed from the data managers of VLIZ are already covered within this project.

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The VLIZ Marine Data Center (VMDC), Local Services & Projects Team, supervised by Jelle Rondelez as Project Manager

Results and data from the project will be stored in the Marine Data Archive of VLIZ (http://mda.vliz.be/). The minimum storage time of 5 years will be respected.
The development, backup and maintenance of the MDA is an institutional activity of VLIZ. One of the key-activities of the datacenter is to offer an efficient tool and support to archive data files and to ensure their long-term existence. VLIZ datacenter (recognized as NODC) offers support and demos to use the MDA in its full potential. If VLIZ ceases to exist or terminates its data-archiving activities, VLIZ shall attempt to transfer the data files to a similar organisation that will continue the Agreement with the Data provider under similar conditions if possible. If VLIZ does not succeed in finding a similar organisation, VLIZ will organise a transfer of all files to each intellectual property right holder or data provider.

5. Data security

Access to the MDA is regulated through an account-based registration procedure, managed by VLIZ. Authorisation is only given after consulting the project contact persons, the VLIZ Data Center.

- Yes

Results and data from the project will be stored in the Marine Data Archive of VLIZ (http://mda.vliz.be/). The minimum storage time of 5 years will be respected.
The development, backup and maintenance of the MDA is an institutional activity of VLIZ. One of the key-activities of the datacenter is to offer an efficient tool and support to archive data files and to ensure their long-term existence. VLIZ datacenter (recognized as NODC) offers support and demos to use the MDA in its full potential. If VLIZ ceases to exist or terminates its data-archiving activities, VLIZ shall attempt to transfer the data files to a similar organisation that will continue the Agreement with the Data provider under similar conditions if possible. If VLIZ does not succeed in finding a similar organisation, VLIZ will organise a transfer of all files to each intellectual property right holder or data provider.

6. Ethics

- Yes

Data generated in the interviews and living labs will need to be compliant with GDPR regulations.

- Yes

Following text will be included in the questionnaires:

We will not collect direct personal information about you in this project – however we will collect it indirectly. First, we will have your consent to participate and tape recordings of the workshops and interviews themselves for quality purposes. We will delete the latter when the workshops/interviews are transcribed – at the end of the project period at the latest. Your consent will be deleted at the end of the project period (30. December 2026).
In case of a continuation of the situation with Covid-19, or similar situations, workshops and interviews may be conducted via Zoom or TEAMS. These will then also have access to your data when we record the sessions to get your consent and to ensure that we have narratives. We will delete these recordings as well after it is transcribed. Your consent will be stored until the end of the project period.
We will only use your information for the purposes described in this letter. All information from the study – including surveys – will be treated with confidentiality, and the data will be anonymized by the end of the project or deleted. You will never be identified when results are published.
SINTEF has hired NSD – Norwegian Centre for Research Data – to assess whether the SOS-ZEROPOL2030 project will process personal data in accordance with the requirements of data protection legislation. They consider the treatment of personal information, as described in this letter, is in accordance with GDPR.
Your rights
As long as you may be identified through the data material, you have a right to:
- *Find out what personal data we have registered about you;*
- *Have corrected any personal data that are wrong;*
- *Have deleted any personal data we have on you;*
- *Have a copy of your personal sent to you (data portability); and*
- *Send a complaint to the Data Protection Administrator or the GDPR (General Data Protection Regulation) about the use of your personal data in this project.*

7. Other issues

- Yes: describe below

Data management activities will be coordinated by the VLIZ data center, which is an internationally accredited data center due to their standardized procedures. In any case, VLIZ will aim to adhere to the FAIR principles, the data policies of the used repositories and systems, as well as the statements within this DMP. Project partners will be urged to implement internal procedures to streamline data management activities. In cases where partners lack the necessary procedures, VLIZ wil aid in the creation of one.