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Deliverable D7.3 - Data Management Plan

WP7 – Project coordination and management

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HORIZON-MISS-2021-OCEAN-02-01- Blueprint demonstration for co-created effective, efficient and resilient networks of MPAs

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Document History

Deliverable Title	Data Management Plan
Brief Description	This document presents an initial data management plan (DMP) for the Blue4All project. This DMP provides data management guidelines for the partners to follow and a summary of data that is to be collected under different Work Packages. The document also explains how the project will adopt FAIR data policy by following widely accepted frameworks and guidelines. The document will be updated with specific information on the data collected, reused, and processed throughout the course of the project.
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Author(s)	Lawrence Whatley (VLIZ), Lennert Schepers (VLIZ)
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Acronyms

Data Management Plan (DMP)

Deliverable (D)

Digital Object Identifier (DOI)

Ethics Board (EB)

Findability, Accessibility, Interoperability, and Reusability (FAIR)

General Data Protection Regulation (GDPR)

Horizon Europe (HEU)

Infrastructure for Spatial Information in Europe (INSPIRE)

Integrated Marine Information System (IMIS)

Intellectual Property Rights (IPR)

Marine Data Archive (MDA)

Marine Protected Area (MPA)

Marine Spatial Planning (MSP)

Other Effective area-based Conservation Measures (OECM)

Work Package (WP)

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1. Executive summary

This document is the initial data management plan (DMP) of the Blue4All project. The DMP presents a summary of the data that will be collected, generated and (re)used in the project and explains the purposes of using this data. It also includes a definition of the data and outlines the steps necessary to maximise the FAIRness (Findability, Accessibility, Interoperability, and Reusability) of the project's outputs. Issues concerning ethics and the General Data Protection Regulation (GDPR) are also addressed. Key data management issues are discussed, including common (meta)data standards and formats, data quality control, (meta)data vocabulary, publication policy, and data licensing. Therefore, the DMP provides data management guidelines for the partners to follow. It should be considered a living document; updates will be made throughout the project's lifetime with more specific information on data collected, generated, and used in Blue4All.

2. Data summary

2.1. Purpose of data collection/generation

Blue4All aims to improve, create, integrate and articulate tools to guide the process of designing and managing MPA networks in European seas, thereby increasing their resilience and preventing marine biodiversity loss. The project will align the top-down approach traditionally followed by authorities and managers with a bottom-up approach by actively involving local stakeholders. Genuine interaction with stakeholders will take place in 12 Information Sites, where challenges, lessons learnt and developed solutions in the MPA processes will be identified, and 13 Living Labs, where new solutions to these challenges will be co-developed and tested. These solutions for conservation, restoration, and sustainability will consider the strong interdependence between the ecological/environmental and human dimensions. The Information Sites and Living Labs range from relatively small individual MPAs to large MPA networks, and are located in the Baltic Sea, Mediterranean Sea, and the North-East Atlantic, with an additional site in Brazil. The sites therefore cover a range of geographical, governance, and socio-economic conditions.

In WP1 a socio-ecological system analysis will be carried out to identify existing and promising frameworks for the co-creation of MPAs and MPA networks involving regulatory processes, socio-interactive processes, and socio-ecological aspects. WP1 will use existing data as much as possible, drawn from the literature and open-access data platforms. Promising frameworks will be operationalised by identifying and developing science-based tools focusing on the social (WP2) and natural dimensions (WP3), which will involve testing assessment frameworks with stakeholders and valuating ecosystem services. These WPs will therefore use a combination of existing data from different sources (e.g., literature, commercial data, EMODnet, Copernicus, and algorithms generated in other Horizon projects) and surveys with key local actors. The resulting science-based tools will be informed by data collected from the Information Sites and tested in ongoing MPA processes in the Living Labs (WP4), requiring interviews and participatory interactions with stakeholders.

In WP5 the tools will be collected and generalised into a Blueprint Platform, a user-friendly guide to support the effective, efficient, and resilient design and management of MPAs and MPA networks across European seas. This will require both existing data, and data from workshops, seminars, and interviews with practitioners and relevant stakeholders. The outreach and exploitation of the project will be handled in WP6,

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in which graphic data in the form of photos and videos will be produced. WP7 will support the project's internal communication, coordination, and management, including data management.

This Data Management Plan (DMP) outlines the ways in which data will be collected, generated and/or processed throughout the lifespan of the project.

2.2. Types and formats of data generated

Blue4All will collect biological, environmental, spatial, and socio-economic data from the Living Labs, the literature, and other existing sources. A variety of outputs, including software, models, algorithms, workflows, guidelines, reports, and maps will be generated. An outline of the different types of data to be collected and used is given in this section.

2.2.1. Biological data

Biological data consist of observations of species and their attributes, including biotic measurements and life-history traits. These may include measures of abundance, body size or shape, age, sex, biomass, growth and biological interactions. They can be collected from field observations (e.g., visual surveys, photo quadrats, and video transects), sample collections (e.g., trawls, nets, corers), acoustic surveys, imaging, molecular techniques, or remote sensing using drones/satellites. Data on species densities or abundance, taxonomic diversity, genetic diversity, functional diversity, species distributions, population dynamics and biogeochemical processes can be generated. These data are often also available from data repositories and European data platforms such as EMODnet and OBIS. Biological data are often related to environmental data; habitat maps, for example, are derived from the distribution of habitat-forming species and physical data. In Blue4All most of the biological data collection will be carried out by WP3 in the Living Labs.

2.2.2. Environmental data

Environmental data are abiotic measurements from the ocean-atmosphere boundary layer, the water column, and the sea floor. These can be physical data (e.g., temperature, salinity, water turbidity, currents, sea level, waves, air temperature, air pressure, wind speed and direction, rainfall, etc.) or biogeochemical data (e.g., nutrients, blue carbon, sediment C/N content, chlorophyll, dissolved organic matter etc.), which are often related to biological data. These variables can be measured *in situ* from ship-based measurements, buoys, and sensors, or through remote sensing. Environmental data can also be obtained from data repositories and European data platforms such as EMODnet and Copernicus Marine Service. In Blue4All most of the environmental data collection will be carried out by WP3 in the Living Labs.

2.2.3. Socio-economic data

Socio-economic data consist of data about human activities, views and opinions, Local Ecological Knowledge, economics, and the relations between them. Data concerning human activities at sea include information on the space and/or structures used to conduct human activities and their economic value. This data type may also include coastal data (e.g., demographics, main industries, agriculture, etc). Socio-economic data are useful to identify and valuate ecosystem services and assess adaptation and vulnerability by studying population and human development, and economic conditions, amongst others. They can be collected in various ways, for example from the databases of commercial organisations and enterprises (e.g., fisheries logbooks and vessel monitoring systems), or quantitative and qualitative surveys in the form of questionnaires and personal interviews. Socio-economic data can also be obtained from data repositories and platforms, such as EMODnet Human Activities. In Blue4All socio-economic data will be collected in the

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information sites (e.g., business and finance models) and the Living Labs (e.g., valuation of ecosystem services) mainly by WP2.

2.2.4. Administrative spatial data

Data that give information about the location of administrative and/or jurisdictional features across space (and sometimes also time) are spatial data. Examples of these features include national or subnational borders and boundaries, MPAs, and MSP zones. These may be associated with biological or environmental data, for example an MPA which aims to protect a certain species or undersea feature. Administrative spatial data, especially the locations of MPA networks, is likely to be used in WPs 4 and 5.

2.2.5. Spatial data products

Spatial data products are derived data; they include raster matrices (gridded data and images) and vector features, such as points, lines, and polygons, and can include temporal data at a broad variety of scales. Maps or spatial products are commonly produced from observations, interpolation of data, or from model outputs (both statistical and numerical). Examples of spatial data products include anthropogenic activities and pressures maps (e.g., fishing, shipping, aquaculture, marine litter, and pollution). They are often the result of multiple datasets and might be associated with more than one data type, including biological, environmental, and/or socio-economic data. Spatial data products will be produced by T1.4, T3.3, T4.1, and WP5 as spatially defined tools for the Blueprint Platform.

2.3. Data Formats

Given the wide range of data types, a great variety of data formats is possible. We recommend adopting the data and metadata formats commonly used by the marine community for data submissions to increase the data's FAIRness. Table 1 gives an overview of the common data file types which BLUE4ALL partners should follow where possible. We also recommend avoiding the use of proprietary software formats (e.g., .docx, .xlsx, .shp) to increase the accessibility of the data. If data files are in a different format, the data should be converted to a more common data format and the transformation method employed should be documented in the metadata.

Table 1: Accepted common file formats by data type.

Data type	Accepted common data file formats
Text	• TXT • ODT • XML / HTML
Tabular data	• CSV • TSV
Images	• TIFF • JPG • PNG

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Spatial data products (maps, model outputs, etc.)	• NetCDF • GeoTIFF • OGC GeoPackage (.gpkg)
Code	• Plain text (usually with an extension that represents the source language)

2.4. Reuse of existing data

Most of the data used in the project will be existing data sourced from scientific literature and open-access platforms such as EMODnet, OBIS, and Copernicus (Table 2). Data will also be sourced from other Horizon projects, including MARBEFES and MSP4BIO. Some WPs will also use data collected by other Blue4All WPs:

- WP1 will provide WPs 2, 3, and 5 with state-of-the-art knowledge on policy, institutional, stakeholder engagement, socio-ecological, and integrated solutions frameworks for MPA establishment and management.
- WP2 will provide WPs 4 and 5 with information on governance tools, valuation tools and business models related to MPA networks.
- WP3 will provide WPs 4 and 5 with ecological and environmental concepts and tools.

The size of the data to be reused is generally expected to be small, in the order of MB.

Table 2: Summary of data to be reused by each work package and task

WP	Data to be reused	Sources
WP1	• T1.1: MPA policies • T1.2: Available frameworks and tools • T1.3: Socio-ecological framework and methodologies • T1.4: Key aspects of MPA governance, environmental and socio-economic solutions	Scientific literature, legal documents, other projects
WP2	• T2.1: Tools for MPA and OECM design and management • T2.2: Not yet defined • T2.3: Qualitative data on fisheries, recreation, vessel traffic, etc. • T2.4: Data on MPA business models and financing	Scientific literature, WP1, open access data platforms and databases
WP3	• T3.1: Ecological, oceanographic, and environmental data • T3.2: Existing and potential ecological and environmental tools to support MPA processes	Scientific literature, WP1, MARBEFES, MSP4BIO, open access data platforms (e.g., EMODnet, Copernicus, Lifewatch, HELCOM data platforms)

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	• T3.3: Algorithms and scripts underlying existing decision support tools	
WP4	• T4.1: Engagement actions • T4.2: Engagement actions, data from tools tested in the Living Labs • T4.3: Not yet defined	Management plans, scientific literature, WP2, WP3
WP5	• T5.1: Policies, socio-ecological interactions, and available methodologies • T5.2-T5.4: Not yet defined	WP1, possibly other WPs
WP7	• T7.1-T7.3: Not yet defined • T7.4: Deadlines, events and news relevant to the partnership	Internet, available internal communication strategies, other WPs

2.5. Data utility

Data used and produced in Blue4All will be useful for the designation, management and expansion of new and existing MPAs and MPA networks across European seas. The data will also be of interest to other, similar projects, such as MSP4BIO and MARBEFES, and some data generated during the project will be used internally by other tasks and WPs. The tools improved, integrated or newly developed by the project and made available via the Blueprint Platform will be openly available to everyone, but specifically aimed at supporting MPA managers, marine area and coastal planners, policy-makers, researchers, governance authorities, and other stakeholders (e.g. the fisheries and tourism industries, NGOs). Specifically, the data could be used by decision-makers involved in the design, creation, socio-ecological management, financial management, and sustainability assessment of MPAs. The project's three preliminary target groups are (1) MPA managers and other key user groups involved in MPA management in the Living Labs, (2) key stakeholders – other stakeholders with influence on the MPA management including NGOs, institutes, authorities, resource users and industry, and citizen groups (e.g., cooperatives), and (3) planners, MPA managers, researchers, and students in general. The final data and data products generated by BLUE4ALL are likely to be of particular interest to researchers and MPA managers. The utility of the project's outcomes will be maximised for all target groups in T5.4, which will improve the user-friendliness of the Blueprint Platform for stakeholders, and T6.4, which will organise demo sessions for MPA managers and planners.

3. Data organisation/data flow

The T7.5 leader will coordinate the process of data management during the project. During the data collection phase, each partner will be responsible for managing the datasets they collect and must follow the data management plan. During initial data generation and quality control, the data will be stored at the data provider's organisation and uploaded to the Blue4All SharePoint folder. It is the data provider's responsibility to ensure that the data is stored securely at this stage. As soon as possible, i.e., after initial quality

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control/pre-processing, and no later than 6 months before the end of the project, the data manager will upload the data to the Marine Data Archive (MDA), which is hosted by the Data Centre of the Flanders Marine Institute (VLIZ), where it will be archived. In this archive, the data can initially be kept private; shared between Blue4All partners. When the data is published, or at the latest 2 years after the project, datasets will be made openly accessible on the MDA and receive a DOI. The metadata will be integrated into IMIS, VLIZ's marine science information system. The submission workflow (Figure 1) is as follows:

Metadata submission

1. Data providers submit the metadata via SharePoint using the metadata template (Table 3).
2. Data managers check the metadata is correctly filled in.
3. Data managers integrate the metadata in IMIS.
4. Data managers assess the most appropriate data format and the data's compliance with the standards for submission to the MDA and inform the data submitter.

Data submission

5. If necessary, data providers format the dataset with support from the data manager.
6. Data providers submit the datasets via SharePoint if the files do not exceed 3GB, or via their online file transfer platform of choice (e.g., ftp, Eudat B2Drop, wetransfer, web services) if the files exceed 3GB. Additional metadata fields may be requested by data managers depending on the repository targeted.
7. Data managers check the data is provided in the appropriate format and provide an overall quality check.
8. Data managers integrate the dataset in the MDA.
9. If relevant, data managers inform other data repositories (e.g., EMODnet, OBIS, GitHub) of the intention to submit the datasets and data providers assist the repositories with submitting their datasets and passing the necessary quality control steps.

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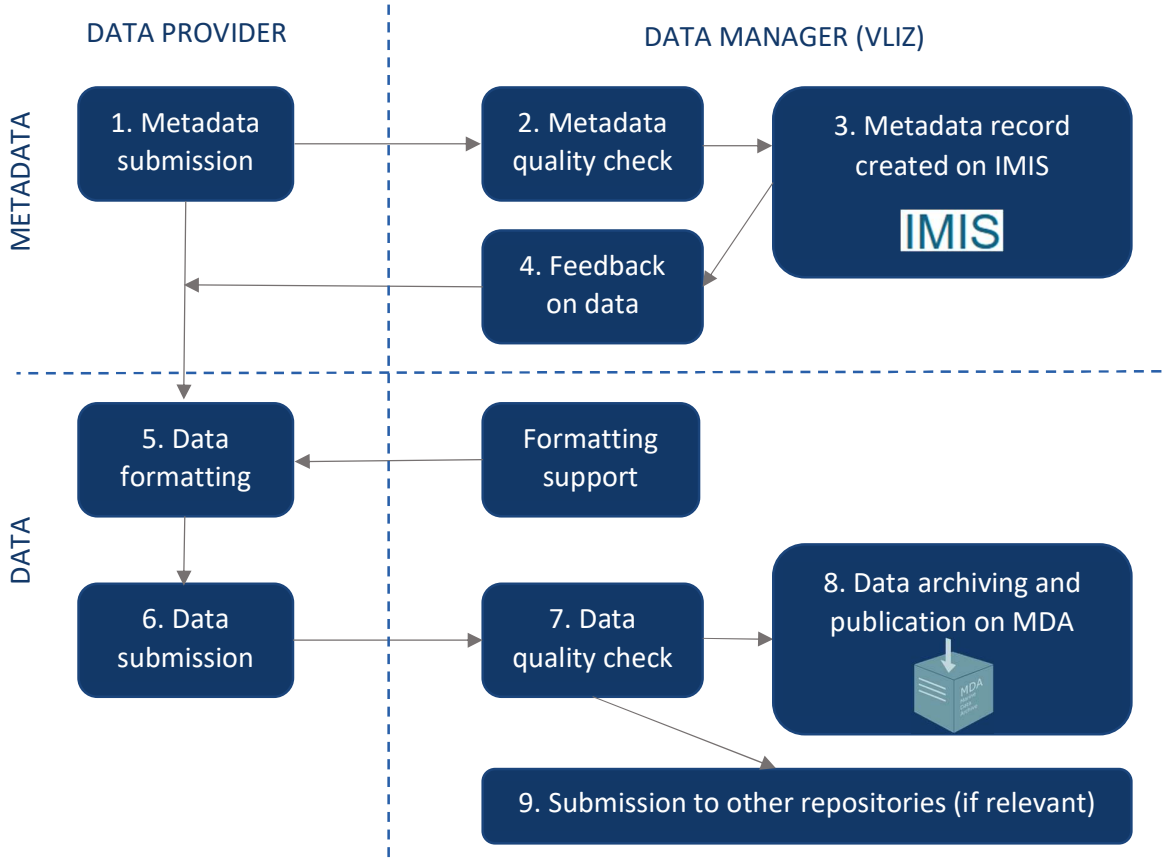


Figure 1: Data flow showing metadata and data submission process

The data provider will be responsible for quality control during data collection and for submitting the data in a recommended or accepted file format. Before the data are stored on the MDA or in another repository, the data provider will also be responsible for data security and back-up and recovery of the data. This could involve, for example, storing copies of the data in the Blue4All SharePoint folder, another secure cloud service, and/or an external hard-drive.

The main purpose of the MDA is long-term preservation, but to increase findability and reuse, data and derived products may also be published in different international repositories such as EMODnet, OBIS, GBIF, and GitHub depending on the relevance and type of the data. Although most of the project data will be uploaded to the MDA, it may not be suitable for some data types such as raw data which take up large amounts of storage space (audio, images, etc.). These will be archived in other, data type-specific, repositories. Before publication, these data types can be shared upon request between partners. However, the data derived from these (e.g., ecosystem valuation data derived from audio interviews) will be archived in the MDA. For all datasets and data products generated by the project, an IMIS metadata record compatible with the OpenAIRE infrastructure will be created, linking to the MDA. In cases where there is both a 'raw' dataset and a 'derived' dataset, these will be linked to each other.

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4. FAIR data

4.1 Making data findable

Data findability will be maximised by assigning a DOI or another globally unique and persistent identifier (assigned by MDA) to each dataset/data product and publishing its associated metadata record. Metadata of all datasets/data products will be stored and published on the Integrated Marine Information System (IMIS), which is hosted by the Data Centre in the Flanders Marine Institute (VLIZ). Where relevant, the data may also be submitted to other repositories, such as EMODnet or OBIS, to increase findability. The metadata will adhere to international standards such as ISO 19115 and will also be available in EML (Ecological Metadata Language) 2.2.0, INSPIRE and Dublin Core formats. The metadata will also be compatible with OpenAIRE infrastructure in order to be included in the OpenAIRE information space, as detailed in Table 3 below. Detailed guidelines on OpenAIRE-compatible metadata can be found here.

Table 3: OpenAIRE and INSPIRE compatible metadata template. The fields are mandatory unless stated otherwise in the description

Metadata field	Metadata sub-field	Description
Creator	• Creator name • Name identifier (e.g., ORCID iD) • Affiliation (organisational or institutional)	The main researchers involved in producing the data, or the authors of the publication, in priority order.
Title	-	A name or title by which a resource is known.
Publisher	-	The name of the entity that holds, archives, publishes, prints, distributes, releases, issues, or produces the resource.
Publication year	-	Year of publication
Subject	-	Subject, keyword, classification code, or key phrase describing the resource, e.g., biology, economics (recommended but not mandatory).
Contributor	• Contributor type (e.g., contact person, data collector) • Contributor name • Name identifier (e.g., ORCID iD) • Contributor affiliation	The institution or person responsible for collecting, managing, distributing, or otherwise contributing to the development of the resource (mandatory when applicable).

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Date	• Date type (e.g., accepted, available)	Different dates relevant to the work in YYYY-MM-DD format (e.g., date of acceptance, submission...).
Resource type	-	A description of the resource, e.g., dataset, text, model (recommended but not mandatory).
Size	-	Size of the resource, e.g., number of MBs or pages (optional).
Format	-	Format of the resource, i.e., file extension (optional).
Rights	-	Any rights information for this resource, e.g., license, embargo (mandatory when applicable).
Description	• Description type (e.g., abstract, methods)	All additional information that does not fit in any of the other categories, e.g., an abstract providing a short summary of the dataset and its content (mandatory when applicable).
Geolocation	• Geolocation point (WGS 84 coordinates) • Geolocation box (WGS 84 coordinates) • Geolocation place (text)	Spatial region or named place where the data was gathered or about which the data is focused (optional).
INSPIRE Theme		Relevant INSPIRE theme (mandatory when applicable).

4.2 Making data openly accessible

In accordance with HEU's open science policy, all data collected or produced in Blue4All should be open access and unrestricted by the end of the project if possible. All data, except for personal data, will therefore be freely accessible at no charge to third parties and available for long term reuse. Data generated will be made accessible by depositing it in MDA and making it available via OpenAIRE. The data and metadata will therefore be available for as long as those portals are available and, as per the policy in MDA and IMIS, metadata will be available in perpetuity, together with the data, unless the data owner requires it to be removed. Blue4All's ultimate outcome, the Blueprint Platform, will provide open access to the operational tools and frameworks developed in the project. Data will preferably be stored in non-proprietary file formats which can be handled by open software. These formats are listed in Table 1. Blue4All aims to share all our open-source scripts and code on a dedicated Blue4All GitHub page. We plan to develop a GitHub repository template so that the different scripts or GitHub repositories in Blue4All follow the same logical and easy to understand structure. It is the responsibility of the creator of the code to document the scripts and make

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sure they are easy to understand and follow. We recommend using the MIT software license as this is a simple permissive license with conditions only requiring preservation of copyright and license notices.

Blue4All conforms with HEU requirements to make all peer-reviewed scientific publications generated by the project open access immediately after publication. Publications will either (1) be published in an open-access journal, or (2) be deposited in a repository for scientific publication (e.g., ResearchGate, Zenodo, institutional repository) and be made open-access. Code written for the project and supporting documentation will be made accessible through GitHub. Exceptionally, some Blue4All data will not be openly accessible. This mainly concerns personal data, from ecosystem valuation surveys (T2.3) and stakeholder engagement groups (T4.2) for example. In these cases, and if possible, personal data will be pseudonymised or anonymised before being made openly accessible, in accordance with the GDPR (see section 7 – Ethical and GDPR aspects)

4.3 Making data interoperable

To maximise interoperability, internationally recognised standards and controlled vocabularies will be applied to metadata and data. The use of common controlled vocabularies in the metadata and data, and the use of common data formats, are important prerequisites for consistency and interoperability, and enable records to be interpreted by computers. Blue4All data generators should follow the recommended file formats per data type indicated in Table 1. The metadata must be submitted in English, and we recommend that the data are translated into English before submission if possible. Biological data should be structured to comply with the Darwin Core standard and environmental data should adhere to the Global Ocean Observing System's guides, best practices and standard operating procedures.

The following controlled vocabularies for standardisation of names should be followed:

- BODC Vocabularies (British Oceanographic Data Centre), for parameters, units, and instruments.
- World Register of Marine Species (WoRMS), for crucial quality control of taxonomic data, for biological data or any other type of data that includes species names. Taxonomy can be standardised by referencing the matching aphia_id from WoRMS. In this way, differences in spelling, or use of species names will be corrected.
- Marine Regions, for standardised marine georeferenced place names and areas.

When unique or uncommon ontologies or vocabularies are used by data providers, they must be mapped to more commonly used ontologies.

4.4 Increasing data reuse

Most of the data generated by Blue4All will be open-access and licensed under Creative Commons CC-BY (Attribution) or CC-0 (Public Domain Dedication) so that it can be reused. The licenses will be specified in the metadata records. Data will become open-access and available for reuse as soon as research involving that data is published. The project's reports and results will become available immediately on Blue4All's website and will be available together with the toolbox (tools, best practices and Blueprint Platform) in an open-access repository. An embargo will be applied to some data from WP1 and WP3 before its publication, although the length of this embargo is not yet defined. Data not (yet) included in published research will become open-access at the latest 2 years after the official end-date of the project. Access rights after disclosure will depend on the Creative Common license those data or products hold, as described earlier in this section. For the products created with restricted data, any necessary discussions with the data owners for the reuse of those datasets and or/products need to be arranged by the partner using those restricted

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datasets. Reports and publications will be made available to the public through the project's website (for non-peer-reviewed literature) or open access facilities (for peer-reviewed literature).

Initial quality control is the responsibility of the data provider. Additional quality control will be performed by the data manager (VLIZ) before publishing and being made available through MDA. Any quality control procedures applied will be described in the metadata.

5. Allocation of resources

The short- and long-term costs and maintenance of MDA and IMIS will be covered by VLIZ, the provider of these services. Data management personnel costs have been included in the Blue4All budget as part of WP7 (T7.5). The Data Centre at VLIZ, supported by the IT Department, will coordinate and lead the data management activities, providing the necessary expertise and capacity to ensure proper data management. The project team has a designated Data Management Officer (VLIZ), whose main tasks are to support the partners engaged in data acquisition with tools for data transformation, quality control and upload. The Data Management Officer is responsible for the implementation of the DMP, the coordination of data evaluation, and the overview of data management practices within the data life cycle frame. The Data Management Officer will also update the DMP throughout the project and contribute to the final DMP (T7.7) at the end of the project.

6. Data security

Data will be stored in trusted repositories which have provisions in place for data security. The data will be shared between partners on SharePoint during the project, access to which is granted only to project partners by the coordination team. The metadata and data will be subsequently archived on IMIS and the MDA respectively, hosted by VLIZ, where there are authentication and authorisation procedures for giving editing rights to certain datasets. This procedure ensures long-term preservation of the data; if VLIZ ceases to exist or terminates its data-archiving activities, VLIZ will transfer the data files to a similar organisation that will continue the agreement with the data provider under similar conditions if possible. If VLIZ fails to find a similar organisation, VLIZ will transfer all files to each intellectual property right holder or data provider. Some Blue4All data may also be replicated to other repositories (e.g., OBIS, EMODnet), further assuring long-term data accessibility and resilience to possible fault occurrences affecting one of the data systems where data are stored.

7. Ethical and GDPR aspects

Blue4All will follow existing EU, international and national guidelines on ethics. Data providers are required to be compliant with the fundamental ethical principles required of all research activities carried out under the Horizon Europe Framework Programme, detailed in Regulation 2021/695, Articles 18 and 19. When collecting, (re)using, and sharing data, we will therefore comply with the principle of proportionality, the right to privacy, the right to protection of personal data, the right to physical and mental integrity of a person, the right to non-discrimination, and the need to ensure high levels of human health protection. Most relevant

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to this DMP is the protection of personal data; data from interviews, surveys and workshops will therefore be protected and stored securely. The research carried out in Blue4All will not involve the use of genetic resources or traditional knowledge associated with genetic resources, so the project will not fall within the scope of the EU Access and Benefit Sharing (ABS) Regulation.

Blue4All must be compliant with the European General Data Protection Regulation (GDPR) regarding the protection of personal data from any survey or questionnaire that involves the collection of this type of data. Furthermore, personal data must not be transferred to other entities. Blue4All will collect personal data from those interacting with the project through workshops, interviews, demo sessions or the newsletter, always in compliance with the GDPR. Consent will always be obtained before collecting personal data using an Informed Consent Form (Annex I), which will be developed and used to inform and obtain the written consent of each individual outside of the consortia participating in the project activities and/or each individual whose personal data is to be collected in the project (i.e. for the purpose of the newsletter, public surveys, interviews, interactive workshops - demos, recorded training sessions and webinars). Participation in these activities will always be entirely voluntary. The current Informed Consent Form is included in this deliverable for reference (Annex I). It was developed as part of D7.1 (Strategy for Addressing the Ethics and Intellectual Property Rights in the Project) and will be updated as needed in month 12 as part of D7.5 (First update of the strategy for Addressing the Ethics and Intellectual Property Rights in the Project) and month 24 as part of D7.6 (Second update of the strategy for Addressing the Ethics and Intellectual Property Rights in the Project).

Personal data will not be shared within the project unless necessary, and in this case, it will be pseudonymised. Any sharing of data outside of the project will be in completely anonymised form not containing any personal identifiable data and therefore not subject to GDPR. If it is not possible for the partners to share personal data in completely anonymised form, the partners agree to use the EU provided templates for transfer of personal data and for processing of personal data cf. decision 2004/915/EC, decision 2001/497/EC and decision 2010/87/EU.

Blue4All will develop a secured Stakeholder Repository with individual access rights and will assign stakeholder interlocutors for each Living Lab to ensure clear lines of responsibility for handling and protecting personal data and the adherence to GDPR and other relevant laws and regulations. Blue4All will also use a secure management system server (SharePoint) with restricted access for internal documents with access rights, the E-Newsletter for instance.

The recommendations and solutions developed in the project will be reviewed on several levels, including by the Ethics Board, which involves all WP leads and some of the Advisory Board participants. The EB will review all the project deliverables, questionnaires and briefing materials to ensure adherence to ethical principles set out in the project and in line with the Nuremberg Code, European Textbook on Ethics in Research, and EC Ethics Appraisal Procedure. The EB will also monitor ethical features throughout the project rollout such as the ‘do no significant harm’ principle and Intellectual Property Rights (IPR) protection. The Strategy for Addressing the Ethics and Intellectual Property in the Project will be laid out. IPR under Horizon Europe are set out in the Grant Agreement art. 16 and Annex 5 (Specific Rules) and are further explored in D7.1. Considerations will be made on how to balance IPR and Open Science regarding the exploitation and dissemination of results and the application of IPR in relation to the FAIR principles.

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8. Annexes

8.1. Annex I: Informed Consent Form

See D7.1 (Strategy for Addressing the Ethics and Intellectual Property Rights in the Project) or D7.5 (First update of the strategy for Addressing the Ethics and Intellectual Property Rights in the Project) for the latest version.

PROJECT TITLE	BLUE4ALL
START DATE OF THE PROJECT	01-01-2023
END DATE OF THE PROJECT	31-12-2026
PROJECT WEBSITE	www.blue4all.eu (under construction)

You have been invited to participate in research under the BLUE4ALL project in the form of a survey, workshop or an interview. Before participation, please read the information below carefully. If statements in the document are unclear to you, do not hesitate to ask the contact researcher for clarification.

1. Project summary

BLUE4ALL will align top-down regulatory demands about European (networks of) MPAs with bottom-up societal expectations as a guarantee for achieving effective, efficient and resilient MPAs and networks of MPAs which meet EU Biodiversity Strategy 2030 objectives. By mobilizing stakeholders from BLUE4ALL's 25 information sites and Living Labs, i.e. locations across the Mediterranean Sea, the Baltic Sea and the North-East Atlantic regions where (networks of) MPAs have been established and from which lessons learned can be drawn about success and failure relative to how challenges were tackled, we will co-create robust and replicable social, governance, ecological and environmental tools to meet conservation and/or restoration objectives in socially sustainable and acceptable ways. These science-based tools will be tested in Living Labs, i.e. locations where (networks of) MPAs are in the process of establishment and where these tools can be fed into the ongoing MPA process. The operationalized and tested frameworks will ultimately be generalized into a Blueprint Platform for the co-creation of effective, efficient and resilient (networks of) MPAs. This scheme will separate generically encountered challenges and applied solutions from MPA (network) specific challenges and solutions and develop guidance in a user-friendly manner to end-users (i.e. MPA (network) managers and authorities). This guidance will take the shape of an interactive web-based Blueprint Platform directing the end-users to those challenges and solutions most applicable to their site(s). User-friendliness and applicability will be maximized by cross-checking the Blueprint Platform development with the actors and stakeholders of the Living Labs throughout the whole process of its development. Knowledge transfer and interaction with stakeholders and society-at-large at local to regional scales will lead to the development of a platform for MPA networking to

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interact with communities of practice boosting the BLUE4ALL legacy to its ultimate goal to restore our oceans and waters.

2. Purpose of data collection

You have been invited to participate in an interview, survey or workshop. Resulting data will be specifically used to

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3. Benefit of participation

Participation is on an entirely voluntary basis and you may not directly benefit. However, you will make a substantial contribution to the BLUE4ALL project aims.

4. Risks of participation

There are no risks foreseen in participation

5. Compliance with ethical and legal regulations

We comply with EU and national ethical and legal regulations, including the GDPR (General Data Protection Regulation 2016/680) framework of the EU.

6. Privacy and data protection

Data resulted from surveys and interviews will be recorded and stored on secure servers. This data will not include any personal identification, so that data cannot be traced back to you as the source of the data. Data might be processed and analysed for publication in reports, scientific journals and other forms of project outputs, only in anonymized form. None of the data will be transferred to third parties. Retention time of the original research data is the same as the project duration, although the anonymized resultant data may be stored for longer periods of time to be used in future research.

7. Withdrawal of participation

At any point you may withdraw from participation by stopping the interview, survey or workshop.

8. Researcher contact

In case of any issues or questions you can contact:

Name: …… and contact: ……

9. Consent statement

By signing this form, I state that I have read all information on this document of informed consent, I understand the information provided, and I agree with the terms and conditions provided on the informed consent document.

…….	……	……
Research Participant	Signature	Date

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…….	……	…….
Researcher	Signature	Date

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