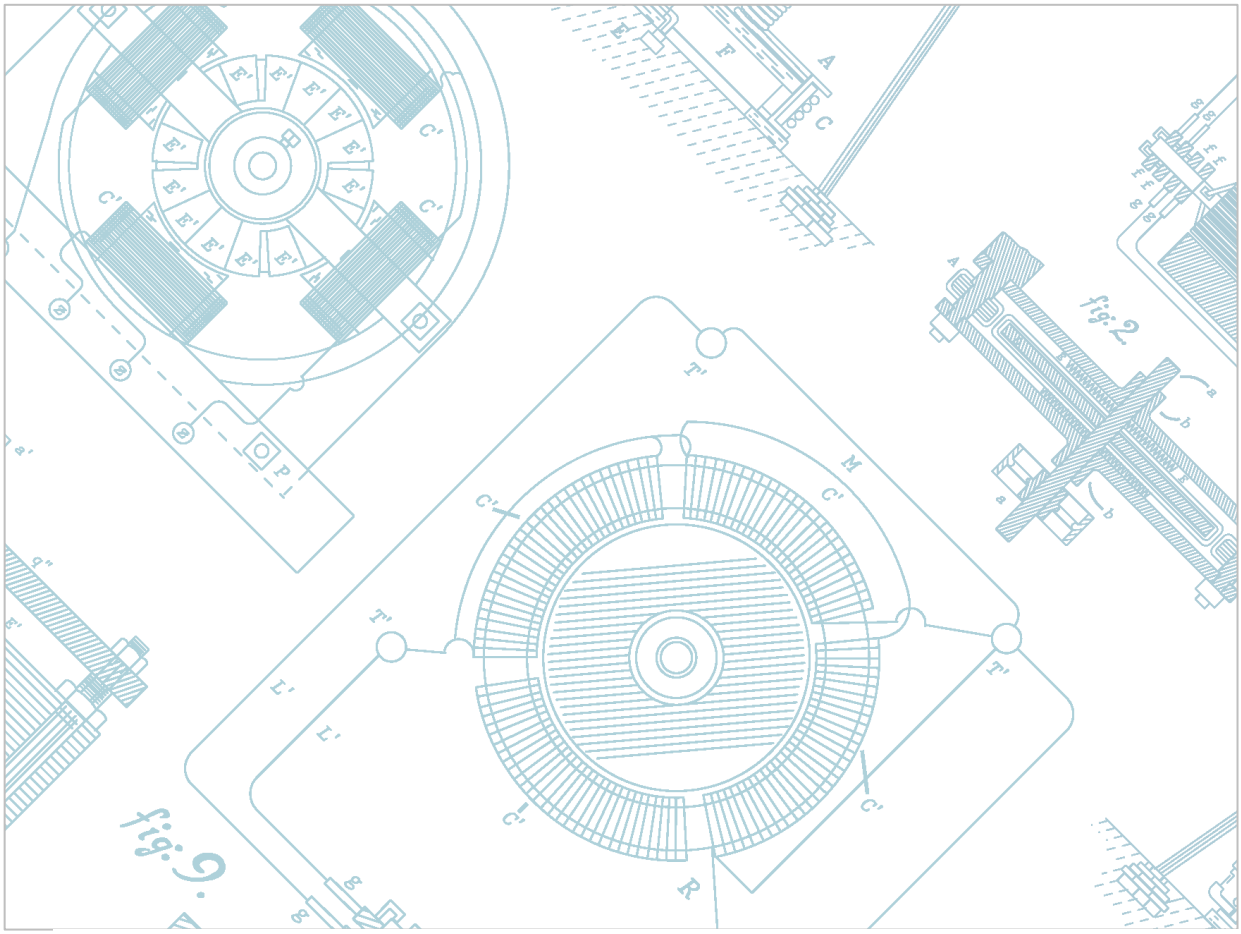

D 6.2 RPX update of the Data Management Plan

CATCHER

Creation of innovative "humidity to electricity" renewable energy conversion technology towards sustainable energy challenge

This project has received funding from the European Union's Horizon Europe HORIZON-EIC under Grant Agreement No. 101046307.
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catcher

Project factsheet

Acronym:	**CATCHER**
Title:	**Creation of innovative "humidity to electricity" renewable energy conversion technology towards sustainable energy challenge**
Coordinator:	COFAC COOPERATIVA DE FORMACAO E ANIMACAO CULTURAL CRL (Ulusofona)
Reference:	101046307
Type:	HORIZON-EIC
Program:	Horizon Europe
Start:	1st April 2022
Duration:	48 months
Website:	catcherproject.eu
Consortium:	**COFAC Cooperativa de Formacao e Animacao Cultural CRL,** Portugal (Ulusofona), Coordinator
	Ecole Royale Militaire - Koninklijke Militaire School, Belgium (RMA)
	Cascatachuva LDA (CASCATA), Portugal (CASCATA)
	Nanomaterials Research and Development SP. Z O.O, Poland (NRD)
	Nanotechcenter LLC, Ukraine (NANOTECHCENTER)
	SYNYO GmbH, Austria (SYNYO)
	LAVOLA 1981 SAU, Spain (ANTHESIS LAVOLA)

Deliverable factsheet

Number:	**D6.2**
Title:	**RPX update of the Data Management Plan**
Lead beneficiary:	ULusofona
Work package:	Management
Task:	6.1 Data Management Plan
Dissemination level:	SEN
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Contributos:	CASCATA, NRD, NANOTECH

Document history:

Revision	Date	Main modification	Author
1	10/09/2024	1st Draft	S. LYUBCHYK (ULusofona)
2	11/09/2024	1st Revision	A.Lyubchyk (CASCATA)
3	12/09/2024	1st Revision	O. Gorban (NRD)
4	22/09/2022	1st Revision	S. Puzko (NANOTECH)
7	24/09/2022	2st Revision	R. Mateus (ULusofona)
7	25/09/2022	Final Revision	S. LYUBCHYK (ULusofona)

Disclaimer of warranties

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Table of Contents

Acronyms and Abbreviations

Term	Description
D	Deliverable
DMP	Data Management Plan
EC	European Commission
RDMP	Research Data Management Plan
ORDI	Open Research Data initiative
FAIR	The principles of findable, accessible, interoperable and re-usable defined for Horizon 2020
EU	European Union

Figures and Tables

1. Executive Summary

CATCHER will develop a highly innovative “atmospheric humidity to electricity” technological solution for direct conversion of the humidity adsorption energy to electrical energy. The project will promote, disseminate, communicate and exploit the elaborated & technically demonstrated on the concept of the “humidity to electricity” for further successful introduction and preparation to the renewable energy market.

CATCHER will gain a new sustainable source of renewable energy to contribute to implementing the specific priorities for strengthening EU leadership on renewables. The successful realization of the project is assured by implementation of knowledge sharing in material science, physics, nanoelectronics, green chemistry, nanoengineering, sustainability and research marketing via international and intersectoral collaboration of highly qualified research and business from Portugal, Belgium, Austria, Spain, Poland and Ukraine.

The Research Data Management Plan (RDMP) is elaborated as an official document for the internal consortium use that sets out how the members of Consortium CATCHER will deal with research data, both during the research and once the research project has been completed. Drawing up an RDMP before the data is collected ensures that the data is generated in the correct format and is categorized properly.

2. The updated Data Management Plan Setup

2.1 Tasks and Deliverables

This deliverable D 6.2 RPX update of the Data Management Plan represents the groundwork for WP6 Project Management as it is the outcome of the first sub-task in this work package. The main objective of this sub-task is to prepare a project management handbook summarising all the required knowledge for the good management of the project (in terms of administrative forms, financial aspects, quality process, etc.).

ULusofona (PT) Coordination team is leading this task together with project partners. On the initial stage project elaborated and provided the Data Management Plan (DMP) document [D6.1 due in M6]. In the Month 30 the initial DMP is updated and presented in a format of the D6.2 RPX update of the Data Management Plan which concerns the respective data, metadata and ways to manage those data, during and after the project duration. The updated the DMP includes the following information: Data description, Data handling, Standards and metadata; Data sharing and Archiving and preservation. For each data set produced during the project, the responsible partner will have to ensure that the data are findable; accessible, interoperable and usable. Furthermore, other aspects related with provision for data security (including data recovery as well as secure storage and transfer of sensitive data) are addressed.

Since the Data Management Strategy affects the whole project, the most important connections to all Technological WPs 1-3 and WP4 on Operation Research and Integrated Sustainability Analysis sub-tasks Furthermore, this deliverable is closely linked to the tasks in WP5, in particular **T5.2 Setting up a communication and dissemination plan** and **T5.3 Exploitation, application strategy and open access**. Based on the identification, the DMP defines the rules for the internal consortium use that sets out how the members of Consortium CATCHER will deal with research data, both during the research and once the research project has been completed.

2.2 Definition and goals

The DMP is prepared to distinguish between potentially sensitive or confidential information derived from the prototype fabrication/testing/specification and open access data.

The project DMP is established within the principles of findable, accessible, interoperable and re-usable (FAIR) defined for Horizon 2020, i.e. in agreement to the Guidelines on FAIR Data Management in Horizon 2020 (version from July 2016); also taking into account the Consortium Agreement content previously approved and Intellectual Property Rights (IPR) signed by all Participating Parties.

The DMP will be updated over the course of the project as planned (M6, M30, M48) and/or also whenever significant changes arise.

3. Setup of the Research Data Management Plan

3.1 Objectives of the Research Data Management Plan (RDMP)

The Research Data Management Plan (RDMP) is an official document that sets out how the members of Consortium CATCHER deal with research data, both during the research and once the research project has been completed. Drawing up an RDMP before the data is collected ensures that the data is generated in the correct format and is categorized properly.

3.2 Responsible persons/partners

Contact Persons of the nodes are responsible for their data management, proper data collection, documentation, and storage, throughout the duration of the project. In the project team's nodes like ULusofona (PT), RMA (BE), NRD (PL), NANOTECH (UA), CASCATA (PT), LAVOLA (ES), and SYNYO (AU) the technicians, IT group members are involved to provide assistance with data back-up and storage. The list of responsible for managing their respective data is given below

1. Svitlana Lyubchyk, ULusofona, Portugal, Coordinator
2. Ricardo Mateus, ULusofona, Portugal, Team member
3. Andriy Lyubchyk, CASCATA, Portugal, Team Leader
4. Leticia Fernandes, RMA, Belgium, Team Leader
5. Oxana Gorban, NRD, Poland, Team Leader
6. Sergiy Puzko, NANOTECH, Team Leader
6. Laura Battel Bayer, LAVOLA, Spain, Team member
7. Cristoph Steiner, SYNYO, Austria, Communication & Dissemination Manager

4. Methodological Framework for Data Management Plan

The role of the DMP is to define a framework concerning the handling of research data generated or acquired as the project progresses but also after the end of it. Subjects for investigation are: the nature of the data in question, which data will be collected and to whom they will be useful, the use of metadata to render data easily retrievable, standardization, whether and which data will be open-access, how they will be stored and preserved etc.

Aiming to actively be part of the Open Research Data Pilot, the CATCHER DMP complies with the Horizon Europe guidelines for making data Findable, Accessible, Interoperable, Re-usable (FAIR). To achieve that, the FAIR template provided by the European Commission[1] is followed. This template is mainly a set of questions addressing the four principles and other related issues and can be found in its original form in Annex II of this document.

The components included in FAIR are the following:

- Data Summary;
- FAIR Data Principles;
    1. Making data findable, including provisions for metadata;
    2. Making data openly accessible;
    3. Making data interoperable;
    4. Increase data re-use (through clarifying licences);
- Allocation of resources;
- Data Security;
- Ethical Aspects;
- Other Issues Refer to other national/ funder/ sectorial/ departmental procedures for data management (if any).

The Data Summary and the FAIR Data Principles will be addressed separately for each dataset that is expected to be generated from the CATCHER project (see Table 5.1). In the adapted template, for the sake of readability, all questions under Data Summary and FAIR Data Principles were codified and transformed in a bullet list. This template will be used for all dataset descriptions. In this early stage, it is not required to cover exhaustively all points for each dataset, as this DMP will be updated during the project, whenever new data or other significant changes emerge.

Allocation of resources for storage and archiving is not foreseen, as the selected online storage solutions described below, are available free of charge. As regards publication and other open access costs, they will be provided under the project[2].

By default, Horizon Europe projects participate in the Open Research Data Pilot and they must deposit the following data in a research data repository:

1. All data needed to validate the results presented in scientific publications, including the metadata that describe the research data deposited. This is called the “underlying data”. These data must be deposited as soon as possible.
2. Any other data (for instance curated data not directly attributable to a publication, or raw data), including the associated metadata, as specified and within the deadlines laid down in the DMP – that is, according to the individual judgement by each project/grantee.
3. Projects should also provide information via the chosen repository about the tools that are needed to validate the results, e.g. specialised software or software code, algorithms and analysis protocols. Where possible, they should provide these instruments themselves, or alternatively, provide direct access to them."

Researchers, information managers and other stakeholders can rely on a framework of various international certification standards for digital repositories in order to assess and improve the quality of their work processes and management systems. “Trustworthy Digital Repository” (TDR) is a term often used in this respect.

Beneficiaries must also provide open access, through the repository, to the bibliographic metadata that identify the deposited publication. The purpose of the bibliographic metadata requirement is to make it easier to find publications and ensure that EU funding is acknowledged. Information on EU funding must therefore

[1] http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf

[2] http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/oa-pilot/h2020-hi-erc-oa-guide_en.pdf

be included as part of bibliographic metadata so that Horizon project can be properly monitored, statistics produced, and the programme's impact assessed. To monitor any embargo periods, the publication date and embargo period must be provided. The persistent identifier (for example a Digital Object Identifier) identifies the publication. It enables a link to be provided to an authoritative version of the publication.

All participating projects' beneficiaries are required to ensure open access for their peer-reviewed scientific publications relating to their results, as defined in Article 29.2 of the H2020 - General MGA[3]. Full details are already given in the submitted D 6.1 Data Management Plan due date month 6 of the project life time.

As previously noted, significant changes on data, which may arise in the course of the project and the development of the platform, are to be reported in the form of new versions of the present deliverable. Finally, all generated and collected project data will be described in detail in the end of the project in Final Report.

5. DMP Process

The CATCHER DMP Process is a set of steps aiming to classify the various datasets according to the analysis presented in the previous section. Each step of the process contains a question requiring a reply. The reply given in each step defines the actual status, and the respective handling, for each dataset generated or acquired during the project. Data storage, preservation and sharing were intentionally not included in the questionnaire, as all the datasets produced and used in the CATCHER project will be stored, preserved and shared through the selected platforms, and thus, these aspects of data management are common for all datasets.

For the CATCHER project, the following questions were selected to classify the datasets:

Table 5.1 The Data Management Process approach for each Dataset.

Issues to be addressed for dataset	Positive Answer (yes)	Negative Answer (no)
Needed for result validation?	Public	Private
Produces added value to third parties?	Public	Private
Can the created data - which may be derived from third-party data - be shared?	Public	Private
Contains personal data as referred to in GDPR - Article 4?	Private	Public
Contains data back traceable to private individuals?	Private	Public
Contains data that could be used in activities raising ethical issues or constitute a danger to the society?	Private	Public
Contains sensitive data or a security threat for one or more partners of the project (e.g. confidential information)?	Private	Public
Either a Licence restriction or an embargo is applied?	Private	Public
Contains data jeopardising a project patent?	Private	Public

[3] European Commission, "Annotated Model Grant Agreement", 2019
H2020 Multi-Beneficiary General Model Grant Agreement v5.0, available at:
http://ec.europa.eu/research/participants/data/ref/h2020/mga/gga/h2020-mga-gga-multi_en.pdf

5.1 Responsibilities and Decision Making

Each and every organisation in the CATCHER project is solely responsible for their own data they create and upload. These data are not accessible to other organisations or individuals without prior permission. The decision of what data to store, how to process them and to whom they will permit access and under what conditions, befalls that organisation. Since the collection of mostly personal data within CATCHER coincides with the same data collection in the day-to-day operations of the pilot organisations, the responsibility cannot and should not be transferred to other parties.

Within this framework, the consortium as a whole will be permitted access to aggregated and anonymised data from the repositories of the pilot partners for research and dissemination purposes. The data that will be allowed to be used, the type and the extent of the anonymisation and aggregation algorithms that will be used will need to be approved by the organisations that will provide the data. A final approval for the dissemination of the aggregated and anonymised data from the pilot operation of the platform and for any use will be provided by the Innovation/Scientific Manager and the Technical Manager of the project.

5.2 Archiving Data and Preserving Infrastructure

Brief descriptions of the platforms and repositories chosen for the CATCHER data storage and dissemination are included in the following section. An outline of their structure and functionalities regarding open access, storage, backup and charging policy is drawn and justifies their selection, as all of them fulfil the requirements elicited from the FAIR data principles and ORD pilot.

Project website

The CATCHER website can be considered as the main online public information point of the project and can be found under this web address: https://catcherproject.eu. The website holds some static text information, such as the brief presentation of the concept and goals of the project, and the proposed approach, while it also offers some dynamic textual data such as the communication of events, news and blog posts.

There is also a dedicated sections (News , Media) for all public data concerning the project and its progress. This section holds the relative documents (press releases and other documentation, info) using the portable document format (PDF), as well as the Office Open XML format for some cases for ease of re-use (e.g. for a press release). In case a file is deposited on a social media or data repository platform, a link to the respective source will be provided, enriched with simple metadata information like the title, a short description and the type of the document.

All public information on the CATCHER website is available with no restrictions and can be accessed by any visitor with no need to create an account or give any personal data. This information and all webpage-related data is backed on a regular basis.

Data and Document Repositories

Two services will be used for archiving project data and documents, Zenodo and ResearchGate, which are presented below:

Zenodo: Following the EC recommendation, CATCHER is going to use the Zenodo platform as a data and document repository. Zenodo is a free, open research data repository created by OpenAIRE[4] and CERN[5] that launched its services in 2013. It is compliant with the open data requirements of Horizon 2020, the EU Research and Innovation funding programme and the Open Access policies of the European Union.

[4] https://www.openaire.eu

[5] https://home.cern

The platform not only supports the publication of scientific papers or white papers in all scientific disciplines, but also the publication of any structured research data (e.g. using XML format) and the collaboration with open source code repositories such as GitHub. All uploaded data and documentation are structured using metadata, licensed under CC license (Creative Commons 'No Rights Reserved'). An important parameter to note is that the property rights or ownership of a data asset do not change by uploading it to Zenodo.

As far as security and availability is concerned, Zenodo guarantees both. All data files are stored in CERN Data Centres, primarily in Geneva, with replicas in Budapest. Data files and metadata are backed up on a nightly basis. Files are regularly checked against their checksums (using MD5 algorithm) to assure that file content remains constant. In case of closure of the repository, Zenodo ensures that all content can be easily integrated into other suitable repositories without this affecting citations and links.

Regarding the CATCHER data management, all public results generated or collected during the project will be uploaded to Zenodo for open access, long-term storage and dissemination, including public deliverables, software documentation, research papers, presentations, and datasets. At the end of the project, the option of using an institutional research data repository to further disseminate the project outcomes will be considered.

> **ResearchGate:** Along with the establishment of Zenodo as the primary data and document repository, CATCHER will create a ResearchGate project profile to further promote the dissemination of scientific publications.

ResearchGate, launched in 2008, is a networking site for scientists and researchers, free to join, with more than 3 million users. Sharing publications, connecting with colleagues, asking or answering questions and finding collaborations from around the world are only some of the services the platform has to offer. A ResearchGate project is actually a dedicated place of research results related to a common cause that other researchers can opt to follow, interact and stay in touch with its progress. In this public area, CATCHER partners will upload their research publications, fill-in the necessary metadata and try to respond to any questions coming from the community.

Both the aforementioned tools hereby defined will act as the platforms for accessing Sphinx project public results and can be found by following the respective links:

Code Repository

CATCHER components will be divided into Open and Closed Source components. The classification will be decided on terms which ensure the project's security and protection of partners' business secrets and at the same time reinforce scientific knowledge. Moving towards this goal, all Open Source Components will be deposited in a public Git based web repository, where they will be in the disposal of the community for exploitation and expansion. Closed Source Components can be stored into private repositories. Git is a distributed version control system and as such, it is promoting sharing and collaboration among users but also offers the creator versioning control.

6. Datasets and Publications for DMP

All data anticipated to be generated during the lifespan of CATCHER project are presented in this section. They are divided into four categories: public deliverables, open source and closed source project's components, research datasets and publications. The adapted FAIR Template (available in Annex II**Ошибка! Источник ссылки не найден.**), will be used to describe every category in general as well as every individual dataset that will be generated in the course of the project.

Guidelines for deciding on the points made in the context of this template are provided through FAIR itself and its four principles pertaining research data, meaning that eventually data should be made easily Findable, Accessible, Interoperable and Re-usable.

6.1 Project Public Deliverables

The public deliverables of the CATCHER project are presented in SYGMA online project page.

The FAIR template has been modified, in line with the FAIR data principles, so as to accommodate the required details for all the public deliverables. Resulting is the following table, which contains a general description of the CATCHER Public Deliverables, addressing all relevant issues indicated originally. Management of all deliverables will be implemented using this table.

Table 6.1 Description of CATCHER Public Deliverables

1. Public deliverable summary	
Purpose	The purpose of the public deliverable
Relation to the objectives of the project	Relation of the public deliverable to the project objectives
Types/Formats	All public deliverables are (or are accompanied by) reports in the cross-platform portable document format (PDF).
Re-use of any existing data	Source of re-used datasets, IRP issues etc.
Origin	How the included data was generated (or mention source, if collected)
Size	Size of the public deliverable
Utility for others	To whom and how the deliverable will be useful.
2. FAIR Data	
2.1. Making public deliverables findable, including provisions for metadata	
Metadata provision	Metadata is added manually and includes name, author, all consortium partner organisations, relevant keywords
Metadata standards	No specific metadata standard used
Unique identifier	The public deliverables are assigned URLs by upload on the official CARCHER website
Naming conventions	• Naming convention used: CATCHER_[Deliverable Code]-[Deliverable Title]-vA.BB. • Version numbering convention used: vA.BB, where A is a major version of the deliverable (Submission to European Commission) and BB is minor version of the deliverable for updates during the preparation phase.
Search keywords	Metadata keywords serve as search keywords
Version control	All changes reported in the document history section.
2.2 Making public deliverables openly Accessible	
Classification	Confidentiality level: PU (public)
Sharing and access regimes	Before submission: available only to consortium partners through the Alfresco platform After submission: publicly available through the official Sphinx website

Needed method/software	No special software needed for the PDF format
Repository	Alfresco platform and CATCHER official website
Access authorisation	Before submission: Access only to authorised consortium partners After submission: upload on the website, no authorisation needed
2.3. Making public deliverables interoperable	
Data/metadata vocabularies and other I/O standards	-
Mapping to common ontologies	-
2.4. Increase re-use of public deliverables (through clarifying licences)	
Licence	No licence needed
Re-use availability schedule	After submission: immediately granted free open Access for mining, exploiting, processing and disseminating
Re-use by third parties	After submission: Accessible and re-usable from third-parties. No access and time limitations apply
Quality assurance	Internal quality audit control by the Quality Manager (ULusofona) and two assigned reviewers (consortium partners CASCATA & NRD)
Availability period	No time limitation scheduled after the end of the project

This template will be completed individually for each, and every public deliverable generated in the project, in order for them to be described in detail. At the time there is no public deliverable prepared and submitted. The relevant tables for all public deliverables will be analytically presented in the context of the Final DMP Release (Final Report of the project).

6.2 Open Source Components

The full details of the open-source components of the CATCHER and the involved partners will be indicated/identified later on within WP3 and WP4 implementation on Sustainable Analysis, including Technical and Economical Feasibility and Life Cycle Assessment. The relevant FAIR analysis of the open sources components is presented in the Table 6.2.

Table 6.2 DMP of he Open Source Components

1. Open component summary	
Purpose	To combine inputs from multiple data sources to address successfully the projects WPs on operation research and LCA .
Relation to the objectives of the project	WP3 and WP4 project sub-tasks implementation
Types/Formats	Source code
Re-use of any existing data	The component will use data produced internally within technical WP1 & WP2 implementation
Origin	Implemented by the involved partner of the consortium
Size	The final size will be defined after the release of the final version of the component

Utility for others	The component is part of the Catcher project which will be used by the project partners.
2. FAIR Data	
2.1. Making component findable, including provisions for metadata	
Metadata provision	The metadata of the component source code will include the main functionality of the component that will combines and other components, installation and build process, the programming languages and technologies that will be used, bug fixes and last updates.
Metadata standards	The URL address of the component into the Git repository
Unique identifier	The URL address of the component into the Git repository
Search keywords	Metadata keywords serve as search keywords
Version control	The component source code will be stored in a Git repository.
2.2 Making component openly Accessible	
Classification	Public
Sharing and access regimes	Stored into a public repository after the end of the project
Repository	Git repository
Access authorisation	Authorised users can access the source code of the component. Public access will be provided after the end of the project in order to assure that the user will access the final version of the component.
2.3. Making component interoperable	
Data/metadata vocabularies and other I/O standards	N/A
Mapping to common ontologies	The component will make use of a common semantic model in order to implement data harmonisation.
2.4. Increase re-use of component (through clarifying licences)	
Licence	Apache license (The GNU General Public License is also under consideration).
Re-use availability schedule	The component will be available for reuse after the end of the project.
Re-use by third parties	After submission: Accessible and re-usable from third-parties. No access and time limitations apply.
Quality assurance	SonarQube will be used for source code quality assurance.
Availability period	No time limitation scheduled after the end of the project.

6.3 Project Datasets

There are the datasets that are/ will be extracted from CATCHER and will be used for academic research purposes. The project will not use any existing data to populate its repositories and all data of real cases will be uploaded during the piloting operation. These data sets will be reported as they become available using the relevant FAIR analysis Table 6.3.

Below is the **Adapted FAIR Template, as modified for the purpose of describing CATCHER project datasets**.

1. Data summary	
Purpose	
Relation to the objectives of the project	
Types/Formats	
Re-use of any existing data	
Origin	
Size	
Utility for others	
2. FAIR Data	
2.1. Making data findable, including provisions for metadata	
Metadata provision	
Metadata standards	
Unique identifier	
Naming conventions	
Search keywords	
Version control	
2.2 Making data openly Accessible	
Classification	
Sharing and access regimes	
Needed method/software	
Repository	
Access authorisation	
2.3. Making data interoperable	
Data/metadata vocabularies and other I/O standards	
Mapping to common ontologies	

2.4. Increase data re-use (through clarifying licences)	
Licence	
Re-use availability schedule	
Re-use by third parties	
Quality assurance	
Availability period	

6.4 Project Publications

Scientific Publications

Along with the dissemination of project deliverables and datasets, we are considering as part of the DMP, further dissemination of project Scientific Publications. Each publication will be added following the structure provided in Annex II. Updated FAIR Template

Other Publications

Other publications refer to any published material created by the consortium members during the project's lifetime that do not fall under the academic research field. Such publications may include press releases, presentations, software documentation, or produced multimedia for dissemination purposes (e.g. a CATCHER video).

All of this material will be available at the CATCHER website, either in their original form or as a link to a related social media/data repository platform (e.g. YouTube or Zenodo link) or as embedded multimedia frame (e.g. embedded radio interview). Their metadata should be available on the source.

When such material is created, special attention should be given on providing references on the various sources used. In case a source is not publicly available, consent should be required.

Publications from third parties that refer to CATCHER (e.g. a special article on a blog post or an extensive tv reportage on the Sphinx approach), or are in any other way related to Sphinx, should go through the project's Coordinator and the Dissemination leader for approval and will be also kept in a dedicated section of the Sphinx website as a reference.

Conclusions

The present deliverable attempts an early approach on the definition of the CATCHER DMP. Described are the main principles and regulations which the DMP is aligned with, as well as the methodology deriving thereof. Following the EU guidelines regarding open access to scientific publications and research data, and FAIR Data Management, we used consistently the adapted FAIR Data template for presentation of all expected data. These data are categorised in four main groups: public deliverables, software components, research datasets and publications. The relevant storage solutions are set out in a dedicated section along with the characteristics that made them an appropriate choice. In the light of the changes in EU data protection regulation, identification of the GDPR roles (controllers, processors, recipients) even among the consortium partners is crucial for clarifying data protection responsibilities. Personal data that will be acquired for the CATCHER needs(if there will be any) and the relevant data processing activities are, to the extent possible, foreseen and described. All the above-mentioned approaches and methodology will mainly serve as a guideline for handling the data that will stem from the project.

This document is intended to be a living document; and during the project may be subject to minor or major amendments and/or additions if will be required.

ANNEX I. FAIR TEMPLATE

The FAIR Template is presented in the following table. Details on the content of the table can be found in the Guidelines on FAIR Data Management in Horizon 2020[6].

DMP component	Issues to be addressed
1. Data summary	• State the purpose of the data collection/generation • Explain the relation to the objectives of the project • Specify the types and formats of data generated/ collected • Specify if existing data is being re-used (if any) • Specify the origin of the data • State the expected size of the data (if known) • Outline the data utility: to whom will it be useful
2. FAIR Data	
2.1. Making data findable, including provisions for metadata	• Outline the discoverability of data (metadata provision) • Outline the identifiability of data and refer to standard identification mechanism. Do you make use of persistent and unique identifiers such as Digital Object Identifiers, URL etc.? • Outline naming conventions used • Outline the approach towards search keyword • Outline the approach for clear versioning • Specify standards for metadata creation (if any). If there are no standards in your discipline describe what type of metadata will be created and how
2.2 Making data openly Accessible	• Specify which data will be made openly available? If some data is kept closed provide rationale for doing so • Specify how the data will be made available • Specify what methods or software tools are needed to access the data? Is documentation about the software needed to access the data included? Is it possible to include the relevant software (e.g. in open source code)? • Specify where the data and associated metadata, documentation and code are deposited • Specify how access will be provided in case there are any restrictions
2.3. Making data interoperable	• Assess the interoperability of your data. Specify what data and metadata vocabularies, standards or methodologies you will follow to facilitate interoperability. • Specify whether you will be using standard vocabulary for all data types present in your data set, to allow inter-disciplinary interoperability? If not, will you provide mapping to more commonly used ontologies?

[6] http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf

DMP component	Issues to be addressed
2.4. Increase data re-use (through clarifying licences)	• Specify how the data will be licensed to permit the widest reuse possible • Specify when the data will be made available for re-use. If applicable, specify why and for what period a data embargo is needed • Specify whether the data produced and/or used in the project is useable by third parties, in particular after the end of the project? If the re-use of some data is restricted, explain why • Describe data quality assurance processes • Specify the length of time for which the data will remain re-usable
3. Allocation of resources	• Estimate the costs for making your data FAIR. Describe how you intend to cover these costs • Clearly identify responsibilities for data management in your project • Describe costs and potential value of long term preservation
4. Data security	• Address data recovery as well as secure storage and transfer of sensitive data
5. Ethical aspects	• To be covered in the context of the ethics review, ethics section of DoA and ethics deliverables. Include references and related technical aspects if not covered by the former
6. Other	• Refer to other national/ funder/ sectorial/ departmental procedures for data management that you are using (if any)

ANNEX II. Adapted FAIR TEMPLATE

Below is the Adapted FAIR Template, as modified for the purpose of describing CATCHER project datasets.

1. Data summary	
Purpose	
Relation to the objectives of the project	
Types/Formats	
Re-use of any existing data	
Origin	
Size	
Utility for others	
2. FAIR Data	
2.1. Making data findable, including provisions for metadata	
Metadata provision	
Metadata standards	
Unique identifier	

Naming conventions	
Search keywords	
Version control	
2.2 Making data openly Accessible	
Classification	
Sharing and access regimes	
Needed method/software	
Repository	
Access authorisation	
2.3. Making data interoperable	
Data/metadata vocabularies and other I/O standards	
Mapping to common ontologies	
2.4. Increase data re-use (through clarifying licences)	
Licence	
Re-use availability schedule	
Re-use by third parties	
Quality assurance	
Availability period	