Fulfilling Open Science

Compliance with European Commission mandates
and Data Management Plan in CODECS project

30 November 2023

Gina Pavone, ISTI-CNR ORCID 0000-0003-0087-2151

Fulfilling Open Science

Compliance with European Commission mandates and Data Management Plan in CODECS project

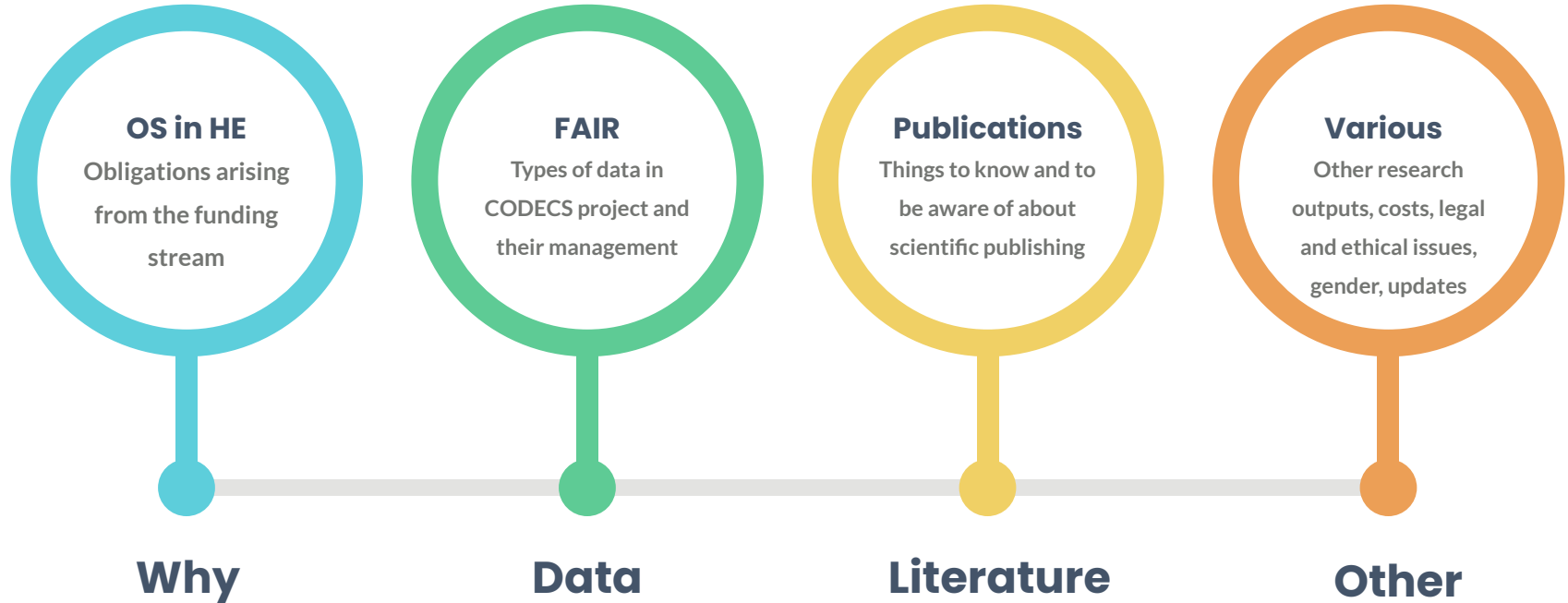Gina Pavone, ISTI-CNR ORCID 0000-0003-0087-2151

Co-funded by
the European Union

Agenda

Fulfilling Open Science, compliance with European Commission mandates and Data Management Plan in CODECS project
Webinar, Thursday 30 November

OS in HE
Obligations arising from the funding stream

FAIR
Types of data in CODECS project and their management

Publications
Things to know and to be aware of about scientific publishing

Various
Other research outputs, costs, legal and ethical issues, gender, updates

Why

Data

Literature

Other

Gina Pavone

- Research fellow at the Institute of Information Science and Technologies of the Italian National Research Council in Pisa, Italy
- Research focus: Open Science and Open Access; Research Data Management
- OpenAIRE National Open Access Desk (NOAD) for Italy
- Coordinator of the editorial board of open-science.it website
- My background: data journalism

WARNING: this is going to be an interactive webinar!

Please stop looking at your email, chats, messages!

We will interact through mentimeter, but you can also use the chat.

Horizon Europe mandates on Open Science and Research Data Management

Where the mandates come from (but also the resources :)

CODECS received the money we are working with from public funding, namely the European Commission's Horizon Europe programme.

We have specific requests to fulfill about Open Science and RDM

1. Project factsheet

Project name	Maximising the CO-benefits of agricultural Digitalisation through conducive digital ECoSystems
Project acronym	CODECS
Horizon Europe Topic ID	HORIZON-CL6-2021-GOVERNANCE-01-22
Project ID	101060179
Project website	https://www.horizoncodecs.eu/
Granting authority	European Research Executive Agency
Project starting date	1 October 2022
Project end date	30 September 2026

Open Science and data sharing fits with CODECS aim

"The CODECS project aims at improving the <mark>collective</mark> capacity to understand, assess and foresee the full range of benefits and costs of farm digitalisation".

We are working together to increase the possibilities for farmers to acquire adequate knowledge.

We must therefore facilitate access to this knowledge: we have to put this transfer into effect!

Open Science practices

What?	How?	Mandatory in all calls/recommended
Early and open sharing of research	Preregistration, registered reports, preprints, etc.	Recommended
Research output management	Data management plan (DMP)	**Mandatory**
Measures to ensure reproduciblity of research outputs	Information on outputs/tools/instruments and access to data/results for validation of publications	**Mandatory**
Open access to research outputs through deposition in trusted repositories	• Open access to publications • Open access to data • Open access to software, models, algorithms, workflows etc.	• **Mandatory** for peer-reviewed publications • **Mandatory** for research data **but** with exceptions ('as open as possible…') • Recommended for other research outputs
Participation in open peer-review	Publishing in open peer-reviewed journals or platforms	Recommended
Involving all relevant knowledge actors	Involvement of citizens, civil society and end-users in co-creation of content (e.g. crowd-sourcing, etc.)	Recommended

- Open science practices listed in the template for proposals (section excellence>methodology)
- Non-exhaustive list
- Mandatory in all calls: Model Grant Agreement or call requirement; all the rest recommended

European Commission

Open Access to scientific publications in HE - 1

Beneficiaries must ==ensure== **OA to peer-reviewed scientific publications** relating to their results. In particular, **they must ensure**:

- at the latest upon publication, **deposition** of the AAM or VoR in a ==trusted repository== + **immediate open access via the repository** under ==CC BY or equivalent== (CC BY-NC/CC BY-ND are allowed for long-text formats)
- **information** via the repository about any research output/tools/instruments needed to **validate the conclusions of the scientific publication**

Metadata must be open under CC 0 or equivalent, **in line with the FAIR principles** and provide information about the licensing terms and persistent identifiers, amongst others.

Open Access to scientific publications in HE - 2

• Beneficiaries (or authors) must retain sufficient intellectual <mark>property rights</mark> to comply with the OA requirements

• Publication in venue of choosing but publication fees are reimbursable only if publishing venue is full open access <mark>(publication fees in hybrids not reimbursed</mark>)

<mark>Please note!</mark> You can still choose a hybrid journal, but you cannot pay the publication fees with CODECS project resources

Trusted repositories

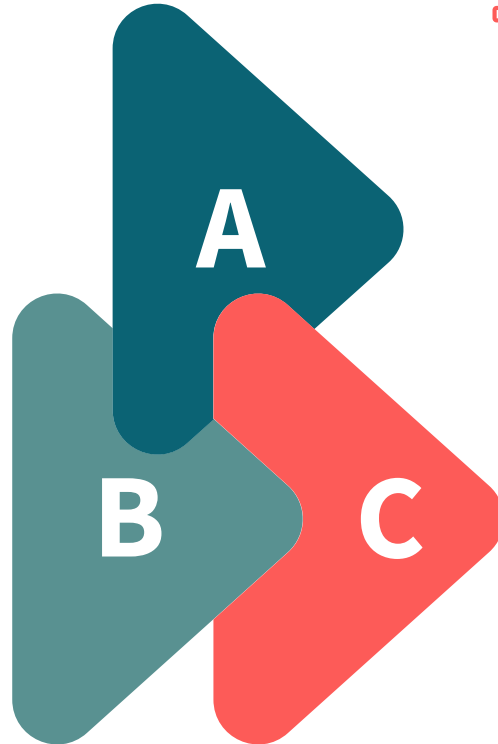Definition contained in the HE Model Grant Agreement

Certified repositories

E.g. CoreTrustSeal,

nestor Seal DIN31644,

ISO16363 etc.

Disciplinary or domain specific repos

Commonly used, endorsed by the research communities and internationally recognized

A

B

C

General purpose or institutional repositories

That present the essential characteristics of trusted repositories:

- Display services, mechanisms and/or provisions that are intended to secure the integrity and authenticity of their contents; display policy

- Provide broad, equitable and ideally open access to content free at the point of use, as appropriate, and respect applicable legal and ethical limitations. They assign PIDs. Have metadata enabling discovery

- Facilitate mid- and long-term preservation of the deposited material.

Stages and versions of a scientific paper

The main steps the intellectual work goes through before the transfer of commercial rights

Pre-print

or **Manuscript**. The original version the author(s) send to the editor in the submission process. Does not contain peer-review contributions

Peer-review

Formal "quality assurance" mechanism

Post-print

Or **Author Accepted Manuscript**. The last version before the acceptance notice. This version has the very same contents of the one to be published in the journal, including peer-review contribution

Version of Record

Or **Published Version**. This is the version you can download on the journal website. It includes editorial layout which makes it differ from the Post-print.

A

B

C

E

E

Editorial checks

Checks for adherence to editorial policies, plagiarism checks, etc.

Copyright transfer

Compliant with OA mandate but beware to editorial policies!

Why always deposit in a repository

Even if the chosen venue for publication is fully OA

01 To guarantee integrity of the content and long term preservation

02 Facilitate the fulfilment of Open Access mandates and/or institutional policy

03 Increase visibility and improve findability of research products

How to manage your copyright?

By depositing an accepted version of the publication (AAM/postprint or VoR) in a repository, you can immediately make your publication open access and be compliant with HE mandates
if one of the following two condition is met:

1. **There is a version allowed for deposition**

You have signed a Copyright Transfer Agreement, but the publisher allows for the AAM or the edited version (i.e. Version of Record - VoR) to be uploaded on a repository.

2. **You have the right to distribute your work**

You retained your copyright to the published article, by applying the Rights Retention Strategy outlined by cOAlition S.

Otherwise: negotiate or search for other venues

If the publishing agreement is contrary to the grant agreement obligations, authors should negotiate its terms and, alternatively, look for a different publishing venue/options.

https://www.openaire.eu/how-to-comply-with-horizon-europe-mandate-for-publications

Notify obligations

Authors may need to interact with prospective publishers, in particular when they publish in venues that are not open access. To facilitate compliance with their open access obligations, researchers may choose to notify publishers of their grant agreement obligations (including the licensing requirements) already at manuscript submission. For example, by adding the following statement to their manuscript:

"This work was funded by the European Union under the Horizon Europe grant [grant number]. As set out in the Grant Agreement, beneficiaries must ensure that at the latest at the time of publication, open access is provided via a trusted repository to the published version or the final peer-reviewed manuscript accepted for publication under the latest available version of the Creative Commons Attribution International Public License (CC BY) or a license with equivalent rights. CC BY-NC, CC BY-ND, CC BY-NC-ND or equivalent licenses could be applied to long-text formats."

What is copyright

When you create an **original literary, scientific and artistic work**, such as poems, articles, films, songs or sculptures, you are protected by copyright. Nobody apart from you has the right to make the work public or reproduce it.

The copyright protection is immediate, this means that the protection **starts from the moment you create your work**, so you don't need to go through any formal application process.

To advise other people of the author's rights on that work, a **copyright notice** can be attached to the work – such as the "**all rights reserved" text, or the © symbol** – together with the year the work was created.

Legal references:
Directive (EU) 2019/789 of the European Parliament and of the Council of 17 April 2019
In Italy: normativa sul diritto d'autore, legge n. 633/1941

- https://europa.eu/youreurope/business/running-business/intellectual-property/copyright/index_en.htm
- https://open-science.it/article?rpk=220966

Copyright protection grants the following exclusive rights:

Moral rights

- usually protecting your rights to claim authorship (right of attribution) and to refuse a modification of your work (right of integrity)
- Moral rights are inalienable (cannot be assigned to others) and relate to the 'authorship' of the work

Economic rights

- guaranteeing you have control over your work and remuneration for its use through selling or licensing
- **Economic rights relate to its commercial exploitation and can be assigned (as is the case when authors sign copyright transfer agreements with scientific commercial publishers)**

Research Data Management in HE

- Data must be in line with ==FAIR principles==
- Establish a data management plan (==DMP==) (and regularly update it)
- Deposit the data in a ==trusted repository== (if required in the call conditions,this repository must be federated in the EOSC)
- Ensure open access to the deposited data (CC BY, CC0 or equivalents), following the principle =='as open as possible as closed as necessary'.==
- ==Metadata always available (in CC0 or equivalent)==

Open Data
and
FAIR Data
are different
concepts

Why do we need a distinction?
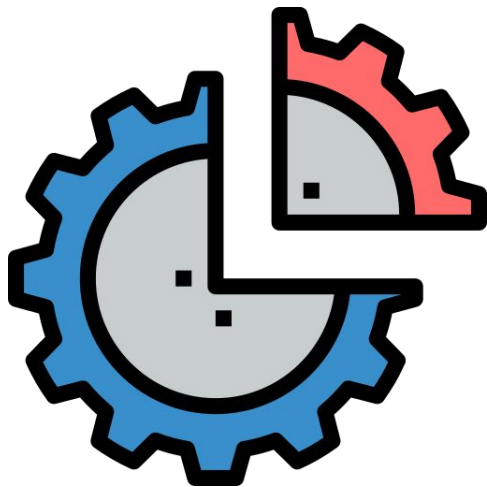
Research data could:

Contain personal information (privacy e GDPR)

Fall under copyright (in the case of a database with creative structure)

Fall under the Sui Generis right (database obtained thanks to a substantial investment)

Be protected by patent or industrial secret

**Data sharing needs to respect the specific law.
Data needs to be protected against non authorised access.**

Data can be protected

Multiple types of protection might exist in research data, or there may be elements that have no legal protection
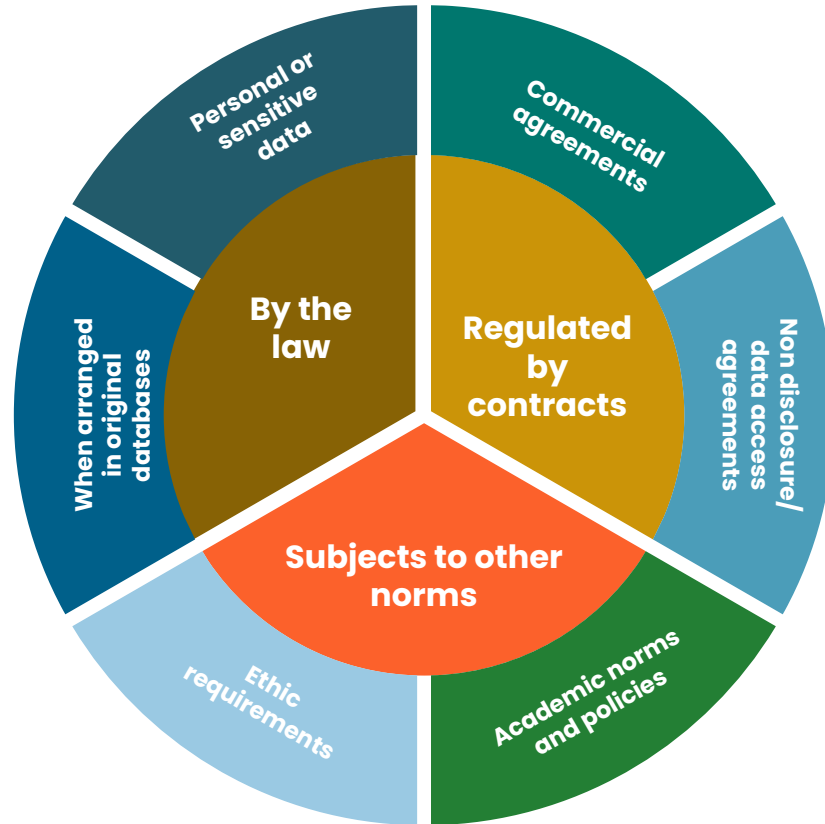
Data are not yours!

Data are **not** intellectual work, they are facts and information.

Copyright protection covers expressions and not ideas, procedures, operating methods or mathematical concepts as such.

Protection is on databases and not on data. Data are protected only and especially when they are collected and organized in a database.

The sui generis property right (only in Europe) covers not only the reproduction and dissemination of the database, but also the extraction and reuse of substantial parts of the database.

FAIR RDM for researchers

FINDABILITY

- Standardized practices related to organizing files (e.g., standardized file naming conventions)

- uploaded to a repository that assigns a persistent identifier (e.g., DOIs, RRIDs, etc.) and describes data sets with standardized metadata.

- high quality metadata

ACCESSIBILITY

- Data is available through a clearly defined process for members of the research team.

- When data and other materials are made available to others, there should be a clear path to gaining access.

F A

I R

INTEROPERABILITY

Data should be structured in a standard way so it can be easily combined with other similarly structured data sets. For example describing and organizing data (e.g., applying appropriate metadata, maintaining data dictionaries) and saving files in open or nonproprietary file formats.

REUSABILITY

Data should be saved, organized, and described with its future (re)use in mind.

A future user may be a member of the research team coming back later on the same data, or another researcher with other research purposes.

Interact!

Go to:

https://www.menti.com/

Voting code 3526 3140

https://www.menti.com/aljrmru8uu
hi

CODECS DMP

A research tool for you!

Use it to improve your everyday work: https://zenodo.org/records/10025015

To organize your files, for you and for others

To know how to find file produced by others (in particular other WPs)

To produce FAIR-by-design datasets (eg. with rich metadata description, PID, licence, etc)

To select data for long-term preservation

Tools and approaches established for personal data

How to comply with Open Access mandates

And so on…

Types of data
Non personal research data - detailed for each WP
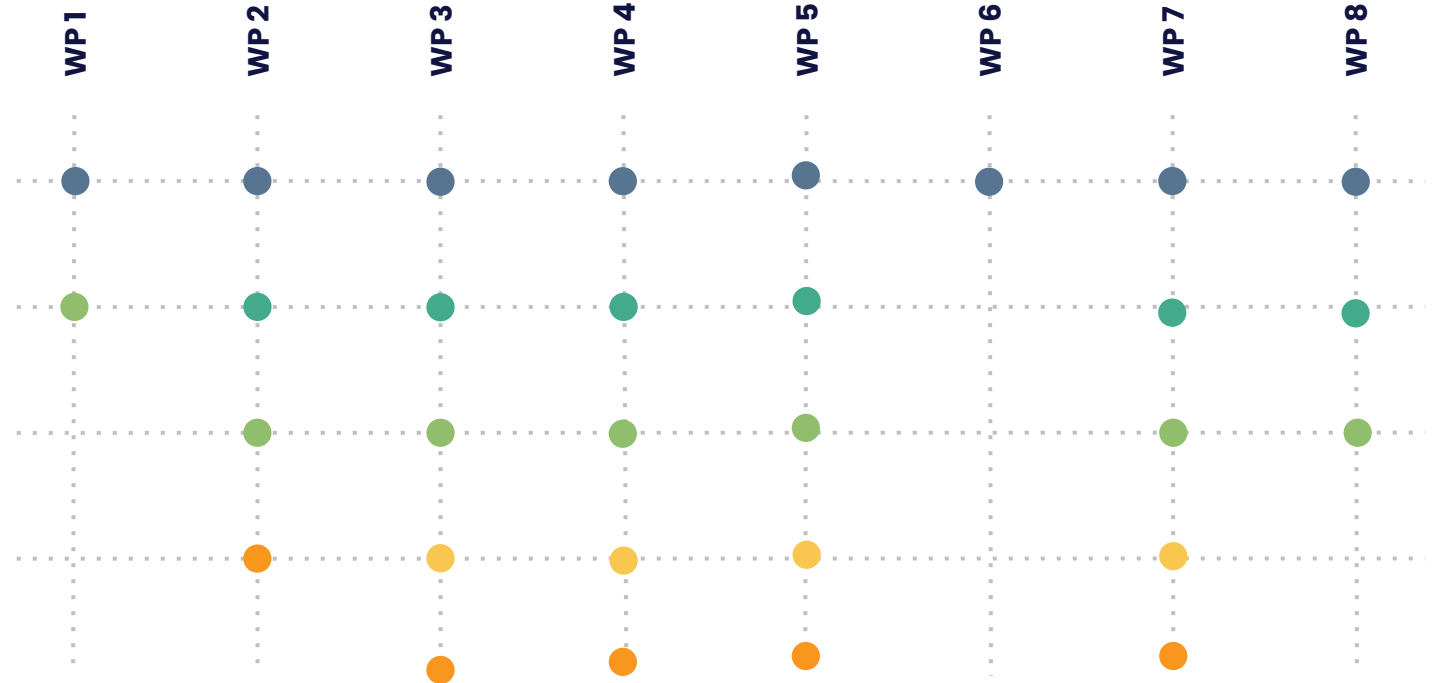
Data Types:
- Documents
- Datasets
- Multimedia
- Software

Primary -> Mode of collection

Secondary -> provenance

Types of collection:
- Interviews
- Surveys
- Measurements
- Experiments
- Literature

Content of the data:
- Text (eg, field or laboratory notes, survey responses)
- Numeric (eg, tables, counts, measurements)
- Audiovisual (eg, images, sound recordings, video, presentations)
- Instrument-specific (eg, equipment outputs)
- Software

Purpose of the data: brief description of the project/research need

Expected size: estimate

Software needed to manage each type of data

File formats

Has something gone differently?

No problem! Let's update it
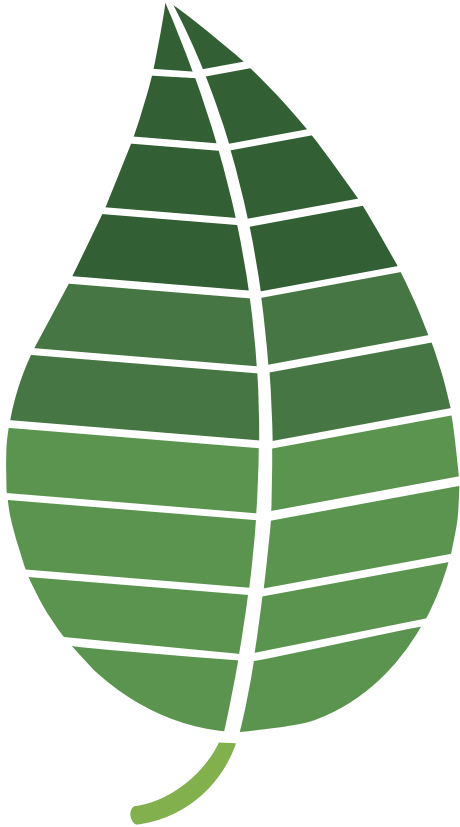
The DMP is a living document

Are you handling data types that were not foreseen at the beginning?

Are you collecting different amounts of data than planned?

Are you using unplanned software or formats?

Do you have more details on expenses and costs?

Are there unforeseen costs?

Is the planned metadata not sufficient to describe the data you are handling?

Have new problems arisen?

Are you planning to patent something?

We can adapt any part and we must update so that it results in a tool that effectively describes how to manage all CODECS data

FAIR data management

" The acronym FAIR - standing for Findable, Accessible, Interoperable, Reusable - and the FAIR principles are widely acknowledged in the scientific community as the model to follow to optimise the dissemination and exploitation of scientific resources. The aim of FAIR principles is to increase the possibility of finding, understanding, and using research data for anyone who can benefit from it.

The repository

A dedicated community in the Open Access **repository** Zenodo has been set up in order to facilitate the discoverability of CODECS research outputs and to guarantee long-term preservation.

https://zenodo.org/communities/codecs

CODECS community in Zenodo

Zenodo metadata that you will have to fill in when depositing your work

Macroarea	Metadata field	Description
	Upload type*	Can be: publication, poster, presentation, dataset, image, video/audio, software, lesson, physical object, workflow, other
Basic information	Digital Object Identifier*	Can be cited an already existing one or a newly issued
	Publication date*	Format: YYYY-MM-DD
	Title*	The title of the resource
	Author(s)*	The name(s) can be complemented with affiliation and ORCID
	Description*	Textual explanation and details
	Version	Mostly relevant for software and dataset uploads. Any string will be accepted, but semantically-versioned tag is recommended
	Language	Primary language of the record
	Keywords	Selected words to facilitate discoverability
Licence	Access right*	Can be: open access; embargoed access; restricted access; closed access
	Licence*	The licence specifying the condition for the reuse of the resource
Funding	Grants	Allows to specify the Research Funding Organization and grant number
Related/ alternate identifiers	Related identifiers	Allows to specify identifiers of related publications and datasets
Contributors	Contributors	The name(s) can be complemented with affiliation and ORCID
References	Reference	Supports linking other resources (also external to Zenodo)
Journal	Journal title	Can be specified: journal title; volume; issue; pages
Conference	Conference title	Can be specified: conference title; acronym, dates, place, website, session, part
Book/Report/Chapter	Publisher	Can be specified: publisher; place; ISBN; book title; pages
Thesis	Awarding university	Can be specified: awarding university, supervisors
	Supervisors	The name(s) can be complemented with affiliation and ORCID
Subjects	Subjects	Here subjects can be specified from a taxonomy or controlled vocabulary. Each term must be uniquely identified (e.g. a URL)

*Mandatory fields

Enrich the metadata of your upload!

It will facilitate the understanding of the content, thus giving you greater visibility and likelihood that your materials will be reused (an hence cited!)

How is this to be done?

"To supplement the information expressed through the Zenodo repository metadata, additional metadata will be attached with a documentation file in .txt format. In this metadata, all the information needed to understand and enhance the reusability of the dataset will be added. If metadata standards suitable for the resource, especially disciplinary ones, will be identified, this will be indicated in the documentation .txt file." (quoted for the DMP, Findability section)

Metadata field	Description
Mode of collection	The procedure, technique, or mode of inquiry used to attain the data. Vocabulary: DDI controlled vocabulary on mode of data collection: https://ddialliance.org/Specification/DDI-CV/ModeOfCollection_3.0.html
Country/ies of reference	To which country(ies) does the resource pertain
Year(s) of reference	To which year(s) the content of the resource refers
Data collection start date	Indicates the start of data collection
Data collection end date	Indicates the end of the data collection
Last Update	Indicates the date the resource was last modified
Data type	Dataset / Multimedia
Data formats	E.g.text / numbers / images / 3D models / audio files / video files / / surveys / maps / scientific articles .txt; .csv; .shp; .pdf, .stadat, .wav; .mp3; mp4 etc.
Data origin	Primary or Secondary
Source	The source of secondary data reused in CODECS project. Ideally a PID or URL can be added to the original source.
Licence	The original licence of secondary data
Software	If specific software is needed to access/process the data. If multiple are available, one is sufficient. Open Source or Free ones are preferred.
Data size	Known data size
Data version	Can be: raw data; pseudo anonymised personal data; anonymized personal data; processed data (see Personal data policy and paragraph 4.3)

Continuing metadata enrichment...

Suggested metadata that could help in describing videos, images and audios.

Not mandatory, but recommended.

Please remember: the best you describe your product, the much possibilities it will have to be noticed :)

Specific metadata for Video	This may include: **Type of product** (interview, video-news release, documentary, stockshots, clips, etc); **Director** (if any); **Place of the event**; **Start date of shooting; End date of shooting**; **Start date of distribution** (if any) **End date of distribution** (if any); **Script or short list with names** and functions of the personalities filmed and clear identification (e.g.: from left to right; 2nd from left; etc.); **Links** and other useful information/website where the product can be viewed or downloaded; **Technical aspects** (such as format, sound transmission, etc)
Specific metadata for images	This may include: **Date** when the photo has been taken; **Place** where the photo has been taken; **Event description**; Description of each photo with **names and functions** of the personalities photographed and clear identification (e.g.: from left to right; 2nd from left; etc.); Name of the **photographer**; **Links** and other useful information/website where the product can be viewed or downloaded; **Technical aspects** (such as format, resolution, etc.)
Specific metadata for audio	This may include: Date when the audio was recorded; **Place** where the photo has been taken; **Event description**; **names and functions** of the personalities audio-recorded; Name of the interviewer/speaker/presenter; **Links** and other useful information/website where the product can be heard or downloaded; **Technical aspects** (such as format, etc.)

Describe your deliverables

All CODECS documents have to display these information on one of the initial pages.

Just copy-paste the table and fill in the missing information, and the work is done!

Field	Content / description
Project name	Maximising the CO-benefits of agricultural Digitalisation through conducive digital ECoSystems
Project acronym	CODECS
Horizon Europe Topic ID	HORIZON-CL6-2021-GOVERNANCE-01-22
Project ID	101060179
Project website	https://www.horizoncodecs.eu/
Document type	Report / Deliverable / Briefing / etc. (see the complete list of document types at paragraph 4.1)
Title	The title of the document
Status	Draft / Final version /Final Version accepted by the Commission
Version number	
Dissemination level	Internal/Public…
Date of creation	DDMMYYYY
Date of release	DDMMYYYY
Author(s)	
Contributors	
Internal reviewers	
Work package Leader	
Project Coordinator	
Keywords	

Documentation

Why

Additional documentation can be necessary to add information to the metadata provided, in order to make the resources more understandable and thus to increase opportunities of data reuse.

What

Eventual information on methodology, codebooks, machinery settings, data cleaning, analyses, variable definitions, units of measurement, etc.

How

Within the consortium, the documentation will be stored together with the data, in a specific data subfolder.

For deposition and public sharing in the Zenodo community, the documentation will be attached in the form of a readme file in .txt format.

CODECS community

Fields which are very important to fill in

CODECS grant

Fields which are very important to fill in

Funding

💵 **Awards**

➕ Add award   ➕ Add custom

Add standard award

CODECS 🔍   Funder ▾

⚪ **Fully Implantable and Programmable Spike-based Codecs for Neuroprosthetics**
5R01NS076460-02
National Institutes of Health

⚪ **Fully Implantable and Programmable Spike-based Codecs for Neuroprosthetics**
1R01NS076460-01
National Institutes of Health

⚪ **Fully Implantable and Programmable Spike-based Codecs for Neuroprosthetics**
5R01NS076460-03
National Institutes of Health

⚪ **COoperative ITS DEployment Coordination Support** 653339
European Commission

⚪ **Maximising the CO-benefits of agricultural Digitalisation through conducive digital ECoSystems** 101060179
European Commission

« ‹ 1 2 › »

Did not find your award? Add a custom award.

Interoperability

In order to enrich metadata and to achieve interoperability with other data, the resources listed in initiatives such as the ==RDA Metadata Standards Catalog== (https://rdamsc.bath.ac.uk) and the ==FAIRsharing registry of standards and semantic artifacts== (https://fairsharing.org/search?fairsharingRegistry=Standard) will be taken into account for the retrieval of specific controlled vocabularies.

To enrich the contextual knowledge about the data, while depositing a new research output, whenever suitable an attempt will be made to ==link and reference other related products== with the appropriate metadata field, with the goal to create as many meaningful links as possible between (meta)data resources.

Data

Data Management in the consortium and public data sharing

Sharing data: what is ment?

With collaborators while the research is active

Data are mutable

(Open) data sharing

Data are stable, searchable, citable, clearly licensed

Storing versus archiving

Storing and backing up files while research is active

Likely to be on a networked filestoreor hard drive
Easy to change or delete

Archiving or preserving data in the long-term

Data are stable, searchable, citable, clearly licensed

Likely to be deposited in a digital repository
Safeguarded and preserved

Data Management within the consortium

Given the multidisciplinary nature of the project and the international dimension of the consortium, adopting a clear organisation of information is essential for the proper management of research data. To this end, a clear convention for file naming has been adopted, as well as an agreed-upon folder structure, documented with a read-me file located at the root folder.

File naming and folder structure

All files will be findable using the following file naming convention:

DocumentType_Title_VersionNumber(if needed)_Dateofrelease.extention

For example: PRES_DMPinCodecs_14122022.ppt

The date format is DDMMYYYY

The document type are shortened as follows:

DATA - short name DATA
DELIVERABLE - DEL
EXPERIMENT - short name EXP
INTERVIEW - short name INT
LITERATURE - short name LIT
PROJECT MANAGEMENT TOOL - short name PMT
MULTIMEDIA - short name MM
POLICY BRIEF - short name PB
PRESENTATION - short name PRES
REPORT - short name REP
SURVEY - short name SURV
WORKING PAPERS - WPP

In the folder structure, a division by WP will be followed and work in progress will be separated from the stable versions.

The following structure will be followed:

- CODECS
  - General
    - 0_Bibliography
    - 1_Proposal&Evaluation
    - 2_Grant&Consortium_Agreements
      - ConsortiumAgreement
      - GrantAgreement
    - 3_Delivered
      - FinalDeliverables (for Deliverables accepted by the Commission)
      - Reports (for accepted version of Reports to the Commission)
    - WP number
      Activities or content, for example:
      - Interviews
        - Country
          - Year
      - Surveys
        - Country
          - Year
      - Literature
      - Training
      - …
      - Deliverable D.X.Y (for ongoing work)

Versioning

Research life-cycle

To facilitate versioning, at different stages of the research life-cycle, depending on the level of processing, data in CODECS project may be referred to as:

Raw data: unprocessed data, eventually with full personal information (non-anonymized data).

Processed data: recodes, transformations, selections, or enrichment of the anonymized data, which are all captured and described in metadata and documentation files.

Stable data: processed data, on which no new data are added. These are preferably selected for long-term preservation.

Personal data

Personal data may be referred to as:

Pseudonymised (personal) data: raw data in which any personal identifiers are removed, but whose link to the data allowing identification is located separately.

Anonymised (personal) data: raw data in which any personal identifiers are removed.

In Zenodo

Zenodo (which is the chosen repository) allows **DOI versioning** allowing to:
- edit/update the record's files after they have been published.
- cite a specific version of a record.
- cite all of the versions of a record.

Patenting

In the Grant Agreement:

"Protection of Foreground Knowledge: It has been ==preliminarily agreed== amongst project partners that protection of the foreground knowledge will be based on copyright protection and ==will not include patent protection of the results=="

However, several partners replied that there might be patents. So ==in the DMP we wrote:==

"If any of the data collected within CODECS will be subject to commercial exploitation, the DMP will be immediately updated with full details of the type of data involved and the type of exploitation that will be applied".

Please, consider if you need an amendment!

Public data sharing

Public data sharing

What we have planned about access to data

The aim

In accordance with the Grant Agreement, ==unrestricted and royalty-free access== will allow third parties and the general public mining, exploitation, reproduction, and dissemination of research data generated by CODECS, thus maximising the impact on the scientific community.

The principle

"As open as possible, as close as necessary"

When depositing

Open access will be granted to all data selected for deposition ==as soon as possible== and considering proper versioning, or at the latest as soon as they are considered ==stable==.

Licences

The deposited data will be made available under the latest available version of the Creative Commons Attribution International Public License (==CC BY==) or Creative Commons Public Domain Dedication (==CC0) or a== ==licence with equivalent rights.==
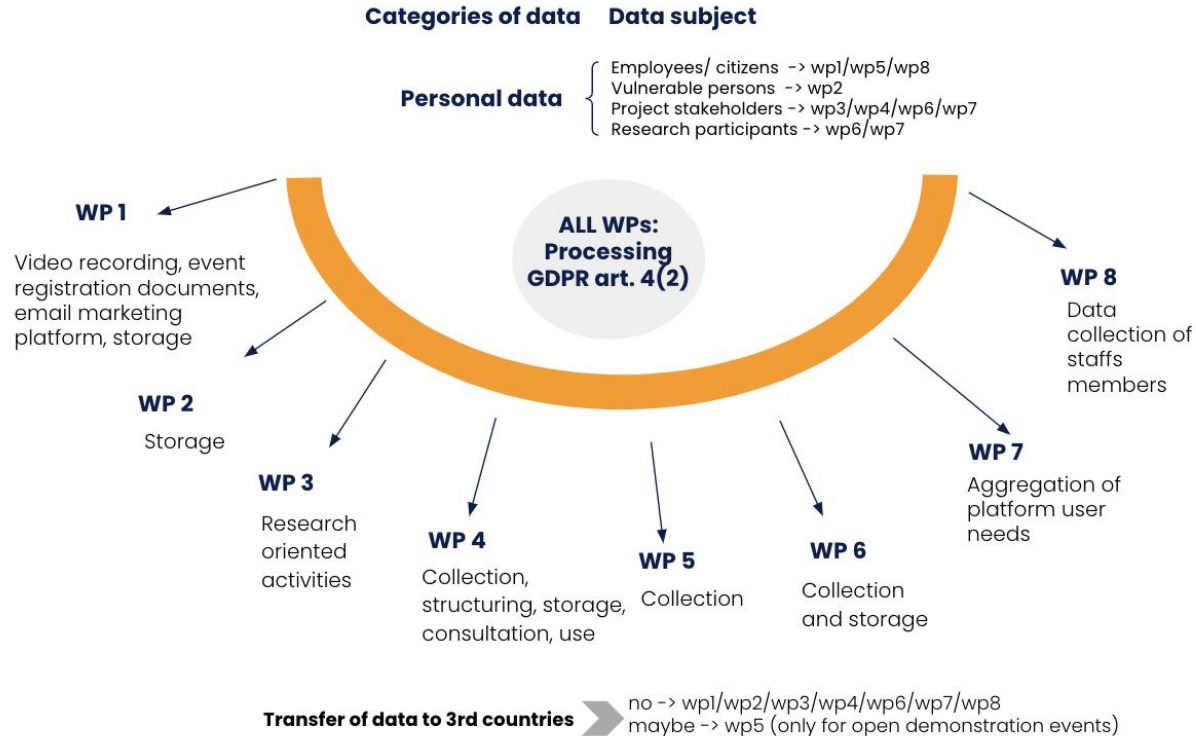
Protection

Should the need arise, embargo periods will be clearly declared, accounting the need to balance openness and exploitation, protection of scientific information, commercialization, IP Rights, security, and preservation questions.

Selection criteria for long term preservation

Primary data; secondary data rearranged into original datasets; and **datasets** whose data will be cited by any of the **publications, reports, or deliverables**, will be preserved.

Secondary data, already available from other sources and provided with a persistent and unique identifier (PID), will not be preserved.

Personal data flow for each wp

Categories of data   **Data subject**

Personal data
- Employees/ citizens -> wp1/wp5/wp8
- Vulnerable persons -> wp2
- Project stakeholders -> wp3/wp4/wp6/wp7
- Research participants -> wp6/wp7

ALL WPs: Processing GDPR art. 4(2)

WP 1

Video recording, event registration documents, email marketing platform, storage

WP 2

Storage

WP 3

Research oriented activities

WP 4

Collection, structuring, storage, consultation, use

WP 5

Collection

WP 6

Collection and storage

WP 7

Aggregation of platform user needs

WP 8

Data collection of staffs members

Transfer of data to 3rd countries
- no -> wp1/wp2/wp3/wp4/wp6/wp7/wp8
- maybe -> wp5 (only for open demonstration events)

Personal data

Pay particular attention when dealing with this kind of data

Ethical aspects

All wps will collect or manage personal data, for research or other purposes (eg. dissemination).

Partners have to implement targeted consent forms, information sheets and storing tools.

Two consent forms: one for research activity and one for processing personal data.

Please check the Ethic Guide, the webinar on ethical and legal aspects and its presentation:
https://unipiit.sharepoint.com/:f:/r/sites/CL6-GOVERNANCE/Shared%20Documents/General/WP8_Coordination/Ethics/Training_13072023?csf=1&web=1&e=QZWtGn

Anonymization and pseudonymization

In all cases where personal data will be handled for research purposes, these will only be shared following anonymisation or pseudonymisation process, as described in the article 4(5) of GDPR.

If the data contain sensitive or person-identifying information, appropriate choices will be made:
- anonymization using specific software such as AMNESIA - https://amnesia.openaire.eu/)
- pseudonymization (personal identifiers are removed, but the link to the data allowing identification is located separately)
- or restricted or closed access.

If the restricted access option is chosen, guidance will be provided in the deposited item, clarifying who can request access, under which conditions, and to whom to address the request.

Interact!

Go to:

https://www.menti.com/

Voting code 3526 3140

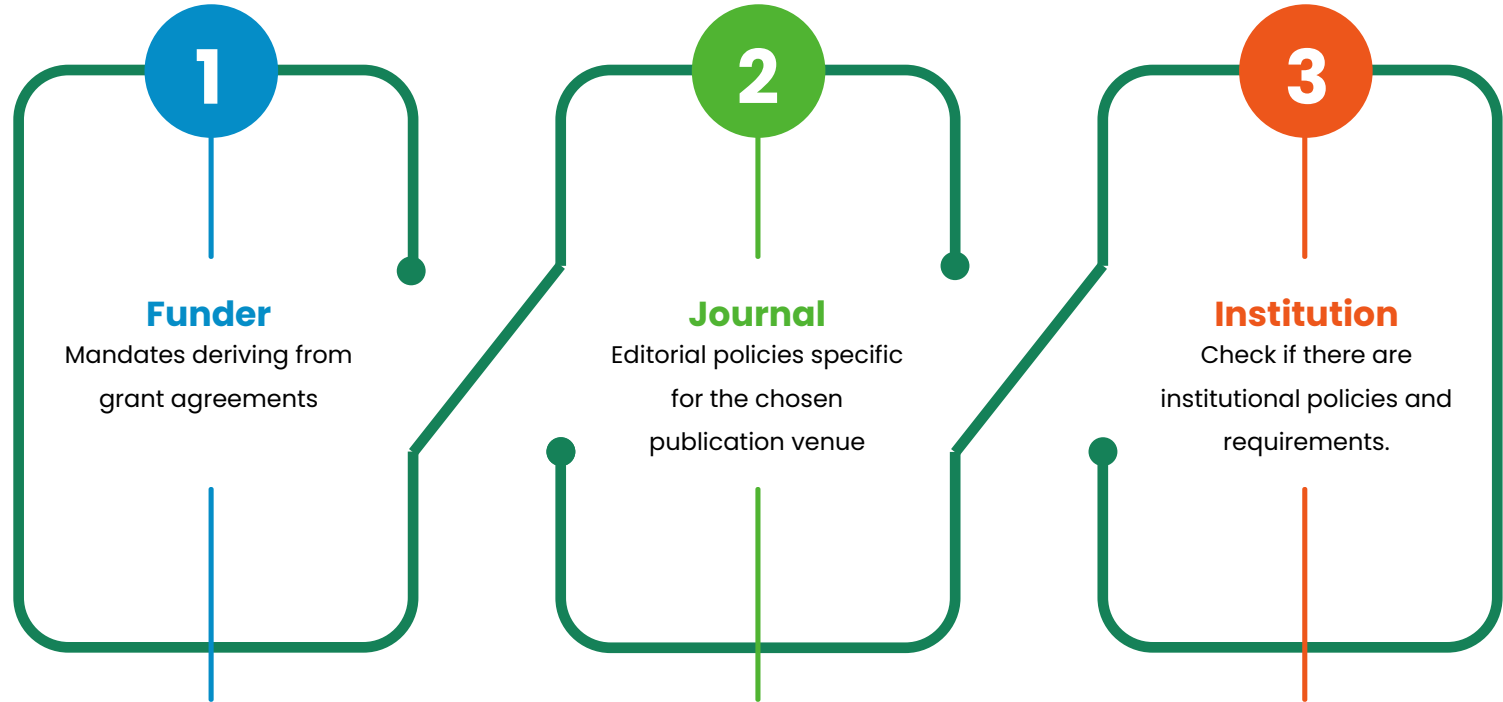https://www.menti.com/aljrmru8uu
hi

Publications

Access to literature.

Things to know and useful tools for choosing a publication venue

Policies and requirements

At least three levels to consider

1

Funder

Mandates deriving from grant agreements

2

Journal

Editorial policies specific for the chosen publication venue

3

Institution

Check if there are institutional policies and requirements.

Access to literature

"

CODECS project will comply with European Commission Open Access mandate on scientific literature ==by depositing a copy of each published article derived by the project activities that will undergo a peer-review process==.

All deposited articles will be assigned an ==open access right== at the time of publication (==no embargo== period will be applied to scientific publications).

Always deposit a permitted version in a repository

No embargo periods

Roads to Open Access

There are several possibilities to meet the requirements

Green OA

- Through the version allowed for Open Access (check editorial policies)
- Deposit this version in a trusted repository (institutional, disciplinary or catch-all, i.e. Zenodo)
- Beware to copyright and embargo periods of the publisher/journal: https://v2.sherpa.ac.uk/romeo/

Gold OA

- Immediate, unrestricted access to the published article
- Open Access Journal - no fee or any type or restriction to read, download, share, and reuse
- Usually no copyright transfer and use of CC licence
- Authors may be required to pay APCs (article processing charges)

Diamond OA

- Contents are free of charge for readers and authors
- Not-for-profit, non-commercial organizations, associations or networks sustain the costs
- Open Research Europe is an example

Choose your route

What we have stated in the DMP

ORE

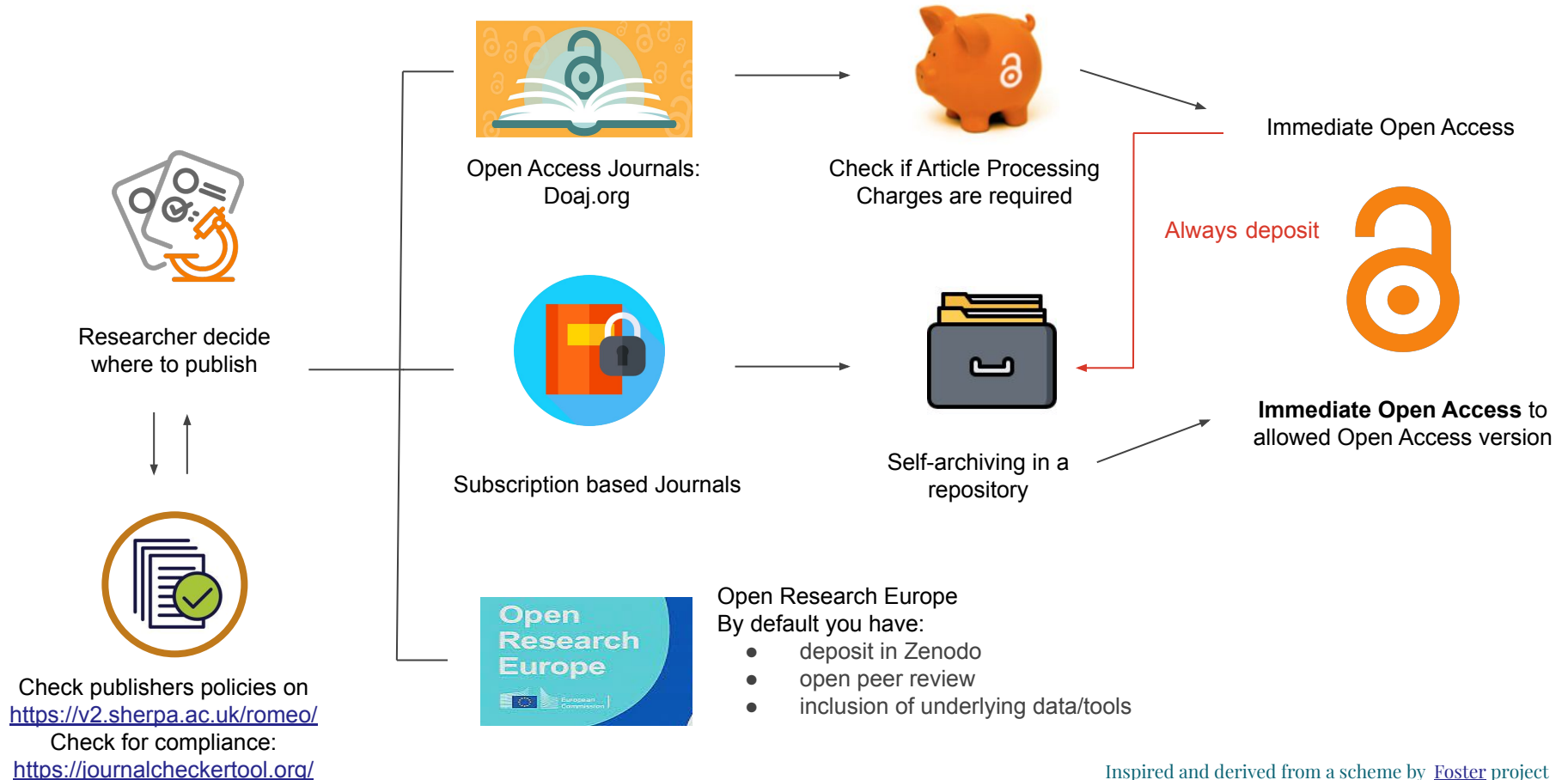The Open Research Europe publishing platform will also be considered.

C

Self-archiving

Green Open Access (i.e., self-archiving a version allowed for deposition in OA) will be the preferred route

B

Gold OA venues

Gold Open Access will be considered when publishing in leading international journals. An estimated budget of 20.000 euros has been allocated for the APCs in fully Open Access publication venues

A

Who and when

As soon as possible after paper acceptance, and at the latest at the time of publication, the corresponding author should deposit in compliance with EC Open Access mandate and publisher Open Access policy, the version of the article that is permitted for open access in the Zenodo repository, include reference to the CODECS grant in the metadata, and set the open access to the file containing the machine-readable version of the article.

The corresponding author of the paper published is responsible for depositing the open access version of the paper that is compliant with the publisher policy and the European Commission mandates.

All articles should contain the reference to the project, possibly in the "funding" or "acknowledgment" sections. Suggested form is the following:

"This [article/chapter/report/result/equipment] is part of the CODECS project - "Maximising the CO-benefits of agricultural Digitalisation through conducive digital ECoSystems". The project has received funding from the European Union's Horizon Research and Innovation Actions under the HORIZON-CL6-2021-GOVERNANCE-01 call, grant agreement No 101060179."

OA to publications in Horizon Europe

Researcher decide where to publish

Check publishers policies on
https://v2.sherpa.ac.uk/romeo/
Check for compliance:
https://journalcheckertool.org/

Open Access Journals:
Doaj.org

Check if Article Processing
Charges are required

Immediate Open Access

Always deposit

Subscription based Journals

Self-archiving in a
repository

Immediate Open Access to
allowed Open Access version

Open Research Europe
By default you have:
- deposit in Zenodo
- open peer review
- inclusion of underlying data/tools

Open Research Europe

Sherpa Romeo

Sherpa Romeo is an online resource that aggregates and analyses publisher open access policies from around the world and provides summaries of publisher copyright and open access archiving policies on a journal-by-journal basis

Different routes

But in the end, is this journal ok with mandates?

Go into details!

Plan S Journal Checker tool

Journal of Rural Studies (Elsevier), ISSN: 0743-0167 + European Commission (Horizon Europe Framework Programme) + National Research Council, Italy (ROR:04zaypm56)

Yes, the journal policy allows compliance with the Horizon Europe open access mandate

OPEN ACCESS PUBLISHING IN THIS JOURNAL ALLOWS COMPLIANCE WITH THE HORIZON EUROPE OPEN ACCESS MANDATE PROVIDED YOU HAVE ALTERNATIVE FUNDS

Remember to select a **CC BY** licence (or equivalent).

Remember to also ensure, at the time of publication, the **immediate deposition** and open access of the Version of Record in a **trusted repository** under a CC BY (or equivalent) licence, as required by Horizon Europe.

Publishing fees, including Article Processing Charges, in Hybrid journals are **not eligible** costs under Horizon Europe and you must locate alternative funds. More information

Yes, it is.

BUT you have to pay with other funds (this would not be eligible in CODECS grant)

Another example

Future Foods (Elsevier), ISSN: 2666-8335 + European Commission (Horizon Europe Framework Programme) + By ROR or name

Yes, the journal policy allows compliance with the Horizon Europe open access mandate

ALLOWS COMPLIANCE WITH THE HORIZON EUROPE OPEN ACCESS MANDATE

Remember to select a **CC BY** licence (or equivalent).

Remember to also ensure, at the time of publication, the **immediate deposition** and open access of the Version of Record or the Author Accepted Manuscript in a **trusted repository** under a CC BY (or equivalent) licence, as required by Horizon Europe.

Publishing fees, including Article Processing Charges, will be **eligible** costs under Horizon Europe.

DOAJ
OPEN GLOBAL TRUSTED

SUPPORT ♡ ⌄   APPLY ⌄

SEARCH ⌄   DOCUMENTATION ⌄   ABOUT ⌄

Future Foods

📖 **2666-8335 (ONLINE)**

⧉ Website   ⧉ ISSN Portal

About   Articles

PUBLISHING WITH THIS JOURNAL

BEST PRACTICE

JOURNAL METADATA

💲 The journal charges up to:

1800 USD

as publication fees (article processing charges or APCs).

🔓 This journal began publishing in **open access in 2020.** ⓘ

This journal uses a **CC BY** or a **CC BY-NC-ND** license.

📍 Publisher
Elsevier , Netherlands

Manuscripts accepted in English

Directory of Open Access Journals (DOAJ)

[DOAJ](#) is an index of open access journals from around the world, committed to ensuring quality content is freely available online for everyone.

Filters on fees, rights retention, licences, subjects ect.

Licences

Tell others what they can do with your data. And pay attention to others' licences

For primary data:

"The deposited data will be made available under the latest available version of the Creative Commons Attribution International Public License (CC BY) or Creative Commons Public Domain Dedication (CC0) or a licence with equivalent rights".

For literature:

"CC BY or equivalent. Only for monographs and other long-text formats, the licence may exclude commercial uses and derivative works (e.g. CC BY-NC, CC BY-ND)".

For secondary data:

when reusing produced by others, you need to know whether and under what conditions we can reuse it.

The CODECS platform offers an inventory of technologies: the original licence of each product should be given.

Open Science aims at CC0 or CC-by

Interact!

Go to:

https://www.menti.com/

Voting code 3526 3140

https://www.menti.com/aljrmru8uu
hi
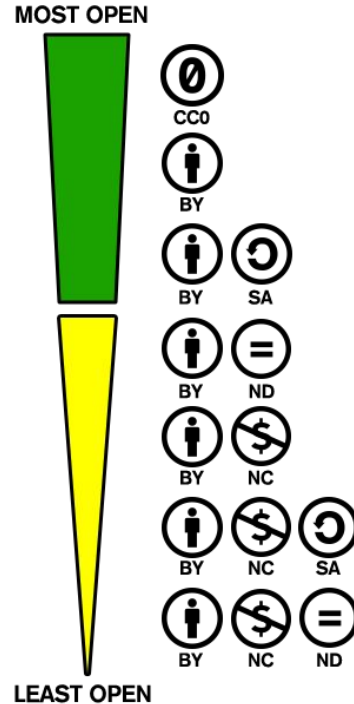
Other Outputs

Software sharing

All relevant software and computer code that will be produced in CODECS project to collect and analyse data will be properly documented and openly shared through the Zenodo repository.

Once it has been ascertained who owns the intellectual property of the software created (the researcher(s) or the institution they work for), it will ==preferably be released under a Free and Open Source Software (FOSS) licence== between the ones listed by the Open Source Initiative: https://opensource.org/licenses/

For anyone to be able to read and understand the research software, the next points will be followed as far as possible:
- ==variables and functions names== will be as self-descriptive as possible.
- proper ==code commenting== will be realised while developing.
- a ==readme file== in .txt format will be attached, including all relevant information (e.g. how to install and configure the software, if a full documentation is available and where it is possible to find it, if a quickstart guide has been released etc.).
- proper ==version control== both of the software and of its documentation will be applied using Zenodo versioning functionalities.

Communication

A variety of outputs are envisaged for dissemination purposes: articles, newsletters, reports and videos. Besides, social media accounts will be managed.

Moreover, a project website has been developed for the project results to be publicised: https://www.horizoncodecs.eu/

The website server is hosted by Siteground with IP 35.214.213.135.

The privacy and cookie policy is already displayed on the website.

To be added: terms of use and licence for the website

It would be nice also to have a Zenodo button :)

The platform

It is an output of the project.

Already online:
https://www.digital-agriculture.horizoncodecs.eu/

Privacy policy and cookie management system already online

Copyrighted (all rights reserved)

Terms of use?

The data it contains to be deposited in Zenodo: closed ore restricted access? And in what form?

Plaform policy underway

DMP to be updated

Costs

Costs we have estimated

No costs for the repository (Zenodo is free)

Purchase of the following supplies and software for the communication and dissemination strategy:

Artgrid: 18,60 EUR/month

Freepik   8,06 EUR/month

Sendinblue 49 EUR/month

Total: 75,66 EUR/month, that is 3.631,68 EUR for the whole project (48M)

An estimated budget of 20.000 euros has been allocated for the APCs in fully Open Access publication venues.

Remember: costs hybrid journals are not eligible!

The Open Research Europe publishing platform will also be considered.

Other infrastructure or software costs that are not detailed here are considered in-kind by the consortium institutions.

Data security

Roles and responsibilities

Researchers, technicians and Living Lab participants will be in charge of **collection** of research data.

Personal data: their security and the compliance with the GDPR are in charge to the **data controller** (the natural or legal person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of personal data).

Ethics Manager: sabrina.brizioli@unipg.it

If needed, institutional staff, such as data management staff, could be involved in the management of research data.

All data will be on servers that are **password** protected with secure online access and **authentication measures**.

The project coordinator is responsible for the quality of the DMP and for its implementation during the project's lifetime.

Within the project consortium, **all the involved beneficiaries** are responsible for
● **uploading all data related to the project into the designated data repository; verifying that sufficient metadata is provided**;
● ensuring that data structure, naming, etc. comply with the DMP

Update of the DMP: UNIPI with CNR support

Storage and backup

The data will be stored in institutional servers and cloud services during the collection phases.

All the data relevant for the activities of the consortium will be stored and managed by the **Microsoft teams cloud service provided by the project coordinator (UNIPI)**.

This cloud environment is based on **Microsoft Azure technology**.

The disaster recovery solution is based on the backup solutions offered by Microsoft Azure cloud services, which are GDPR compliant.

gender

Gender dimension

The expert groups on legal and ethical issues within the CODECS project will work to monitor in a systematic and strategic manner the gender perspective in CODECS research and training activities.

A preliminary survey was addressed to the CODECS WPs dealt with the gender dimension in order to scrutinise the gender balance in the organising and working structure of WPs as well as to estimate whether gender participation occurs on equal footing.

Check the results of the survey in the DMP

Updates of the DMP

The Data Management Plan will be mandatorily updated at:
- M18 (March 2024)
- M36 (September 2025)
- M48 (September 2026) of the CODECS project.

It will also be updated whenever any relevant change occurs.

Interact!

Go to:

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https://www.menti.com/aljrmru8uu
hi

CODECS

Thank you!

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in @codecs

t @horizoncodecs

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