



linec

Unlock The Power of your Data

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Agenda



- Open Science
- Data Management Plan
- Introduction to Data
- Metadata: Data About Data
- Data Storage: Zenodo

Open Science (OS)

- **“As Open as Possible, as closed as necessary”**
- Open Science is a **legal obligation** under [Horizon Europe](#) , [Flemish funder FWO](#), [VLAIO](#) and other Funding agencies
- Research Data are freely available to:
 - Reuse
 - Redistribute
 - Reproduce



Data Management Plan



Data Management Plan

Definition

A Data Management Plan, or DMP, is a document in which the researcher should outline how data will be handled throughout and after a project.

- **What is in a DMP?**

- Basic info
- Description of data
- Division of responsibilities
- Resource allocation



Why are Data management plans everywhere?

Introducing Open Science (EU Commision)

- **Open Science** (OS) policy strives to quickly spread knowledge
- Requires beneficiaries of research + innovation funding (**you**) to make **research outputs available**:
- **Publications** in open access
- **Data** as open as possible and as closed as necessary

Data needs to
be managed

You need to
have a plan

“Data Management Plan”

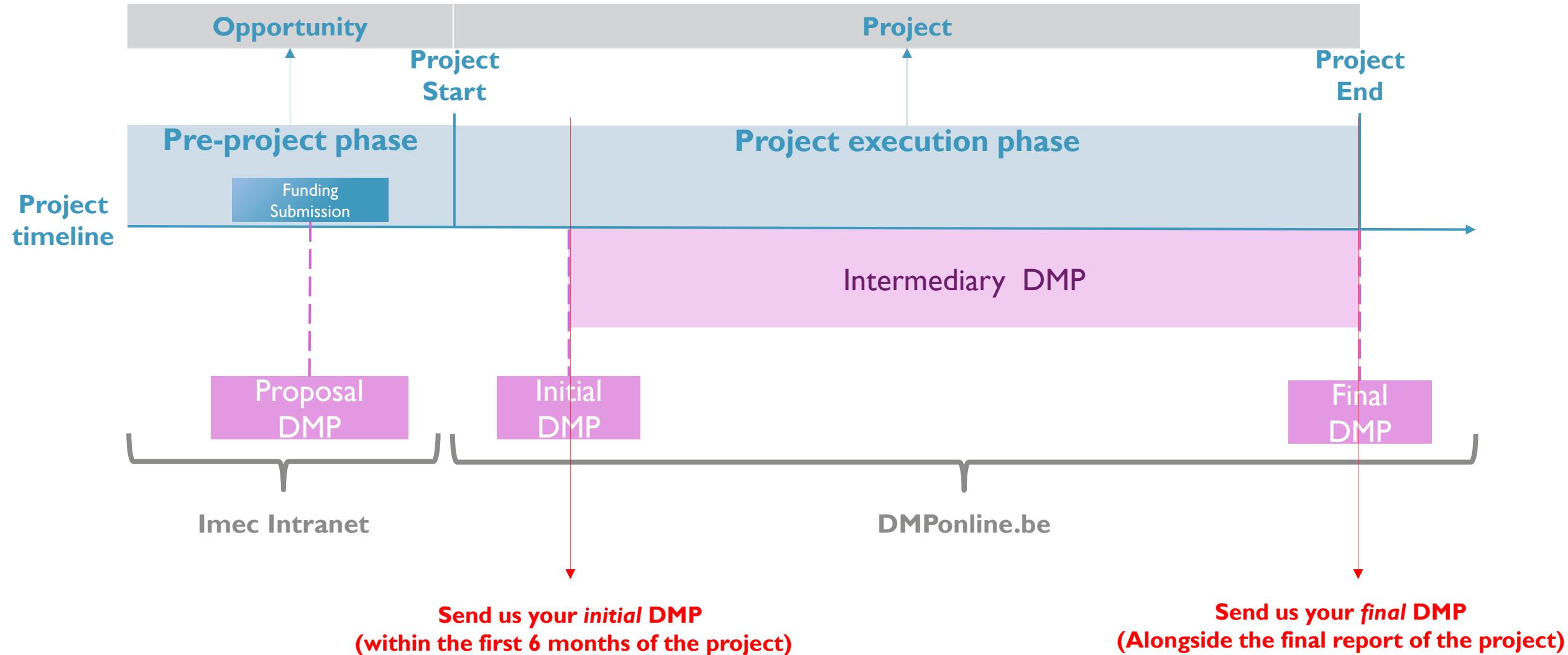
2 reasons to make a DMP

Funders require them, but they are good for you too ...

- They help you keep track of **legal** and **security** issues.
 - Intellectual Property Rights?
 - Contractual agreements?
 - Confidential data?
 - Dual-use potential?
- They help you keep track of **your data**.
 - Where to store?
 - Should you store?
 - Where was that file **again**?
 - Is everyone working on the same **version**?

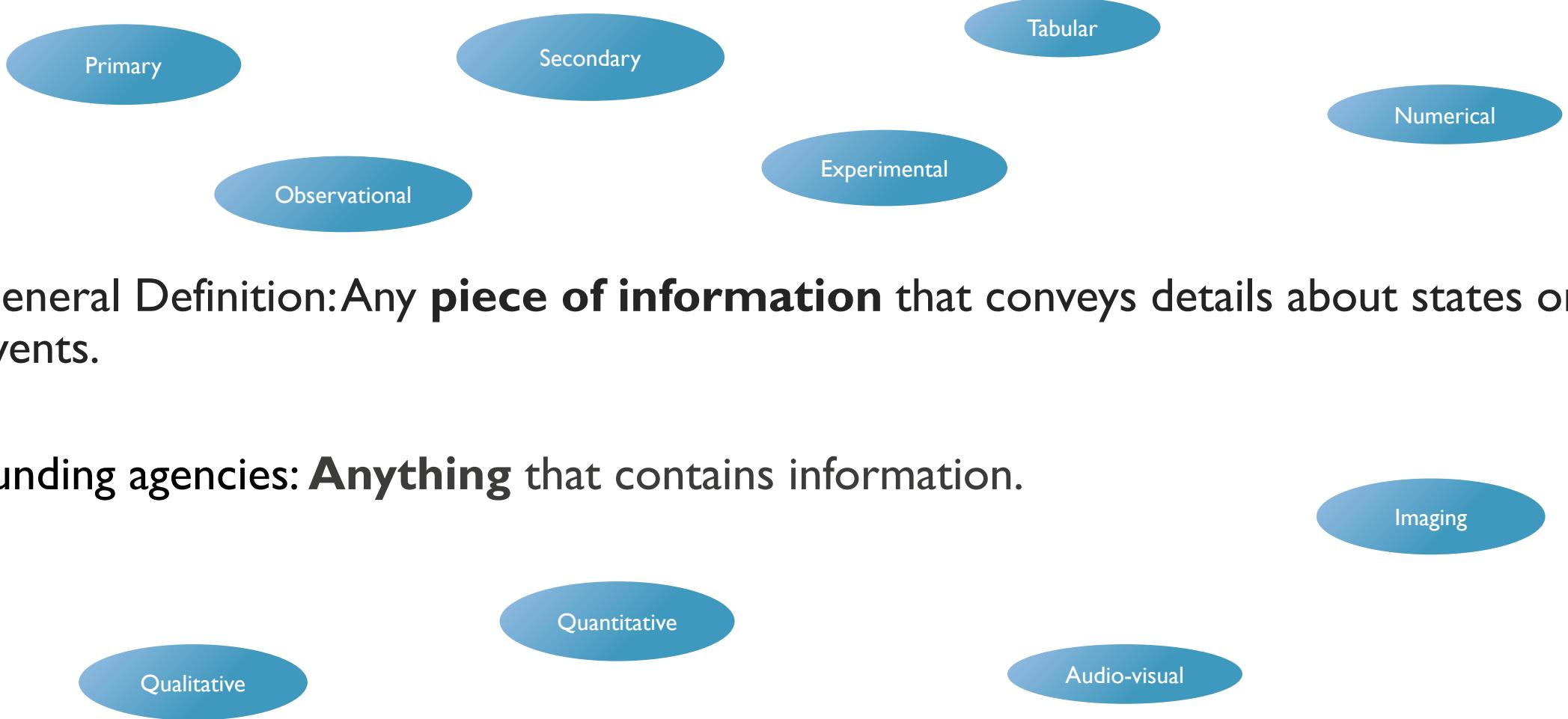


DMPs document how you handle your data



Introduction to Data

What is Data ?

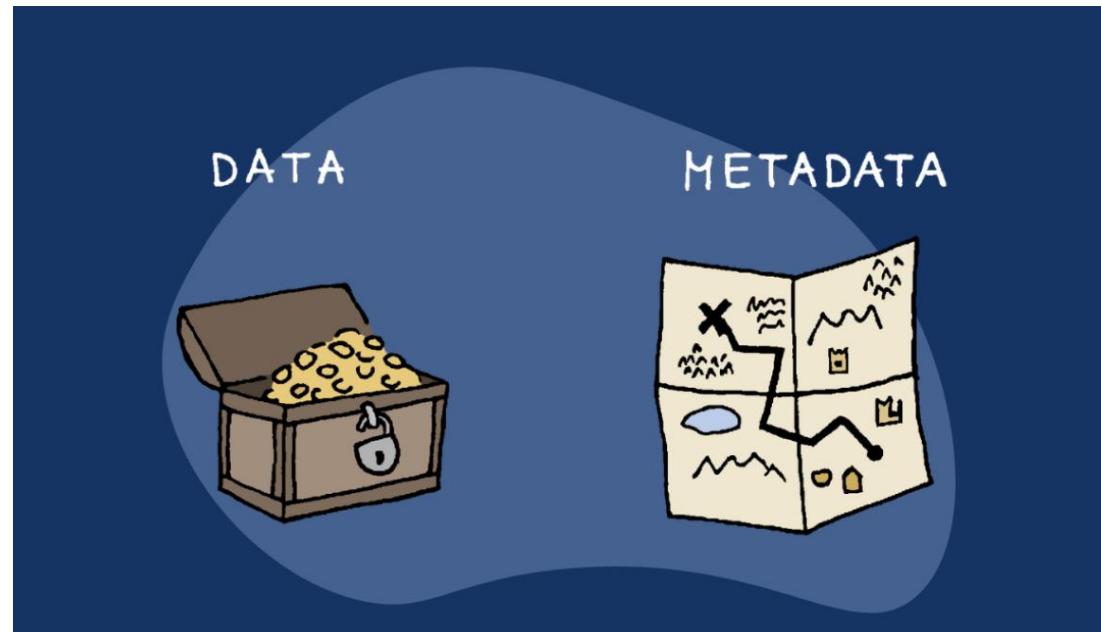


Data About Data: Metadata within imec

Into the Data: Metadata

Data About Data

- Metadata are crucial for making your data FAIR. They should be added continuously throughout your project, not just at the start or end. From a FAIR perspective, metadata are more important than the data itself, as they are always openly available and link research data and publications on the Internet of FAIR Data
- Metadata is the interface that provides better descriptions for improved discovery of archives and special collections.¹
- The effect of metadata on end-users may be reflected in exclusive data, like the 90% boost in discoverability achieved through investment in semantic technology.²



¹ Schaffner, J. & OCLC Research. (2009). *The Metadata is the Interface: Better Description for Better Discovery of Archives and Special Collections, Synthesized from User Studies*. OCLC Research.

<https://www.oclc.org/content/dam/research/publications/library/2009/2009-06.pdf>

² Conrad, L. Y. (2024, September 24). *The Experience of Good Metadata: Linking metadata to research Impacts - The Scholarly Kitchen*. The Scholarly Kitchen.

<https://scholarlykitchen.sspnet.org/2021/09/30/the-experience-of-good-metadata-linking-metadata-to-research-impacts/>

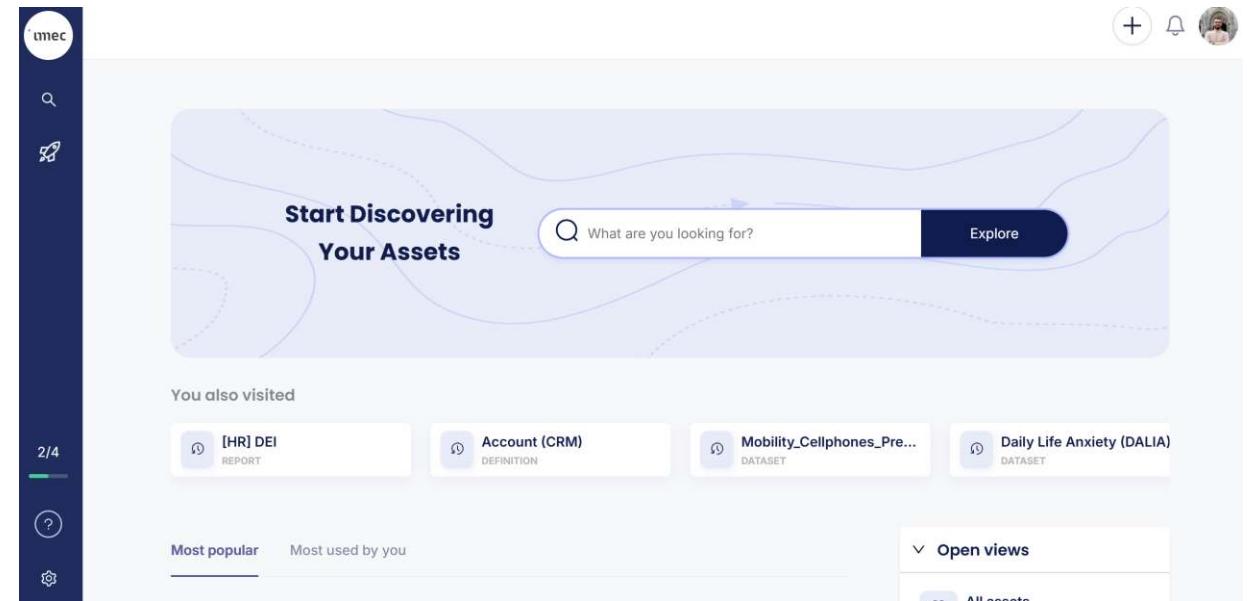
Importance for Researchers and Science

- How can researchers and science benefit from metadata?

Researchers	Science
More Visibility and Citation	Facilitates data finding and reuse
Opportunities for collaborations	Enables new research and insights into the data.
Career recognition	Valuable data is protected
Decrease of non-compliance risks (legal, ethical, institutional and funders' policies).	Supports research integrity and reproducibility.

Where is the Metadata located within imec ?

- Dscribe
- Dscribe (data catalog) serves as a centralized database that stores and manages metadata within imec
- How to Use DataCatalog:
The imec Catalog

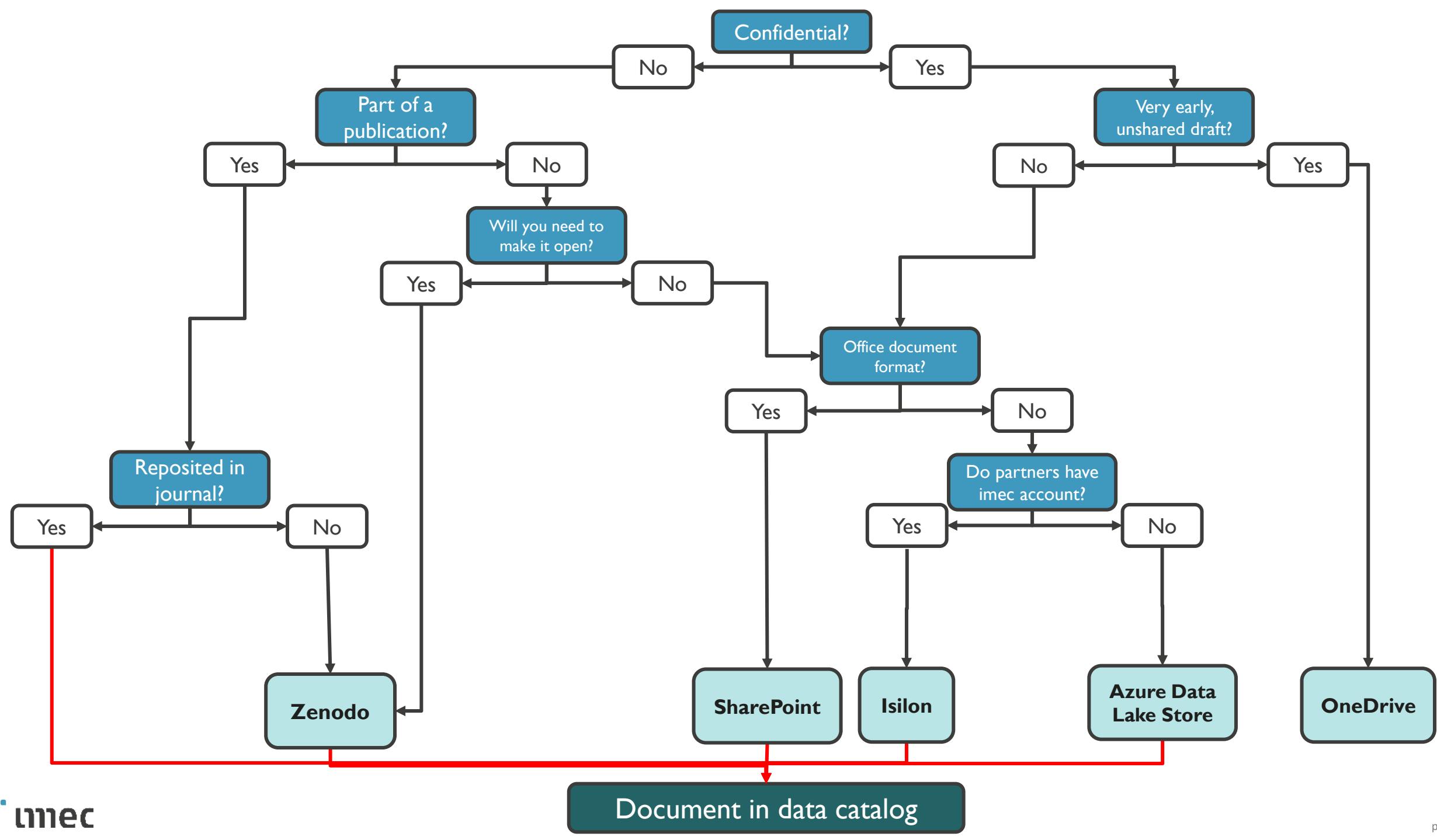


Are you a project lead for a publicly funded project? If so, you need to upload your metadata to dscribe

➤ **Please keep the following important remarks in mind:**

- It is mandatory to upload your metadata as part of applying open science principles, ensuring it is sent to the publicly funded agencies especially at the end of the project.
- If you have a valid dataset during the project, please ensure its metadata is uploaded.
- It is recommended to upload at least one metadata for the project.
- Keep your metadata up to date. For example, if you change the name of the project or if a new colleague joins the project, etc..

Unlocking The Data Storage With Metadata

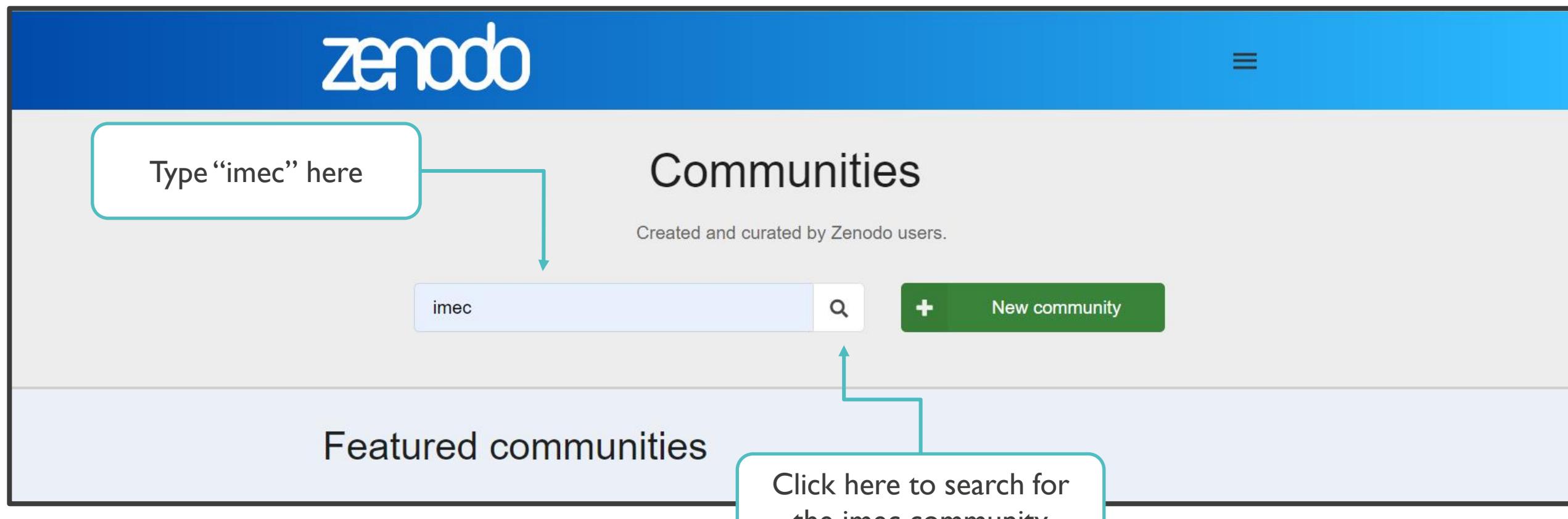


What is Zenodo ?

Definition

- Zenodo is a general-purpose research repository designed to facilitate the sharing, preservation, and dissemination of research outputs across all scientific disciplines. Launched in 2013 by the CERN, Zenodo offers researchers and institutions a user-friendly space to deposit and archive various types of scholarly content, including datasets, software, presentations, publications, and more.

Searching for our community



Where should you go?

zenodo

Communities

[New community](#)

imec

Sort by Best match

imec Imec

Imec Open Data Community

This community aims to unite all assets that are uploaded to Zenodo and has been (partially) contribut...

Organization <https://www.imec-int.com/en>

IMEC [ROR](#), Imec the Netherlands [ROR](#), Interuniversitair Micro-Electronica Centrum

Click here to enter the imec community. It will be the **second** search result.

Upload your information assets



Imec Open Data Community

 <https://www.imec-int.com/en>  Organization  IMEC 

Imec the Netherlands  , Interuniversitair Micro-Electronica Centrum



New upload

 Records

 Members



Click here to upload a
new information asset to
Zenodo!

Uploading your assets (basic information)

Save or preview your draft here

Drag and drop your information asset in here!

Drag and drop files

Storage available 0 out of 100 files 0 bytes out of 50.00 GB

Basic information

Add the DOI if already existing or let Zenodo assign one to your asset!

Digital Object Identifier *

Do you already have a DOI for this upload? Yes No

Copy/paste your existing DOI here...

A DOI allows your upload to be easily and unambiguously cited. Example: 10.1234/foo.bar

Resource type *

Title *

Add titles

Publication date *

2024-04-02

In case your upload was already published elsewhere, please use the date of the first publication. Format: YYYY-MM-DD, YYYY-MM, or YYYY. For intervals use DATE/DATE, e.g. 1939/1945.

Creators *

Add creator

Save or preview your draft here

Draft

Save draft Preview

Submit for review

Visibility *

Files only

Public Restricted

Public

The record and files are publicly accessible.

Options

Apply an embargo

Record or files protection must be restricted to apply an embargo.

Write the asset title here

Add other versions of the title here

Write the date of publication here

Copy the authors as creators (affiliation: IMEC). **DO NOT select a role!**

Select the type of resource to upload!

Select visibility here. If you pick "restricted" the metadata will be visible to everyone, but the asset itself will only be shared with people you select.

Uploading your assets

Basic information

Add a short description of your asset here

Add additional
descriptions here

If you have not paid for a CC-BY license, remove this field. Otherwise, write your license here.

 **Description**

Paragraph  **B** *I*             

Uploading your assets (recommended information)

Recommended information

Add contributors here

Contributors

Add contributor

Add people or organizations here

Add names and surnames here

Add researchers' identifiers here

Add researchers' affiliations here

You can add the entity's role here (but don't! It will result in a very long list)

Add contributor

Person Organization

Search for persons by name, identifier, or affiliation...

Family name **Given names**

Family name Given names

Identifiers
e.g. ORCID, ISNI or GND.

Affiliations
Search or create affiliation

Role
Select role

Contact person
Data collector
Data curator
Data manager
Distributor
Editor
Hosting institution
Other

Cancel

Save and add another

Save

24

Uploading your assets (recommended information)

Add keywords here

Keywords and subjects

Suggest from

All

Search for a subject by name

Add languages here

Languages

Search for a language by name (e.g "eng", "fr" or "Polish")

Add relevant asset dates here

Dates

Date *

YYYY-MM-DD or YYYY-MM-DD/YYYY-MM-DD

What happened?

Type *

Description

Format: DATE or DATE/DATE where DATE is YYYY or YYYY-MM or YYYY-MM-DD.

Add more dates here

 Add date

Add the current version here

Version

Mostly relevant for software and dataset uploads. A semantic version string is preferred see semver.org, but any version string is accepted.

Add the publisher here

Publisher

Zenodo

The publisher is used to formulate the citation, so consider the prominence of the role.

Accepted

Available

Collected

Copyrighted

Created

Issued

Other

Submitted

Updated

Valid

Withdrawn

Accepted



Uploading your assets (funding, IDs, related works, references, software)

IMPORTANT!

Only valid if there is an acknowledgement of funding in the publication!
If H2020 grant → add grant number/acronym.
It will get you to the funded project and link to all necessary information.

Expand these sections to add:

- Other ways to identify the asset.
- Related works.
- References

Funding

Awards

[+](#) Add award [+](#) Add custom

Alternate identifiers

Related works

References

Software

Repository URL

URL or link where the code repository is hosted.

Wip
Wip
Active
Inactive
Moved
Abandoned
Concept
Unsupported
Suspended

Programming language

e.g. Python ...

Repository's programming language.

Development Status

Repository status

Repository current status.

Uploading an asset (publications)

Add the journal's ISSN

Add the journal's title

Publishing information



Title

Title of the journal on which the article was published

ISSN

International Standard Serial Number

Add the volume, issue and pages of your publication

Volume

Issue

Pages



If you have published a book or report, write here its name and ISBN

Book or report title

Title of the book or report which this upload is part of

ISBN

International Standard Book Number

Add the place of publication and the pagination of your contribution

Place

Place where the book or report was published

Pagination



If you are publishing your thesis, add the awarding university

Awarding university

Uploading an asset (conference papers)

Write here the
name of the
conference

Write here where
and when the
conference took
place

Add here the conference's website

Add the session
within the
conference

Conference

Title

Place

Location where the conference took place

Website

Session

e.g. \

e.g. VI

e.g. VI	Session within the conference.
e.g. 1	Part within the session.

If the conference has
an acronym, write it
here

Acronym

Dates

e.g. 21-22 November 2022.

Add the part
within the session

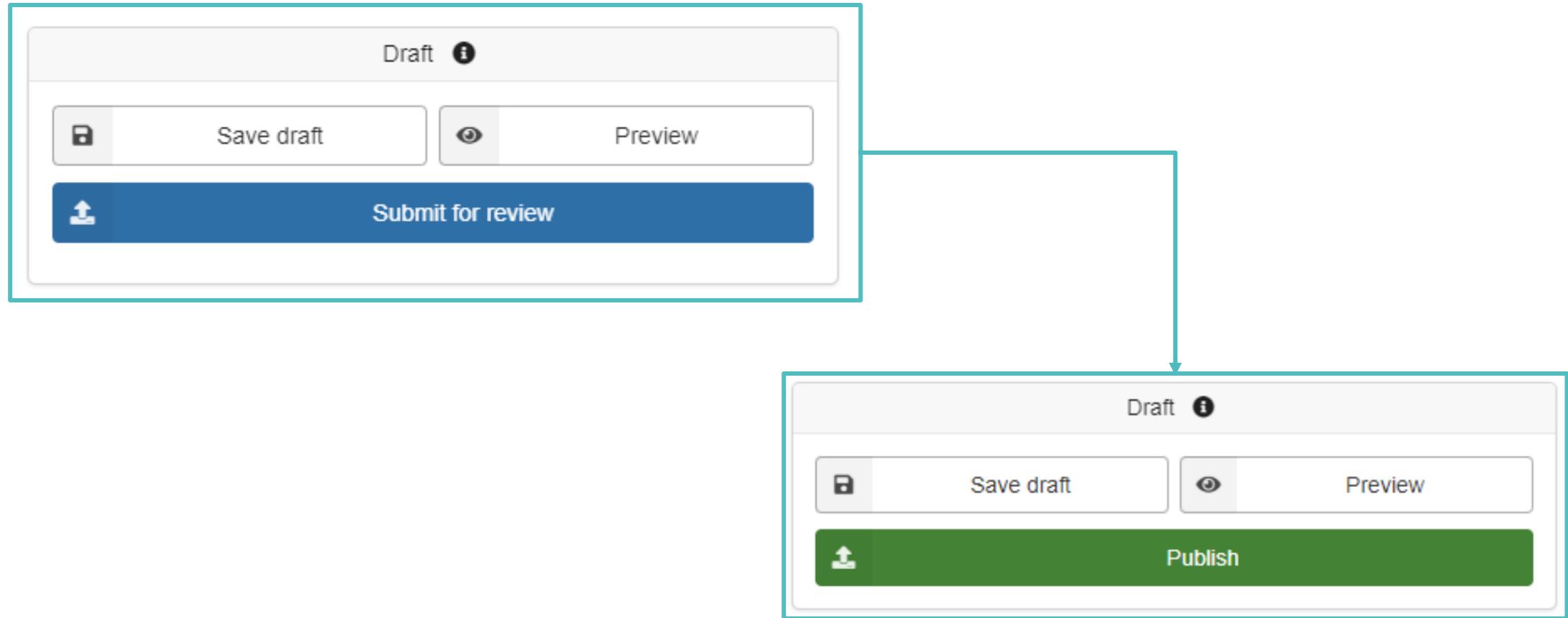
Uploading an asset

The image shows a user interface for uploading an asset, specifically focusing on adding domain-specific fields. On the left, a blue header bar contains the text "Domain specific fields". Below this, a button labeled "Add field" with a plus sign is highlighted with a red box and a red arrow pointing to the "Add domain specific fields" dialog box on the right. The dialog box has a title "Add domain specific fields" and a search bar with a placeholder "Search field names...". A dropdown menu "in: All domains" is shown. The dialog lists several fields with their descriptions and domain tags:

- Basis of record**: The specific nature of the data record, e.g., PreservedSpecimen, Observation. Options: Biodiversity: dwc, Multiple value field, Text field.
- Catalog number**: An identifier for the record within the catalog or collection. Option: Biodiversity: dwc.
- Class**: The taxonomic class of the organism. Option: Biodiversity: dwc.
- Collection code**: A unique identifier assigned to the collection from which the record was obtained. Option: Biodiversity: dwc.
- Country**

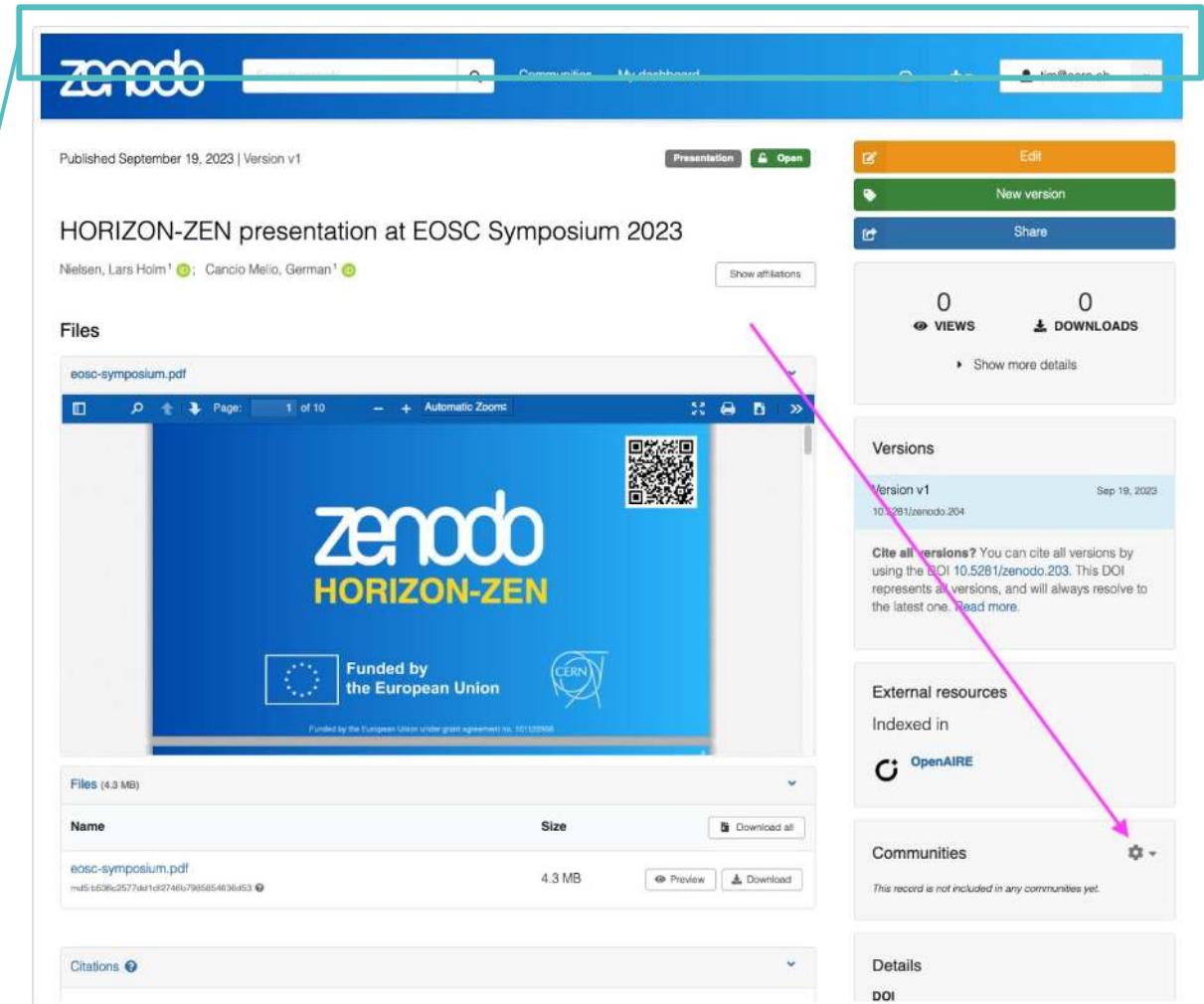
At the bottom of the dialog box are "Cancel" and "Add field and continue" buttons, along with a "Add field and close" button.

Uploading an asset



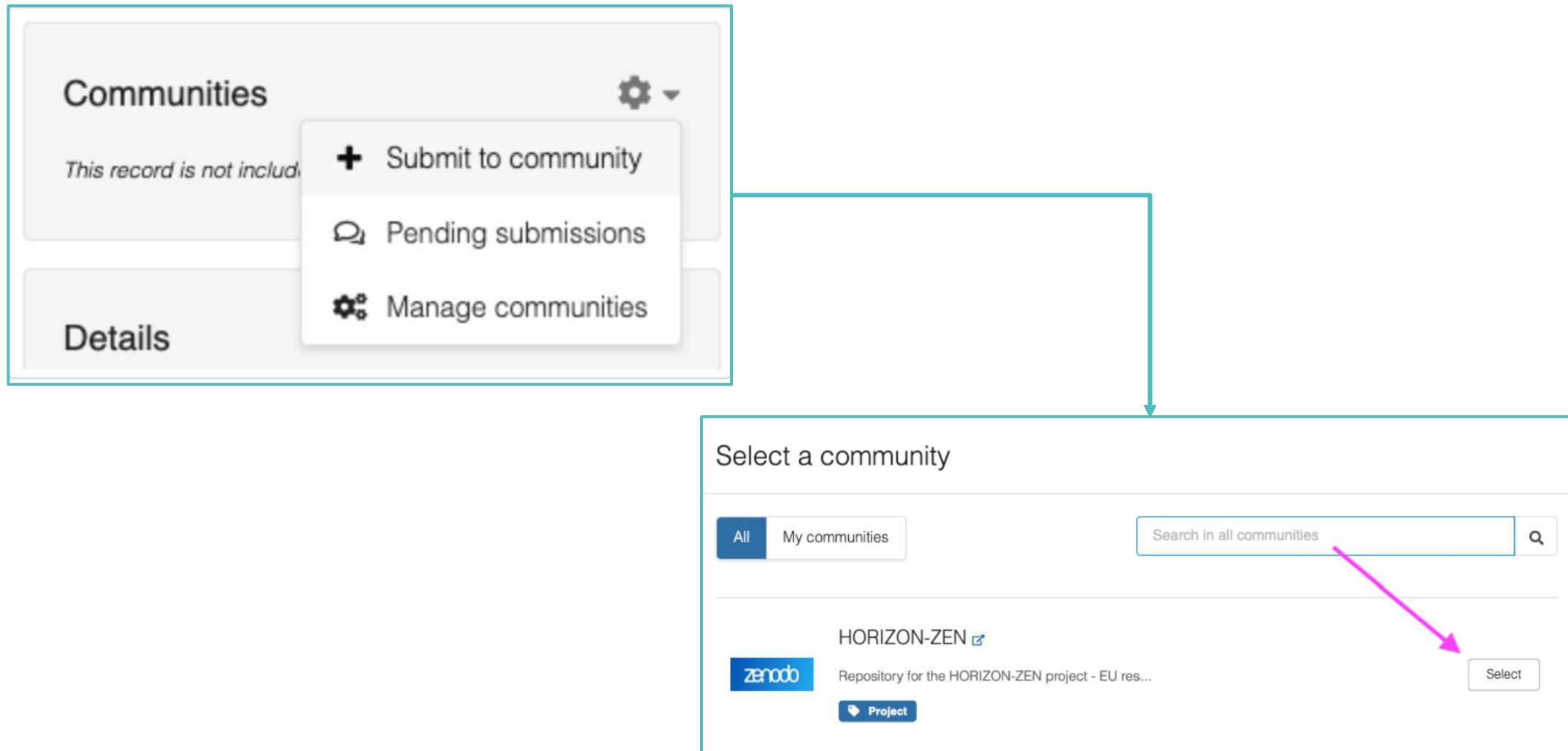
Submit to community

Go to the record you want to submit to a community and click the cog-wheel icon to open the communities menu.



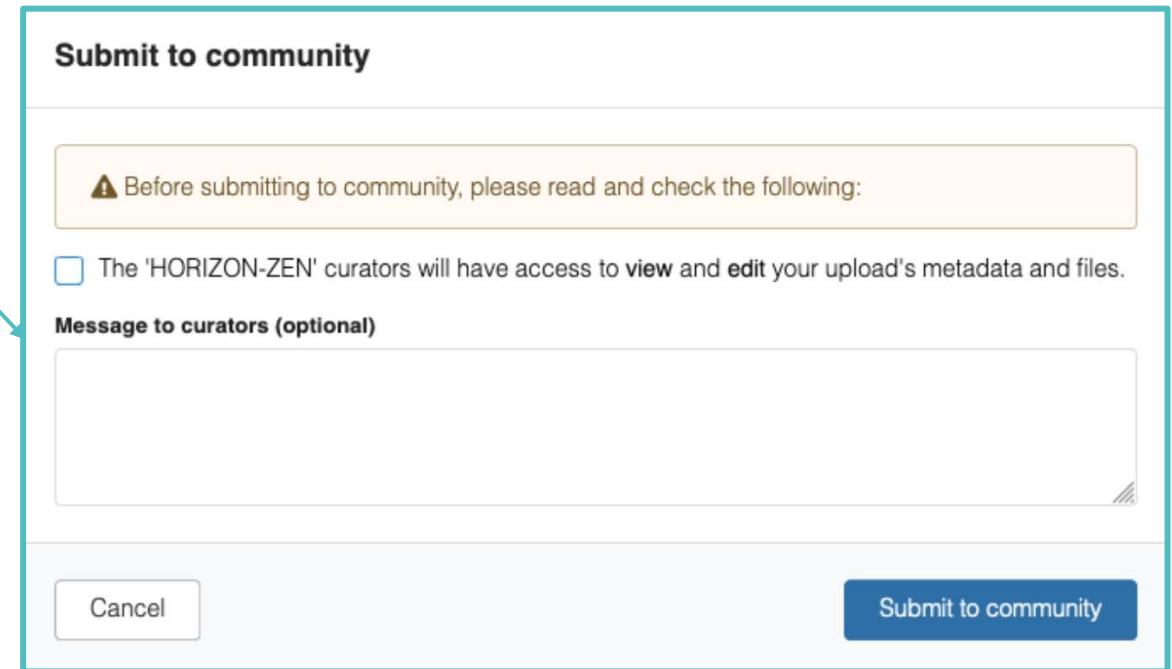
The screenshot shows a Zenodo record page for a presentation titled "HORIZON-ZEN presentation at EOSC Symposium 2023". The page includes details like the date (September 19, 2023), version (v1), and authors (Nielsen, Lars Holm and Cancio Melo, German). A large thumbnail image of the presentation slide is displayed. On the right side, there are sections for "Edit", "New version", "Share", "Views" (0), "Downloads" (0), "Versions", "External resources", and "Communities". A pink arrow points from the text in the box on the left to the "Communities" section on the right.

Select a Community



Finally..

Finally, click the blue submit to community button



FAQ

- **Where do researchers submit their DMPs ?**
 - Colleagues should follow the instructions provided by the funders to submit their DMPs on the designated portal.
- **Who has the authority to reject a DMP?**
 - The ultimate responsibility of a DMP quality falls on the researcher(s).The information management team do not have any policing power to reject DMPs.We only provide feedback and give support. DMPs get reviewed and can eventually be rejected by the Project Officer of the funders.
- **Do I need a final DMP ?**
 - You should check the funder requirements. For FWO, the final and updated DMP must be submitted with the final report of the project and submitted to FWO via the e-portal.The DMP will be checked by the evaluation panel during the final evaluation of the project.The final dmp will be considered as incomplete in the absence of a details DMP. It is always good practice to keep the DMP updated.
- **What is different in the final DMP ?**
 - At this stage, your DMP should list all the research materials used and produced during the project and describe them comprehensively. It should focus on clearly describing the preservation strategy and indicating where data/materials and documentation are accessible for whom are these accessible and under which conditions.

Agenda



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- Metadata: Data About Data
- Data Storage: Zenodo



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embracing a better life