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Webinar |
07 November 2025

Horizon Europe Open Science requirements in practice

Jonathan England

USEFUL LINKS

Horizon Europe reference documents	Program Guide of Horizon Europe	Annotated Model Grant Agreement (AGA)	ERC Managing your project > Open Science	EC Participant Portal – 'Continuous reporting' guide
Information package for MSCA	Financial Guide (6.4) for MSCA	Data Management Plan template	Open Research Europe	EU Open Research Repository
EOSC EU Node	EOSC EU Node Learning Center	Q&A from previous webinars	'A Quick Guide to Horizon Europe Open Access requirements'	'A Quick Guide to Horizon Europe Research Data requirements'

Open Science

"Open science is an approach based on open cooperative work and systematic sharing of knowledge and tools as early and widely as possible in the process"

European Commission

- Open Access to publications
- Responsible management of data (FAIR principles)
- Open access to data 'as open as possible, as closed as necessary'
- Information about outputs / tools / instruments to validate/re-use results and data
- Digital /physical access of results to validate the conclusions

Requirements for publications

Requirements

- Peer-reviewed manuscript (AAM or VoR) in a metadata-ready **trusted repository**
- **No embargo period** (i.e. immediate OA)
- Authors retain their rights by having the AAM and/or the VoR under a **CC-BY 4.0** licence
- Information about research outputs or tools/instruments needed to validate the conclusions of the publication
- Add the acronym/code of the project within

OVERVIEW

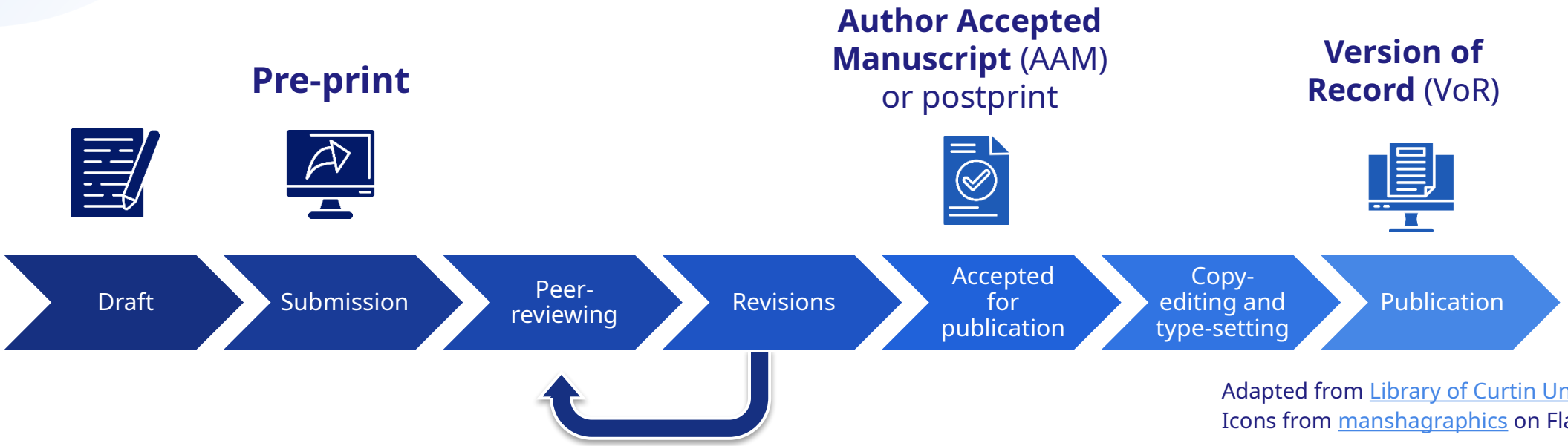
Specificities

- Publication fees (Article Processing Charges) are **reimbursable** if the venue is full OA
- **No restrictions** on where to publish (journal doesn't have to be full OA), but APCs for hybrid journals are not covered
- CC BY-NC/BY-ND/BY-NC-ND allowed for long-text formats (e.g. monographs; a chapter in an edited book is not eligible)

Mandate

- Applies **only to peer-reviewed publications** (but recommended for all your work)
- **No restrictions** on where you can publish
- **Deposit the peer-reviewed version** of your manuscript (AAM or VoR) in a ‘trusted repository’
- Provide **immediate Open Access** upon publication (i.e. no embargo period)
- Ensure you retain your rights on at least one of the peer-reviewed version of your manuscript (AAM, VoR) under a **CC-BY 4.0 licence**
- Provide information about research outputs or tools/instruments needed to validate the conclusions of the publication
- Acknowledge the EU (Art. 17 AGA); add the acronym/code/DOI of the project

Author Accepted Manuscript (AAM) **vs** Version of Record (VoR)



Adapted from Library of Curtin University
Icons from manshagraphics on Flaticon

Self-archiving

- **Open repository** = digital platform that provides free, immediate and permanent access to research results for anyone to use, download and distribute
- Social networking sites (e.g. ResearchGate, Academia), the publisher's website, your profile page on the institution's website, etc. are **NOT repositories**
- **Self-archiving** = you deposit a version of your work in an open repository
- **Regardless of where you publish** (even fully Open Access or hybrid journal), always deposit the AAM or VoR in a repository.
- It is about **where you make it available** in Open Access, NOT where you publish

Definition from Wikipedia,"Open-access repository", CC BY-SA 4.0

Trusted repositories

- Three categories of trusted repositories:
  - Certified repositories
  - **Discipline and domain-specific** repositories commonly used and endorsed by the international research communities
  - **General-purpose / institutional** repositories that meet a set of essential criteria (metadata)
- Compliance challenge:
  - Another mandatory requirement: metadata should be in line with the FAIR principles and under a CC0 licence
  - Not all ‘trusted repositories’ are fully ready for Horizon Europe compliance

Search for a repository on:

OpenAIRE EXPLORE

https://explore.openaire.eu/

For your publications:

OpenDOAR

https://opendoar.ac.uk/

For everything:

zenodo

EU Open Research Repository

https://zenodo.org/communities/eu/

Trusted repositories

- Currently only 5 trusted repositories are ‘ready’ for compliance (HAL, AUSSDA, <intR>²Dok, DANS Data Station Archaeology, Zenodo)
- Check if the repository is ‘trusted’ and has the essential metadata criteria (Annex 1). But many are “close to essential” and currently making changes, so check even if it is not in the list yet:

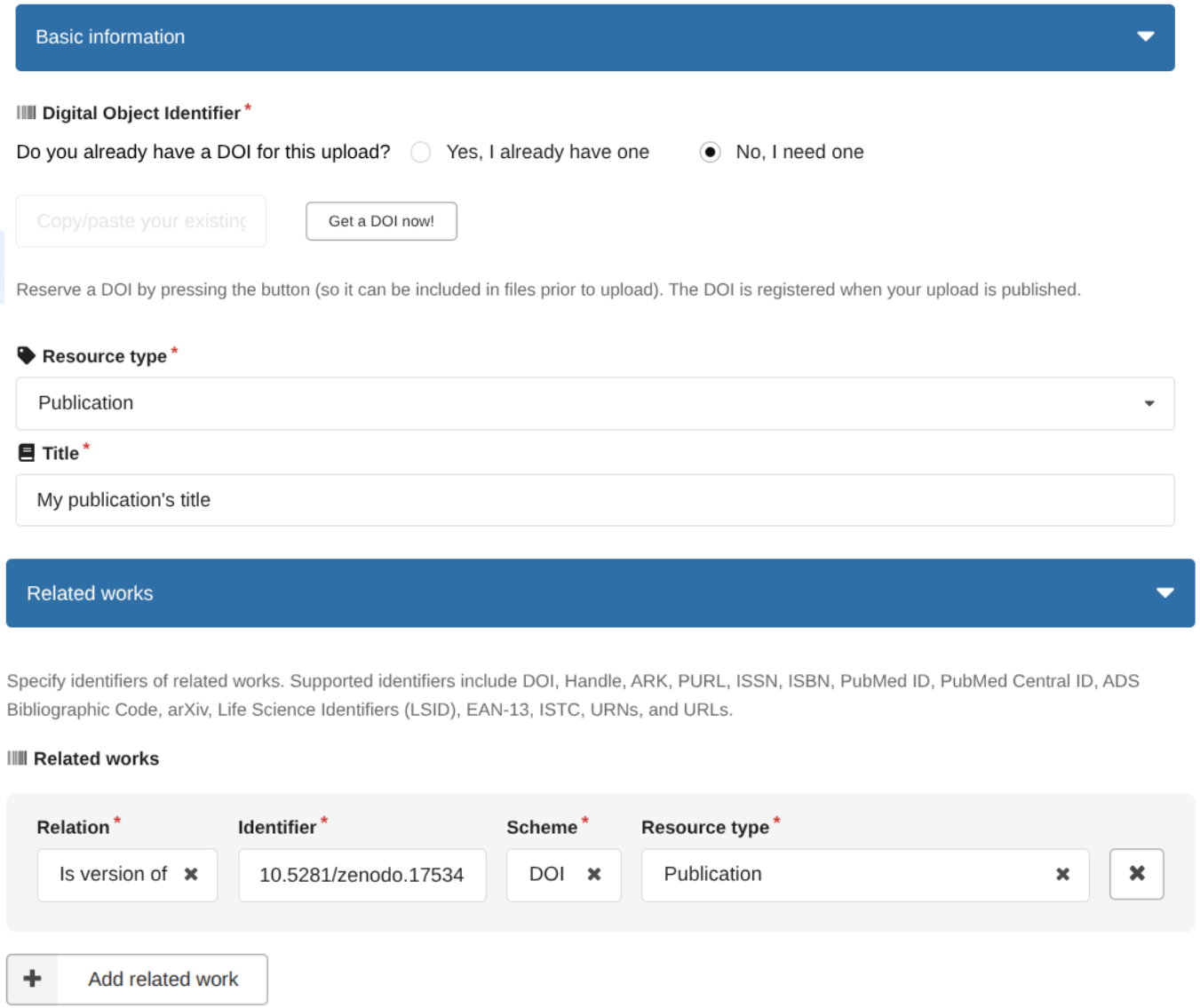
https://doi.org/10.5281/zenodo.13919642

In doubt **deposit on Zenodo***:
- Fully compliant with repository requirements
- Free and easy to use (also used by the EC to deposit Open Research Europe publications)

+

Subject-specific and/or institutional repository
- Improves visibility and discoverability
- Better community engagement and networking

*EU Open Research Repository in Zenodo



IF YOU UPLOAD THE AAM:

- The AAM and VoR are considered different documents and you should **get a new DOI** – select “No, I need one”.
- Link back to the VoR by adding its DOI in the “Related works” section: – select “**Is version of**”, fill in the DOI (removing the ‘doi.org’ part), and select “DOI” as the ‘Scheme’.

1. Deposit on institutional repository

2. Deposit on Zenodo

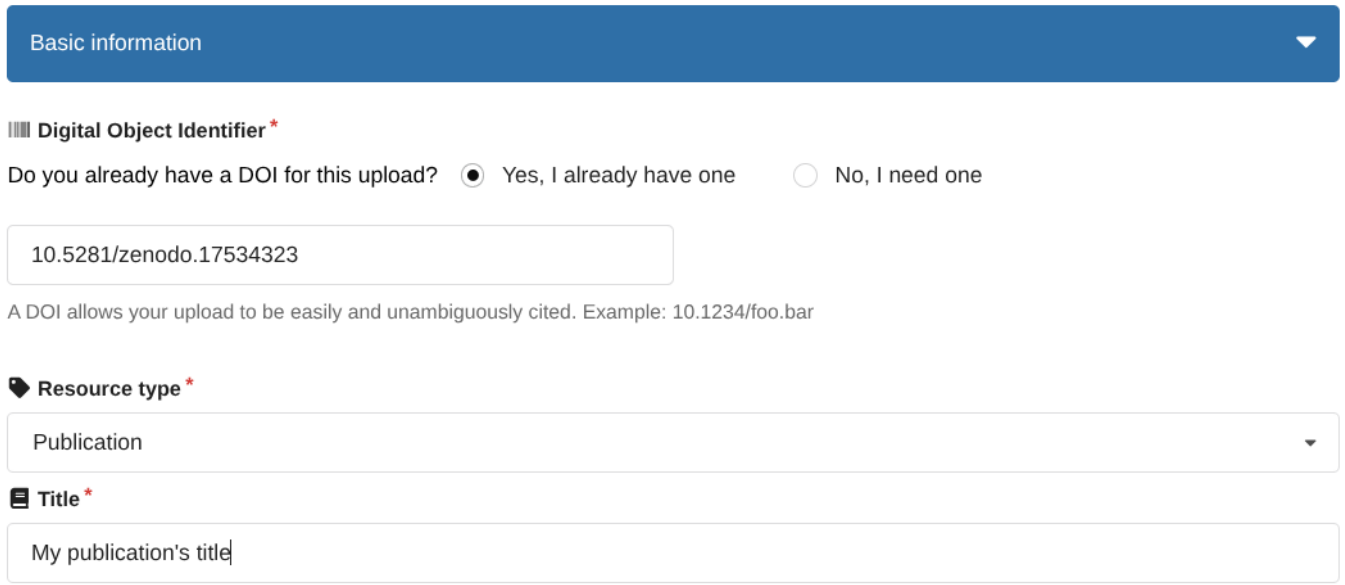
- “Do you already have a DOI for this upload?” – “Yes I already have one
- Add the DOI created by the institutional repository
- In “Related works” - “Is version of” + VoR’s DOI
- Complete all other metadata fields

If you upload the AAM on another repository first, and then on Zenodo to comply with the policy:

1. Deposit on the subject-specific / institutional repository to **get attributed a DOI**;

2. **Deposit on Zenodo** and under the section "Do you already have a DOI for this upload?" select “Yes, I already have one” and add the DOI (or other identifier) that was created by your repository;

3. **Fill-in all the fields as much as possible** on Zenodo (which your other repository might be missing). Don’t forget to link back to the VoR by adding its DOI in the “Related works” section – select “**Is version of**”, fill in the DOI of the publisher (i.e. VoR)



IF YOU UPLOAD THE VoR:

- **Don’t create a new DOI**. The VoR on Zenodo is to future-proof your work in case it isn’t available on the publisher’s website anymore – when asked “Do you already have a DOI for this upload?”, **select “Yes, I already have one”**, and fill-in the field with the publisher’s DOI.
- Don’t link back to the publisher’s DOI in the “Related works” section.

Licence

- AAM and/or VoR has to be under a Creative Commons Attribution licence (CC BY 4.0)
- Different ways to achieve this:
  - **Publish in a full OA journal**: VoR under CC BY 4.0
  - **Pay to publish in a hybrid venue**: pay an OA fee to publish in a subscription-based journal (when publishers offer different licences, make sure to select CC BY 4.0)
  - Publish in a subscription-based journal (you don't pay an OA fee) and add the '**Rights Retention Statement**'

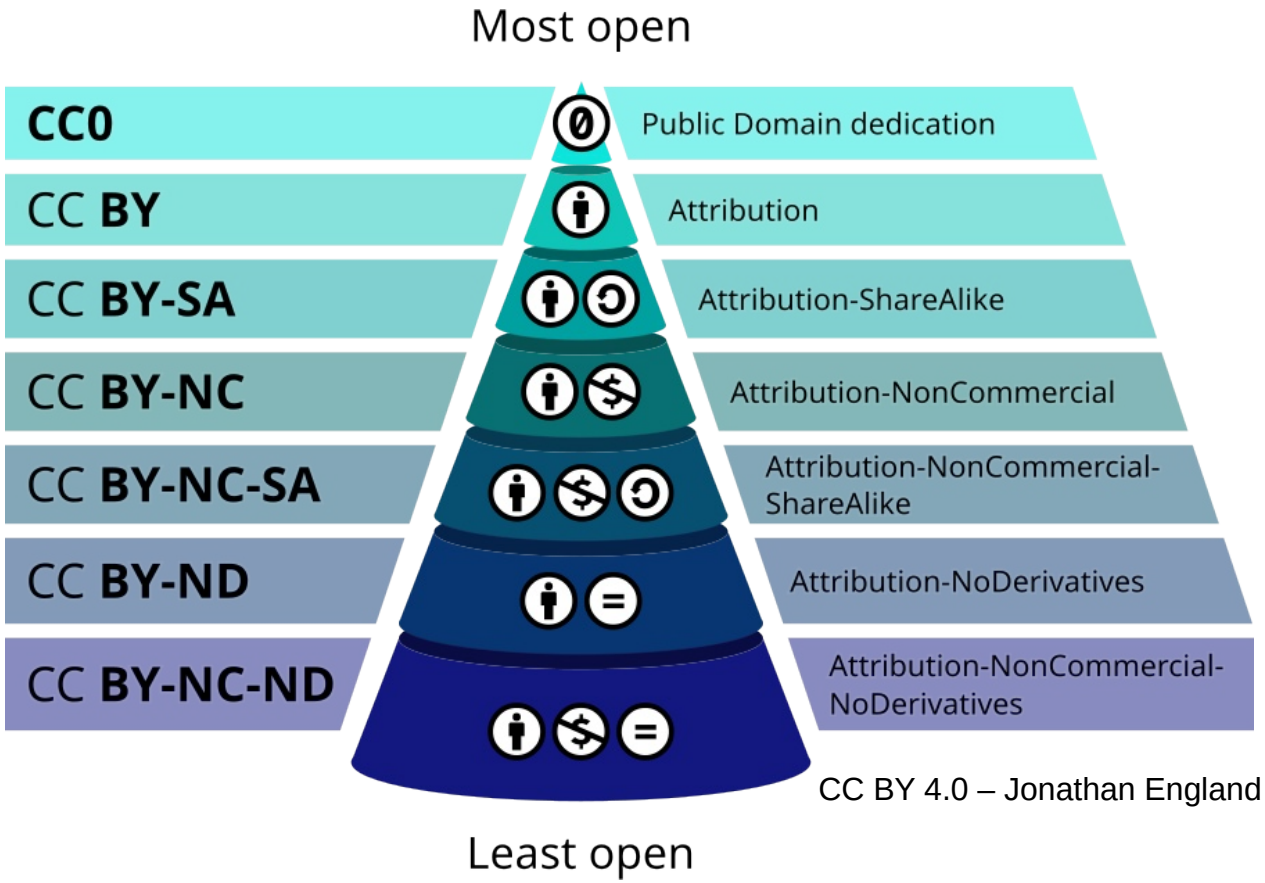
- With a CC BY licence you **own the rights** to that version of your work, so you can deposit it freely on any repository, website, etc.
- The AAM and VoR might be available under different licences, e.g. signing a Copyright Transfer Agreement on the VoR but retaining your rights (under a CC-BY licence) on the AAM, allowing you to share it openly
- CC BY-NC/BY-ND/BY-NC-ND licence **allowed for long-text formats** (e.g. monographs); **a chapter in an edited book is not eligible**

Creative Commons

- Removes ambiguity over what others can and cannot do with your work
- You keep (certain) rights, but you grant certain reuses without them needing to contact you
- Universally recognisable and juridically sound (you can still claim copyright infringements)

You can share, adapt for any purpose, no attribution is required (it is similar to ‘Public Domain’ but is an actual licence

You can share, adapt for any purpose as long as you **credit the author**



CC BY 4.0 – Jonathan England

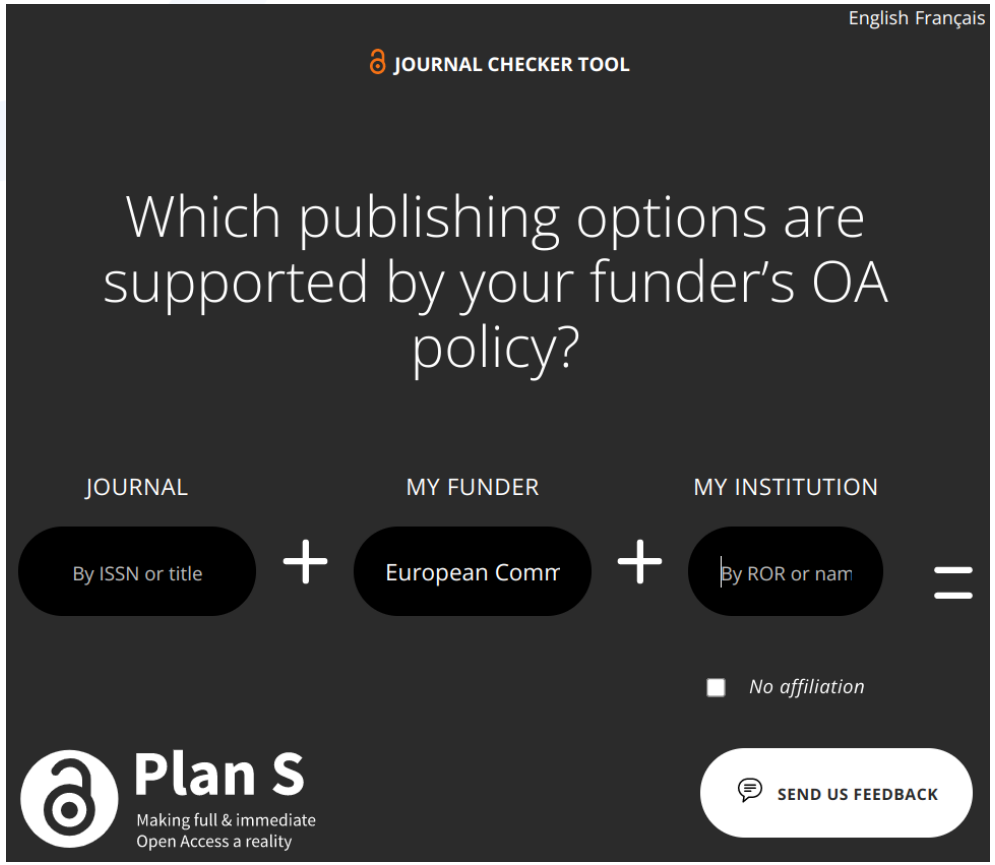
Commercial exploitation

- **Publication's** licence ≠ licence applied to the **results** themselves.
- The requirement for the CC BY licence **concerns your publication**, the written words and figures describing your research and its results.
- A different licence can be applied to your data, model, software, results, patent, etc.
- ⚠️ PATENTS - the 'novelty' aspect is required to file a patent. You must not have shared it in any way (e.g. conference talk, publication, data repository) before the patent is established. Make sure to establish a clear timeline so you do not hinder your commercialisation plan by mistake.

Rights Retention Statement

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 Licence (CC BY) or a licence with equivalent rights. CC BY-NC, CC BY-ND, CC BY-NC-ND or equivalent licenses could be applied to long-text formats.

Check the journal's eligibility

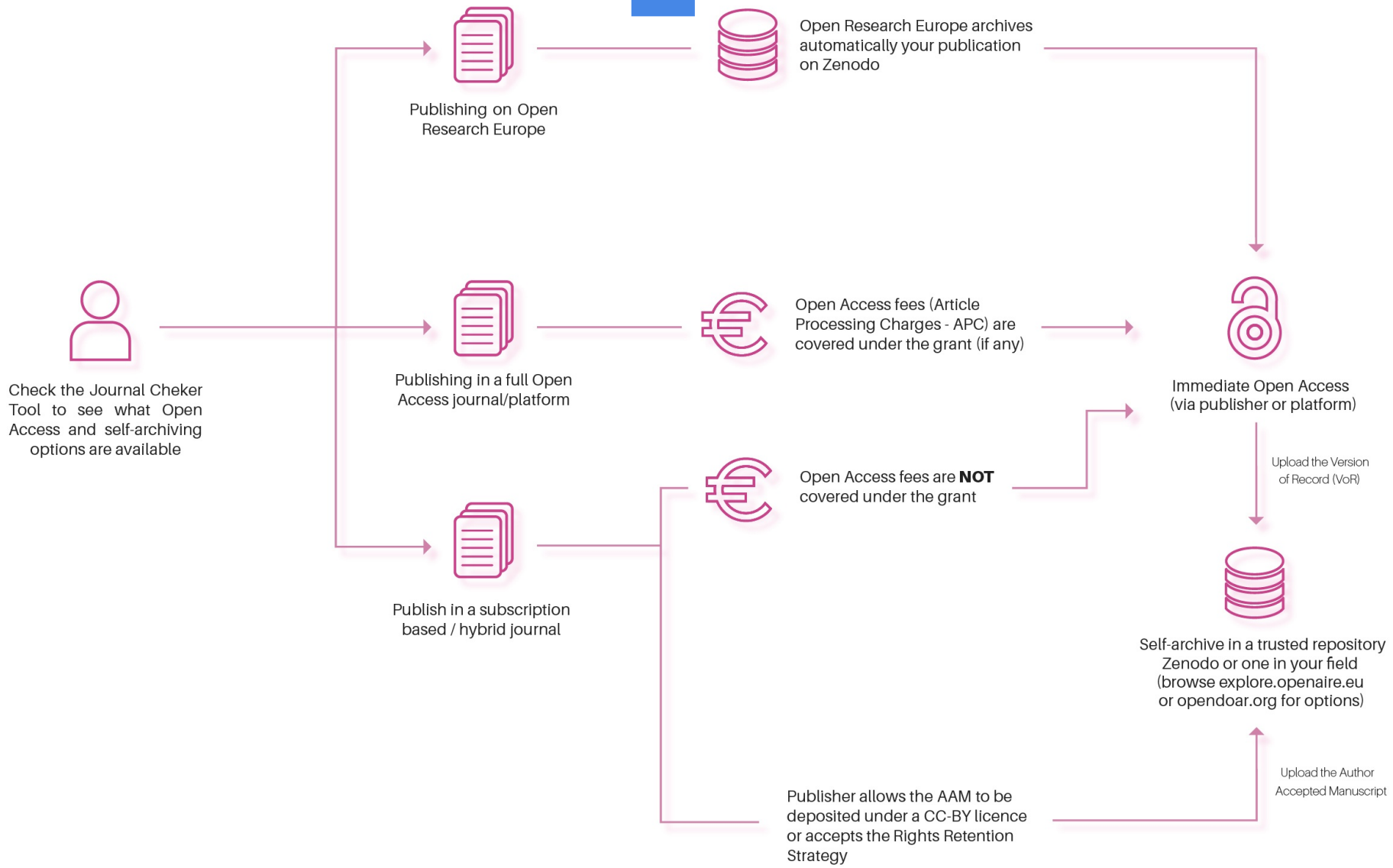


https://journalcheckertool.org/

In practice

- **No specific rule of where to put the RRS**. You can:
  - add it in the first page of the article;
  - add it in the acknowledgement section;
  - add it in the message to the editor accompanying your article (cover letter).
- ⚠️ **Keep the statement from the initial submission up to the final version.**
- Keep a copy of the successive versions of your manuscript that have the licence notice, and archive any discussions with the publisher to ensure you can prove you retained your rights during the whole process.
- Go the extra step:
  - add the text "CC BY 4.0" or "Distributed under a Creative Commons Attribution 4.0 International licence", and
  - add the CC BY logo to your manuscript, on all versions from submission to the final peer-reviewed version.

recommendations based on "Implementing the rights retention strategy for scientific publications - Guide for researchers", French Ministry of Higher Education and Research, 2022



Budget

- Publication fees (Article Processing Charges) can be **covered by the grant if the venue is full Open Access** (also known as 'Gold' OA)
- **Hybrid venues aren’t eligible:** you will have to find another way to cover those costs (except for MSCA)
  - no matter whether they are considered "transformative journals" committed to transition to a fully open access journal, or covered by "transformative agreements" between institutions and publishers
- Any printing fees (for monographs, books or articles) can’t be covered by the grant either
- **IEEE’s new “Repository License Fee” isn’t eligible,** as the venue is still considered hybrid.

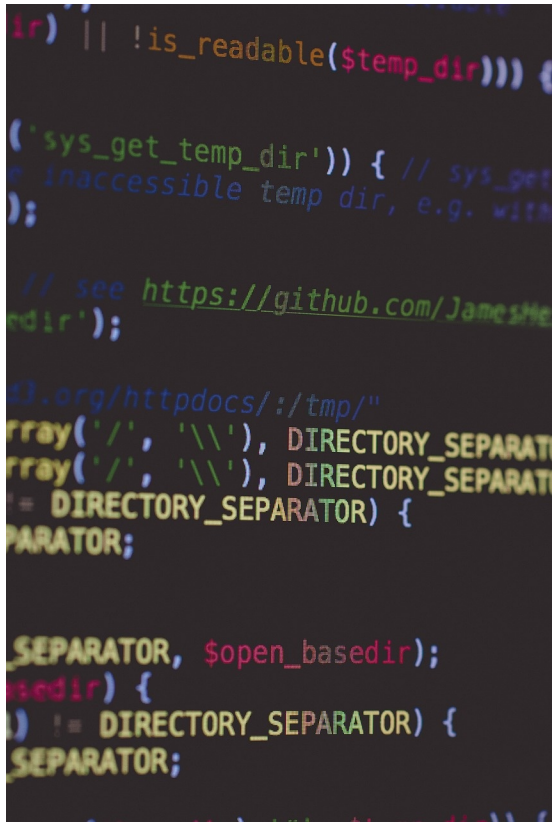
Extra information

- Research outputs, tools and instruments;

  e.g. data, software, algorithms, protocols, models, workflows, electronic notebooks and others.

- Information should include a detailed description of the research output/tool/instrument, how to access it, any dependencies on commercial products, potential version/type, potential parameters, etc.

- Best practice: open access is provided to these research outputs, tools and instruments — unless legitimate interests or constraints apply.



Another option

Open Research Europe publishing platform

Slides adapted from:
Durowoju, G. (2022) 10.5281/zenodo.7266373;
England & Malaguarnera (2022) 10.5281/zenodo.7324363;
England & Tsoukala (2023) 10.5281/zenodo.10125224;
England, Leo & Dolinar (2025) 10.5281/zenodo.14999515
all under CC-BY 4.0

Victoria Tsoukala

Policy Officer-Open Science, European Commission, DG RESEARCH

Overview

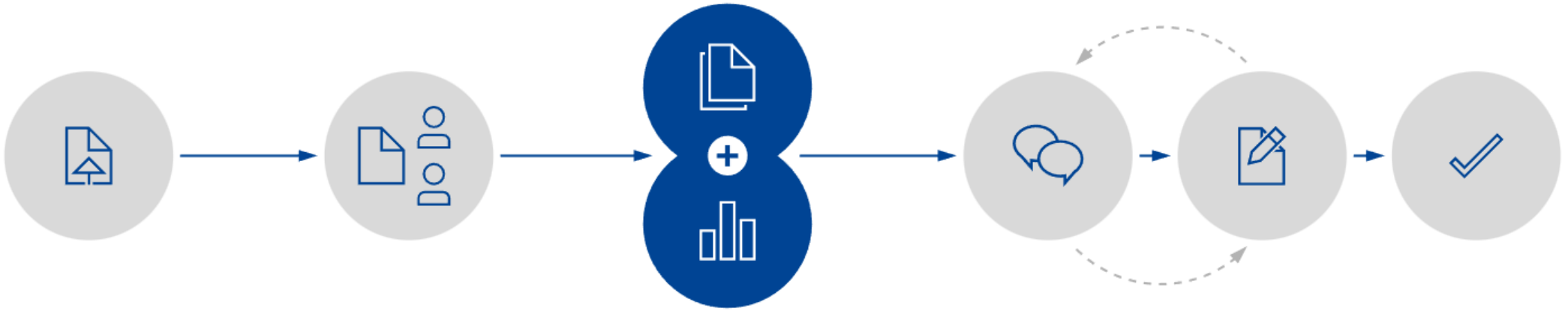
- Diamond Open Access publishing platform for Horizon 2020 and Horizon Europe beneficiaries (even partially funded) – **NOT a repository**
- **No costs to authors or readers** (i.e. no APCs) - costs are met directly by the European Commission
- **Optional** service, available during and after the end of the project
- Post-publication **Open peer-review** - name of the reviewers, the revisions and the comments from the authors after revisions, are openly available (all under a CC BY licence)
- Immediate publication – publish first, then the review takes place
- **Automatic compliance** with the OA requirements - no need to self-archive as it will be archived in Zenodo once passed peer-review
- High scientific standards and policies - Scientific Advisory Board; policies and guidelines (e.g. underlying data availability, analysis of methods)

ORE in numbers

By the end of October 2025:

- > 1100 articles published
- > 700 articles indexed (completed successful peer-reviews)
- > 1500 published authors; > 1700 submitted authors
- > 2000 reviewers
- > 850 unique institutions published, > 950 unique submitting institutions

Publishing process



Article Submission

Submit research via a single-page submission system. See the Article Guidelines for information about submitting different article types. Track your submission via My Account.

Prepublication Checks

Our in house team of professional editors carries out comprehensive prepublication checks to ensure that all policies and ethical guidelines are adhered to. Find out more about these prepublication checks and what is required.

Publication & Data Deposition

Once the article has passed the prepublication checks, a fully typeset version is published with a DOI enabling immediate viewing and citation as well as indexation in Google Scholar. Once the article is published it cannot be sent to another journal for review and publication.

Open Peer Review & Article Revision

Expert reviewers are selected and invited, and their reviews and names are published alongside the article, together with the authors' responses and comments from registered users.

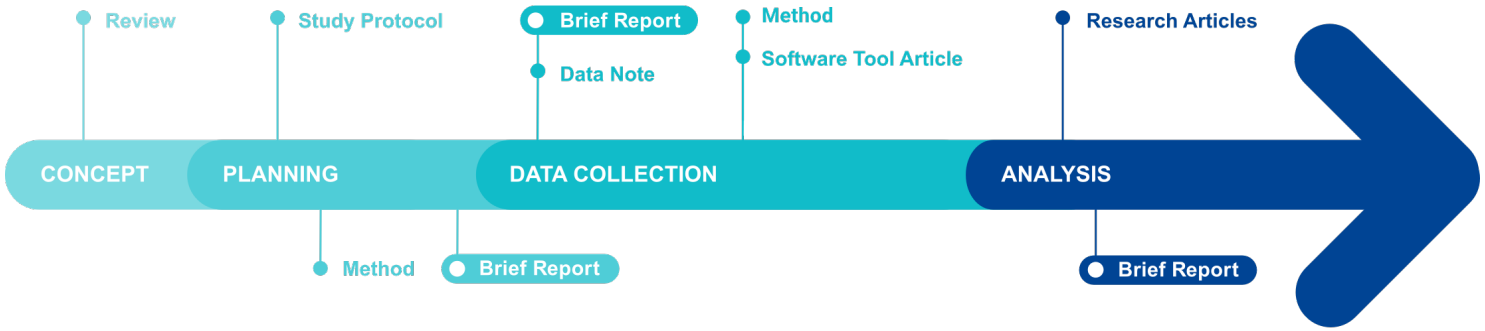
Send to Indexers & Repositories

Authors are encouraged to publish revised versions of their article. All versions of an article are linked and independently citable. Articles that pass peer review are indexed in external databases such as PubMed, Scopus, and Google Scholar.

Indexed in important indexers and national lists:

Scopus
PubMed
IET Inspec
OpenAlex
ERIH PLUS EUROPEAN REFERENCE INDEX FOR THE HUMANITIES AND SOCIAL SCIENCES
Dimensions
TOP FACTOR
DOAJ DIRECTORY OF OPEN ACCESS JOURNALS
Reaxys
Google Scholar
zenodo

Publishing throughout the research process

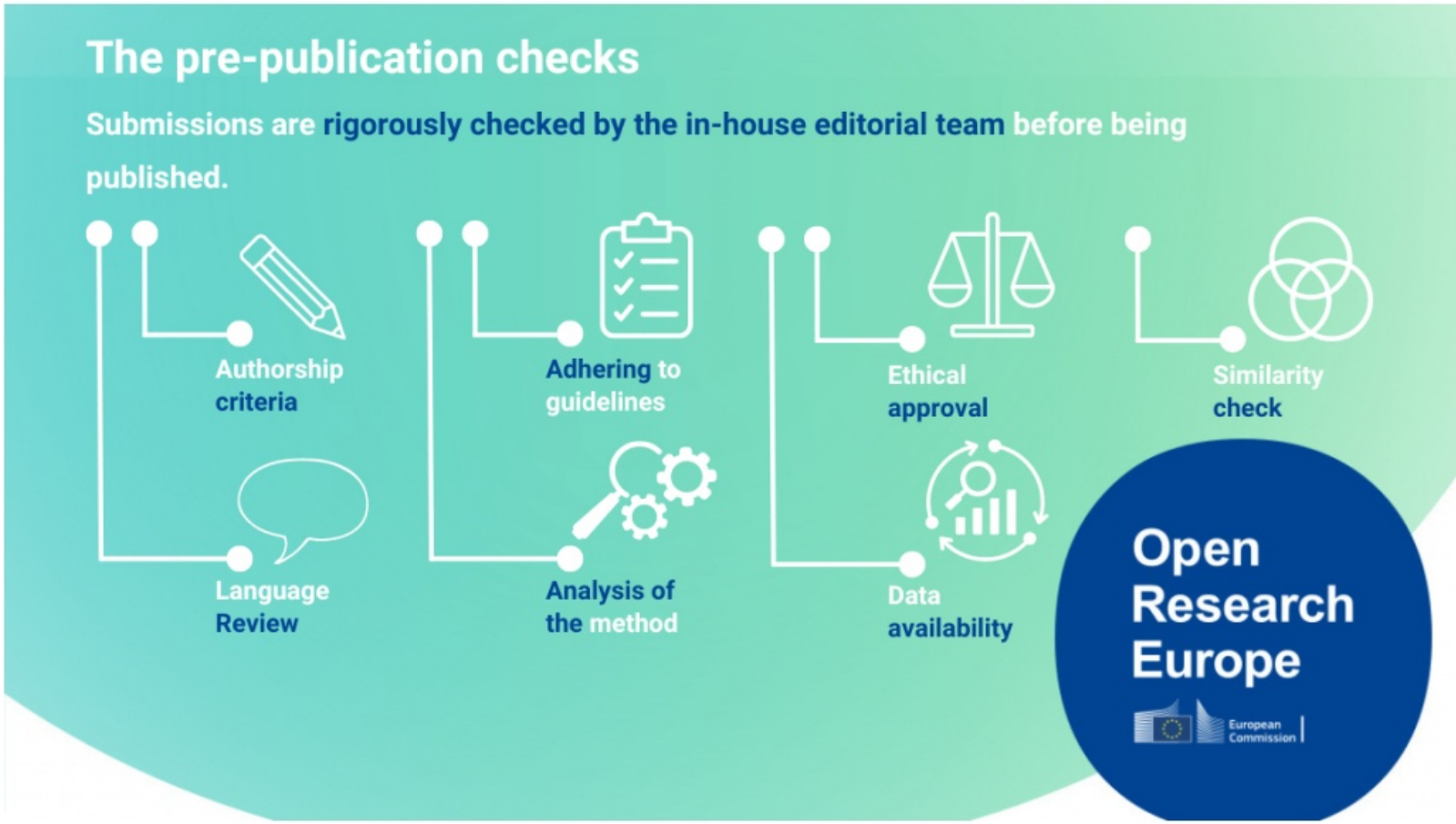


Open Research Europe

ARTICLE TYPES by subject

	Natural sciences	Engineering and technology	Medical and health sciences	Agricultural and veterinary sciences	Social sciences	Humanities and the arts
Case Study	•	•	•	•	•	•
Research Article	•	•	•	•	•	•
Brief Report	•	•	•	•	•	•
Data Note	•	•	•	•	•	•
Method Article	•	•	•	•	•	•
Open Letter	•	•	•	•	•	•
Software Tool Article	•	•	•	•	•	•
Review	•	•	•	•	•	•
Case Report	•	•	•	•		
Registered Report	•	•	•	•	•	
Clinical Practice Article	•	•	•	•		
Study Protocol	•	•	•	•	•	
Systematic Review	•	•	•	•	•	
Essay					•	•

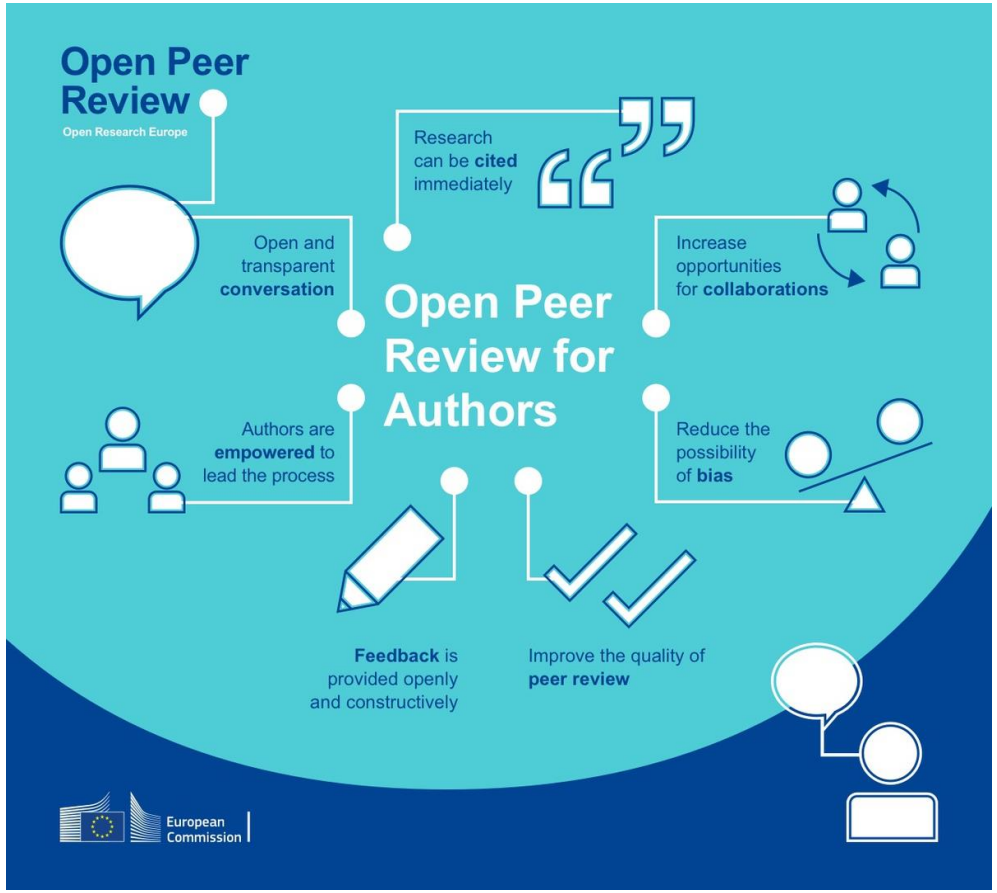
Pre-publication checks



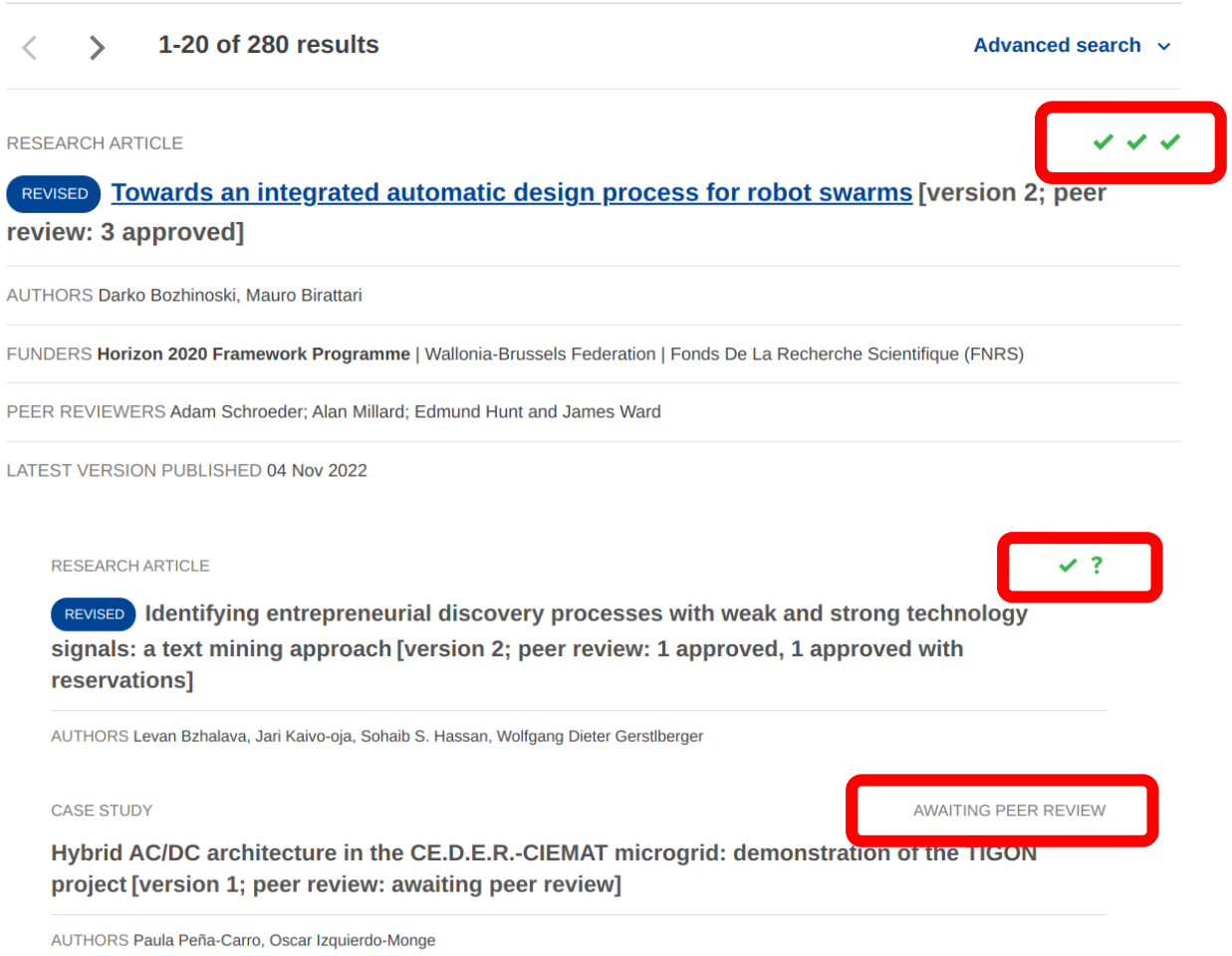
The in-house editorial team does not review the academic/scientific content of the publication. Only the reviewers (selected by the authors) do that.

Review process

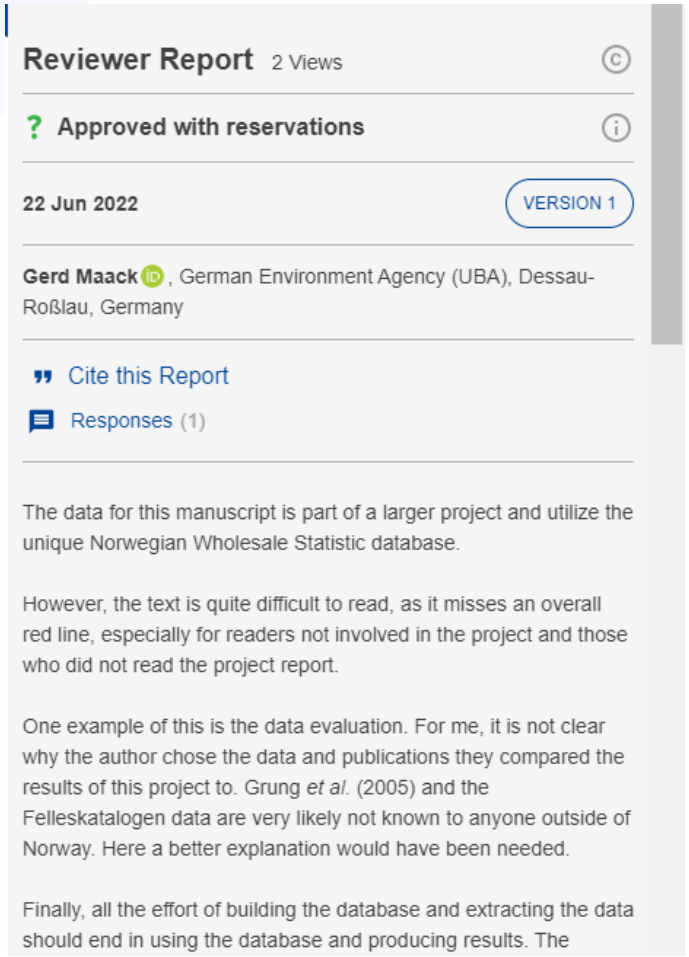
- Reviewers are suggested by article authors, with the editorial team ensuring they meet necessary criteria (e.g. conflicts of interest) or suggesting additional expertise
- An extensive list of questions, which must be answered, guides the review process, appropriate for different domains; there is also a reviewer code of conduct to be followed
- Once all necessary reviews performed, the editorial team checks for process, content, language and correct status, and completes the publishing process



Open peer-review example



Open peer-review example



Reviewer Report 2 Views

? Approved with reservations

22 Jun 2022 VERSION 1

Gerd Maack, German Environment Agency (UBA), Dessau-Roßlau, Germany

Cite this Report

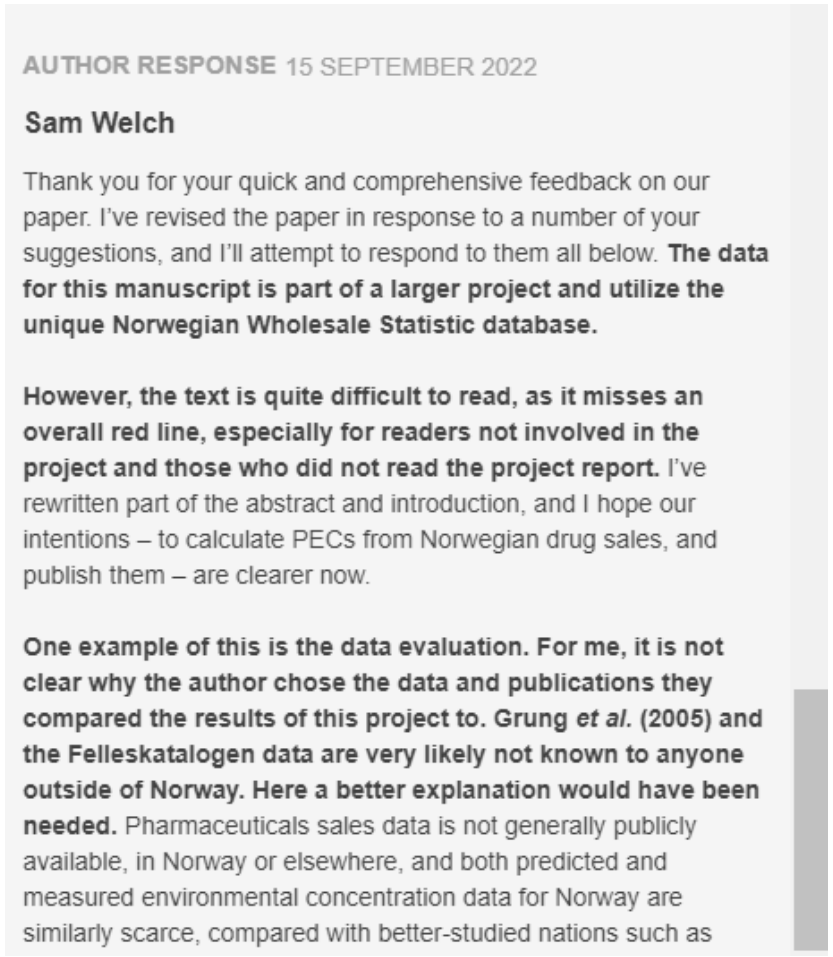
Responses (1)

The data for this manuscript is part of a larger project and utilize the unique Norwegian Wholesale Statistic database.

However, the text is quite difficult to read, as it misses an overall red line, especially for readers not involved in the project and those who did not read the project report.

One example of this is the data evaluation. For me, it is not clear why the author chose the data and publications they compared the results of this project to. Grung *et al.* (2005) and the Felleskatalogen data are very likely not known to anyone outside of Norway. Here a better explanation would have been needed.

Finally, all the effort of building the database and extracting the data should end in using the database and producing results. The



AUTHOR RESPONSE 15 SEPTEMBER 2022

Sam Welch

Thank you for your quick and comprehensive feedback on our paper. I've revised the paper in response to a number of your suggestions, and I'll attempt to respond to them all below. **The data for this manuscript is part of a larger project and utilize the unique Norwegian Wholesale Statistic database.**

However, the text is quite difficult to read, as it misses an overall red line, especially for readers not involved in the project and those who did not read the project report. I've rewritten part of the abstract and introduction, and I hope our intentions – to calculate PECs from Norwegian drug sales, and publish them – are clearer now.

One example of this is the data evaluation. For me, it is not clear why the author chose the data and publications they compared the results of this project to. Grung *et al.* (2005) and the Felleskatalogen data are very likely not known to anyone outside of Norway. Here a better explanation would have been needed. Pharmaceuticals sales data is not generally publicly available, in Norway or elsewhere, and both predicted and measured environmental concentration data for Norway are similarly scarce, compared with better-studied nations such as

Research communities

Gradually developing researcher-led **community gateways and collections** in specific fields

Community Gateways

Gateways | **Community Gateways** | Collections

Community Gateways are dedicated hubs within Open Research Europe to bring together all content related to a specific area of research. They can be tracked to trigger email alerts whenever there is new research published within the Community Gateways of interest.

Agriculture, Land and Farm Management

The Agricultural, Land and Farm Management Community Gateway is the home for research ensuring the correct use and management of land for agricultural functions and interests, and is led by Dr. Olivier Le Gall.

Analytical Chemistry

Analytical chemistry involves the separation, identification and quantification of the composition and structure of matter in both natural and artificial substances. This Community Gateway is led by Dr. Imad El Haddad.

Animal and Dairy Science

The Animal and Dairy Science community gateway is focused on publishing both industry- and lab-based research relating to animal and dairy produce, and is led by Dr. Emer Kennedy.

Arts

This multidisciplinary gateway showcases research on all aspects of the Arts, a field encompassing an immense variety of human practices with creative expression and imagination at their core. This Community Gateway is led by Dr Ruth Sargent Noyes.

Collections

Gateways | Community Gateways | **Collections**

Collections are compilations of content relating to a specific Horizon 2020 or Horizon Europe-funded community, project or conference.

Adaptation to Climate Change

This collection draws on the interdisciplinary nature of climate research in the Horizon funding programmes, looking at both current climatic conditions as well as the lessons that can be learned from climatic changes in the past. It is led by Dr. Jana Vořišková.

Additive Manufacturing

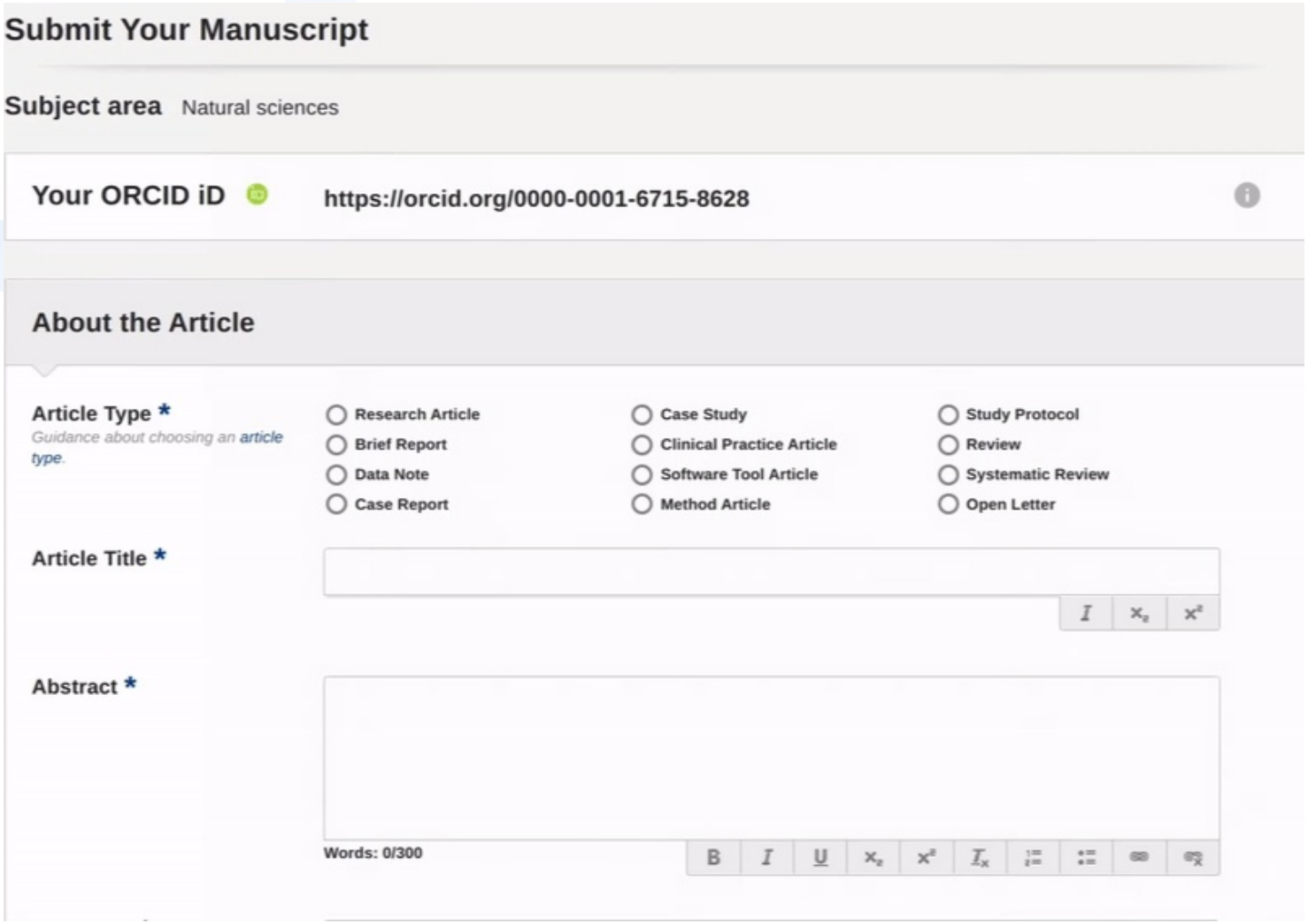
Additive Manufacturing refers to technologies that produce three-dimensional objects one superfine layer at a time. It has many applications across Engineering. Examples include the creation of weight-saving, complex geometric designs for Aerospace Engineering, the rapid prototyping in Automotive Engineering, and creating custom on-demand surgical implants in Medical Engineering.

Advances in Natural Language Generation

The aim of this collection is to bring together recent works related to developments and improvements within the field of language generation. It has been developed by the Multi3Generation COST Action network (CA18231) but is open to submissions from Horizon projects. It is led by Dr Anabela Barreiro, Dr Elena Lloret Pastor, and Professor Max Silberztein.

Advances in Optics

Optics is concerned with studying and understanding the behavior and properties of light, specifically in relation to its interaction with different media. This collection focuses on the latest developments within this field of physical sciences.



Follow **@OpenResearch_EU** on social media

Scan to register to **ORE Newsletter** (4/year)

Requirements for research data

Mandate

- Must manage the digital research data in line with the **FAIR principles** (Findable, Accessible, Interoperable, Reusable).
- **Data Management Plan** (DMP) is required by M6; updated mid-project and at end of project.
- **Deposit (meta)data as soon as possible** after production / generation or after processing and quality controls.
- Deposit data in a **trusted repository** and make them **open as soon as possible** (deadlines set in DMP), following the “as open as possible, as closed as necessary” (open by default) principles.
- You should deposit all of the (meta)data generated / collected during the project, **whether it was used in a publication or not** (including relevant ‘raw’ data).

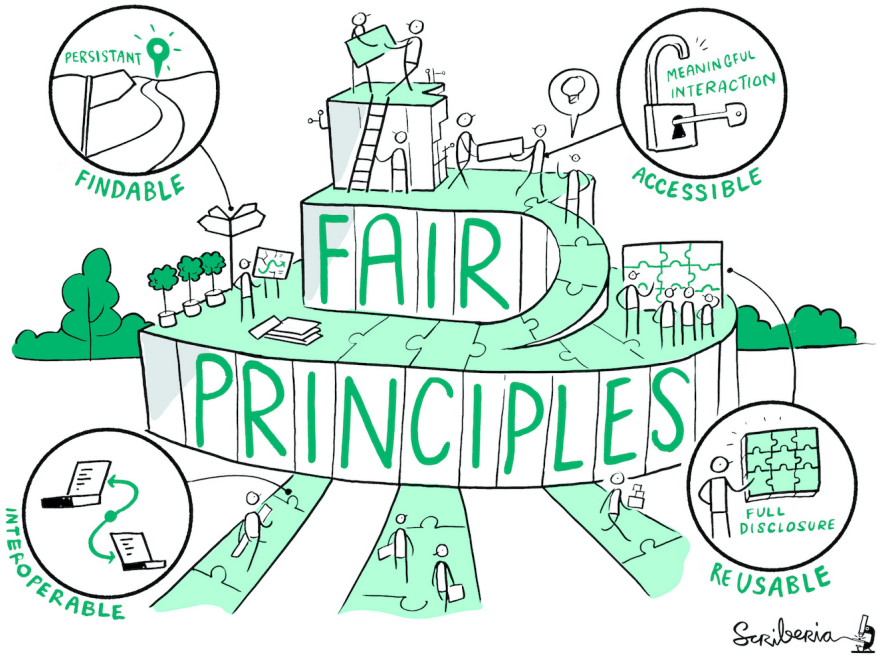


Image by Scriberia for The Turing Way Community under CC-BY 4.0

FAIR principles

Findable

- Persistent identifier (e.g. DOI)
- Rich metadata
- Searchable and discoverable online

Accessible

- Deposited on a trusted repository (e.g. Zenodo)
- Data can be restricted and still FAIR – “as open as possible, as closed as necessary”

Interoperable

- Lossless, open and/or standardised file formats (e.g. using a CSV file format instead of the proprietary XLSX format).
- Use shared definitions and standardised terms within your specific domain.

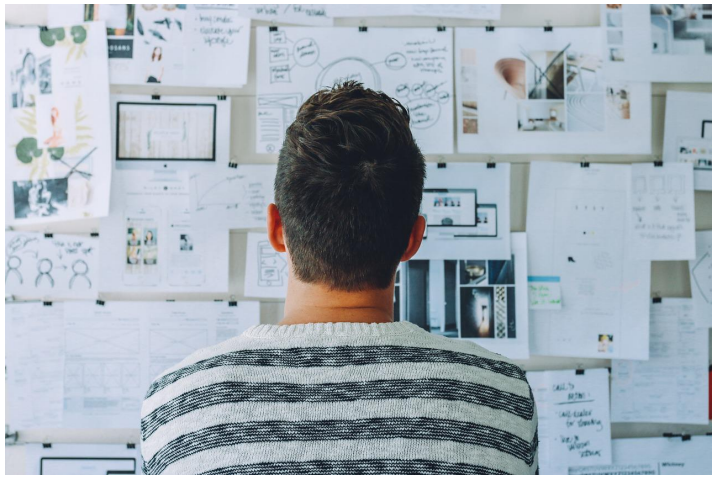
Reusable

- Well documented (e.g. README files), including provenance and tools/instruments needed to reproduce the results
- Clear licence (e.g. CC BY 4.0, CC0)

https://www.openaire.eu/how-to-make-your-data-fair

Data Management Plan

- **Formal ‘living’ document** that specifies how research data will be handled both during and after a research project.
- It identifies key actions and strategies to ensure that research data are of a high quality, safe, sustainable and – where possible – accessible and reusable.
- There are **no absolute right answers**
- But be clear, specific and detailed… and justify decisions
- The DMP is to prove to the funder that you’ve reflected on what to do and the approach seems reasonable
- And that your data is “**As open as possible, as closed as necessary**” (FAIR principles)



Slide adapted from Venkataraman, S. (2018) under CC-BY 4.0 http://doi.org/10.5281/zenodo.1489929

ARGOS – write your DMP

Free and open source

- **Free for researchers**, open source, configurable and extensible tool for planning Research Data Management activities according to OA & FAIR data policies.
- **Has the Horizon Europe DMP template**
- Discoverable through OpenAIRE EXPLORE
- Accessible: Persistent Identifiers (ORCIDs & DOIs)
- Interoperable: Research Data Alliance DMP Common Standard
- Reusable: Licences
- Versioned (history/provenance)
- Published and preserved in Zenodo
- Enables research communities to create templates (dataset profiles) tailored to domain standards and practices.

https://argos.openaire.eu/

Slide adapted from Papadopoulou, E. (2022) under CC-BY 4.0

Specificities

- Data closed if necessary, but **metadata must be FAIR and under CCO** (metadata-ready trusted repositories will automatically share metadata in CCO)
- Open licence, preferentially CC-BY or CC0 licence
- Detailed information about research outputs or tools/instruments needed to re-use or validate the data (e.g. data, software, algorithms, protocols, models, workflows, electronic notebooks)

Examples of metadata
author(s) name, author(s) ORCID, DOI, licence, language, journal, title, etc.

Valid justification for not opening the data

- Commercially valuable data if it would undermine its exploitation or other results (e.g. endanger trade secrets (‘soft’ IP)), or make IP protection of results more difficult
- Data protection/privacy rules of sensitive and/or personal data
- Security rules for projects dealing with strategic assets, interests, autonomy or security of the EU

Doesn't apply to ERC projects

Exceptions

Validation of findings

- Restricted or closed data might need to be made available through agreements with relevant confidentiality provisions

Public emergencies

- Can be triggered by the request of the granting authority
- Immediate OA is extended beyond publications to any research outputs – as soon as feasible and in CC BY or CC0
- DMP provided with the proposal or before grant signature
- In case of conflict of legitimate interests for openness, beneficiaries must grant non-exclusive licences to legal entities that need the research to address the emergency (this provision applies up to 4 years after the end of the action)

AMNESIA – anonymisation tool

Why anonymise?

- Anonymised data are outside the scope of GDPR
- Anonymisation provides a statistical guaranty about the risk of information leakage
- It is the most suitable way to give information to third parties, without revealing personal data

- User friendly
- Works locally, no data transfer risk
- Allows users to customize the solution
- The only tool to offer anonymization for set-valued data
- The only tool to support k^m-anonymity
- Easy to incorporate to third party information systems

Slide adapted from Terrovitis, M. (2023) under CC-BY 4.0

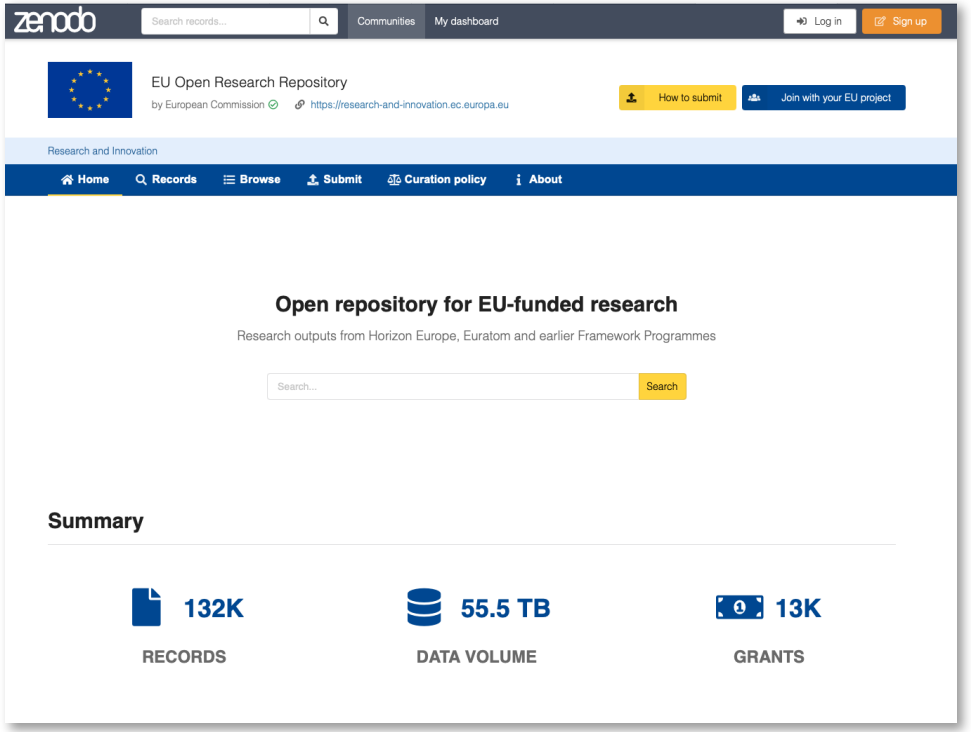
EU Open Research Repository

Lars Holm Nielsen

Head of Open Science Infrastructure at CERN

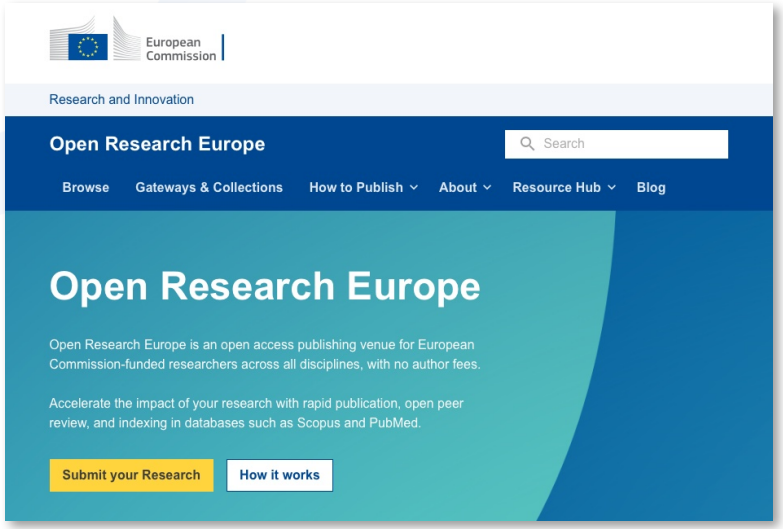
EU Open Research Repository

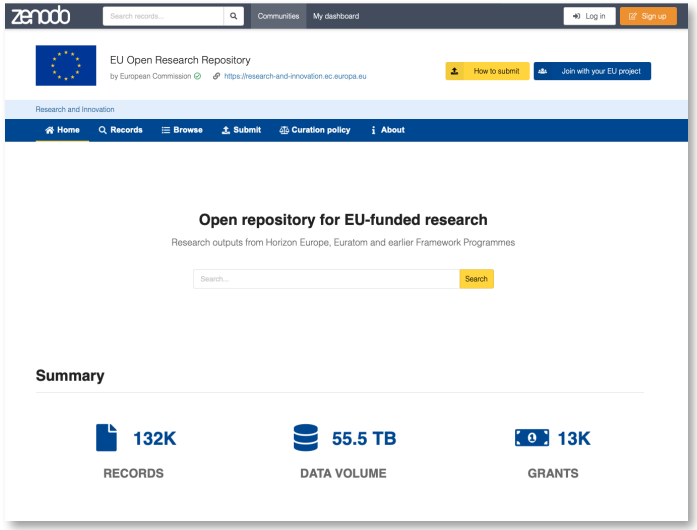
- A free to use Zenodo-community for EU-funded research outputs (publications, data, software, presentations, ...).
- Any discipline, any output.
- Managed by CERN on behalf of the European Commission.
- **A repository solution for projects**



https://zenodo.org/communities/eu/

ORE vs EU Open Research Repository



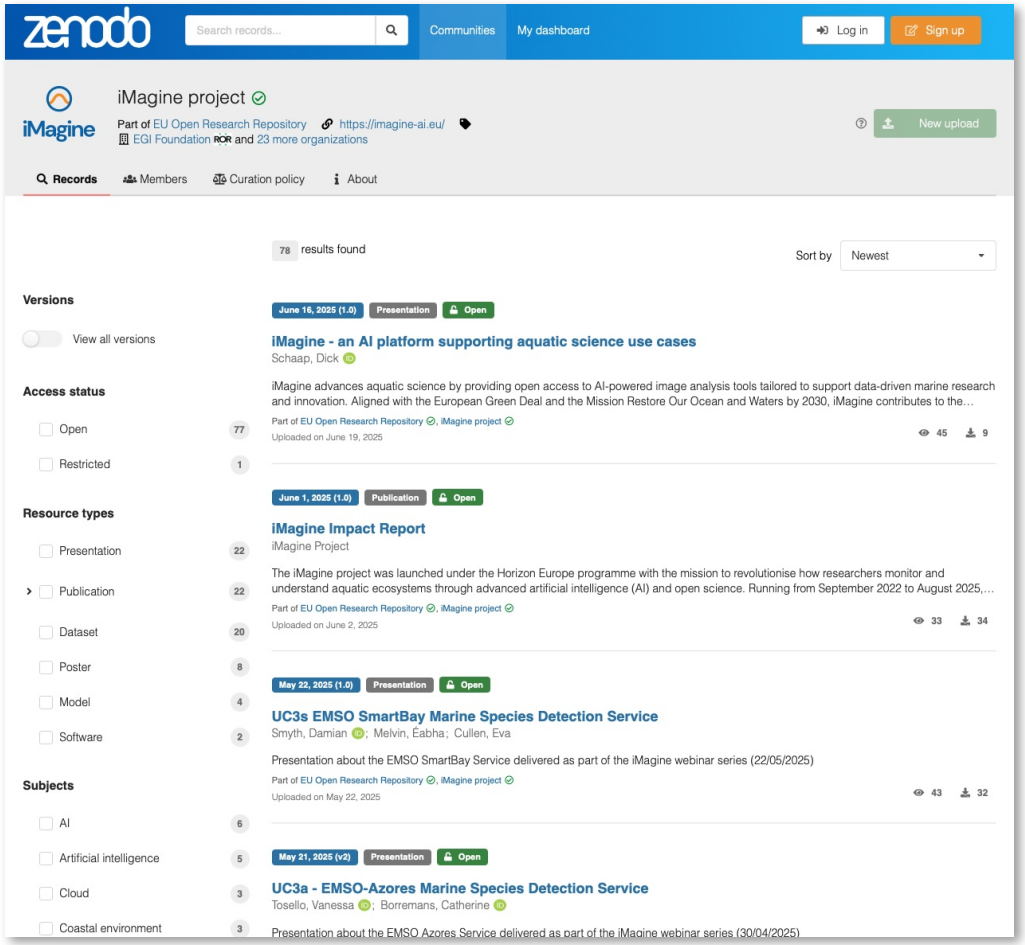


- Publish **articles**
- Articles are **peer-reviewed**
- An open access **publishing venue**

- Publish any research output
- **Curated** but not peer-reviewed
- A trusted **repository**

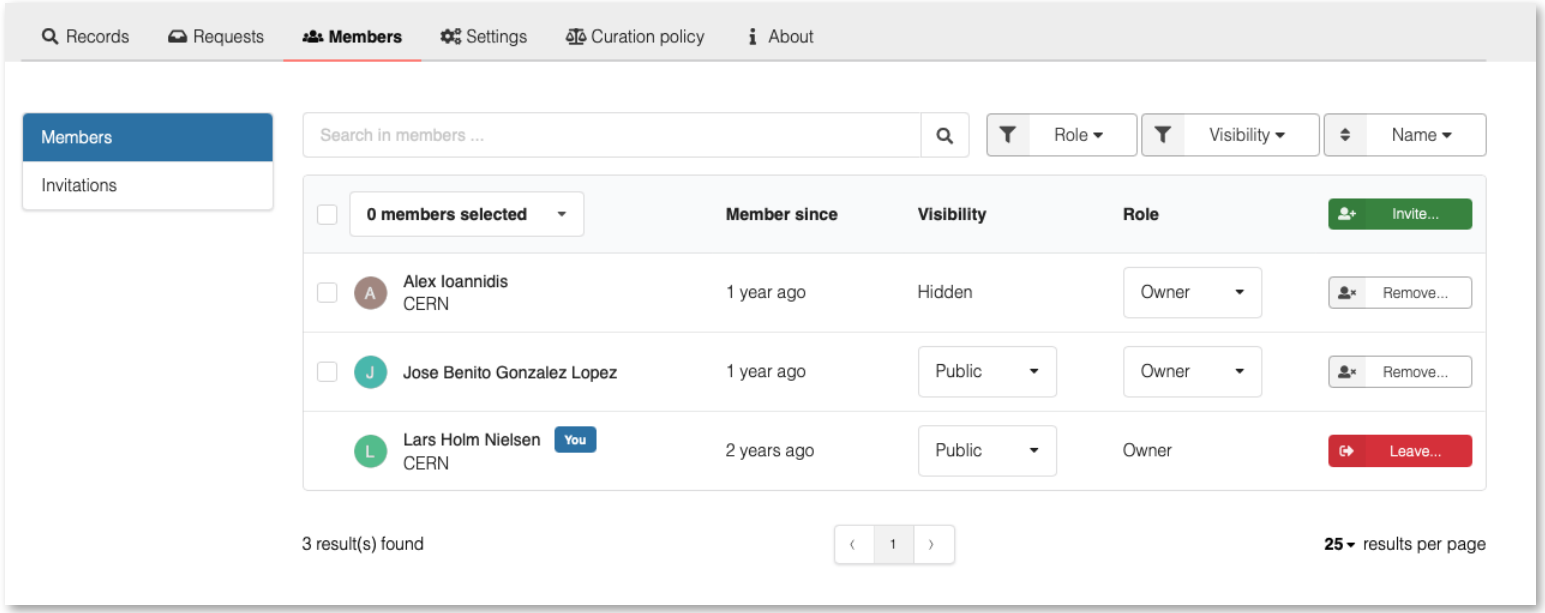
EU Project Community

- A Zenodo-community for your EU project
- **Collaborate** across all project partners
- **Compliance** with related open science requirements in grant agreement
- **Integrated** with OpenAIRE for reporting to EC participant portal
- All content is indexed automatically in **EU Open Research Repository**



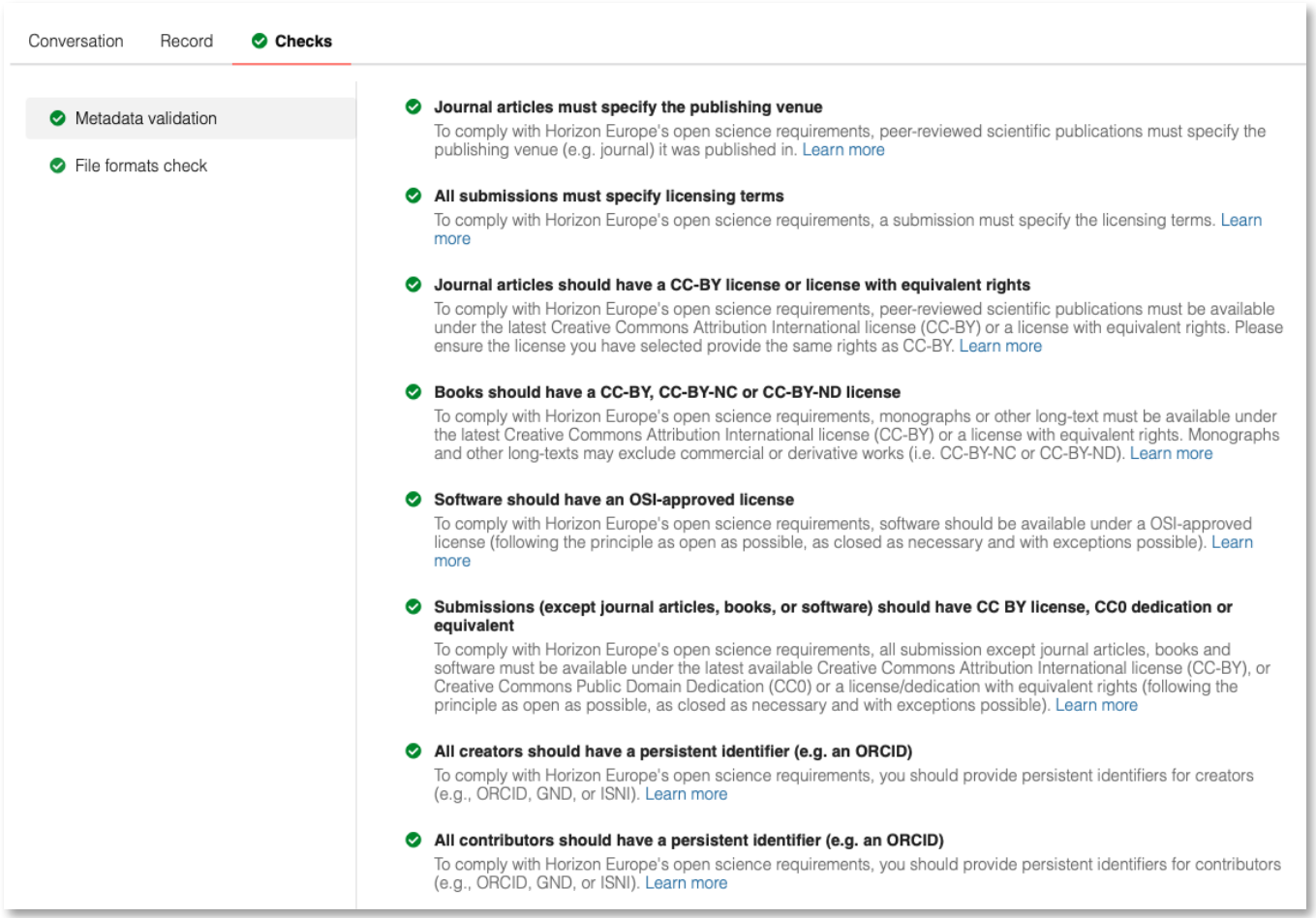
Collaborate across institutions

- Login with institutional account (OpenAIRE AAI)
- Invite and manage members
- Review and curate records



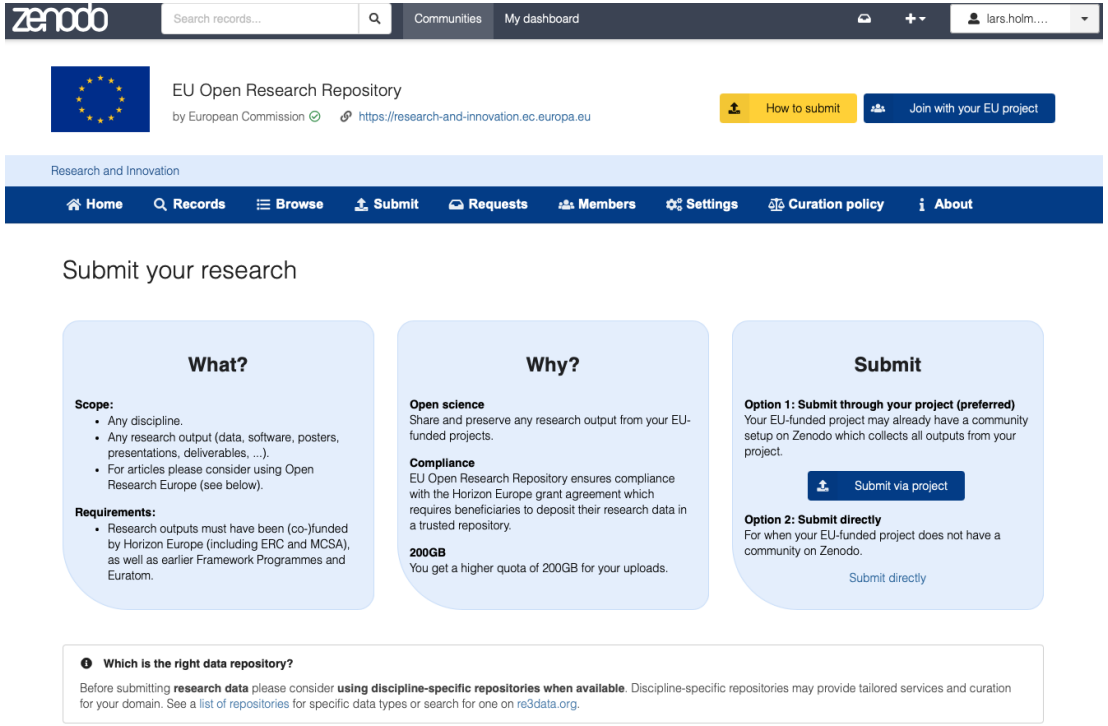
Compliance with open science requirements

- Supports you comply with related open science requirements
- FAIR – file format checks for open/scientific formats.



Submitting content

- **Via EU Project Community** (preferred)
  - self-managed
- Via direct submissions
  - single and occasional submissions only
  - curated by Zenodo staff
  - takes longer to get approved
- Via automated harvesting
  - records already in Zenodo and linked to grant number
  - not fail-proof, some records might not get added



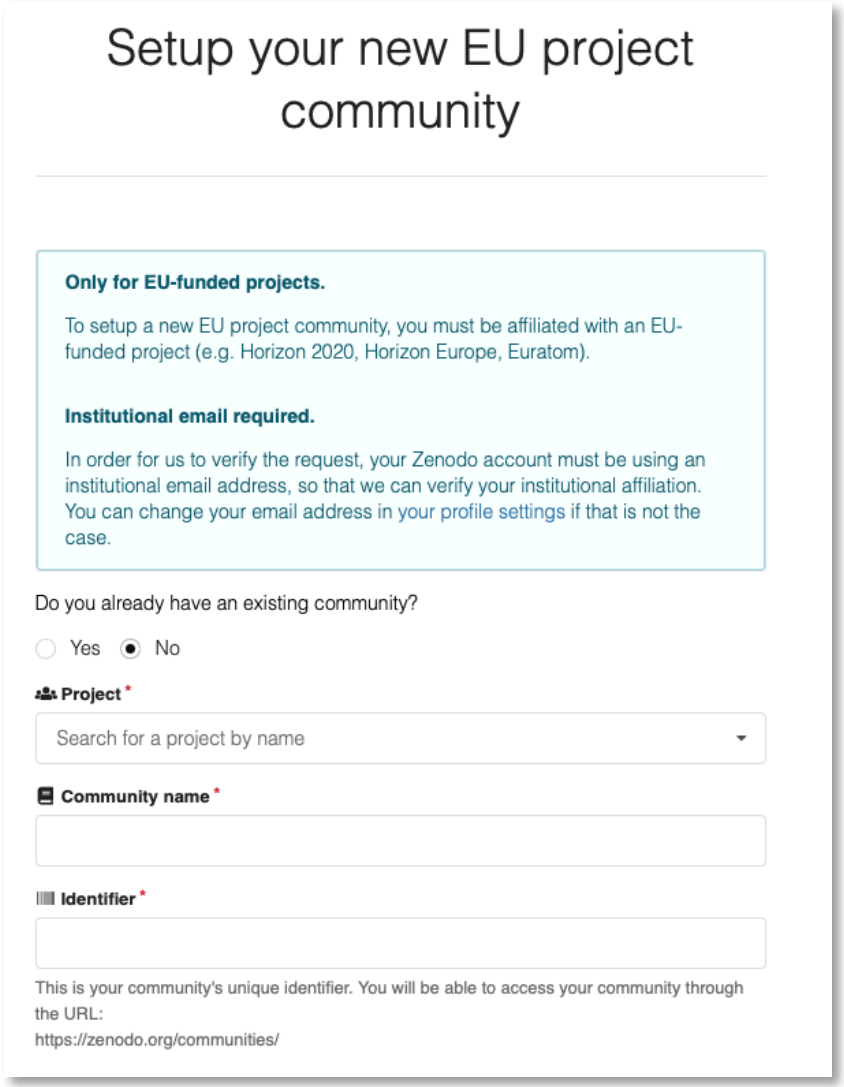
Get started

- **Eligibility**

  Funded by Horizon Europe (MCSA, ERC, H2020, Euratom, …)

  Must be requested by user affiliated with project partner institution.

https://help.zenodo.org



EOSC EU Node

Maja Dolinar

OpenAIRE, User Engagement & EOSC Liaison

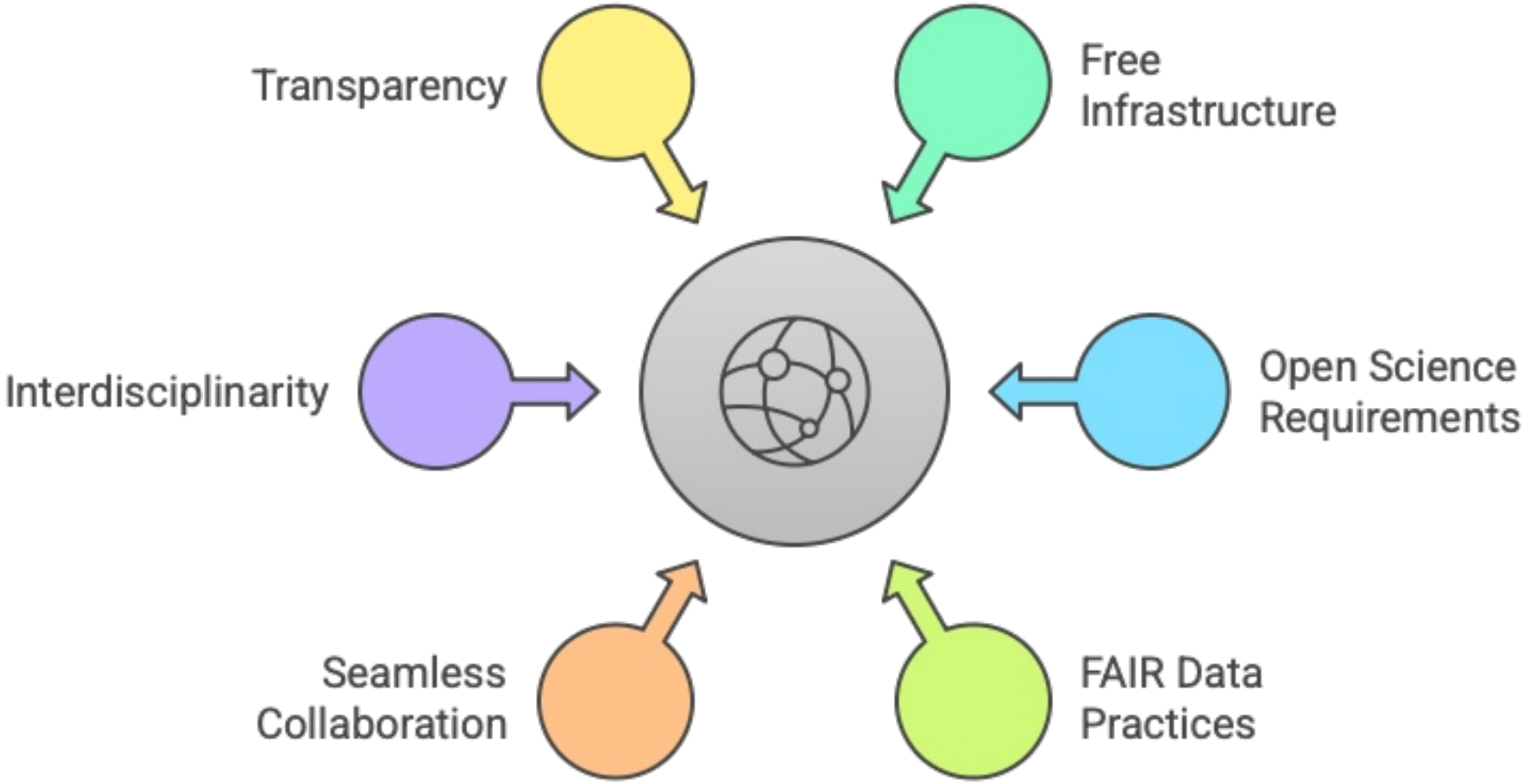
What is the EOSC EU Node?

- A platform created by the European Commission enabling Open Science in Europe.
- Provides federated access to research data, services, and computing resources.
- Supports Open Science principles (FAIR data, open access, reproducibility).
- Built and operated by a consortium of research institutions and service providers.
- Supports researchers, citizen scientists, and Horizon Europe projects.

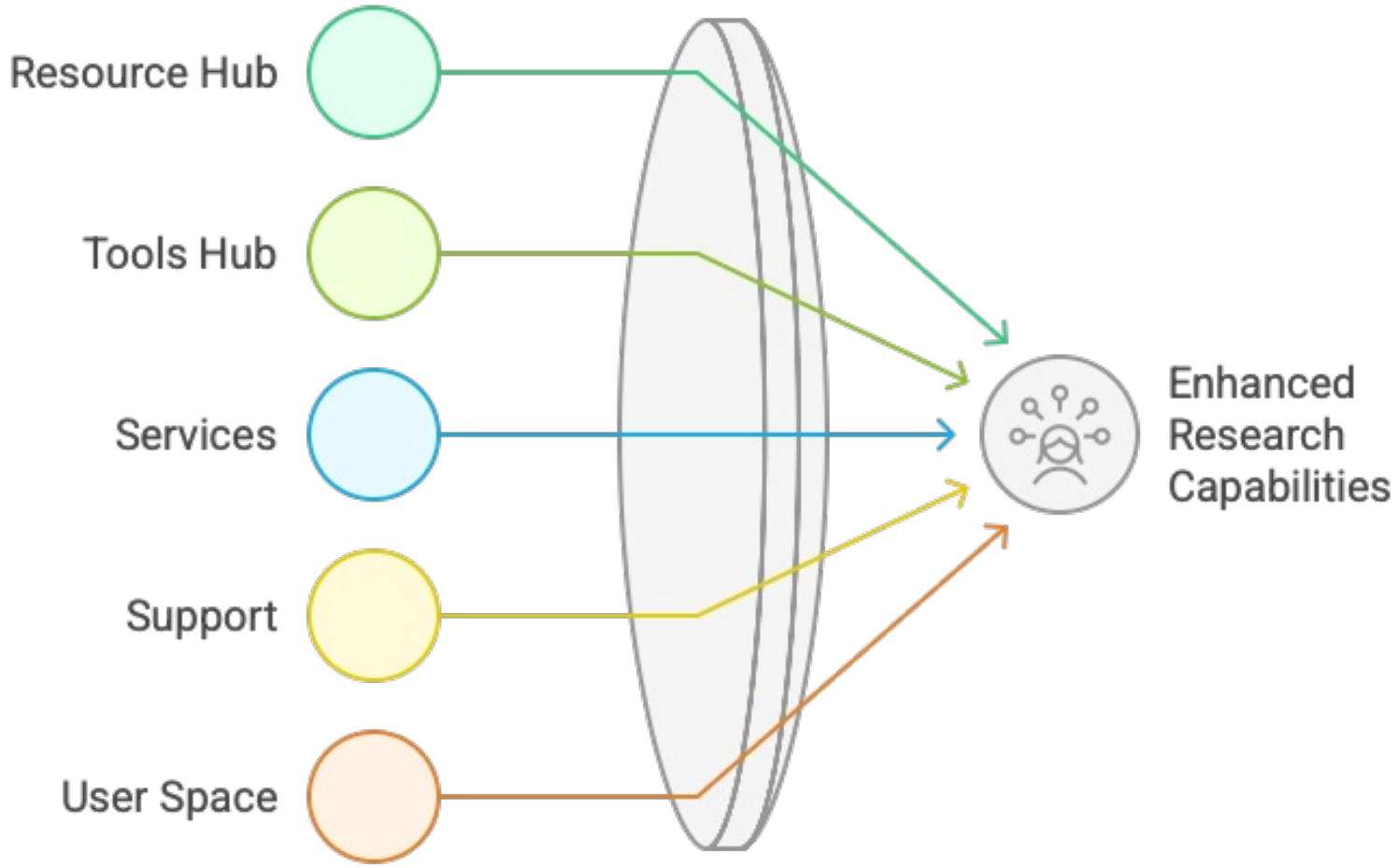
Who can use EOSC EU Node?

- **Open to all researchers**, not just Horizon Europe projects.
- Accessible for academic institutions, citizen scientists, and public initiatives.
    - Various levels of credits apply!
- Access is free – supported by European Commission funding.
- **Helps projects comply with Open Science and FAIR data requirements**.

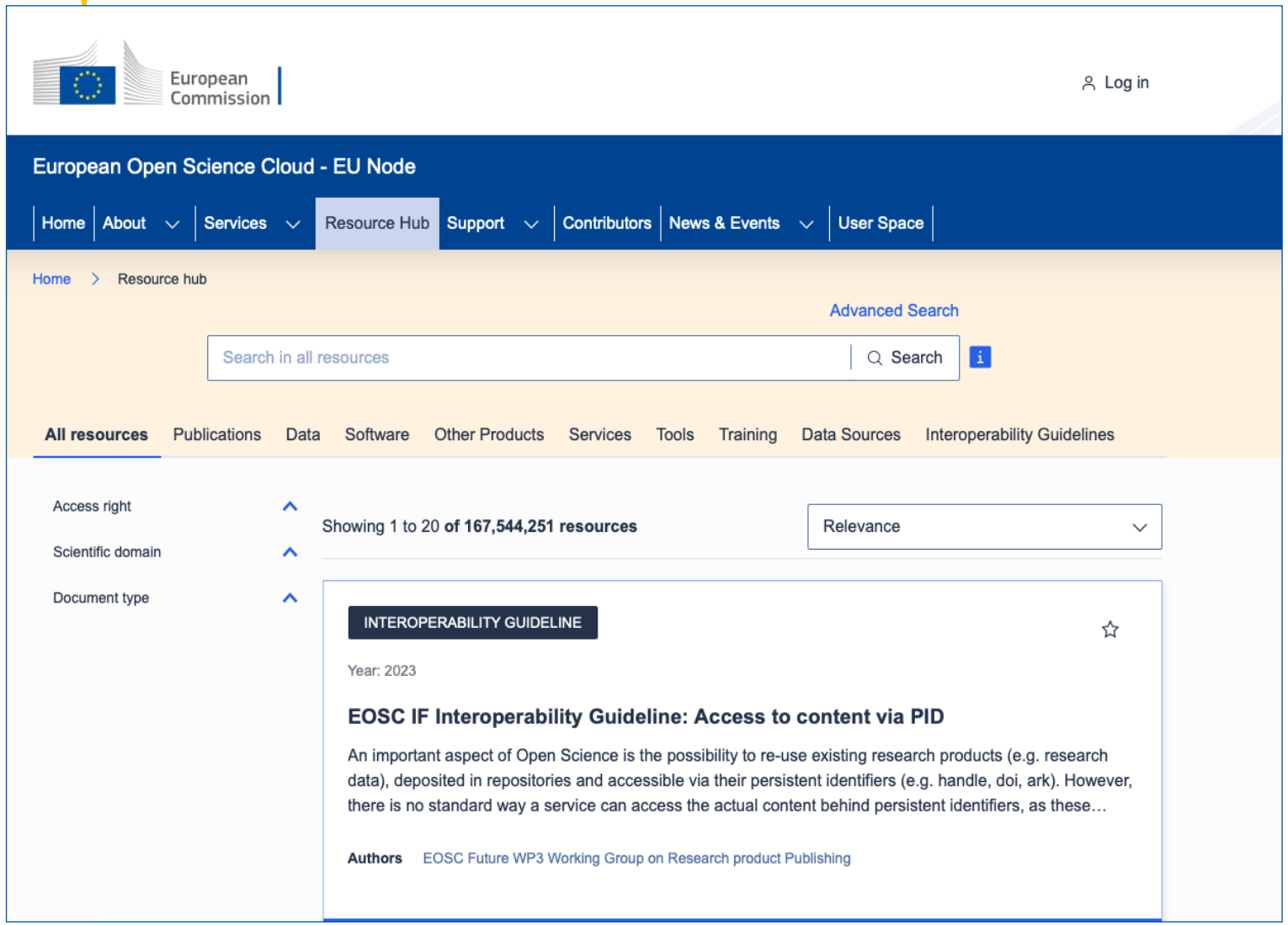
Why EOSC EU Node for Horizon Europe?



Empowering Researchers through EOSC EU Node



Resource Hub



- Discover ~167M resources
  - OpenAIRE, EC data sources
  - Harvested & indexed
- Resources
  - Publications
  - Data
  - Software
  - Services
  - Data Sources
  - Training
  - Tools

Available Services

File Sync and Share

Your personal cloud storage for collaborative research.

Interactive Notebooks

A shared space for coding and analysis.

Large File Transfer

Fast and secure file transfers.

Virtual Machines

Scalable cloud computing for reliable and reproducible results.

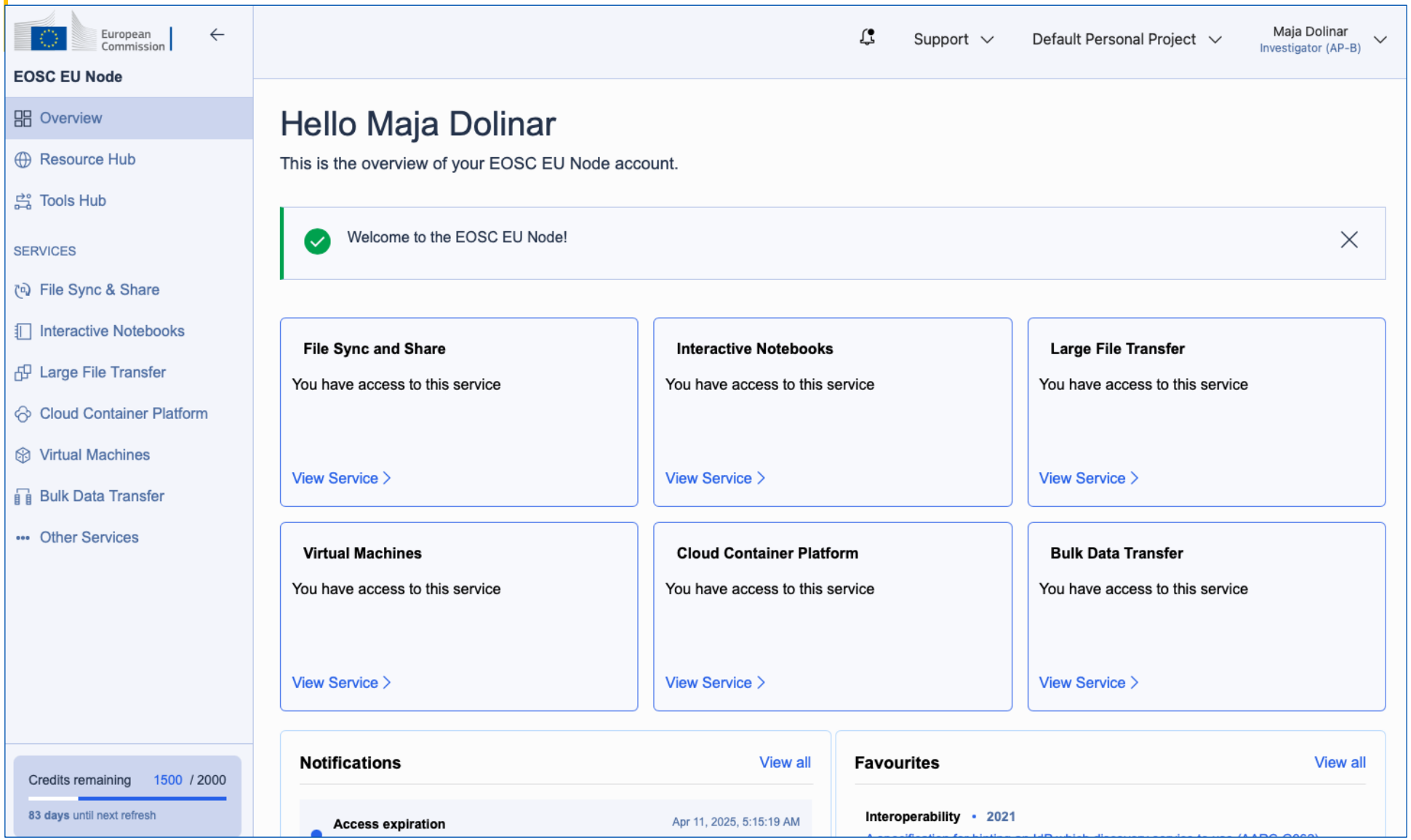
Cloud Container Platform

Simplified Kubernetes for scalable research.

Bulk Data Transfer

Smooth high-volume data transfers.

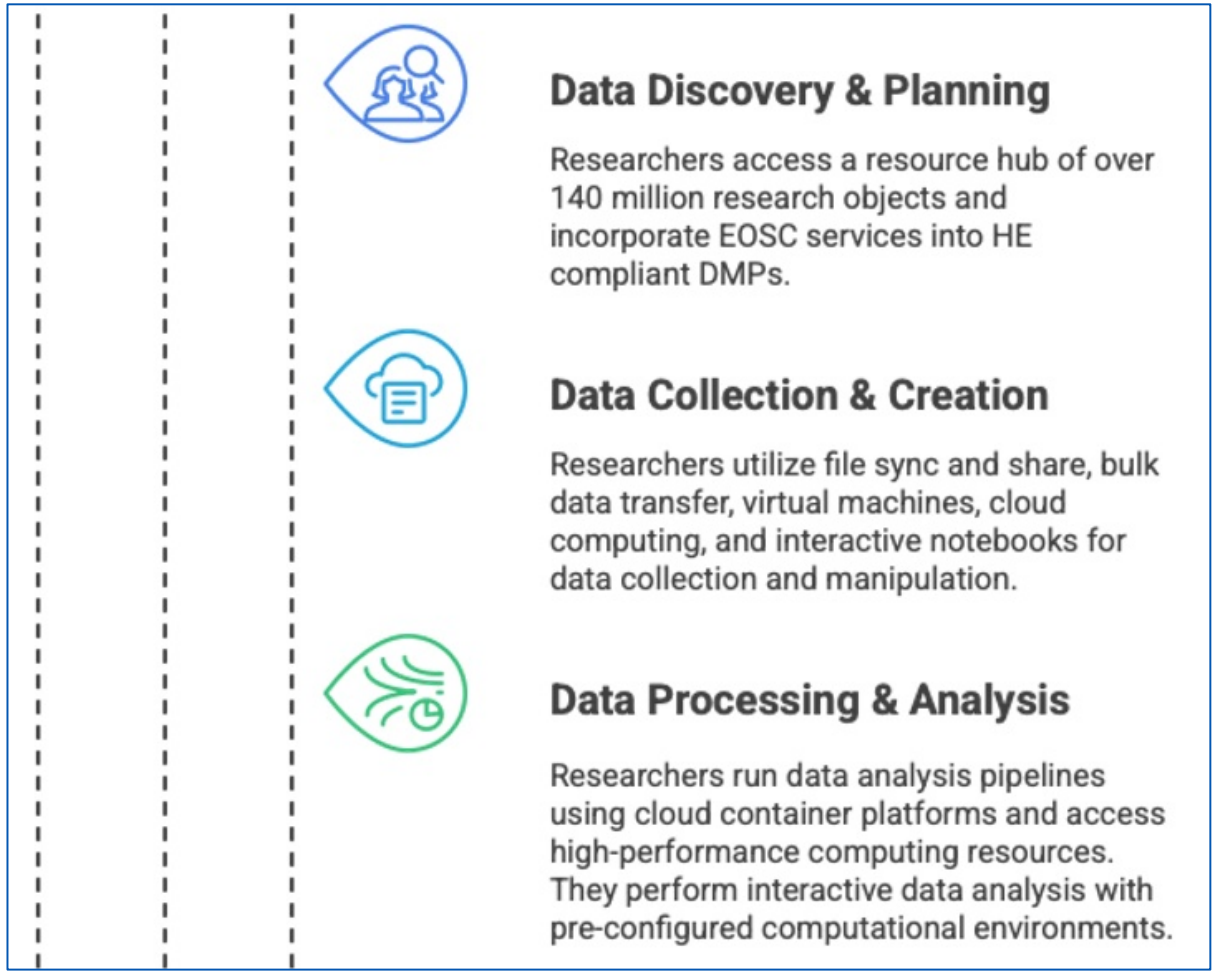
User Space



Maximizing the Research Data Lifecycle with EOSC EU Node

Use Cases:

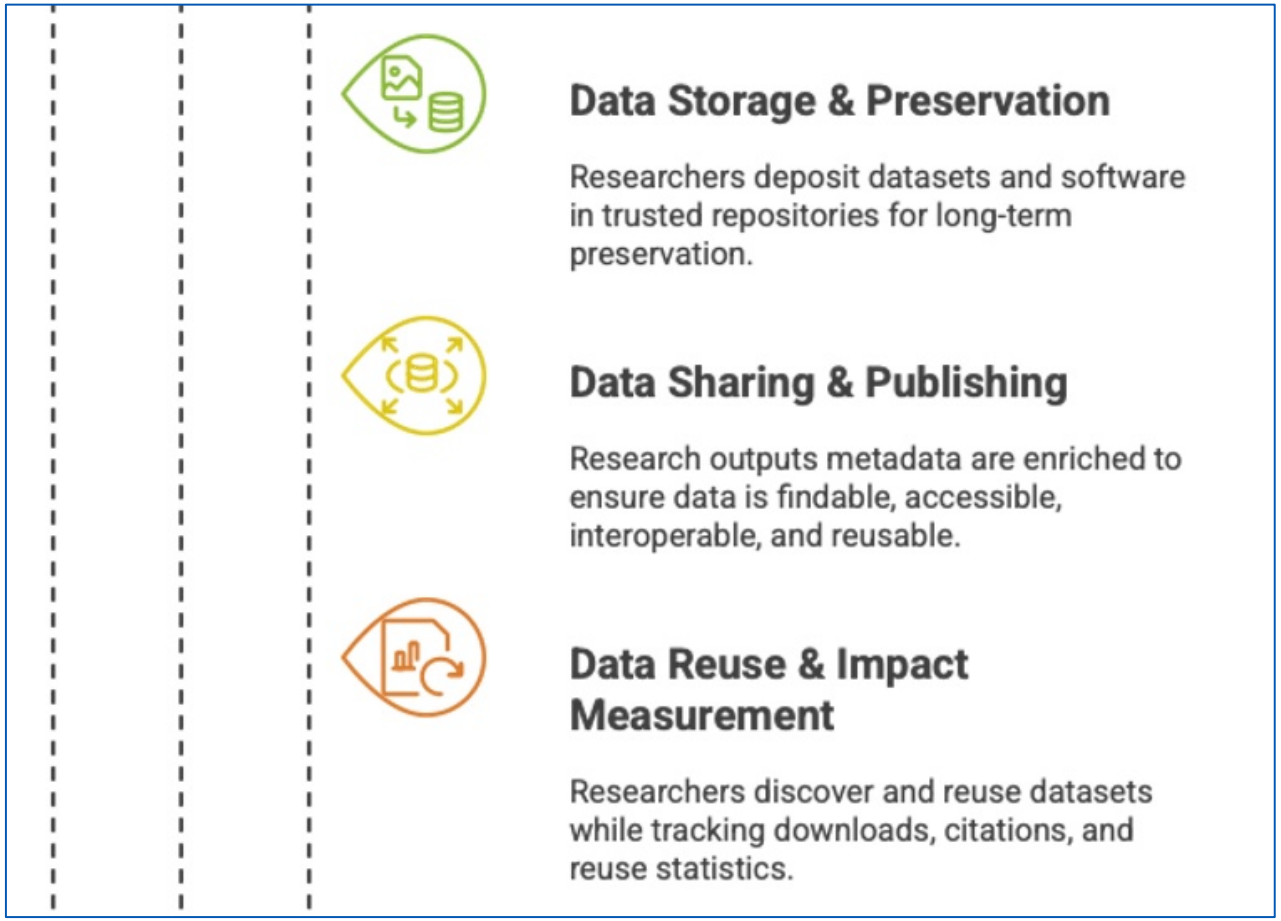
- *A Horizon Europe project can browse **Resource Hub** to find existing datasets to reuse, reducing duplication of effort.*
- *A research team analyzing climate data can use **Virtual Machines** to store and preprocess satellite images before analysis.*
- *A bioinformatics researcher can process genomic data in a **secure, cloud-based Jupyter Notebook** without setting up local infrastructure.*



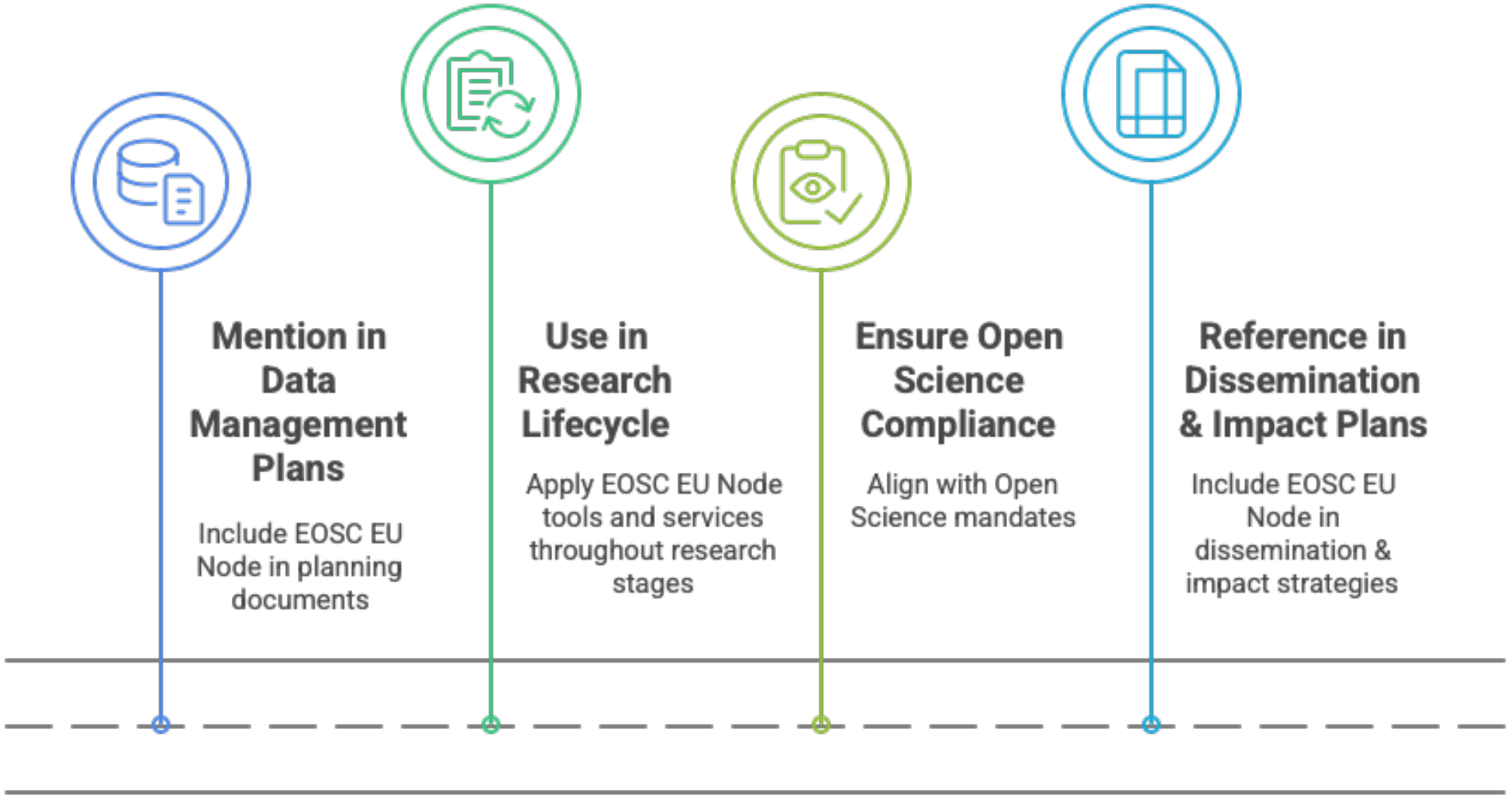
Maximizing the Research Data Lifecycle with EOSC EU Node

Use Cases:

- *A HE project must comply with Open Access and FAIR principles – EOSC EU Node provides access to trusted repositories, persistent identifiers (DOIs), and metadata-rich datasets, ensuring that research outputs are FAIR.*
- *A HE project coordinator needs to report on data sharing and Open Science practices. EOSC EU Node's integrated metrics dashboard provides insights on dataset usage, downloads, and citations, ensuring compliance with EC reporting requirements.*
- *A social scientist finds economic datasets in Resource Hub and integrates them into new research, ensuring cross-disciplinary collaboration.*



Integrating EOSC EU Node into Research Proposals



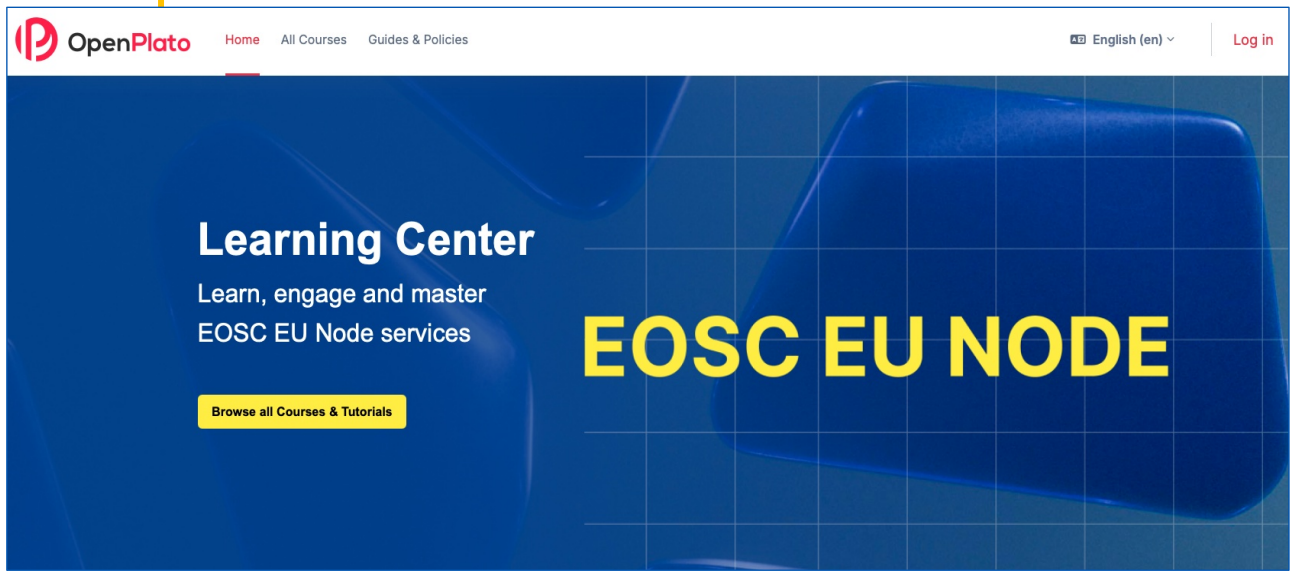
EOSC EU Node supporting Horizon Europe projects

Grants of up to 40,000 credits are available to EC-funded R&I projects

- One grant per project, one-time and non-replenishable
- Usable only during the project's duration
- For project-related needs within the EOSC EU Node
- Credits are added to the *Group Project Wallet*

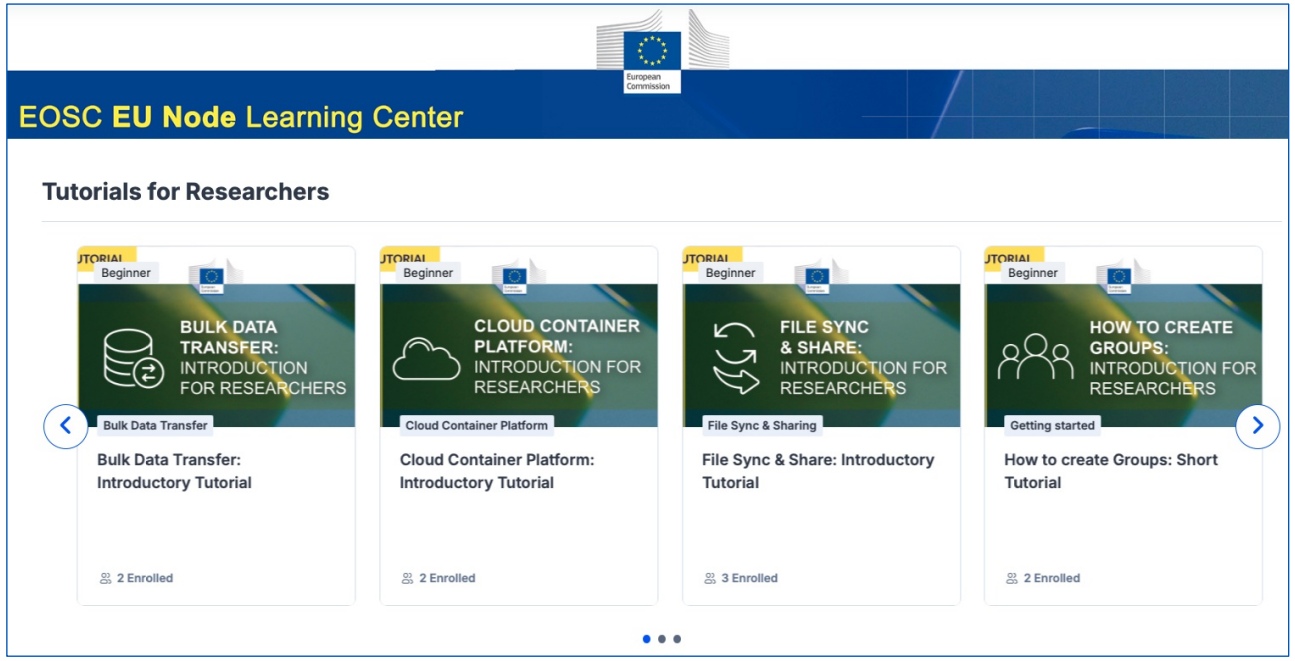
How to get access:

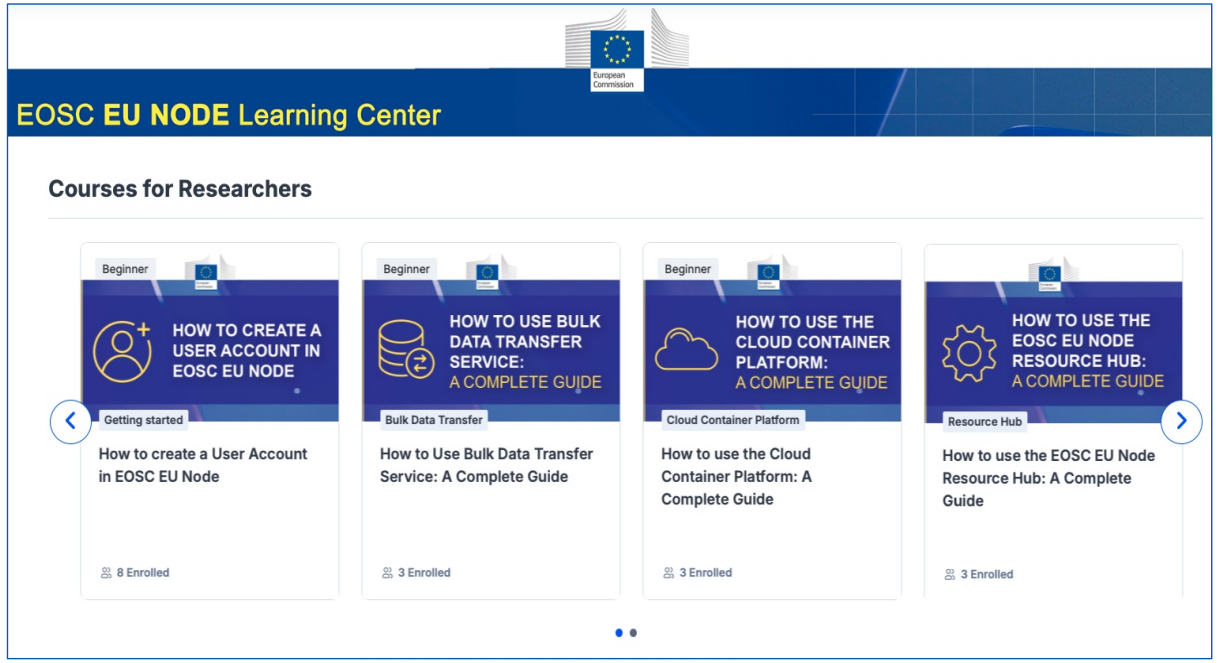
- Submit a **helpdesk ticket** with following details:
  - EC Grant Number
  - EC Project Officer
  - Group Project ID and Owner
  - Short description of intended use of EOSC EU Node services



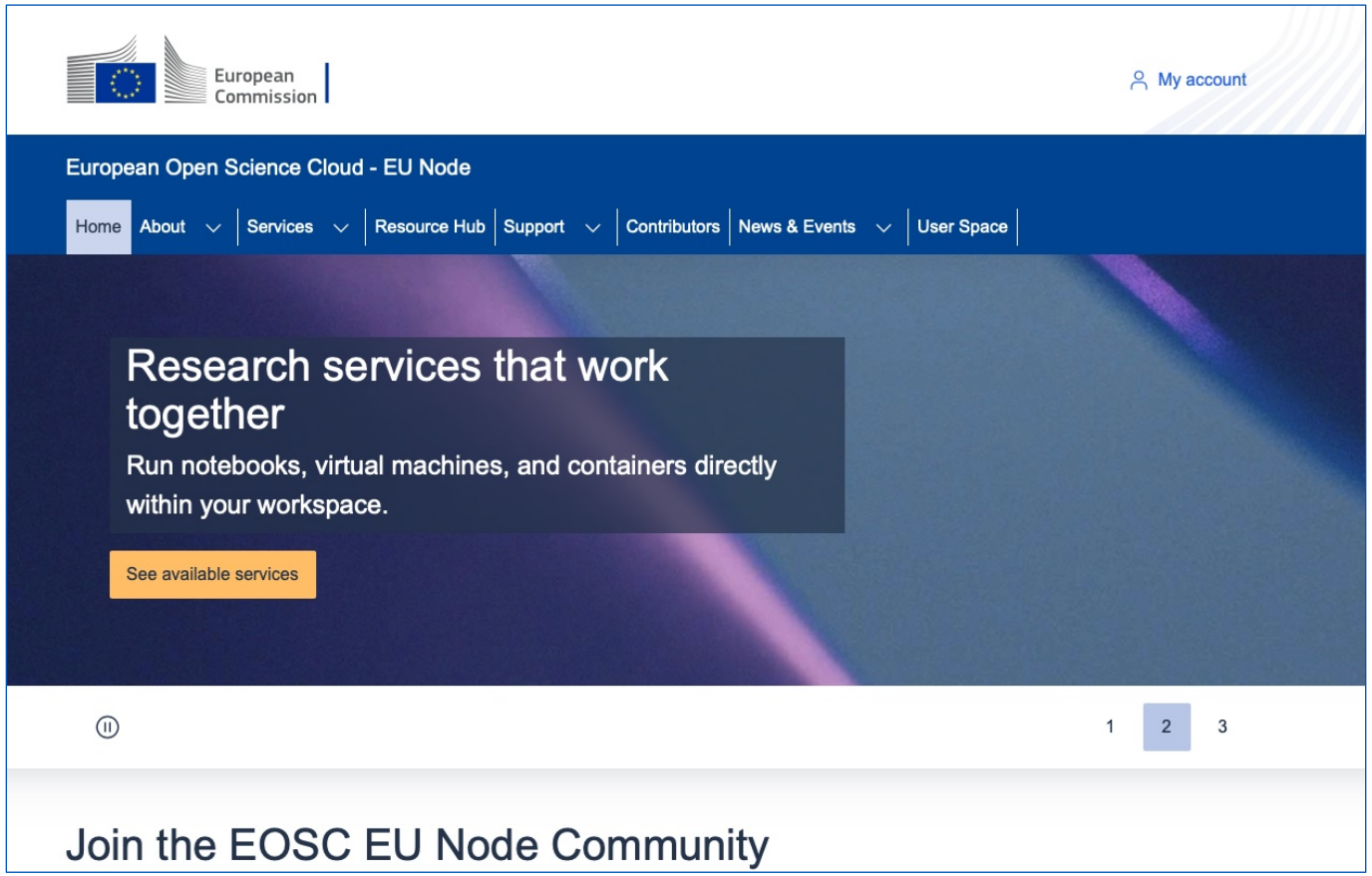
https://openplato.eu/eosceunode

- Earn Certificates
- Collect Badges
- Showcase your progress





Get started with EOSC EU Node



- Visit: https://open-science-cloud.ec.europa.eu/
- Explore the Resource Hub
- Sign in using institutional credentials
- Explore available tools and services
- Integrate into your research workflows and Horizon Europe proposals

OpenAIRE Explore

OpenAIRE EXPLORE

Makes the links

- A comprehensive and open dataset of research information covering 166m publications, 59m research data, 203k research software items, from 131k data sources, linked to 3m grants and 193k organisations
- Connect and view all of your research – publications, datasets, ORCID, software, DMP, etc. All linked together through citations and semantics.
- Search for publications, research data, research software...
- Download reports for research products of projects, organisations and data sources
- Find statistics, metrics and graphs for projects, data sources, research products...
- Browse by Sustainable Development Goals or fields of research
- Add to ORCID your research products with the ORCID search and link wizard
- Find a repository to deposit or publish your research (publications, data or software) in Open Access.

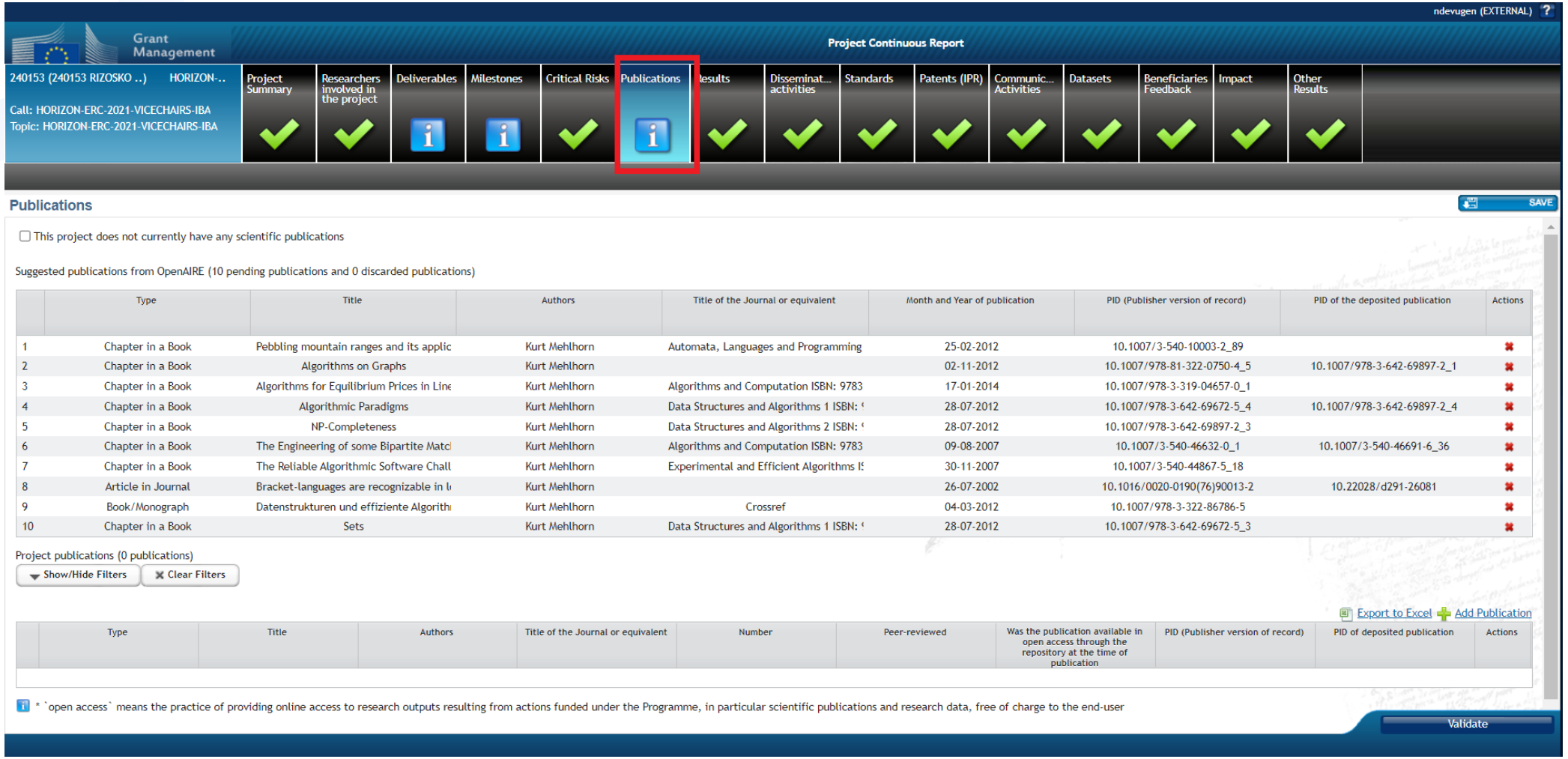
https://explore.openaire.eu/

Reporting and monitoring

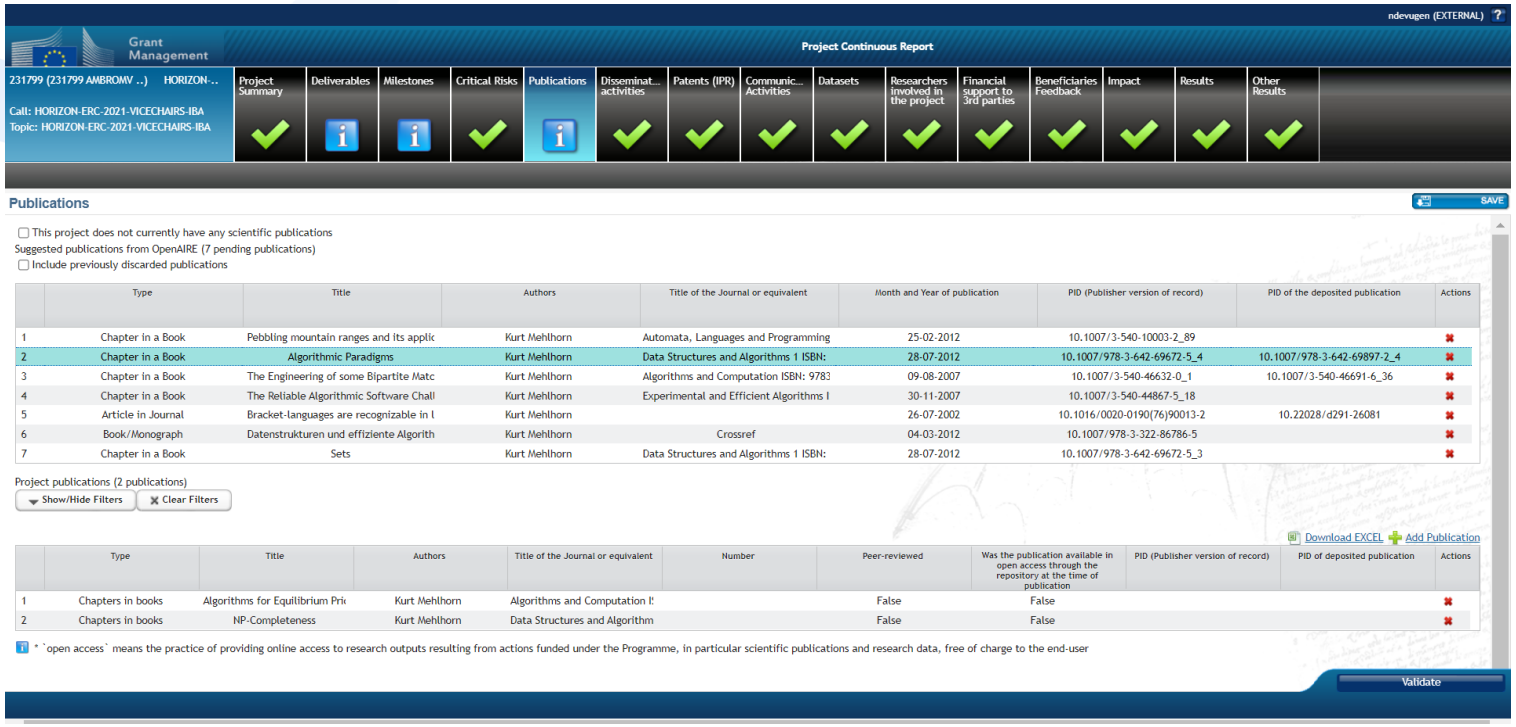
Reporting - Monitoring

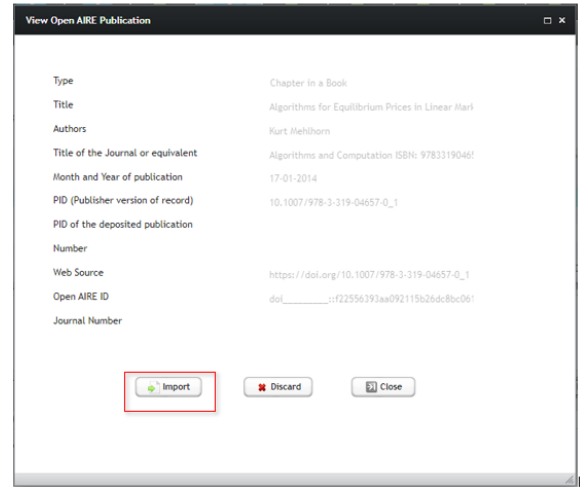
- Extensive reporting of Open Science practices:
  - Structured reporting of requirements regarding OA
  - Free-text reporting of encouraged Open Science practices
- Monitoring by project officers and reviewers in periodic reviews
- Monitoring of the FP through Key Impact Pathways (KIPs)

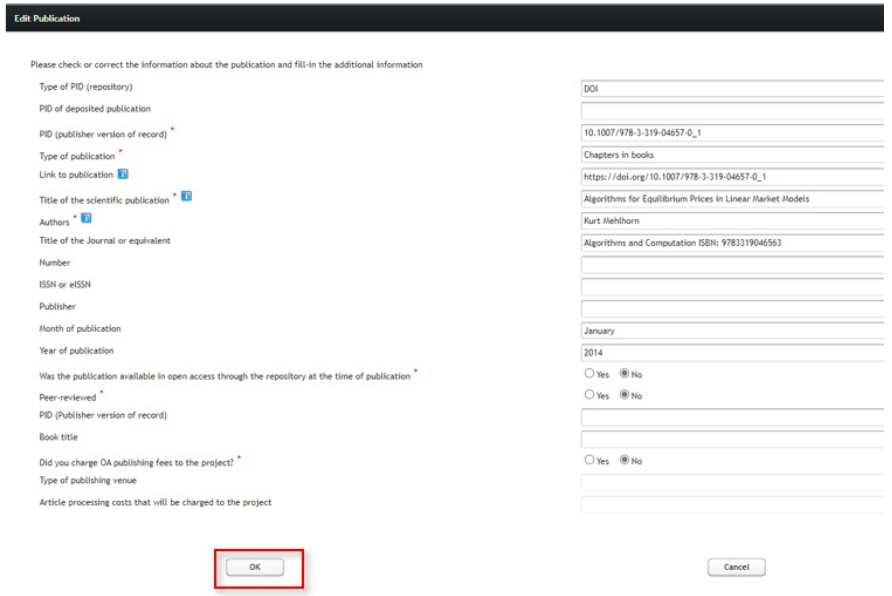
EC Participant Portal – Continuous reporting



Publications



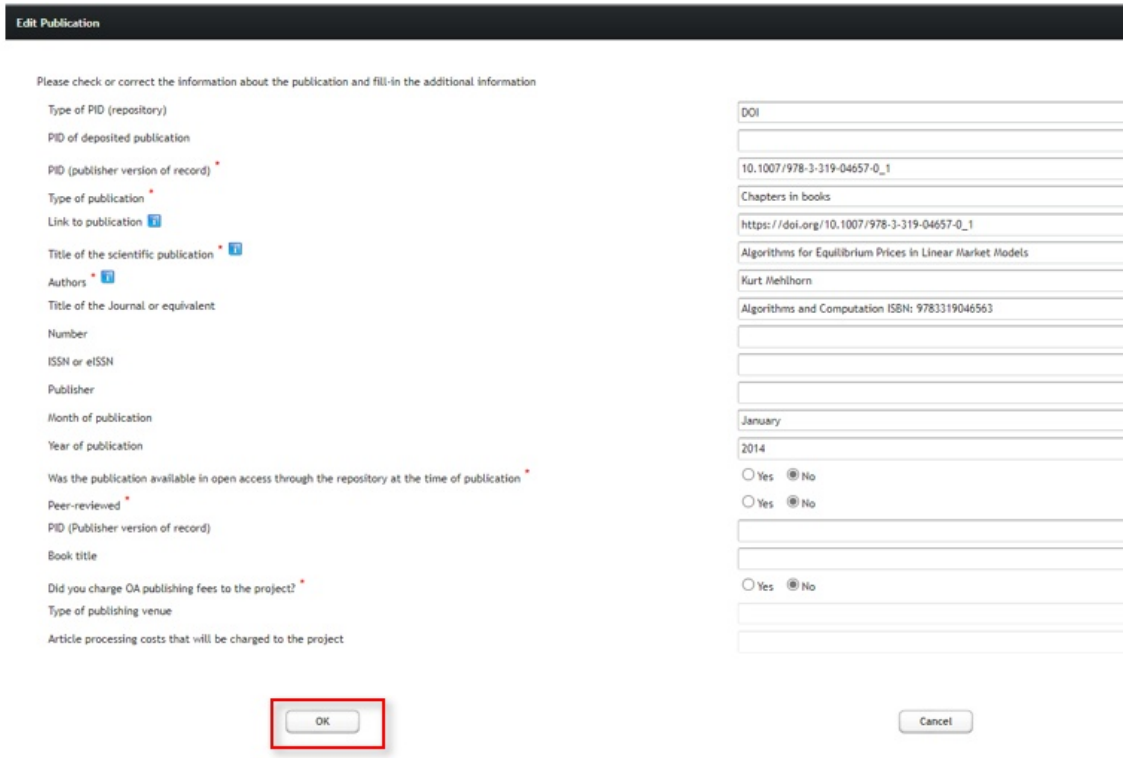




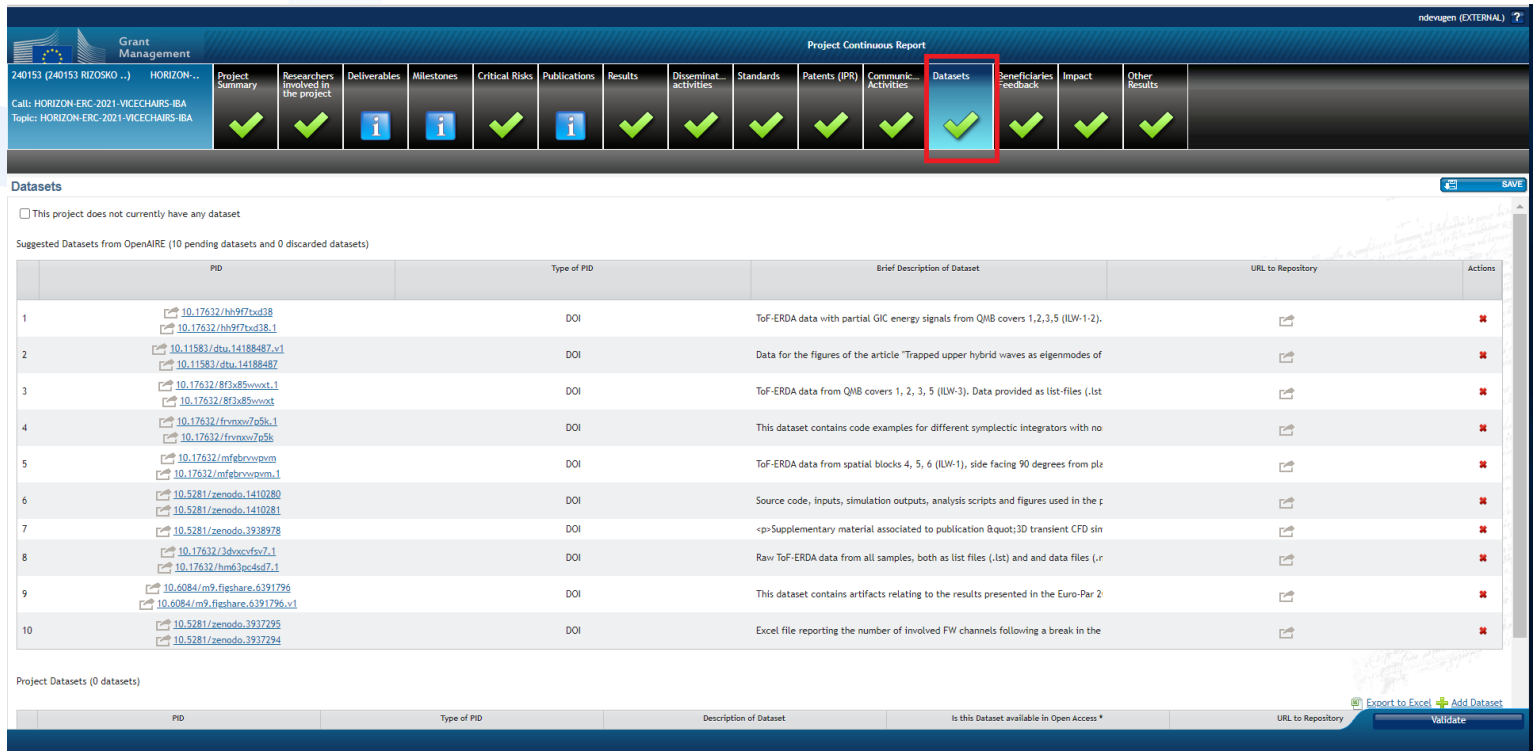
https://webgate.ec.europa.eu/funding-tenders-opportunities/pages/viewpage.action?pageId=34472316

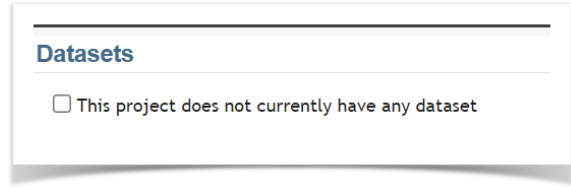
Publications

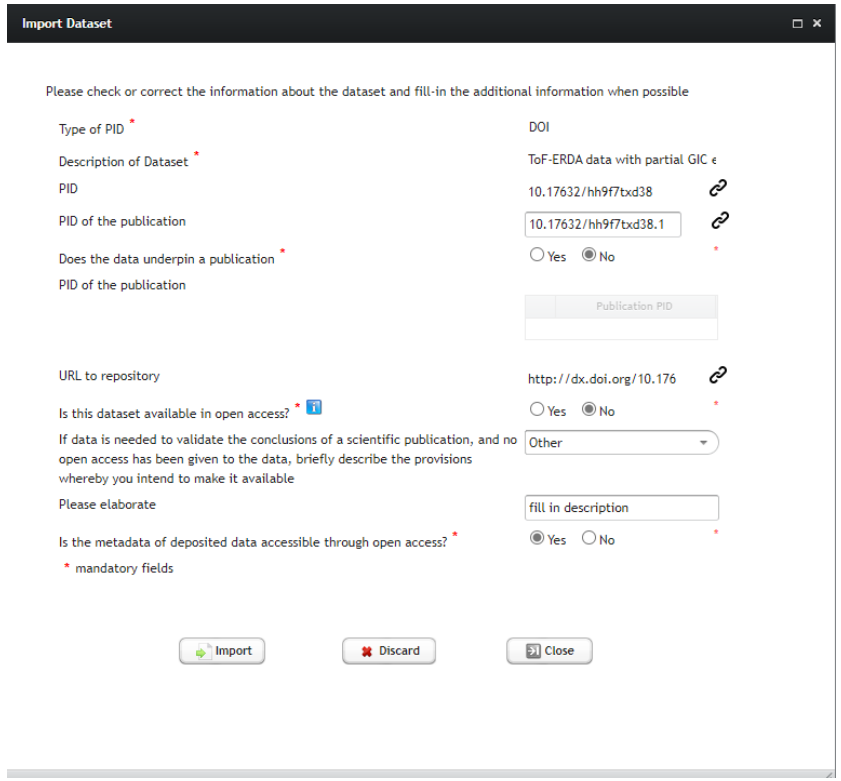
- "Type of PID" = unique URL given by the repository or the publisher
- "PID of deposited publication" = URL to the repository where AAM/VoR is archived
- "PID (Publisher version of record)" = URL to the place where it was published (e.g. given by the journal)
- "Article processing costs that will be charged to the project" – remember that OA fees to publish in a non-full-OA journal/platform cannot be charged to the project



Datasets



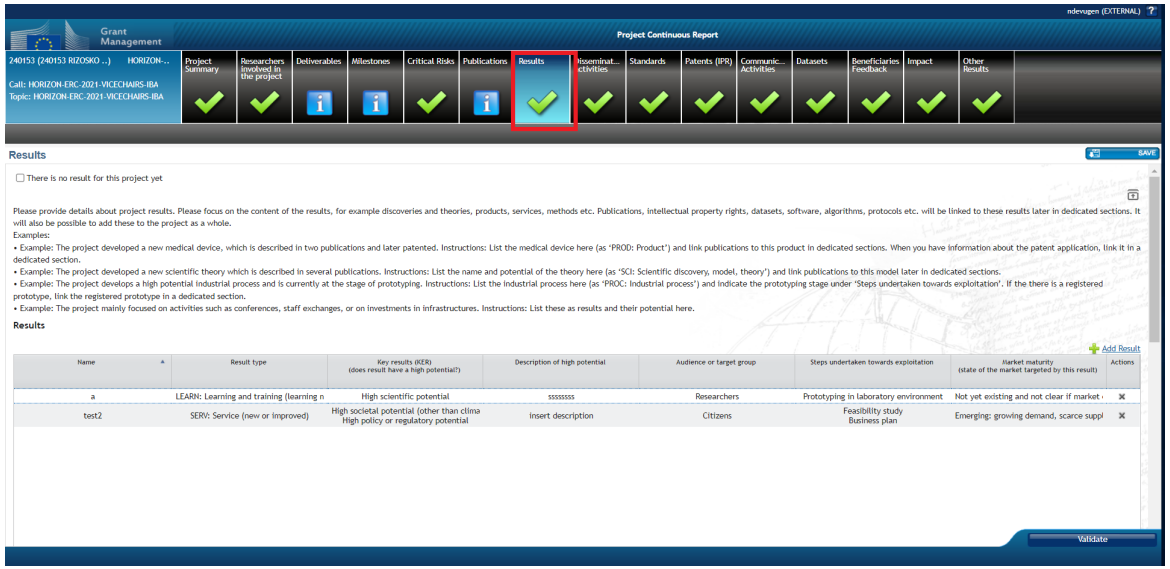


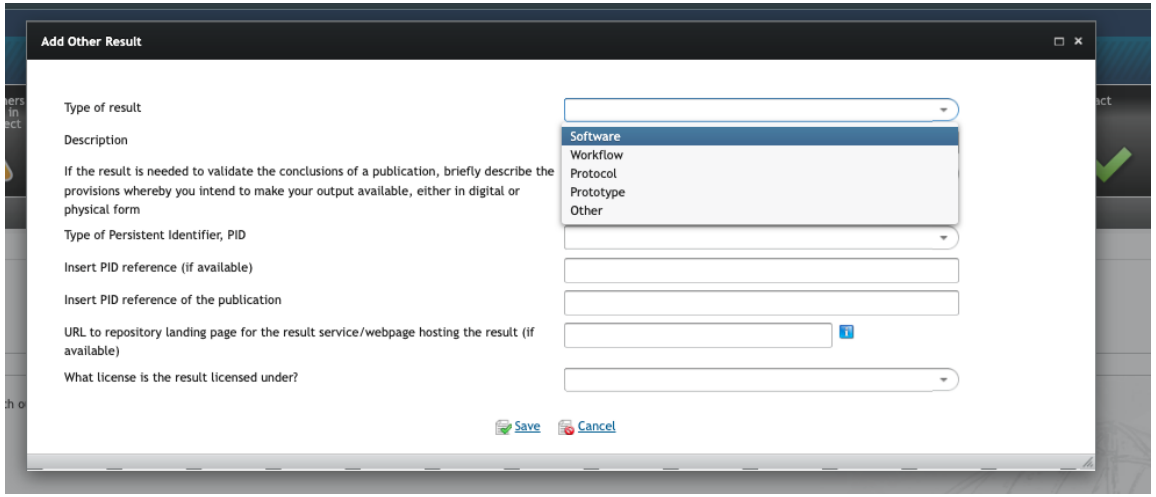


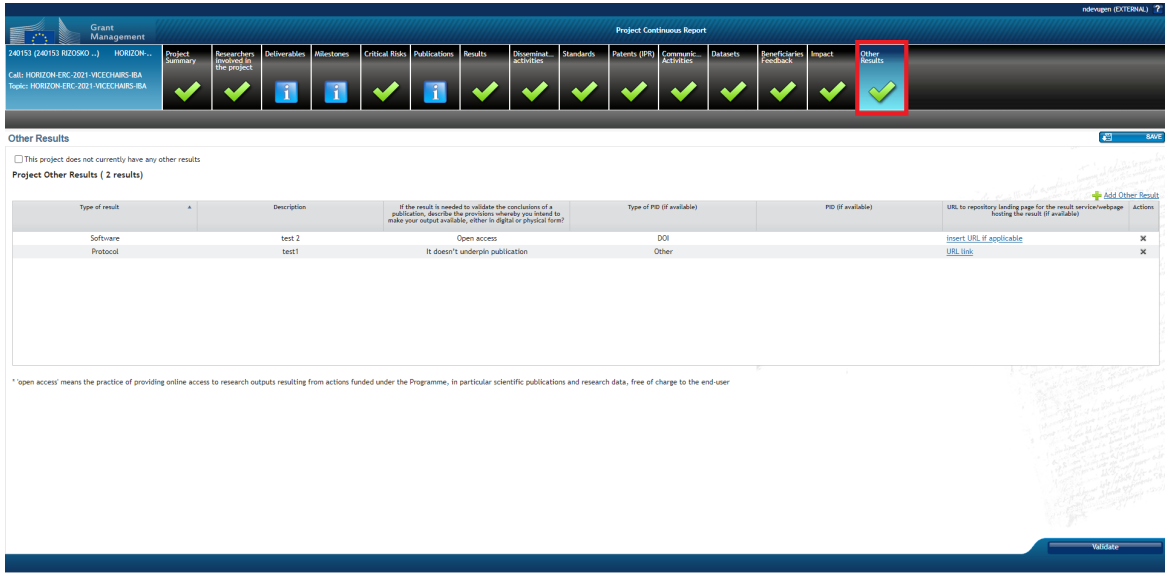
https://webgate.ec.europa.eu/funding-tenders-opportunities/pages/viewpage.action?pageId=25559674

Results vs Other Results

- 'Results' tab focused on the content of the results: discoveries and theories, products, services, methods, etc.
- 'Other Results' tab is for reporting about software, workflows, protocols, prototypes, etc.







www.openaire.eu

Webinar |
07 November 2025

Horizon Europe grant proposals

Jonathan England

OpenAIRE

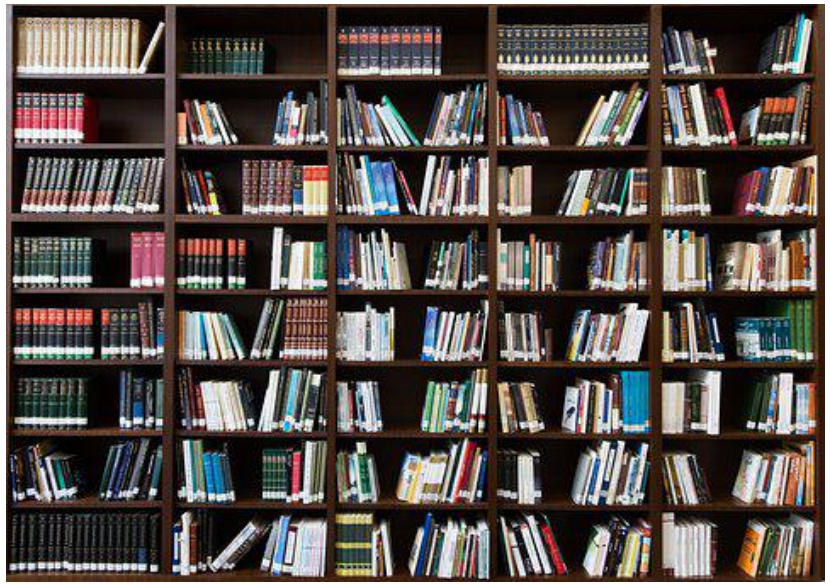
@openaire_eu

Open Science parts

- PART A – Application form
  - List 5 publications, widely-used datasets, softwares, goods, services or any other achievements relevant to the call
- PART B – Project proposal – technical description
  - Under ‘Excellence’ – ‘1.2 Methodology’ (Open Science, RDM and management of other research outputs)
  - Under ‘Impact’ – ‘2.2 Measures to maximise impact’ (dissemination, exploitation and communication)
  - Under ‘Quality and efficiency of the implementation’ – ‘3.1 Work plan and resources’ and ‘3.2 Capacity of participants and consortium as a whole’

Publications

- Your **publications cited should be available in OA** (i.e. openly available on a trusted repository)
- Your publications cited will only be evaluated **qualitatively** (i.e. the Impact Factor of the journal is irrelevant)
- Give insights in where you are hoping to publish (e.g. Open Research Europe, full OA journals)



Depositing existing articles

It will depend on the publisher, but in many cases you will be able to make a version available in Open Access.

1. Check the Open Policy Finder (formerly SherpaRomeo) if the **publisher allows the upload** of the AAM on a repository.

2. Check the **embargo period** set by the publisher to the publication date of your work. If the embargo is over, you are free to upload it on a repository.

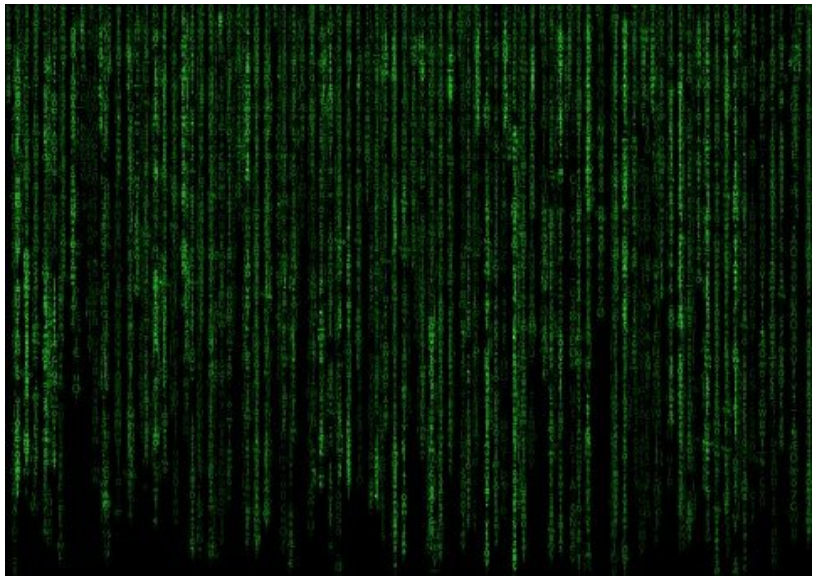
3. Upload the AAM on the repository, and **select the correct licence** set by the publisher.

Some advice:

- Prioritise the repository of the institution you were at when you published that work (some institutions might not allow you to deposit new work after you have left)
- Make sure you are uploading the AAM and not the VoR
- The **requirement of the CC BY licence does not apply here**, the publication only needs to be openly accessible on the repository.

Research Data

- Your **data listed should be FAIR**, available on a trusted repository and a Persistent Identifier (e.g. DOI) provided
- An official **DMP is not needed** but the grant proposal does include aspects very similar to a DMP (e.g type and size of data, Persistent Identifiers, Intellectual Property Rights, interoperability, licences, curation, responsabilities
- Distinct Work Package on ‘project management’ that must include the DMP as a deliverable



Other aspects eligible in the budget

- “engagement of citizens, civil society and end-users” – citizen science and participation in crowdsourcing activities
- Data curation costs
- Article Processing Charges (hybrid journals are not eligible)1

Writing tips

- **Be as specific as possible**
- You do not need to explain what Open Access, FAIR data, Open Science, etc. mean. Focus on what concretely you will do

Special cases

ERC

- **No explicit evaluation or requirement to describe Open Science practices**; but if included, will (implicitly) positively affect assessment of ‘scientific excellence’
- ERC projects do not have scientific work packages or deliverables.
- But now requires a “Research Data Management” WP, with “Data Management Plan” as the one deliverable (type “R – Document, report” with due data M6)

ERC DMP template

MSCA

- Underlying principles: Open Science, Responsible Research & Innovation
- Award criteria will consider the “soundness of the proposed methodology” **(‘Excellence’ criteria** weighing 50% of the evaluation) which must consider “the quality of Open Science practices”
- **Training activities** and **Career Development Plan** must address key transferable skills “fostering the culture of Open Science, innovation and entrepreneurship” and prepare to the increase in “research collaboration and information-sharing” (e.g. collaborative tools, OA, open data, FAIR data, public engagement, citizen science)
- There is **no specific cost eligibility rule** for APCs: OA fees for hybrid venues can be covered

MARIE CURIE **ACTIONS**

Open Science recommended practices

Evaluation

- Mandatory Open Science practices – score will be lowered for not sufficiently addressing them unless duly justified
- Recommended Open Science practices – **no impact on score** if not addressed but score will be increased if sufficiently addressed
- Open Science practices listed in the template for proposals (section Excellence > Methodology) but is a non-exhaustive list

de San Román (2021). Open Science in Horizon Europe. Train-the-trainer workshop. Zenodo. CC-BY 4.0 https://doi.org/10.5281/zenodo.5549524

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

Pre-registration

- Quantitative evaluation of research outputs has pushed towards less responsible research practices and the replication crisis (e.g. data dredging/p-hacking, cherry picking, HARKing [Hypothesising after the results are known])
- Pre-registration = “practice of publishing the plan for a study, including research questions/hypotheses, research design, data analysis before the data has been collected or examined” (FORRT)
- Some research domains have standard procedures in place; e.g. pre-registration of clinical trials, check ECRIN: https://ecrin.org/

https://www.cos.io/initiatives/prereg

Nosek et al. (2018). The preregistration revolution.

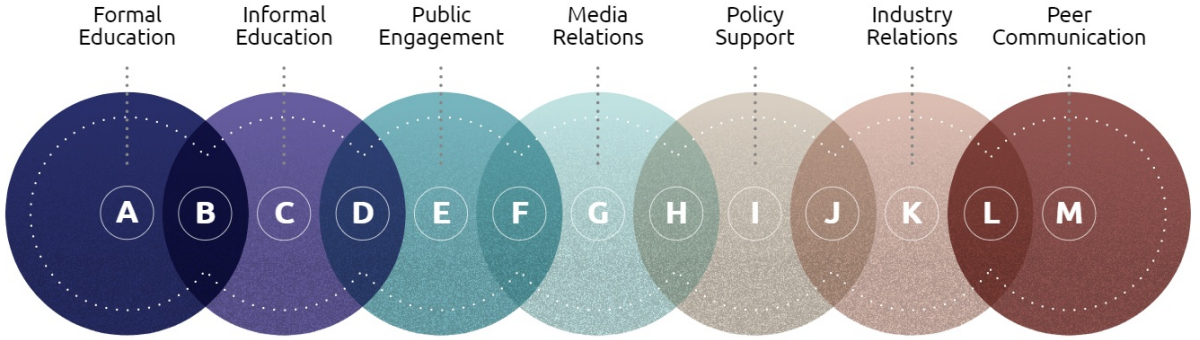
https://doi.org/10.1073/pnas.1708274114

Pre-prints

- Traditional scholarly publishing is usually time-consuming and slow
- Preprints allow authors to share their results ahead of peer-reviewing on preprint servers
- Faster dissemination and broader access to research outputs, opportunities for early feedback
- Visible outputs for early-career researchers, can increase employability

Public engagement

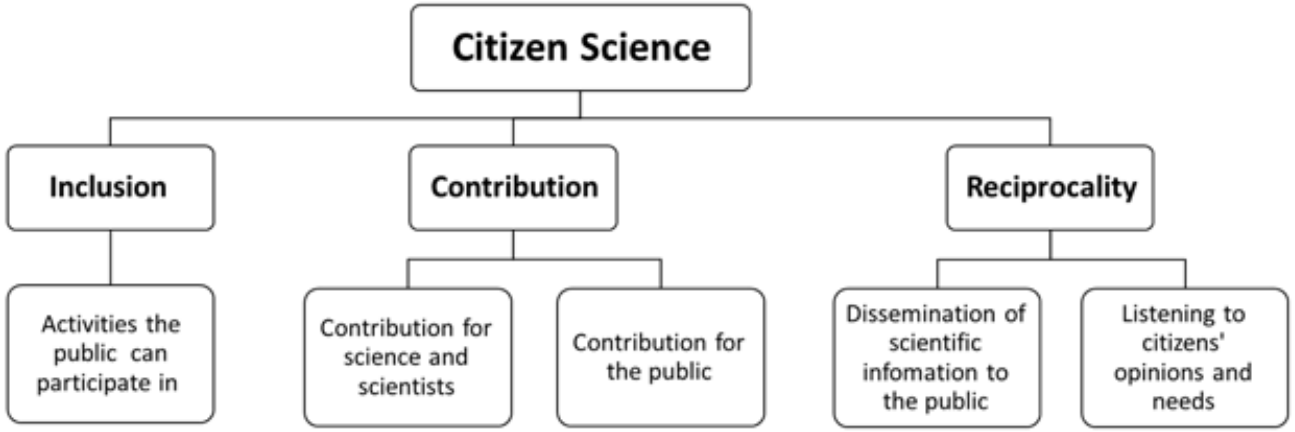
- Open and inclusive research and innovation includes society that can be listened to, awarded relevant input and influence during all stages of the research process (RRI Tools) – public engagement contributes to the democratisation of science
- Increases scientific literacy of the public, improves societal relevance of science, increases the support and uptake of research
- E.g. European Researchers' Night, Science is Wonderful, public talks, talks in schools or cultural centres, popular science books, social media, documentaries, TV shows, school activities, art/science projects



Pompea & Russo (2020). The role of astronomers in the astronomy education ecosystem. https://doi.org/10.48550/arXiv.2011.11350

Citizen Science

- Projects that actively involve the general public, in any of the stages of research, acting as collaborators, contributors or project leaders (FORRT)
- Increases scientific literacy of the public, empowers citizens with scientific approaches, improves societal relevance of science, increases the support and uptake of research, explores new pathways for participatory governance
- European Citizen Science Association, EU Citizen Science platform
- E.g. Zooniverse, School Network Alerts Citizens analysing seismograms, in video games (e.g. Borderlands 3)… and many more



Golumbic et al. (2017). CC-BY 4.0.

Final tips

Overall tips

- Design an **Open Science strategy** for your project.
- Include specific **provisions in the Consortium Agreement** about where publications and data will be deposited and who is responsible for doing this. Who will make sure that all outputs have been deposited in the appropriate repositories?
- Implement your Open Science strategy, **report at reviews and provide updates**.
- **Keep track of issues**, discuss the solutions.

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THANKS

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