

Horizon Europe Open Science requirements in practice

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Horizon Europe reference documents

Program Guide of Horizon Europe

Annotated Model Grant Agreement (AGA)

ERC Managing your project > Open Science

MSCA Work Programme

EC Participant Portal – 'Continuous reporting' guide

Q&A from previous webinars

OpenAIRE guides

- ['A Quick Guide to Horizon Europe Open Access Requirements'](#)
- ['A Quick Guide to Horizon Europe Research Data Requirements'](#)



Next webinar
Tuesday 19
March 2024 at
15:00 CET

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

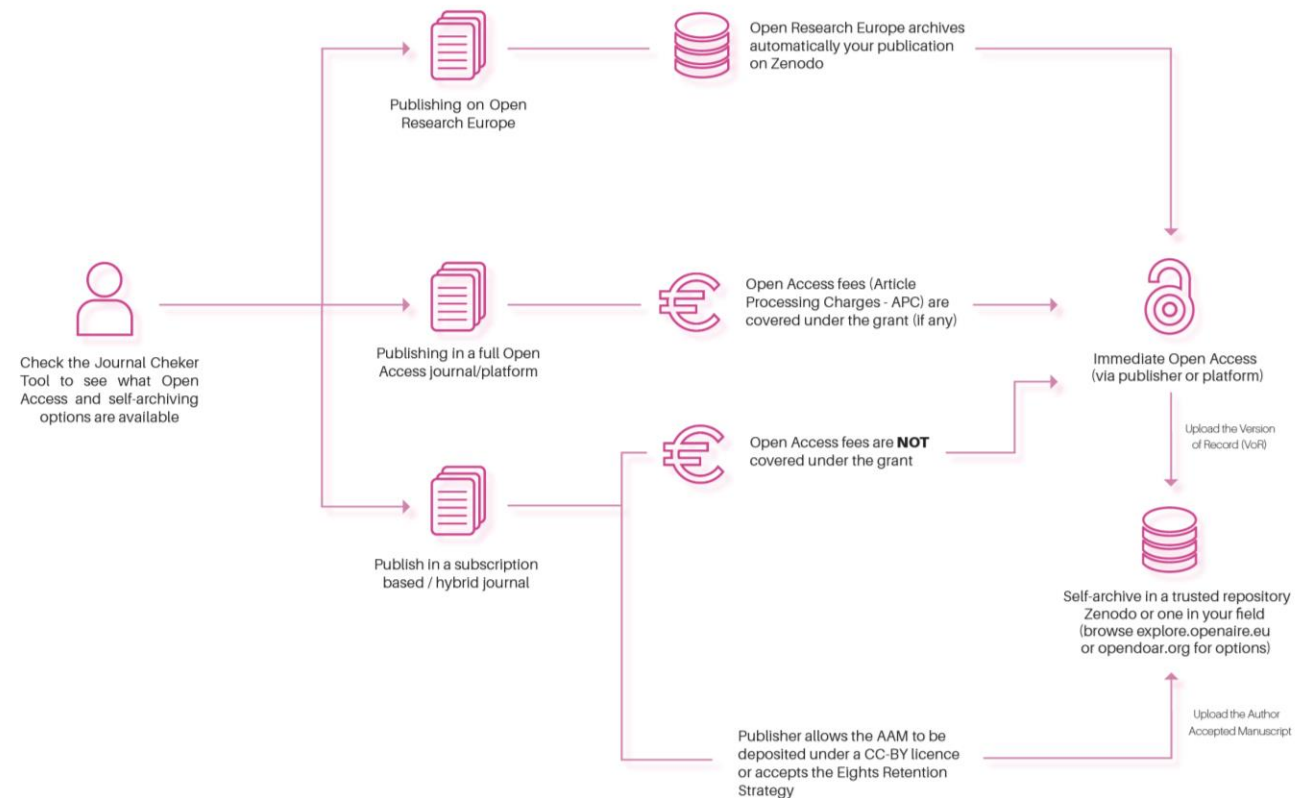
Digital /physical
access of results to
validate the
conclusions

Requirements

- Peer-reviewed manuscript (AAM or VoR) in a **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

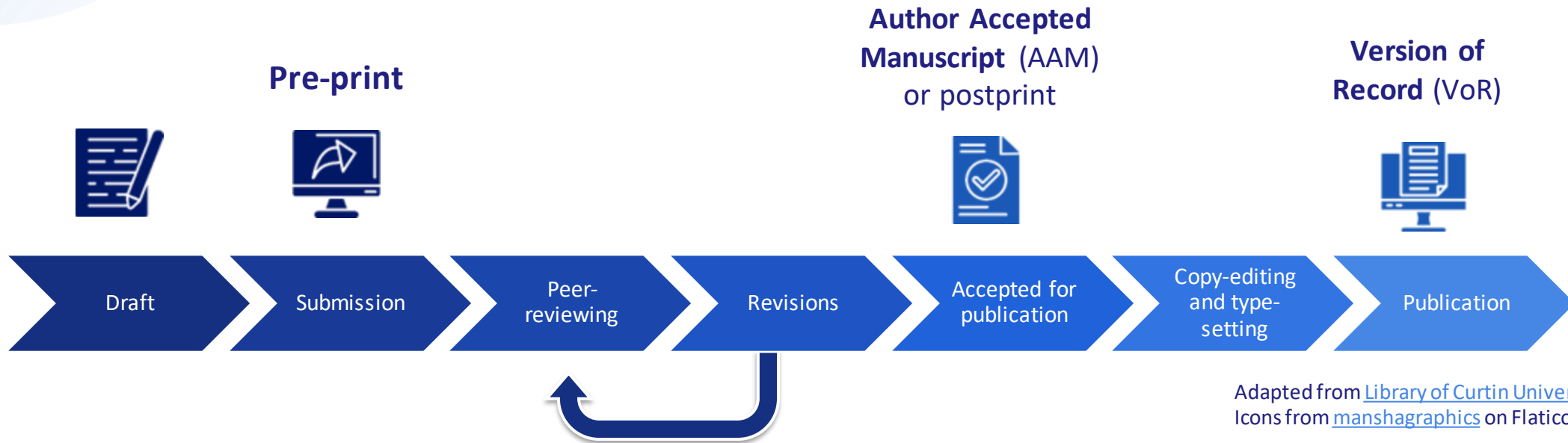
Specificities

- 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 allowed for long-text formats (e.g. monographs; a chapter in an edited book is not eligible)



Requirements for publications

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



Self-archiving

it is about where you
make it available in OA,
NOT where you publish

Minimum for Open Access = **SELF-ARCHIVING**

Check the journal's eligibility

English Français

JOURNAL CHECKER TOOL

Which publishing options are supported by your funder's OA policy?

JOURNAL MY FUNDER MY INSTITUTION

By ISSN or title + European Comr + By ROR or nam =

No affiliation

Plan S
Making full & immediate
Open Access a reality

SEND US FEEDBACK

<https://journalcheckertool.org/>

Rights Retention Strategy

“For the purpose of Open Access, the author has applied a CC BY public copyright licence to any Author Accepted Manuscript version arising from this submission.”

- To assert ownership, the author – as the intellectual creator and original copyright holder – applies a CC BY licence to the AAM
- Delivering publication services does not entitle publishers to ownership of the AAM, which remains the intellectual property of the author. Publication services should be paid for, but not with ownership of the AAM (from cOAlition S)

<https://www.coalition-s.org/rights-retention-strategy/>

~~Self~~-archiving

Minimum for Open Access = **SELF-ARCHIVING**



Open Research Europe

If you publish in Open Research Europe, you do not need to self-archive. Your manuscript will be automatically archived on a repository (Zenodo) once it successfully passes peer-review

Requirements for research data

Requirements

- 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
- Data closed if necessary, but **metadata must be FAIR and under CCO** (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



A few definitions

Trusted repositories

- Certified repositories (e.g. CoreTrustSeal, nesto Seal DIN31644, ISO16363)
- Disciplinary and domain repositories commonly used and **endorsed by the international research communities**
- General-purpose (e.g. **Zenodo**) or institutional repositories that present the essential characteristics of trusted repositories:
 - services, mechanisms and provisions in place to secure the accuracy, integrity, authenticity and access of contents
 - use of PIDs
 - machine-actionable, standardised and detailed metadata (including provenance and licencing)

For your publications:

OpenDOAR

<https://sherpa.ac.uk/opendoar/>

For your research data:

re3data.org
REGISTRY OF RESEARCH DATA REPOSITORIES

For everything:



<https://zenodo.org/>

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**



Data Management Plan

A formal ‘living’ document

- Formal 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 the researcher has taken time to reflect on what to do, that consideration has been given and the approach seems reasonable
- And that your data is “As open as possible, as closed as necessary” (FAIR principles)



Venkataraman, S. (2018, November). RDM, Open Research and DMP presentations and associated files. Zenodo, CC-BY 4.0 <http://doi.org/10.5281/zenodo.1489929>

FAIR principles

Findable

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

Interoperable

- Open and/or standardised file formats



Accessible

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

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 Availability Statement

- All articles must include a Data Availability statement, even where there is no data associated with the article
- Should be added to the end of the article prior to submission
- The Data Availability Statement should not refer readers or reviewers to contact an author to obtain the data (i.e. not FAIR data – Accessibility issue)
- You can also mention the DMPs if it is published on Zenodo or on another repository



Requirements for specific cases

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)



Some useful tools

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/>

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

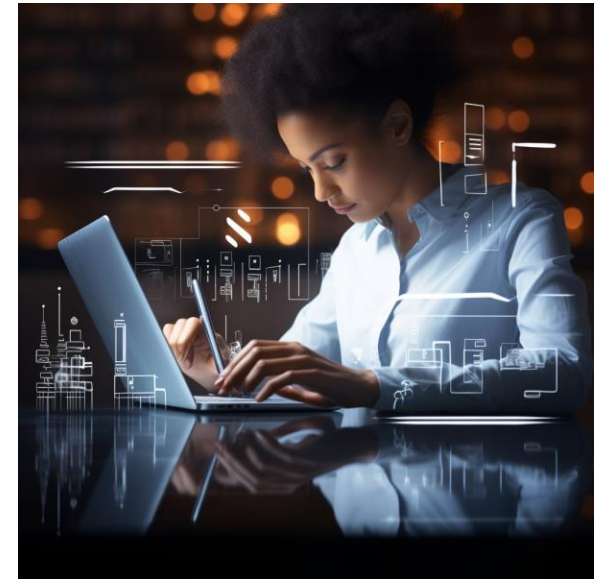
Terrovitis, Manolis (2023) OpenAIRE webinar - Amnesia: High-accuracy Data Anonymization. CC-BY 4.0 [10.5281/zenodo.7636541](https://doi.org/10.5281/zenodo.7636541)

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.
- 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.



Papadopoulou, Elli (2022) ARGOS - Unlock new potentials in writing DMPs. CC-BY 4.0 [10.5281/zenodo.6703324](https://zenodo.org/record/6703324)

<https://argos.openaire.eu/>

ARGOS – write your DMP



Argos

Community Calls

Are you a researcher or administrator of Argos? Got questions on how to write your Data Management Plan (DMP) or how to create your Template and connect DMPs with other data services and outputs? Join us and learn more!



OpenAIRE is running a series of **community calls for Argos** to support all researchers in meeting their **Horizon Europe requirements** by creating **FAIR (Findable, Accessible, Interoperable, Reusable) DMPs**. Similarly, it supports **all research performing and funding organisations** to orchestrate their data services around Argos and **connect data workflows** contributing to **interconnected Research Data Management ecosystems**.

These calls offer the opportunity to discover Argos novelties and learn how to benefit from them in your practice, share feedback and discuss the future of DMPs as FAIR and machine actionable outputs, i.e. as complete outputs that bring validated information, qualified references and automations to the table to assist the processes of collecting, documenting and publishing your data.

The **Argos Community Calls** will run every last Wednesday of the month at **14.00 CEST**, starting from June 29th!

<https://www.openaire.eu/argos-community-calls>

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)



Alea López de San Román, Open Science in Horizon Europe, CC-BY 4.0
<https://doi.org/10.5281/zenodo.4681073>

EC Participant Portal – Continuous reporting

ndevugen (EXTERNAL) ?

Project Continuous Report

240153 (240153 RIZOSKO ..) HORIZON-..

Project Summary ✓
Researchers involved in the project ✓
Deliverables ⓘ
Milestones ⓘ
Critical Risks ✓
Publications ⓘ
Results ✓
Disseminat... activities ✓
Standards ✓
Patents (IPR) ✓
Communic... Activities ✓
Datasets ✓
Beneficiaries Feedback ✓
Impact ✓
Other Results ✓

Publications SAVE

This project does not currently have any scientific publications

Suggested publications from OpenAIRE (10 pending publications and 0 discarded publications)

	Type	Title	Authors	Title of the Journal or equivalent	Month and Year of publication	PID (Publisher version of record)	PID of the deposited publication	Actions
1	Chapter in a Book	Pebbling mountain ranges and its applic	Kurt Mehlhorn	Automata, Languages and Programming	25-02-2012	10.1007/3-540-10003-2_89		✘
2	Chapter in a Book	Algorithms on Graphs	Kurt Mehlhorn		02-11-2012	10.1007/978-81-322-0750-4_5	10.1007/978-3-642-69897-2_1	✘
3	Chapter in a Book	Algorithms for Equilibrium Prices in Line	Kurt Mehlhorn	Algorithms and Computation ISBN: 9783	17-01-2014	10.1007/978-3-319-04657-0_1		✘
4	Chapter in a Book	Algorithmic Paradigms	Kurt Mehlhorn	Data Structures and Algorithms 1 ISBN: €	28-07-2012	10.1007/978-3-642-69672-5_4	10.1007/978-3-642-69897-2_4	✘
5	Chapter in a Book	NP-Completeness	Kurt Mehlhorn	Data Structures and Algorithms 2 ISBN: €	28-07-2012	10.1007/978-3-642-69897-2_3		✘
6	Chapter in a Book	The Engineering of some Bipartite Matc	Kurt Mehlhorn	Algorithms and Computation ISBN: 9783	09-08-2007	10.1007/3-540-46632-0_1	10.1007/3-540-46691-6_36	✘
7	Chapter in a Book	The Reliable Algorithmic Software Chall	Kurt Mehlhorn	Experimental and Efficient Algorithms I!	30-11-2007	10.1007/3-540-44867-5_18		✘
8	Article in Journal	Bracket-languages are recognizable in li	Kurt Mehlhorn		26-07-2002	10.1016/0020-0190(76)90013-2	10.22028/d291-26081	✘
9	Book/Monograph	Datenstrukturen und effiziente Algorith	Kurt Mehlhorn	Crossref	04-03-2012	10.1007/978-3-322-86786-5		✘
10	Chapter in a Book	Sets	Kurt Mehlhorn	Data Structures and Algorithms 1 ISBN: €	28-07-2012	10.1007/978-3-642-69672-5_3		✘

Project publications (0 publications)

Type	Title	Authors	Title of the Journal or equivalent	Number	Peer-reviewed	Was the publication available in open access through the repository at the time of publication	PID (Publisher version of record)	PID of deposited publication	Actions

i * "open access" means the practice of providing online access to research outputs resulting from actions funded under the Programme, in particular scientific publications and research data, free of charge to the end-user

Publications

Grant Management | Project Continuous Report

231799 (231799 AMBROWV ...) | HORIZON-...

Call: HORIZON-ERC-2021-VICECHAIRS-IBA
Topic: HORIZON-ERC-2021-VICECHAIRS-IBA

Project Summary	Deliverables	Milestones	Critical Risks	Publications	Dissemination activities	Patents (IPR)	Communications Activities	Datasets	Researchers involved in the project	Financial support to 3rd parties	Beneficiaries Feedback	Impact	Results	Other Results
✓	i	i	✓	i	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Publications

This project does not currently have any scientific publications
Suggested publications from OpenAIRE (7 pending publications)
 Include previously discarded publications

Type	Title	Authors	Title of the Journal or equivalent	Month and Year of publication	PID (Publisher version of record)	PID of the deposited publication	Actions
1	Chapter in a Book	Febbling mountain ranges and its applic	Kurt Mehlhorn	Automata, Languages and Programming	25-02-2012	10.1007/3-540-10003-2_89	✖
2	Chapter in a Book	Algorithmic Paradigms	Kurt Mehlhorn	Data Structures and Algorithms 1 ISBN:	28-07-2012	10.1007/978-3-642-69672-5_4	✖
3	Chapter in a Book	The Engineering of some Bipartite Matc	Kurt Mehlhorn	Algorithms and Computation ISBN: 9783	09-08-2007	10.1007/3-540-46632-0_1	✖
4	Chapter in a Book	The Reliable Algorithmic Software Chall	Kurt Mehlhorn	Experimental and Efficient Algorithms I	30-11-2007	10.1007/3-540-44867-5_18	✖
5	Article in Journal	Bracket-languages are recognizable in l	Kurt Mehlhorn		26-07-2002	10.1016/0020-0190(76)90013-2	✖
6	Book/Monograph	Datenstrukturen und effiziente Algorith	Kurt Mehlhorn	Crossref	04-03-2012	10.1007/978-3-322-86786-5	✖
7	Chapter in a Book	Sets	Kurt Mehlhorn	Data Structures and Algorithms 1 ISBN:	28-07-2012	10.1007/978-3-642-69672-5_3	✖

Project publications (2 publications)
Show/Hide Filters | Clear Filters

Type	Title	Authors	Title of the Journal or equivalent	Number	Peer-reviewed	Was the publication available in open access through the repository at the time of publication	PID (Publisher version of record)	PID of deposited publication	Actions
1	Chapters in books	Algorithms for Equilibrium Pri	Kurt Mehlhorn	Algorithms and Computation I	False	False			✖
2	Chapters in books	NP-Completeness	Kurt Mehlhorn	Data Structures and Algorithm	False	False			✖

* "open access" means the practice of providing online access to research outputs resulting from actions funded under the Programme, in particular scientific publications and research data, free of charge to the end-user

Download EXCEL | Add Publication | Validate

View Open AIRE Publication

Type: Chapter in a Book
Title: Algorithms for Equilibrium Prices in Linear Mark
Authors: Kurt Mehlhorn
Title of the Journal or equivalent: Algorithms and Computation ISBN: 97833190465
Month and Year of publication: 17-01-2014
PID (Publisher version of record): 10.1007/978-3-319-04657-0_1
PID of the deposited publication:
Number:
Web Source: https://doi.org/10.1007/978-3-319-04657-0_1
Open AIRE ID: doi:10.1007/978-3-319-04657-0_1
Journal Number:

Import | Discard | Close

Edit Publication

Please check or correct the information about the publication and fill-in the additional information

Type of PID (repository):
PID of deposited publication:
PID (publisher version of record):
Type of publication:
Link to publication:
Title of the scientific publication:
Authors:
Title of the Journal or equivalent:
Number:
ISSN or eISSN:
Publisher:
Month of publication:
Year of publication:
Was the publication available in open access through the repository at the time of publication:
Peer-reviewed:
PID (Publisher version of record):
Book title:
Did you charge OA publishing fees to the project?:
Type of publishing venue:
Article processing costs that will be charged to the project:

DOI:
10.1007/978-3-319-04657-0_1
Chapters in books
https://doi.org/10.1007/978-3-319-04657-0_1
Algorithms for Equilibrium Prices in Linear Market Models
Kurt Mehlhorn
Algorithms and Computation ISBN: 9783319046563
January
2014
Yes No
Yes No
Yes No
Yes No
OK | Cancel

<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

Edit Publication

Please check or correct the information about the publication and fill-in the additional information

Type of PID (repository)

PID of deposited publication

PID (publisher version of record) *

Type of publication *

Link to publication ⓘ

Title of the scientific publication ⓘ ⓘ

Authors ⓘ ⓘ

Title of the Journal or equivalent

Number

ISSN or eISSN

Publisher

Month of publication

Year of publication

Was the publication available in open access through the repository at the time of publication *

Peer-reviewed *

PID (Publisher version of record)

Book title

Did you charge OA publishing fees to the project? *

Type of publishing venue

Article processing costs that will be charged to the project

DOI

10.1007/978-3-319-04657-0_1

Chapters in books

https://doi.org/10.1007/978-3-319-04657-0_1

Algorithms for Equilibrium Prices in Linear Market Models

Kurt Mehlhorn

Algorithms and Computation ISBN: 9783319046563

January

2014

Yes No

Yes No

Yes No

OK

Cancel

Datasets

Project Continuous Report

Grant Management: 240153 (240153 RIZOSKO ...) HORIZON-...

Call: HORIZON-ERC-2021-VICECHAIRS-IBA
Topic: HORIZON-ERC-2021-VICECHAIRS-IBA

Project Summary, Researchers involved in the project, Deliverables, Milestones, Critical Risks, Publications, Results, Dissemination activities, Standards, Patents (IPR), Communication Activities, **Datasets**, Beneficiaries feedback, Impact, Other Results

This project does not currently have any dataset

Suggested Datasets from OpenAIRE (10 pending datasets and 0 discarded datasets)

	PID	Type of PID	Brief Description of Dataset	URL to Repository	Actions
1	10.17632/hh9f7txd38 10.17632/hh9f7txd38.1	DOI	ToF-ERDA data with partial GIC energy signals from QMB covers 1,2,3,5 (ILW-1-2).	↗	✖
2	10.11583/dtu.14188487.v1 10.11583/dtu.14188487	DOI	Data for the figures of the article "Trapped upper hybrid waves as eigenmodes of	↗	✖
3	10.17632/8f3x85vovxt.1 10.17632/8f3x85vovxt	DOI	ToF-ERDA data from QMB covers 1, 2, 3, 5 (ILW-3). Data provided as list-files (.lst	↗	✖
4	10.17632/frmox7o5k.1 10.17632/frmox7o5k	DOI	This dataset contains code examples for different symplectic integrators with no	↗	✖
5	10.17632/mfghvovvpm 10.17632/mfghvovvpm.1	DOI	ToF-ERDA data from spatial blocks 4, 5, 6 (ILW-1), side facing 90 degrees from plz	↗	✖
6	10.5281/zenodo.1410280 10.5281/zenodo.1410281	DOI	Source code, inputs, simulation outputs, analysis scripts and figures used in the	↗	✖
7	10.5281/zenodo.3938978	DOI	Supplementary material associated to publication "3D transient CFD sim	↗	✖
8	10.17632/3dovcvfs7.1 10.17632/hm63ocd4d7.1	DOI	Raw ToF-ERDA data from all samples, both as list files (.lst) and as data files (.r	↗	✖
9	10.6084/m9.fishare.6391795 10.6084/m9.fishare.6391795.v1	DOI	This dataset contains artifacts relating to the results presented in the Euro-Par 2	↗	✖
10	10.5281/zenodo.3937295 10.5281/zenodo.3937294	DOI	Excel file reporting the number of involved FW channels following a break in the	↗	✖

Project Datasets (0 datasets)

Export to Excel, Add Dataset, Validate

Datasets

This project does not currently have any dataset

Import Dataset

Please check or correct the information about the dataset and fill-in the additional information when possible

Type of PID * DOI
Description of Dataset * ToF-ERDA data with partial GIC €
PID 10.17632/hh9f7txd38 [↗](#)
PID of the publication 10.17632/hh9f7txd38.1 [↗](#)
Does the data underpin a publication * Yes No
PID of the publication
Publication PID
URL to repository http://dx.doi.org/10.176 [↗](#)
Is this dataset available in open access? * Yes No
If data is needed to validate the conclusions of a scientific publication, and no open access has been given to the data, briefly describe the provisions whereby you intend to make it available
Please elaborate fill in description
Is the metadata of deposited data accessible through open access? * Yes No
* mandatory fields

Import

Discard

Close

<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.

Project Continuous Report

240153 (240153) R20200... HORIZON...
Call: HORIZON-ERC-2021-VICECHAIRS-IBA
Topic: HORIZON-ERC-2021-VICECHAIRS-IBA

Project Summary, Researchers involved in the project, Deliverables, Milestones, Critical Risks, Publications, **Results**, Nonprofit activities, Standards, Patents (PR), Communic. Activities, Datasets, Beneficiaries Feedback, Impact, Other Results

There is no result for this project yet

Please provide details about project results. Please focus on the content of the results, for example discoveries and theories, products, services, methods etc. Publications, intellectual property rights, datasets, software, algorithms, protocols etc. will be linked to these results later in dedicated sections. It will also be possible to add these to the project as a whole.

Examples:

- Example: The project developed a new medical device, which is described in two publications and later patented. Instructions: List the medical device here (as "PROD: Product") and link publications to this product in dedicated sections. When you have information about the patent application, link it in a dedicated section.
- Example: The project developed a new scientific theory which is described in several publications. Instructions: List the name and potential of the theory here (as "SCI: Scientific discovery, model, theory") and link publications to this model later in dedicated sections.
- Example: The project develops a high potential industrial process and is currently at the stage of prototyping. Instructions: List the industrial process here (as "PROD: Industrial process") and indicate the prototyping stage under "Steps undertaken towards exploitation". If there is a registered prototype, link the registered prototype in a dedicated section.
- Example: The project mainly focused on activities such as conferences, staff exchanges, or on investments in infrastructures. Instructions: List these as results and their potential here.

Name	Result type	Has results (SER) (does result have a high potential?)	Description of high potential	Audience or target group	Steps undertaken towards exploitation	Market maturity (state of the market targeted by this result)	Actions
a	LEARN: Learning and training (learning n	High scientific potential	ssssss	Researchers	Prototyping in laboratory environment	Not yet existing and not clear if market	X
test2	SER: Service (new or improved)	High societal potential (other than clima High policy or regulatory potential)	Insert description	Citizens	Feasibility study Business plan	Emerging: growing demand, scarce suppl	X

Project Continuous Report

240153 (240153) R20200... HORIZON...
Call: HORIZON-ERC-2021-VICECHAIRS-IBA
Topic: HORIZON-ERC-2021-VICECHAIRS-IBA

Project Summary, Researchers involved in the project, Deliverables, Milestones, Critical Risks, Publications, Results, Nonprofit activities, Standards, Patents (PR), Communic. Activities, Datasets, Beneficiaries Feedback, Impact, **Other Results**

This project does not currently have any other results

Project Other Results (2 results)

Type of result	Description	If the result is needed to validate the conclusions of a publication, describe the provisions whereby you intend to make your output available, either in digital or physical form?	Type of PID (if available)	PID (if available)	URL to repository landing page for the result service/webpage hosting the result (if available)	Actions
Software	test 2	Open access	DOI		Insert URL, if applicable	X
Protocol	test1	It doesn't underpin publication	Other		URL link	X

* 'open access' means the practice of providing online access to research outputs resulting from actions funded under the Programme, in particular scientific publications and research data, free of charge to the end-user

Add Other Result

Type of result:

Description:

If the result is needed to validate the conclusions of a publication, briefly describe the provisions whereby you intend to make your output available, either in digital or physical form

Type of Persistent Identifier, PID:

Insert PID reference (if available):

Insert PID reference of the publication:

URL to repository landing page for the result service/webpage hosting the result (if available):

What license is the result licensed under?:



Open Research Europe

The Open Access Publishing Platform of the European Commission

Victoria Tsoukala, PhD
European Commission, Directorate-General for Research &
Innovation, Unit 'Open Science'

OpenAIRE training
November 16, 2023

Open Research Europe (ORE)

- Peer-reviewed open access publishing platform (not a repository)
- Platform for Horizon 2020/Horizon Europe grantees (papers partially or funded funded)
 - **Optional** service, at **no cost to authors**, during and after end of their projects
 - **Automatic compliance** with Horizon Europe open access requirements
- Innovative publishing model initiated by a funder
 - **Post-publication open peer review**: first you publish; then review takes place
 - All articles and reviews in **open access under CC BY licenses**
 - **High scientific standards and policies**: Scientific Advisory Board; publisher policies and guidelines, including underlying data availability, analysis of method etc.
 - **Transparent** service: in editorial process, in research process
- Publishes in **all disciplines**
 - Gradually developing researcher-led **community gateways and collections** in specific fields
 - Close to 500 articles; 900 reviews
- **Indexed** in important indexers & national lists (including Scopus and PubMed)
- **Operated by F1000 Research Ltd**, subsequent to **public procurements**

ORE in line with policy and programme strategy

- **EC leads by example** in operationalising open science practices within scientific publishing in line with policy priorities
- Supports **Horizon Europe strategy and compliance** with contractual obligations
- Supports **institutional not-for-profit open access publishing** for the public good
- Supports **transparency and cost-efficiency** in publishing
- **Long-term commitment** by the Commission
- Discussions with national funders to **collectively support ORE as of 2026**

Open Research Europe in Action



Efficient

- Rigorous open peer review
- Rapid and transparent
- International scientific advisory board



Impactful

- Immediate open access
- Article-level metrics
- Open data for reproducibility and reuse



Stress-free

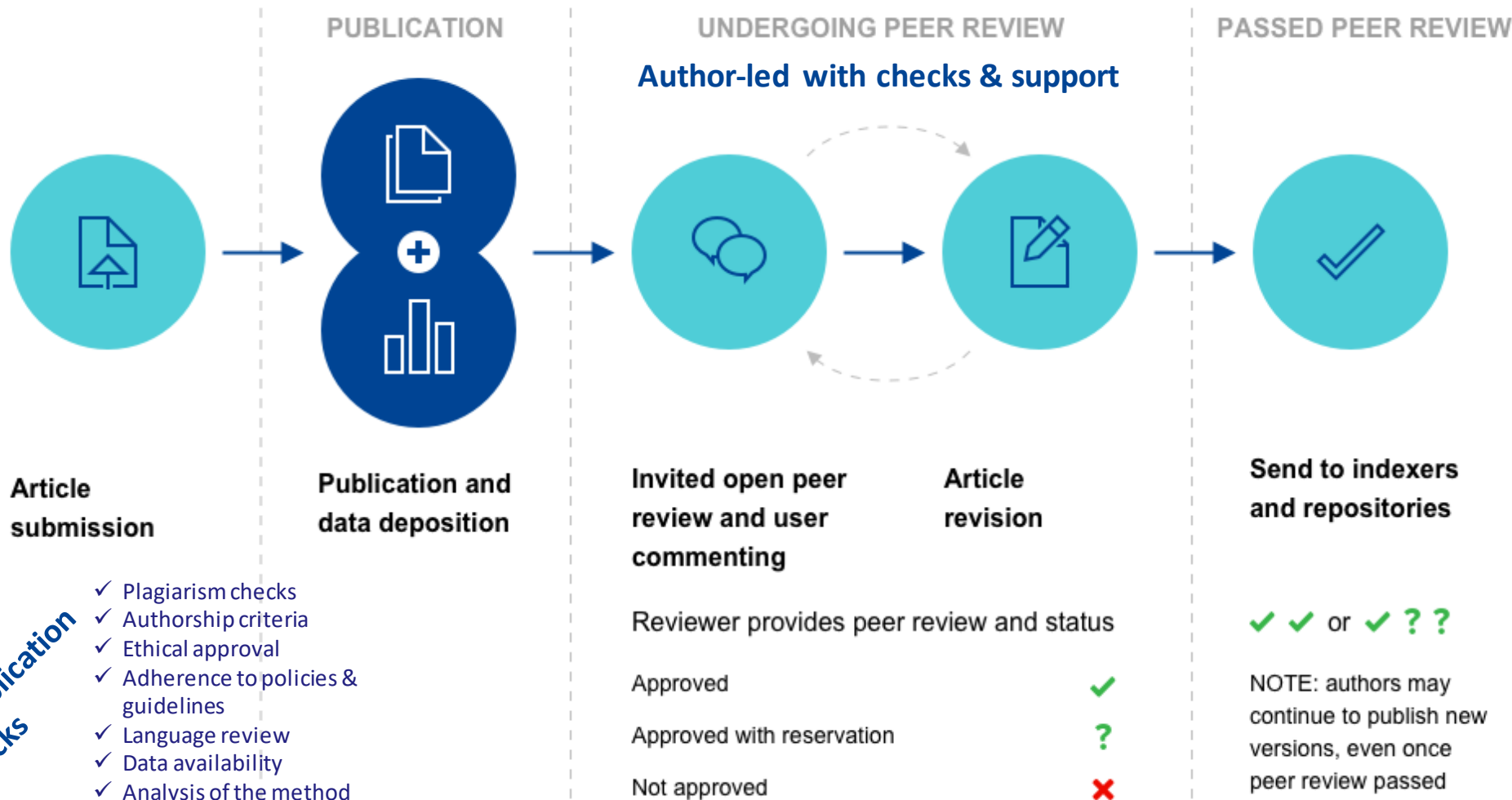
- Optional service*
- No administrative burden
- No author fees
- Automatic compliance with open access requirements

* Service available also after grant has ended

Open
Research
Europe



AN INNOVATIVE PUBLICATION MODEL



Prepublication checks

- ✓ Plagiarism checks
- ✓ Authorship criteria
- ✓ Ethical approval
- ✓ Adherence to policies & guidelines
- ✓ Language review
- ✓ Data availability
- ✓ Analysis of the method

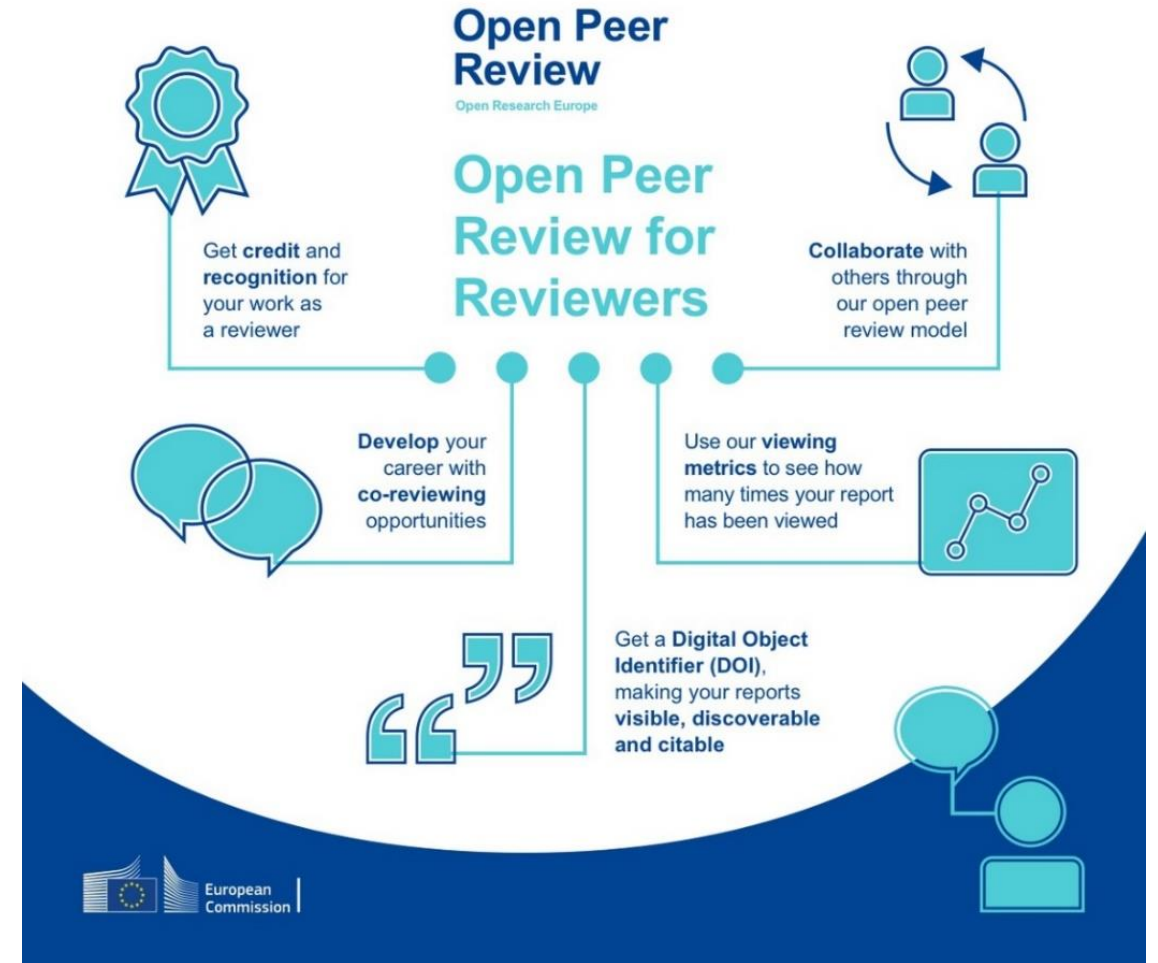
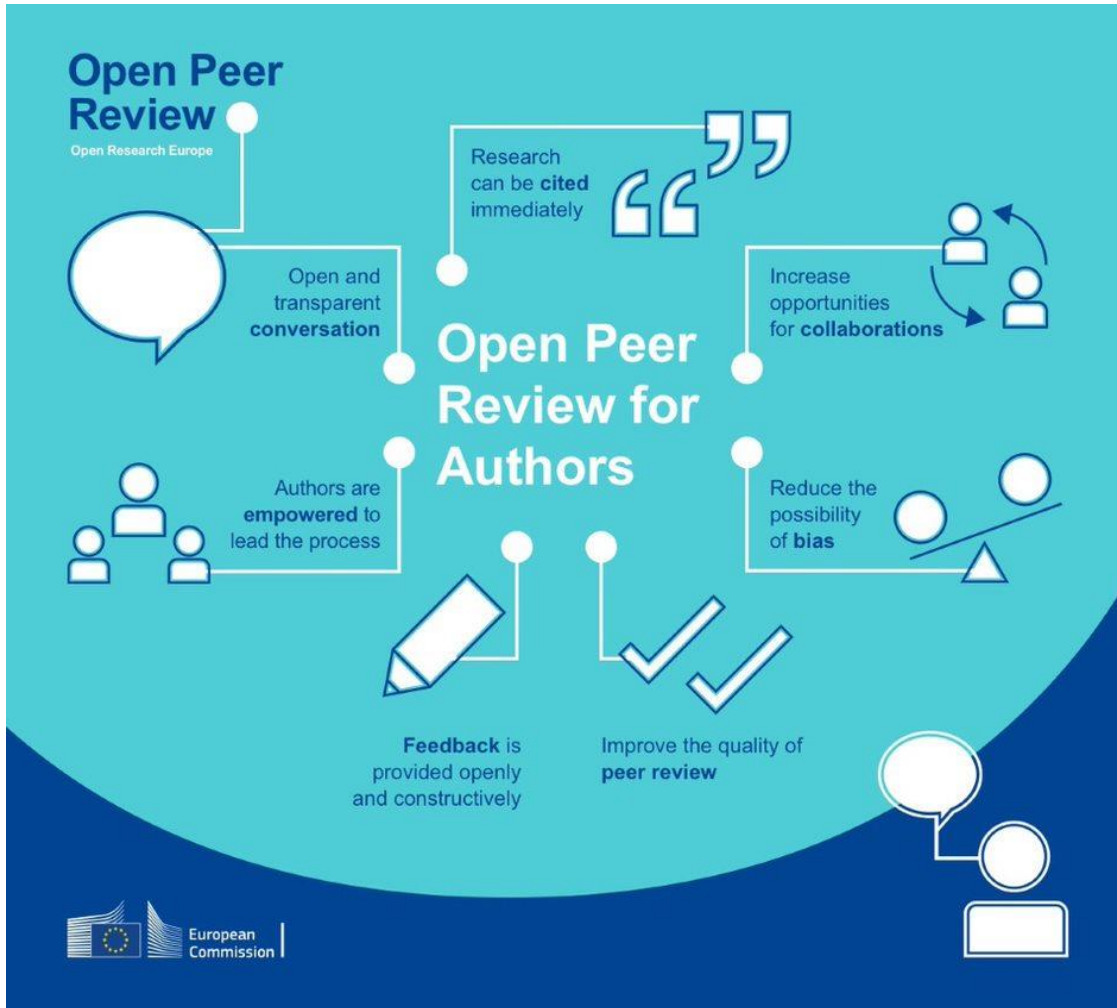
Reviewer provides peer review and status

- Approved ✓
- Approved with reservation ?
- Not approved ✗

✓ ✓ or ✓ ? ?

NOTE: authors may continue to publish new versions, even once peer review passed

Open peer review: a win-win situation



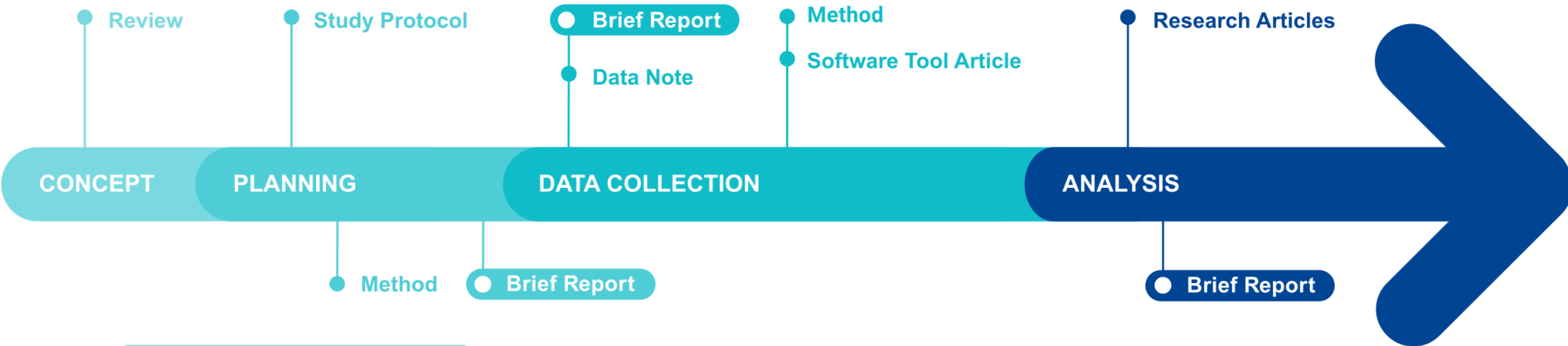
Open Research Europe

4 Steps to Open Data



SUPPORTING
REPRODUCIBILITY
& TRANSPARENCY
IN RESEARCH

Publishing throughout the research process



	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					•	•

Example of a publication

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DATA NOTE

REVISED **Pharmaceutical pollution: Prediction of environmental concentrations from national wholesales data [version 2; peer review: 2 approved, 1 approved with reservations]**

Samuel A. Welch , Kristine Olsen, Mohammad Nouri Sharikabad, Knut Erik Tollefsen, Merete Grung , S. Jannicke Moe

This article is included in [Earth and Environmental Sciences gateway](#)

This article is included in [Horizon 2020 gateway](#)

This article is included in [Marie-Sklodowska-Curie Actions \(MSCA\) gateway](#)

[Article](#) [Authors](#) [Metrics](#)

Abstract

The regulation and monitoring of pharmaceutical pollution in Europe lag behind that of more prominent groups. However, the repurposing of sales data to predict surface water environmental concentrations is a promising supplement to more commonly used market-based risk assessment and measurement approaches. The Norwegian Institute of Public Health (NIPH) has since the 1980s compiled the Drug Wholesale Statistics database - covering all sales of both human and veterinary pharmaceuticals to retailers, pharmacies, and healthcare providers. To date, most similar works have focused either on a small subset of Active Pharmaceutical Ingredients (APIs) or used only

Open Peer Review

Approval Status

	1	2	3
Version 2 (Revision) 15 Sep 22	 view		 view
Version 1 01 Jun 22	 view	 view	

- Gerd Maack** , German Environment Agency (UBA), Dessau-Roßlau, Germany
- Ad M. J. Ragas**, Radboud University, Nijmegen, The Netherlands
Caterina Zillien, Radboud University, Nijmegen, The Netherlands
- Rosa Maria Marce** , Universitat Rovira i Virgili, Tarragona, Spain

Comments on this article

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The peer review process


- Reviewers are suggested by article **authors**, with the **editorial team** ensuring they meet necessary criteria (incl. 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

Example of a peer review report


Reviewer Report 2 Views ©

? **Approved with reservations** i

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

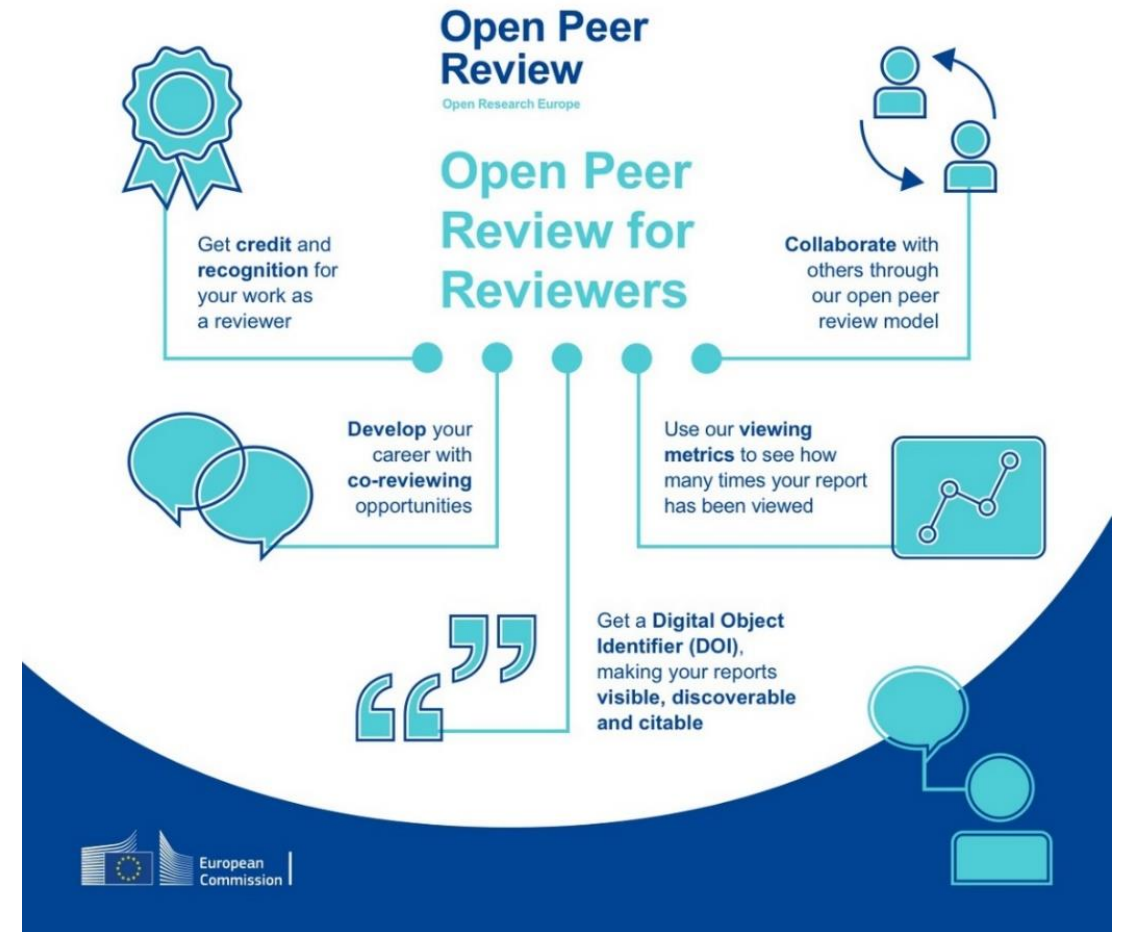
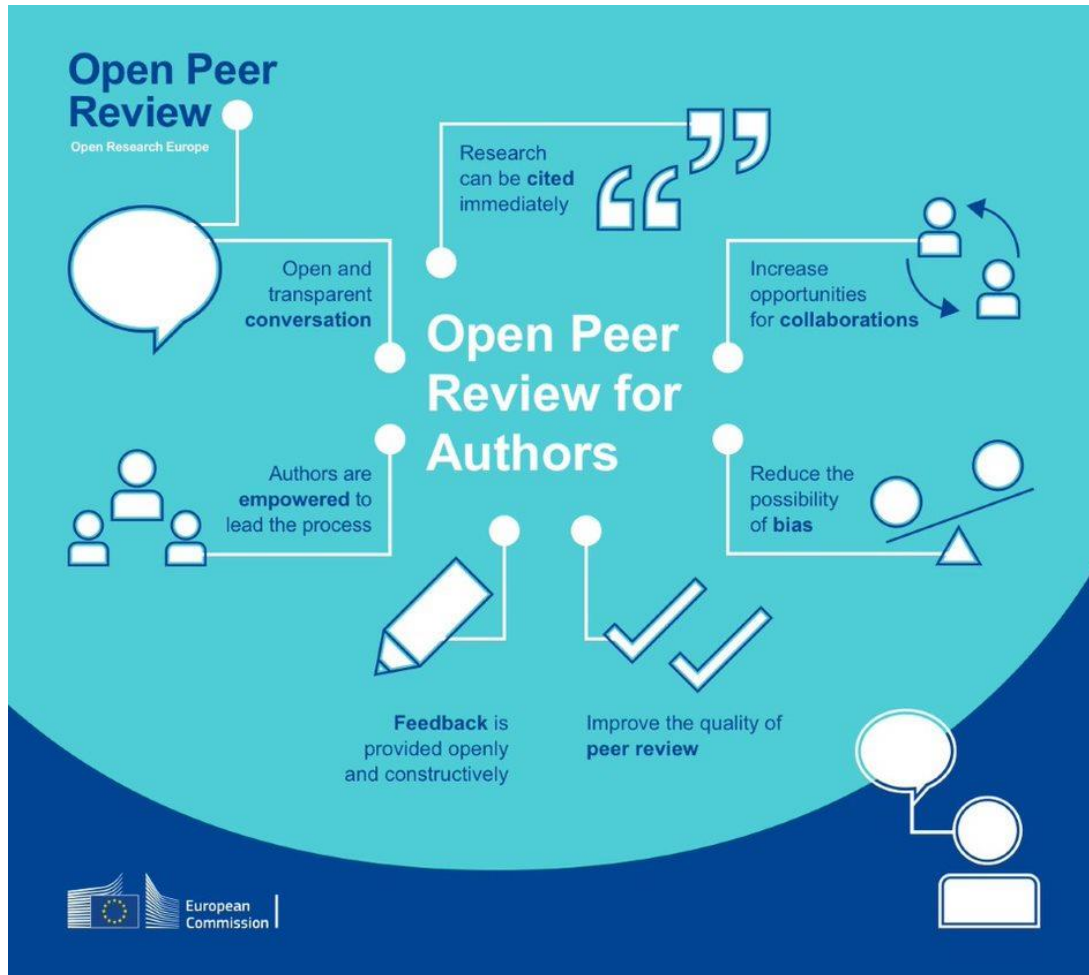
Sam Welch

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.**

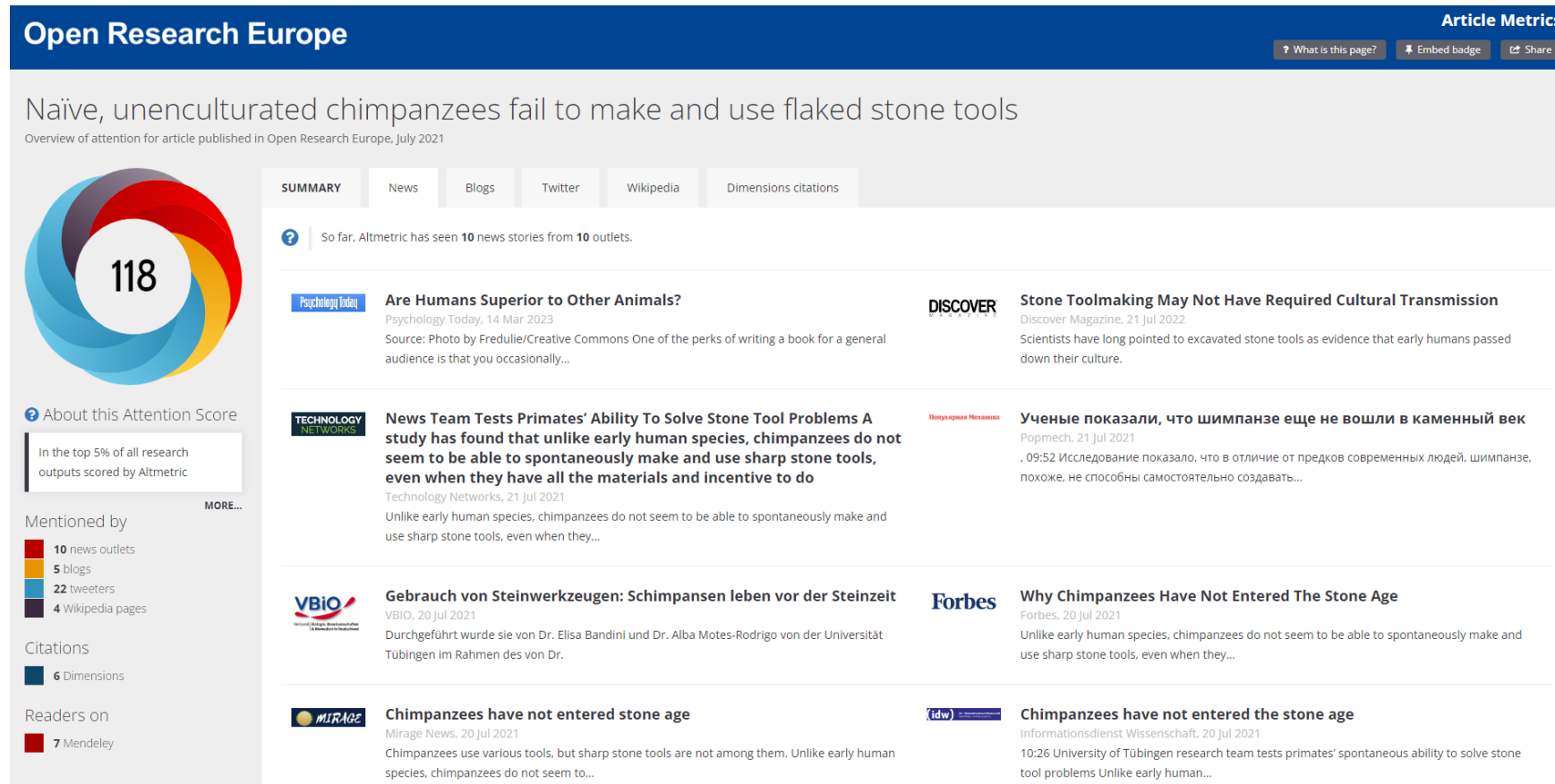
However, the text is quite difficult to read, as it misses an overall red line, especially for readers not involved in the project and those who did not read the project report. I've rewritten part of the abstract and introduction, and I hope our intentions – to calculate PECs from Norwegian drug sales,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

Open peer review: a win-win situation



Interest and influence: altmetric indicators



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<p>Horizon Europe</p> <p>Horizon Europe is the EU's current key funding programme for research and innovation. This Gateway hosts published articles on Open Research Europe that we funded by Horizon Europe.</p>	<p>Marie Skłodowska-Curie Actions (MSCA)</p> <p>The Marie Skłodowska-Curie actions (MSCA) provide grants for all stages of researchers' careers and encourage transnational, intersectoral and interdisciplinary mobility. This gateway hosts the articles stemming from MSCA funded projects.</p>		

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Community Gateways

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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 small alerts whenever there is new research published within the Community Gateways of interest.

<p>Agriculture, Land and Farm Management</p> <p>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.</p>	<p>Analytical Chemistry</p> <p>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 Ines El Haddad.</p>	<p>Animal and Dairy Science</p> <p>This multidisciplinary 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.</p>	<p>Arts</p> <p>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.</p>
<p>Astronomy, Astrophysics & Cosmology</p> <p>Astronomy, astrophysics & cosmology contribute to our knowledge of the Universe through observations, precision studies and theory development. This Community Gateway is led by Prof Jackson Said.</p>	<p>Cell, Molecular and Structural Biology</p> <p>Cell Biology studies the structure, function and behaviour of cells, considering them the fundamental units of life. Potential topics include but are not limited to: Cell Signalling, Cell Metabolism, Cell Polarity, Cell Cycle, Membrane-trafficking, non-membrane...</p>	<p>Chemical Engineering</p> <p>Chemical Engineering is a multidisciplinary branch of engineering research that combines natural and experimental sciences with life sciences, mathematics, and economics to design, develop, produce, transform, transport, operate and manage the industrial...</p>	<p>Civil Engineering</p> <p>Civil Engineering brings together advanced knowledge of the physical and natural sciences, mathematics, computational methods, and economics to facilitate the development of vital projects for the benefit of society. This Community Gateway is led by Dr...</p>

Gateway Advisor

Ruth Sargent Noyes
National Museum of Denmark, Denmark

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Collections

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

<p>Active Living as a Lifestyle</p> <p>Being habitually active is regarded as a healthy lifestyle, leading to healthy ageing and longevity. Ensuring all society members are able to lead an active lifestyle is paramount for reducing costs to health services. This collection is a dedicated area for research on activity prescription, promotion and monitoring, with a particular focus on inclusivity.</p>	<p>Adaptation to Climate Change</p> <p>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 Volz.</p>	<p>Additive Manufacturing</p> <p>Additive Manufacturing refers to technologies that produce three-dimensional objects one superimposed 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.</p>	<p>Advances in Optics</p> <p>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.</p>
<p>Advances in Photonics</p> <p>Photonics is the science of light waves, specifically relating to the generation, detection and manipulation of light. The field focuses on the creation and...</p>	<p>Agricultural Chemistry</p> <p>Chemistry is involved with agriculture in two core ways: it can be used to understand the underlying reactions that govern plant growth & behavior and it can...</p>	<p>Amines</p> <p>Amines are versatile organic compounds that form the basis of several naturally occurring & chemically synthesized products. This collection aims to bring...</p>	<p>Analytical Techniques</p> <p>Quantitative study & result validation is a common practice spanning across multiple disciplines in science and this can be achieved by using different...</p>

Collection Advisor

Toma Susi
University of Vienna, Austria

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Thank you



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Horizon Europe grant proposals

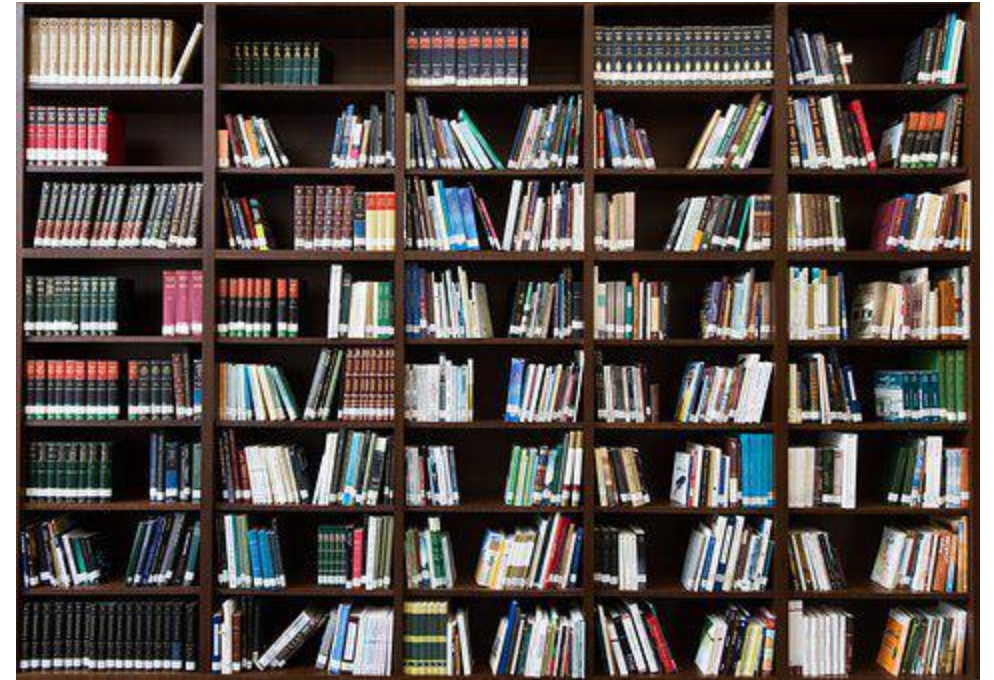
Jonathan England

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’

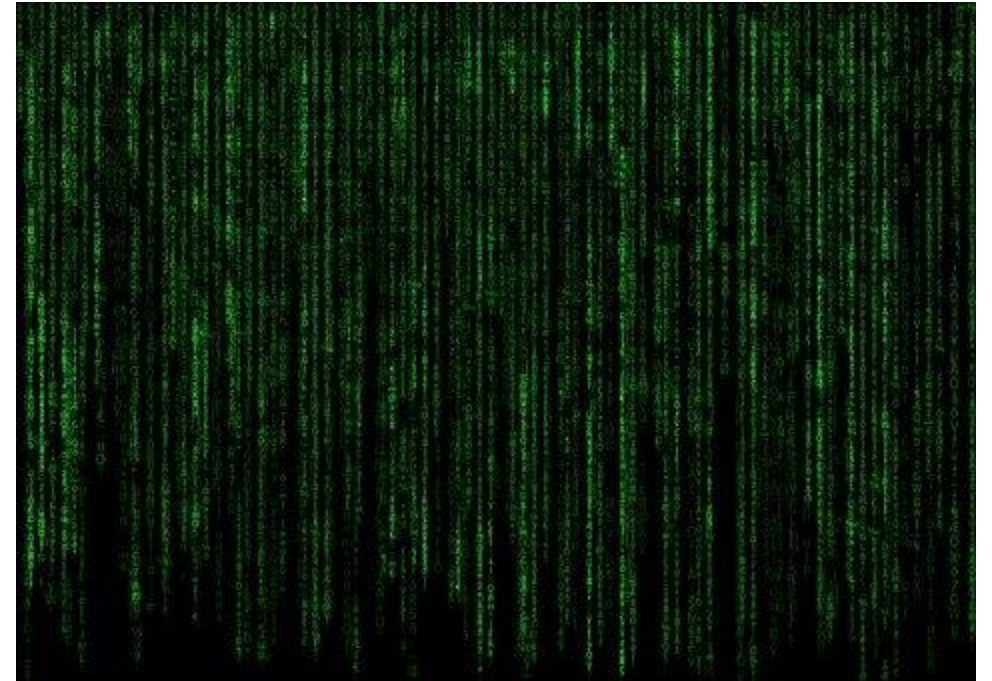
Publications

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



Data

- Your data listed should be FAIR, on a repository and the PID 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, PIDs, IPR, interoperability, licences, curation, responsibilities)
- Distinct WP 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 not eligible)



Writing tips

- Be as specific as possible
- Don't let the project officer dig for information
- 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](#)



European Research Council

Established by the European Commission

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)



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



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 reproducibility 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	<ul style="list-style-type: none"> Open access to publications Open access to data Open access to software, models, algorithms, workflows etc. 	<ul style="list-style-type: none"> 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



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>

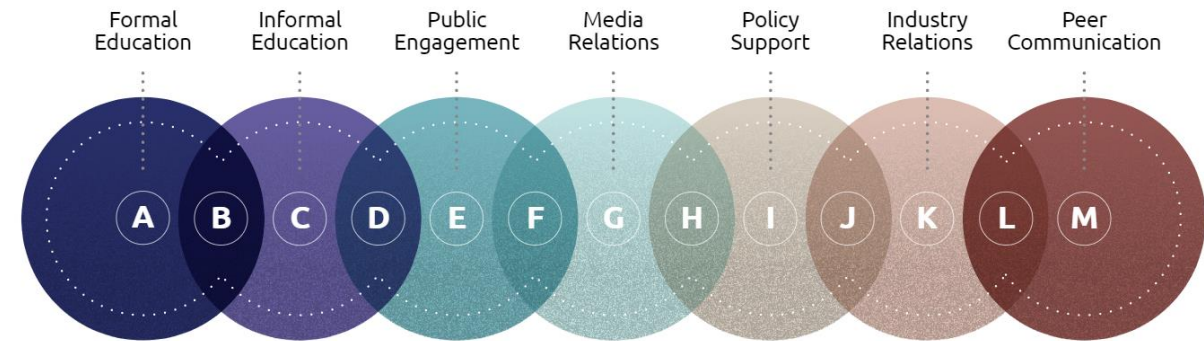
Pre-prints

- 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

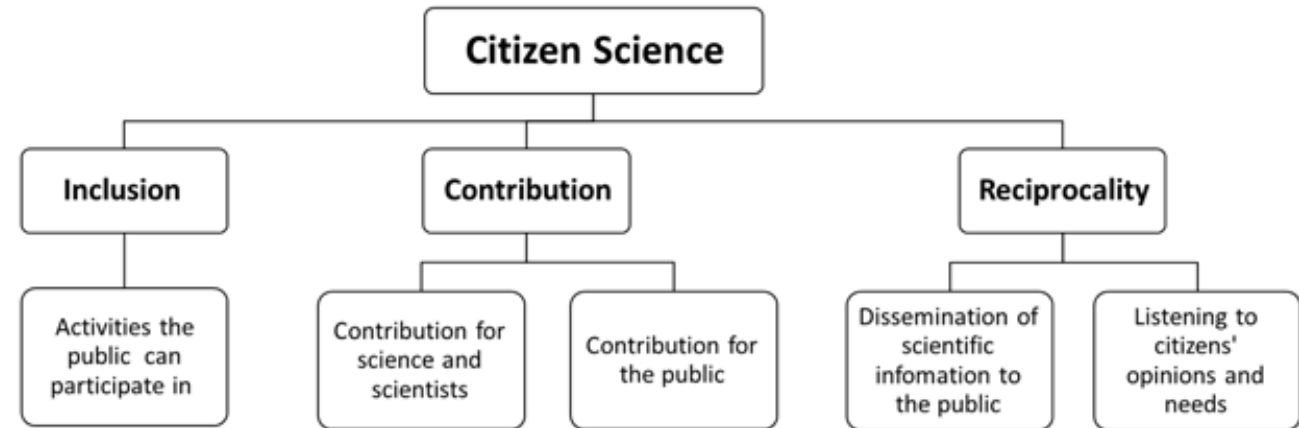


Pompea & Russo (2020). The role of astronomers in the astronomy education ecosystem. <https://doi.org/10.48550/arXiv.2011.11350>



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. <http://doi.org/10.5334/cstp.53>

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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- ✓ TOOLS TO SUPPORT

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