News and insights from Open Science

And how to exploit them in your scientific work

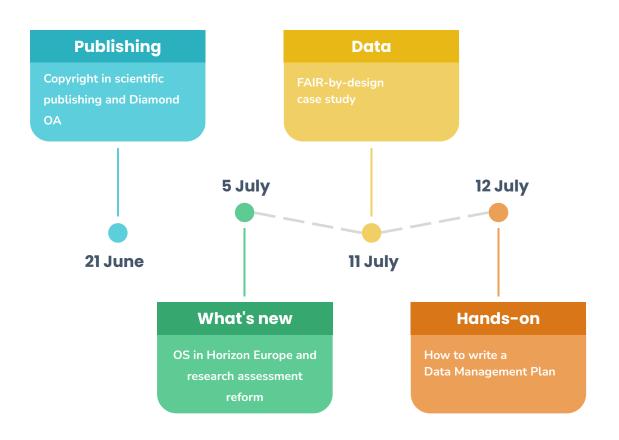
Gina Pavone, Cnr-Isti, ORCID 0000-0003-0087-2151

Module 2: OS in Horizon Europe and research assessment reform
5 July 2023



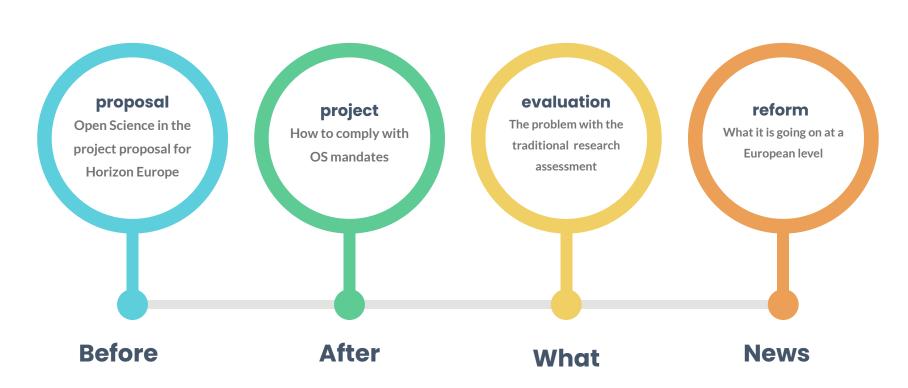
Open Science training plan

the dates



Today's agenda

05/07/2023 MSCA-ITN SMART-X





WARNING: this is going to be an interactive webinar!

Please Stop looking at your email, chats, messages!

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

Interaction

Go to:

https://www.menti.com

Voting code: 22 21 68 0



Leftovers...

How much Open Access?

Check the OpenAIRE Open Science observatory:

https://osobservatory. openaire.eu/home



Protect your rights!

As a researcher, you are the original owner of the intellectual property rights on the manuscripts you write



What is copyright

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

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

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

Legal references:

<u>Directive (EU) 2019/789 of the European Parliament and of the Council of 17 April 2019</u>

In Italy: normativa sul diritto d'autore, legge n. 633/1941

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

Copyright protection grants the following exclusive rights:

Moral rights

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

Economic rights

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

Beware to copyright and data





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



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



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



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

Use and distribute your work!

The traditional scientific journal publishing model is based on researchers transferring their proprietary rights exclusively to publishers so they can publish and distribute the manuscripts and make commercial use of them.



https://www.ouvrirlascience.fr/wp-content/uploads/2022/12/RRS_Guide_for__Researchers_web.pdf



Plan S and Coalition S

- "Plan S aims for full and immediate Open Access to <u>peer-reviewed</u> scholarly publications from research funded by public and private grants.
- "Transition to a scholarly publishing system characterised by immediate, free online access to, and largely unrestricted use and re-use (full Open Access) of scholarly publications.
- cOAlition S is the coalition of research funders that have committed to implementing Plan S

Rights Retention Strategy (RRS)

RRS has been developed to give researchers supported by a <u>cOAlition S</u> <u>Organisation</u> the freedom to submit manuscripts for publication to their journal of choice, including <u>subscription journals</u>, <u>whilst remaining fully compliant with Plan S</u>.

A Creative Commons Attribution licence (**CC BY**) has to be applied to all Author Accepted Manuscripts (AAMs) or Versions of Record (VoR) reporting original research, supported in whole or in part by CoalitionS funding. Some funders also allow the CC BY ND (no derivative) by exception.

AAM: the version of the work as accepted for publication, including all changes made during the peer review process

VoR: the version of a journal article that has been made available by any organization that acts as a publisher by formally and exclusively declaring the article "published".

No longer transfer exclusive copyright

The rights retention strategy (RRS) encourages you to no longer transfer exclusive copyright to the publishers of scientific journals.

This procedure allows you to retain control over the dissemination of your manuscripts before, during and after the peer review process. The RRS does not involve any additional costs for you or your institution.

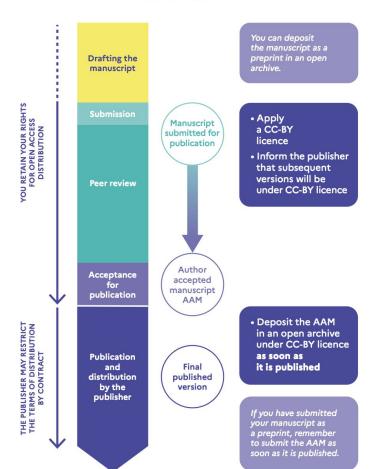
How to implement RRS

State that you are applying the CC-BY licence when I initially submit your manuscript to the journal

For the sake of transparency, it is best to inform your publisher that you are applying the rights retention strategy by including the standard text and by applying a CC-BY licence to the manuscript when you first submit it. However, this is not strictly necessary: you could apply the rights retention strategy only to the peer-reviewed version of your manuscript. In that case, however, be careful not to transfer your distribution rights during the submission phase before the manuscript is accepted. Dice the lights have been transferred, it is no longer possible to apply a CC-BY licence to the manuscript. The rights retention strategy must therefore be applied before this stage.

https://www.ouvrirlascience.fr/implementing-the-rights-retention-strategy-for-scientific-public ations/

The rights retention strategy: main steps of implementation



Use the standard text

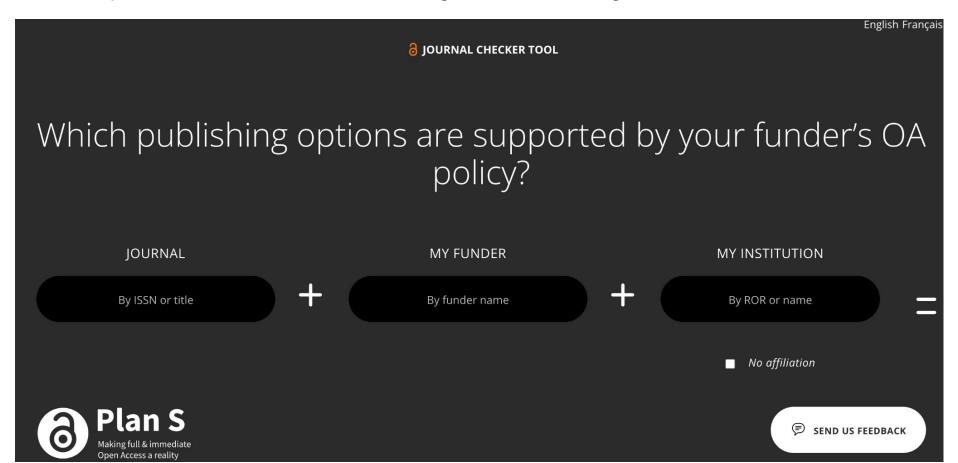
Possibly, upon submission.

If you are not funded by a member of cOAlition S: "For the purpose of Open Access, a CC-BY public copyright licence has been applied by the authors to the present document and will be applied to all subsequent versions up to the Author Accepted Manuscript arising from this submission."

If you are funded by a member of cOAlition

S: "This research was funded, in whole or in part, by [Organisation name, Grant #]. A CC-BY public copyright licence has been applied by the authors to the present document and will be applied to all subsequent versions up to the Author Accepted Manuscript arising from this submission, in accordance with the grant's open access conditions."

Does the journal I plan to publish in accepts the rights retention strategy? Use the Journal Cheker Tool



Open Science in Horizon Europe funding programme



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Search

Research and innovation

Home > Strategy on research and innovation > Strategy 2020-2024 > Our digital future > Open Science

Open Science

An approach to the scientific process that focuses on spreading knowledge as soon as it is available using digital and collaborative technology. Expert groups, publications, news and events.

PAGE CONTENTS

The EU's open science policy

8 ambitions of the EU's open science policy

Future of open science under Horizon Europe

Tracking open research trends - Open Science

The EU's open science policy

Open science is a policy priority for the European Commission and the standard method of working under its research and innovation funding programmes as it improves the quality, efficiency and responsiveness of research.

When researchers share knowledge and data as early as possible in the research process with all relevant actors it helps diffuse the latest knowledge.

And when partners from across academia, industry, public authorities and citizen groups are invited to participate in the research and innovation process, creativity and trust in science increases.

Open Science in Europe

... as a means for improving the quality of research for transparency and reproducibility, and their use by the industry and society as a growth mechanism.



he European Research Area (ERA) is a unified research area open to the world, in which researchers, scientific knowledge and technology circulate freely.

Through ERA, the Union and its Member States will strengthen their scientific and technological bases, their competitiveness and their capacity to collectively address grand challenges.

The (not new) EU commitment to Open Science

EC policies: Open Science is the new normal!

2008

FP7
OA Pilot

Deposit and open access

2014

H2020

access

OA **Mandatory**Deposit and open

& ORD/DMP Pilot

2017

H2020

OA Mandatory

Deposit and open access

& ORD/DMP by default (exceptions)

2021

Horizon Europe

OA **Mandatory**Deposit and open

access

DMP in line with FAIR **Mandatory**

OD by default (exceptions)

& Open Science embedded

In Horizon Europe the project proposal is evaluated under the Open Science Perspective

What

Results must be managed in line with FAIR principles and as open as possible as closed as necessary

How

Methodology must show Open Science practices are embedded

Who

Single Researchers and Consortium are evaluated for their capacity to support Open Science practices

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



Os in the Horizon Europe project proposal

Os in excellence and quality of implementation sections

Horizon Europe moves beyond open access to open science

"In Horizon Europe, open science practices are considered in the evaluation of proposals, under 'excellence' in particular under methodology and under the 'quality and efficiency of implementation' award criterion. Proposers should address open science practices in the relevant section on open science under methodology.

See Horizon Europe programme guide: https://ec.europa.eu/info/funding-tenders/opportunit ies/docs/2021-2027/horizon/guidance/programmeguide horizon en.pdf

Mandatory and recommended OS practices

In HE both mandatory and recommended OS practices will be evaluated in the project proposal phase.



"Proposers will have to provide concrete information on how they plan to comply with the mandatory open science practices. Failure to sufficiently address this, will result in a lower evaluation score.

Recommended open science practices are incentivised through their evaluation at the proposal stage.

'Excellence', part B (Project proposal -**Technical** description)

What to describe in the **methodology** section

"proposers should describe how open science practices (mandatory and recommended, as appropriate) are implemented as an integral part of the methodology and show how their implementation is adapted to the nature of their work, therefore increasing the chances of the project delivering on its objectives.

If open science practices are not applicable to the proposal, justifications should be provided sp that, if evaluators agree, open science will not be taken into consideration in the evaluation.

See Horizon Europe programme guide:
https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/h
orizon/guidance/programme-guide horizon en.pdf

What to include in the methodology section

- Open Science Practices
- Research data Management and management of other research outputs
- FAIR aspects of RDM
- Curation and storage/preservation costs; person/team responsible for data management and quality assurance.



'Capacity of participants and consortium as a whole', part B

Os in the description of the consortium

"Proposers should describe how the consortium brings together the necessary disciplinary and interdisciplinary knowledge.

Proposers should show how this includes expertise and/or track record in open science practices, relevant to what is planned for the project.

Part A of the proposal

Os in the application form of the proposal

"Proposers are asked to list up to five relevant publications, widely used datasets or other achievements of consortium members that they consider significant for the action proposed.

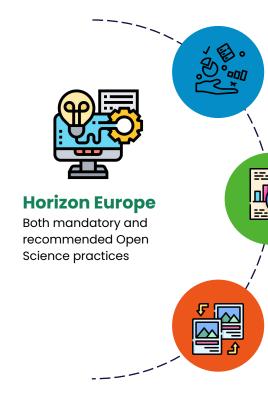
Publication should be OA (if they are not, deposit them retroactively) and data should be FAIR and 'as open as possible, as closed as necessary'.

The significance of publications will not be evaluated on the basis of the Journal Impact Factor of the venue they are published in, but on the basis of a qualitative assessment provided by the proposers for each publication.

See Horizon Europe programme guide: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/h orizon/guidance/programme-guide horizon en.pdf

How to address OS in a proposal

Some aspects to highlight in a project proposal



Early opening and sharing

You may mention preprints or preregistration/registration reports, and which platforms you plan to use

Open Access

You may elaborate on the (subscription-based or open access) publishing venues, the trusted repository/repositories. OA to data anf other outputs in a RDM section of the proposal

RDM

Outline in a maximum of one page how data will be managed. Mention a EOSC federated repository

Open Peer Review

Highlight the venues that would qualify as providing open peer review (if you intend to use them)

Reproducibility

No ambiguity on methodology. Detail on process and tools (software, materials, protocols, flows, ...). In case of negative results? Check on existing results and data

Public engagement

Citizen Science? Co-design, co-creation, co-assessment activities?

List of up to 5 publications, widely-used datasets, software, goods, services, or any other achievements of consortium members relevant to the call content

- · Publications expected to be open access
- Datasets expected to be FAIR and open*







How do Laddress open science in my proposal?



Open science (OS) takes a central place in Horizon Europe and open science practices are considered in the evaluation of Horizon Europe proposals. If not applicable to the proposal, justifications should be provided so that, if evaluators agree, open science will not be taken into consideration in the evaluation.

Excellence





Methodology

Open Science [max. 1 page]

How will the project implement mandatory and recommended open science practices in a manner appropriate to the nature of the proposed work?

Mandatory OS practices

Open access# to scientific publications

Open* access to research data

Information/documentation about research outputs needed for research validation and data reuse

Management of research data in line with FAIR principles

Recommended OS practices

Early and open sharing of research

Preregistration, open peer-review

Citizen science, society engagement

Research output management (beyond data)

Reproducible outputs

Research Data Management (RDM) and management of other research outputs (exc. publications) [max. 1 page]

How will the data/ research outputs be managed in line with the FAIR principles?

Types of data & research outputs

Findability, Accessibility, Interoperability, Reusability of data & research outputs

Costs and responsibilities of data curation, storage and preservation

Project's pathways towards impact

Measures to maximize impact. Dissemination, exploitation & communication

Refer to relevant Open Science practices described in the Methodology section (i.e. open access to research outputs and early and open sharing of research)

Make sure proposed practices are compatible with your dissemination and exploitation plan (e.g. protection of intellectual property) and consortium agreements

Quality and efficiency of the implementation

Work plan and resources

Give visibility to RDM with distinct tasks or work packages

Include the full Data Management Plan (DMP) as a deliverable

Include other relevant RDM activities and budget them

Capacity of participants & consortium as a whole

Describe consortium partners' capacities in open science

#Open Access to publications

1) Publish in DRE - Open Research Europe 2) Publish in an Open Access journal (see DDAJ)

3) Publish in a subscription based journal + maintain the rights to deposit and give immediate access





For more info, check the research tip Horizon Europe: How do I address open science in my proposal?

Adapted by Elena Giglia

Open Access to scientific publications in HE - 1

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

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

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

Trusted repositories

Definition contained in the HE Model Grant Agreement



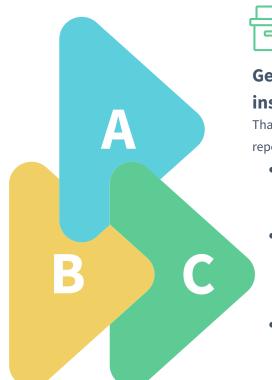
Certified repositories

E.g. CoreTrustSeal, nestor Seal DIN31644, ISO16363 etc.



Disciplinary or domain specific repos

Commonly used, endorsed by the research communities and internationally recognized





General purpose or institutional repositories

That present the essential characteristics of trusted repositories:

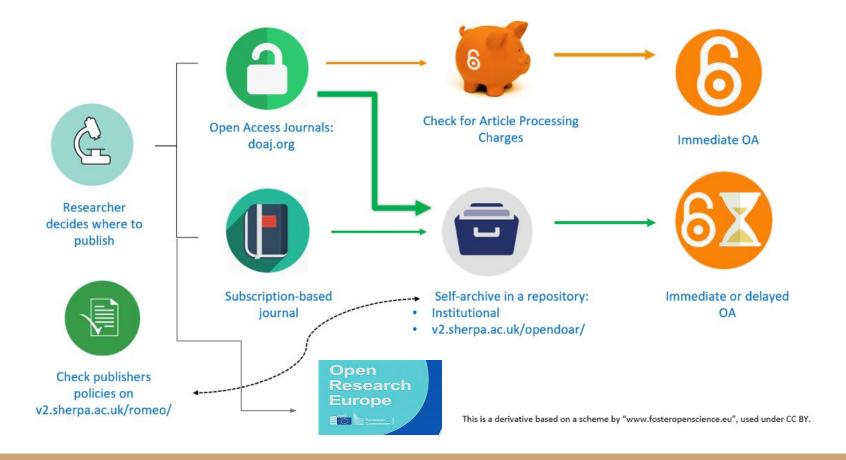
- Display services, mechanisms and/or provisions that are intended to secure the integrity and authenticity of their contents; display policy
- Provide broad, equitable and ideally open access to content free at the point of use, as appropriate, and respect applicable legal and ethical limitations. They assign PIDs. Have metadata enabling discovery
- Facilitate mid- and long-term preservation of the deposited material.

Open Access to scientific publications in HE - 2

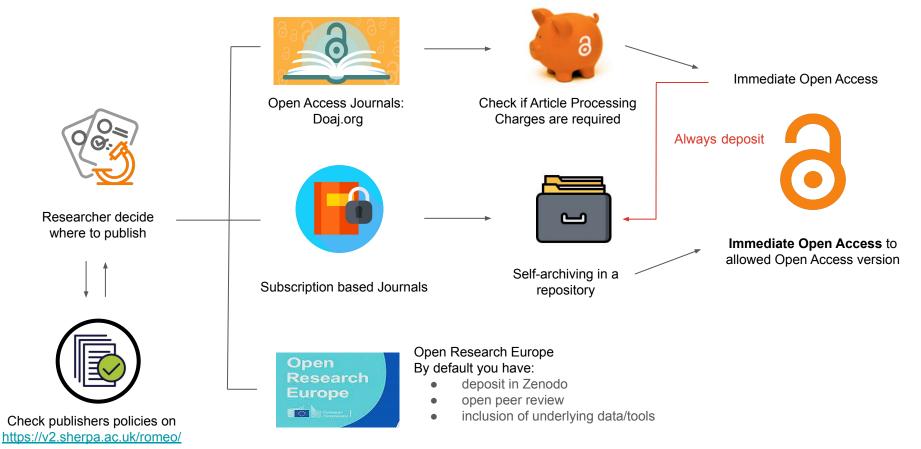
•Beneficiaries (or authors) must retain sufficient intellectual property rights to comply with the OA requirements

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

Open Access to publications in H2020



OA to publications in Horizon Europe



Why always deposit in a repository Even if the chosen venue for publication is fully OA









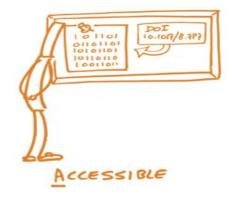
Research Data Management in HE

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

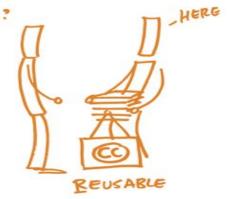
The FAIR principles











Findable:

Others can easily discover your data

Accessible:

It is clear who, when and how can access your data (does not mean open)

Interoperable:

Your data can be integrated with other data and/or they can be easily used and read by machines

Reusable:

Your data can be reused by others in new research

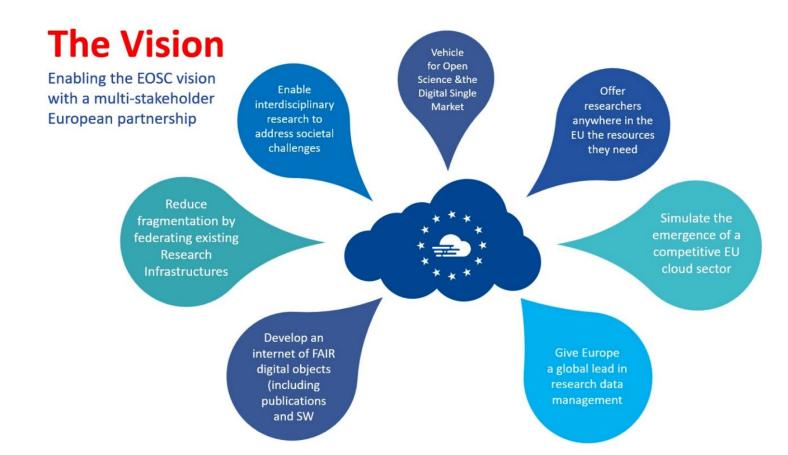
The European Open Science Cloud

What

The EOSC is intended for European researchers, innovators, companies and citizens

A federated and open multi-disciplinary environment where they can publish, find and re-use data, tools and services for research, innovation and educational purposes.

- seamless access
- FAIR management
- reliable reuse of research data and all other digital objects produced along the research life cycle (e.g. methods, software and publications...)



The main aim

To develop a 'Web of FAIR Data and services' for science in Europe upon which a wide range of value-added services can be built.



The EU Council recognizes the EOSC as

The pilot action to deepen the new European Research Area (ERA)

The science, research and innovation data space which will be fully articulated with the other sectoral data spaces defined in the European strategy for data.

Fully deployment of the EOSC

will lead to higher research productivity, new insights and innovations, as well as improved reproducibility and trust in science.



Implementing the EOSC

Ongoing integration process since 2015

In the initial phase of implementation (2018-2020), the European Commission invested around €250 million to prototype components of the EOSC through calls for projects under Horizon 2020

A co-investment (with in kind and financial contributions) by the EU and non-EU partners of at least €1 billion is foreseen for the next 7 years.

The current phase of implementation (2021-2030) in accordance with the Strategic Research and Innovation Agenda (SRIA) which is co-developed with the entire EOSC community.

EOSC governance partnership

Tripartite governance partnership:

- the EU represented by the European Commission,
- the participating countries represented in the <u>EOSC Steering</u>
 <u>Board</u>
- the research community represented by the <u>EOSC</u>
 <u>Association</u>

The EOSC Association

- Setup in July 2020 as an AISBL (association internationale sans but lucratif) under Belgian law. <u>ICDI</u> was one of the four founding members.
- The aim is to provide a single voice for advocacy and representation for the broader EOSC stakeholder community.
- Around 150 members and 79 observers, essentially from public organisations having a research mandate in Europe. The aim is to extend the membership.
- Italy participates with 26 research organizations:
 https://www.eosc.eu/general-assembly?field_country_value=Italy&field_status_value=All&field_type_of_organisation_value=All&field_type_of_organisation_value=All&field_type_organisation_value=All&field_type_organisation_value=All&field_type_organisation_type_organi

Advisory Groups and Task Forces

An opportunity to make the difference

https://www.eosc.eu/advisory-groups



EOSC STRATEGIC AGENDA + ADVISORY GROUPS + GET INVOLVED + NEWS & EVENTS + ASSOCIATION +



Advisory Groups

The EOSC Association Advisory Groups are a structure to allow Association members and others to help steer the implementation of EOSC. The Advisory Groups provide an "umbrella" for a set of Task Forces that are highly related and have the same Liaison person from the EOSC Association Board of Directors.

Task Forces

The Task Forces address key areas of implementation. They will liaise with EOSC projects to offer feedback on developments, as well as identify strategic gaps and areas for investment to input to SRIA.

An open call was held to define the membership of the Task Forces. This resulted in several hundred members of the community offering their expertise as volunteers to shape the future direction of EOSC.

- Implementation of EOSC
- · PID policy and implementation (charter)
- · Researcher engagement and adoption (charter)
- · Rules of Participation (RoP) compliance monitoring (charter)
- · Metadata and data quality
- · FAIR metrics and data quality (charter)
- Semantic interoperability (charter)
- · Research careers and curricula
- Data stewardship curricula and career paths (charter)
- Research careers, recognition and credit (charter)
- · Upskilling countries to engage in EOSC (charter)
- Technical challenges on EOSC
- AAI Architecture (charter)
- Infrastructure for quality research software (charter)
- Technical interoperability of data and services (charter)
- Sustaining EOSC
- Defining funding models for EOSC (charter)
- · Long-term data preservation (charter)

Links

- https://ec.europa.eu/research/openscience/index.cfm?pg=open-s cience-cloud
- www.eoscsecretariat.eu https://www.eosc-portal.eu/
- www.eosc.eu

Interaction

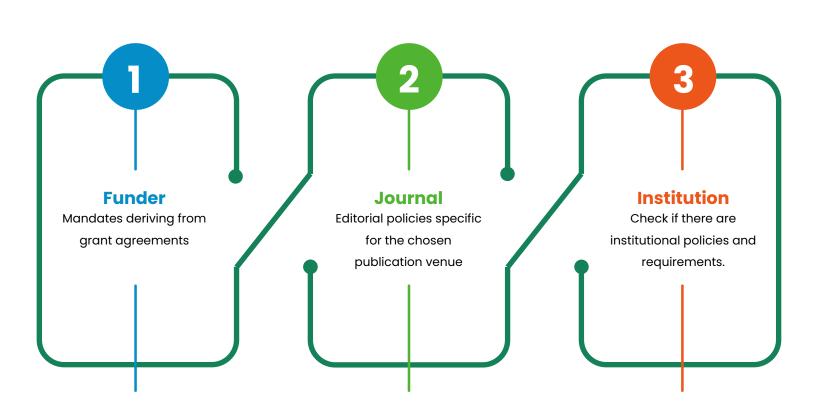
Go to:

https://www.menti.com

Voting code: 22 21 68 0



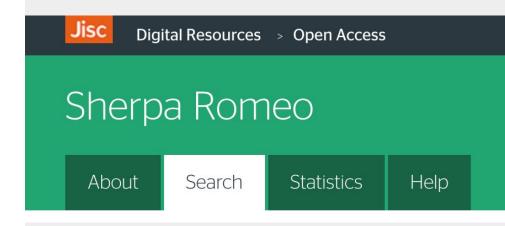
Policies and requirements At least three levels to consider



Publishers OA policies

- summaries of publisher copyright and open access archiving policies
- journal-by-journal basis

https://v2.sherpa.ac.uk/romeo/



A concrete example on sherpa romeo

Journal: Applied Surface Science

Information on:

submitted)

OA option

Presence of APCs

Licence applied

- read carefully here!

(exclamation mark icon)

https://v2.sherpa.ac.uk/id/publication/11418

Versions (published, accepted,

Embargo period (sandglass icon)

Conditions agreed with funders

Conditions to respect (checklist icon)

Open Access pathways permitted by this journal's policy are listed below by article version. Click on a pathway for a

more detailed view

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Published Version

Published Version

Accepted Version

Accepted Version

Accepted Version

Submitted Version

[pathway b]

[pathway c]

[pathway a]

[pathway b]

[pathway c]

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▼ 12m

X None

Any Website, +2

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Institutional Repository, Subject Repository, PMC, Research for Development Repository, +2

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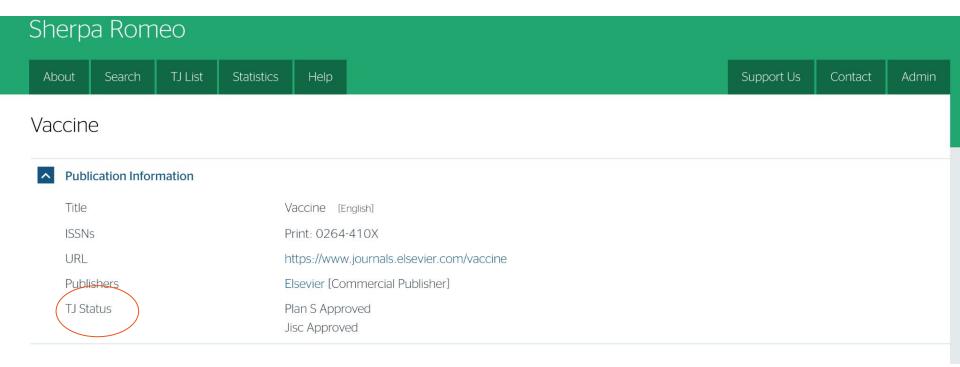
PMC Institutional Repository, Subject Repository, PMC, Research for Development Repository, +2

10

Institutional Repository, Subject Repository

CC BY-NC-ND Institutional Repository, Subject Repository

Che if there are transformative agreements



TJ = Transformative Journal

The icon legend

Sherpa Romeo list of icons

Icon key

lcon	Name	Description
	Open access publishing	The pathway includes open access publishing
£	Additional open access fee	The pathway requires the payment of a fee (in addition to any normal publication fees that may be required) to make the article open access
×	Not permitted	No open access pathway exists for the article version
(C)	Copyright owner	The copyright owner that the pathway requires
 	Conditions	Conditions that apply to the pathway
Š	Licence	The licence that the pathway requires
!	Prerequisites	Requirements that must be met to allow the pathway to be used. These may include prerequisite funders, subjects, or permissions from the publisher
	Location	The websites on which the pathway allows the article version to be available. This includes self-archiving and publisher-deposit locations, including the website of the journal
	Notes	Additional notes on the policy
①	Publisher deposit	The publisher will deposit on your behalf in the location specified
X	Embargo	The embargo that the pathway requires. Unless stated otherwise, the embargo starts on the date of publication

For a demonstration of the icons, please refer to our range of tutorial videos on our Help page.

Check the glossary

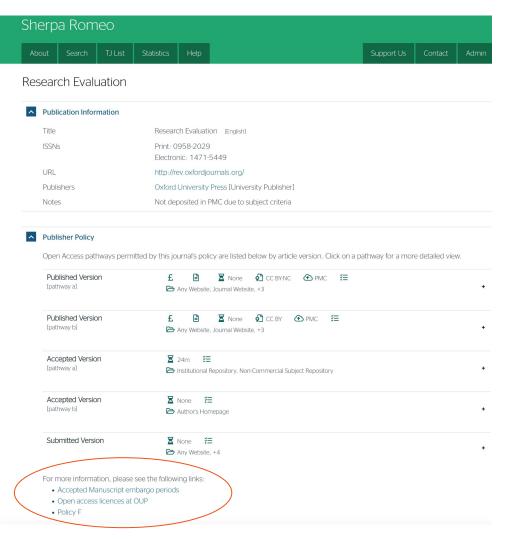
Definitions for the different versions

Pay attention to the "places" where the deposition is allowed: subject repository, author's homepage, institutional website...

Glossary

Term	Definition
Academic social network	A social network where academics can deposit their publications, e.g. ResearchGate or Academia.edu
Accepted version	The final author-created version that incorporates referee comments and is the accepted for publication version. Also known as: Authors Accepted Manuscript (AAM), Authors accepted version, Final Author version, Post-print
Additional OA fee	A fee that is paid in addition to other publication fees, in order to make an article open access immediately
Associated publisher	An organisation that is associated with the journal, for example an academic society
Author's homepage	The personal home page of the author
Creative commons	A collection of open licences. For more information, see https://creativecommons.org
DOI (digital object identifier)	A persistent identifier that uniquely identifies an article
Funder designated repository	A repository required by the funding agency
Institutional repository	A repository that is associated with the Institution of the author
Institutional website	A website at the author's institution that is not the institutional repository
Journal website	The primary website on which a journal may make articles available for download
Open access journal	A journal which is free to access at point of publication
Pathway	A way in which a document can become Open Access. A policy is made up of multiple pathways that represent the permissions that the policy grants
Preprint repository	A repository that primarily contains articles prior to peer-review, e.g. arXiv.org
Published version	The publisher-created published version, that has been peer-reviewed and copy edited. Also known as: Final Published Version, Version of Record
Publisher	The organisation which holds the rights to determine the journal's open access policy, for example, a commercial publisher or an academic society
Subject repository	A repository that only contains articles within a pre-set subject field
Submitted version	The version that has been submitted to a journal for peer review. Also known as: Author's Original Manuscript (AOM), Original manuscript, Pre-print

Read the publisher policy



Exercise: What is your journal Green Open Access Policy?

- 1. Choose a **Journal** (eg. the last journal you published in or the one you wish as a venue for your research, otherwise, check Vaccine, ISSNs 0264-410X
- 2. Check the journal policy on Sherpa Romeo (https://v2.sherpa.ac.uk/romeo/) or on the journal/publisher website and answer the following questions:
 - a. Can you clearly identify the journal open access policy?
 - b. Does the journal provide a policy for Green Open Access?
 - c. Given the Journal policy, are you allowed to deposit a version of your paper an institutional repository?
 - d. If answer to question c. is "Yes":
 - i. Is any OA fee necessary?
 - ii. Which version can you deposit?
 - iii. Is any embargo period envisaged?
 - iv. What licence can you associate with the OA version?
 - v. Are there any further restriction/obligation regarding the deposit?
 - e. Given the Journal policy, are you allowed to deposit a version of your paper in other kind of repositories?
 - f. If answer to question e. is "Yes":
 - Is any OA fee necessary?
 - ii. Which version can you deposit?
 - iii. Is any embargo period envisaged?
 - iv. What licence can you associate with the OA version?
 - v. Are there any further restriction/obligation regarding the deposit?
- 3. Is there any transformative agreement ongoing between your institution and the publisher?



Photo by Alexas Fotos on Unsplash

Overcoming the bottleneck

Research evaluation

Based on bibliometric indexes built upon commercial and closed (non transparent) databases



What are we evaluating?

- Researchers are evaluated by looking at the Impact Factors of the Journals where they publish papers
- Commercial publishers are responsible for assessing ranking (Impact Factor) of the Scientific Journals

Researcher's survival kit?

- many many publications
- high citation rate
- "important" venus (read: high IF)

But this does not in itself imply excellence in research!

19th century scientist

I must find the explanation for this phenomenon in order to truly understand Nature...



21st centurt scientist academic

I must get the result that fits my narrative so I can get my paper into



facebook.com/pedromic

The two most important bibliometric indexes

Journal Impact Factor

For a given year, the two-year jif is the ratio between the number of citations received in that year for publications in that journal that were published in the two preceding years and the total number of "citable items" published in that journal during the two preceding years

$$ext{IF}_y = rac{ ext{Citations}_{y-1} + ext{Citations}_{y-2}}{ ext{Publications}_{y-1} + ext{Publications}_{y-2}}$$

H-index

For a researcher:

the maximum value of h such that the given author has published h <u>papers</u> that have each been <u>cited</u> at least h times.

As an example, an h-index of 10 means that among all publications by one author, 10 of these publications have received at least 10 citations each.

What do JIF and H-index measure?

Journal Impact Factor

Impact Factor is a measure of the frequency with which the average article in a journal has been cited in a particular year.

H-Index

H-index tries to estimate productivity and impact of a research.

Citation index criticism - part 1

- Early career researchers are penalised
- The citation context is not considered (e.g. negative citation)
- They are influenced by the limitation of the citational databases (which are all owned by big scientific publishers and not publicly available)
- It can be manipulated by both authors and reviewers (self and cross citations)

Citation index criticism - part 2

- It does not take into account the number of authors in a paper and their contribution
- It does not take into account research multidisciplinarity (i.e. citation conventions differ widely among different fields)
- It does not facilitate science freedom

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- Member of CO-OPERAS Go-FAIR
- Implementation Network Member of the EOSC Association Task Force on Research careers, recognition and credit
- Member of the G7 Open Science Working Group, Sub-group on Research assessment and incentives
- In 2022, she was part of the core group of 20 institutions that drafted the Agreement on Reforming Research Assessment.



Thank You!

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