

Open Science Policies

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Open Science Policies, A. Díaz-Cano, UCM.

Open Science Policies:

- Strategies and actions aimed at promoting Open Science.

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- Usually established by research performing institutions, research funders, governments or publishers.
- Initially were aimed at requiring an open dissemination of the research results based on the idea that results achieved from publicly funded research should be available to the public without any restriction.
 - The scope of the policies has grown and we may find national policies fostering Open Science practices at any point of the research level.
 - There are specific provisions in new and existing laws, regulations or directives. <u>https://book.fosteropenscience.eu/</u>



The EU's open science policy: objectives

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- **Open Data:** FAIR (Findable, Accessible, Interoperable and Re-usable data) and open data sharing should become the default for the results of EU-funded scientific research.
- **European Open Science Cloud (EOSC):** The (EOSC is a trusted, virtual, federated environment that cuts across borders and scientific disciplines to store, share, process and reuse research digital objects (like publications, data, and software) that are Findable, Accessible, Interoperable and Reusable (FAIR). EOSC brings together institutional, national and European stakeholders, initiatives and infrastructures.
- **New generation metrics:** New indicators must be developed to complement the conventional indicators for research quality and impact, so as to do justice to open science practices.



The EU's open science policy: objectives

- **Future of scholarly communication:** All peer-reviewed scientific publications should be freely accessible, and the early sharing of different kinds of research outputs should be encouraged.
- **Rewards:** Research career evaluation systems should fully acknowledge open science activities.
 - **Research integrity & reproducibility of scientific results:** All publicly funded research in the EU should adhere to commonly agreed standards of research integrity. The results of Research & Innovation activities should be reproducible.

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- **Education and skills:** All scientists in Europe should have the necessary skills and support to apply open science research routines and practices.
- **Citizen science:** The general public should be able to make significant contributions and be recognised as valid European science knowledge producers

Aims for open science policy under Horizon Europe

- Ensure that beneficiaries **retain the intellectual property rights** they need to comply with their open access obligations.
- Require research data to be FAIR and open by default (with exceptions notably for commercial purposes).
- Promote the **adoption of open science practices**, from sharing research outputs as early and widely as possibly, to citizen science, and developing new indicators for evaluation research and rewarding researchers.
- Engage and **involve citizens**, civil society organisations and end-users in co-design and cocreation processes and promote responsible research and innovation.
- European Open Science Cloud (EOSC) will enter its next stage of development in 2021.
- Fund the development of an open-access publishing platform to host Horizon 2020 (and later Horizon Europe) beneficiaries' publications.



Institutional Access Policy Open to scientific and academic production UCM (2014)

- Citizens, who through their taxes finance research through national and European programs, **should not pay again** to learn about the results of this research.
- Researchers of the UCM will **deposit their publications**, the result of their research and academic activity in the Complutense institutional repository.
- The deposit of the documents by researchers of the UCM will take into account the editorial policies, intellectual property rights, and the usual conditions of self-archiving in institutional repositories.
- The deposit of the documents must be carried out within a period not exceeding 12 months once published.
- The version of the articles allowed by the editor will be deposited. If the publisher sets an embargo period, open access to the article content in the repository will be delayed for required amount of time.

Institutional Access Policy Open to scientific and academic production UCM (2014)

- **Ph.D. theses** of the UCM will be deposited in the institutional repository.
- Researchers of the UCM may deposit their teaching **materials** or other unpublished materials in the institutional repository in accordance with the quality criteria established by the UCM.
- The Master's Final Projects and Final Degree Projects may be integrated into the Complutense institutional repository in accordance with the quality criteria established by the UCM.
- The UCM recommends **avoiding the total assignment of copyright** when publishing a work, to allow it to be deposited in open access repositories.



Institutional Access Policy Open in relation to the documents deposited in the institutional repository

- Establish the appropriate procedures for depositing documents in the institutional repository.
- Ensure **respect for copyright** and intellectual property of the content deposited in the institutional repository.
- Negotiate **agreements with publishers** about permits and policies that stipulate favorable conditions for the deposit of documents in the institutional repository.
- Ensure the **integrity of the metadata** entered by the authors.
- Preserve, ensure and maintain **perpetual access** to publications housed in its institutional repository.
- Follow current metadata exchange protocols and standards to increase the interoperability and visibility.
- Guarantee the relationship between the research management program, the standardized curricula of academics and researchers and the institutional repository.
- Advise, provide technical support and facilitate the tasks of depositing documents, through the Library, to the entire university community.

Miscellany

- Journal: Classical, Hybrid, Open Access.

Skepticism, distortion \rightarrow arxiv, e-prints, academic journals

- Books and Open Access?
- Backward Open Access?



References

- <u>https://book.fosteropenscience.eu/</u>
- <u>https://biblioteca.ucm.es/cienciaabierta</u>
- https://en.unesco.org/sites/default/files/open_science_brochure_sp.pdf
- <u>https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/open-science_en</u>
- https://www.crue.org/wp-content/uploads/2020/02/2019.02.20-Compromisos-CRUE_OPENSCIENCE-VF.pdf



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Thank you for your attention!



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