

MedOANet  
**Guidelines** for  
implementing  
open access policies

**For research performing and  
research funding organizations**

# Table of Contents

- About the guidelines
- The MedOANet project
- What is open access?
- Why open access?
- The current European policy context
- Guidelines for policy development for Research Performing Organizations (RPOs)
  - a| major steps in the process of policy development
  - b| Important points to consider in developing a policy
  - c| Model open access policy
  - d| Good practices
- Guidelines for policy development for Research Funding Organizations (RFOs)
  - a| major steps in the process of policy development
  - b| important points to consider in developing a policy
  - c| Model open access policy
  - d| Good practices
- Resources

# About the guidelines

These Guidelines for implementing open access policies have been produced by the EC-funded project “Mediterranean Open Access Network” ([www.medoanet.eu](http://www.medoanet.eu)). They aim at coordinating policy-development in the six Mediterranean countries that participate in the project by providing concise and targeted guidelines for a harmonized approach towards policy development (France, Greece, Italy, Portugal, Spain and Turkey). They are directed to policy-makers and policy stakeholders specifically, to Research Performing Organizations and Research Funders.

The guidelines take into consideration best practices and recent policy developments, in particular the European Commission’s Recommendation and Communication on access to and preservation of and dissemination of scientific information (2012) and the planning for Horizon 2020. They are also informed by relevant documents, policy papers, recommendations and guidelines, produced recently by organizations such as UNESCO, The League of European Research Universities, the European University Association, Science Europe, among others, as well as by surveys performed in the six countries by the project.

More specifically the guidelines:

- Present the main concepts and issues with respect to open access
- Discuss the major steps that are necessary in the process of policy development
- Present the important components of an institutional and funder policy
- Present model policies for research performing and research funding organizations
- Present best practices in policy development for research performing and research funding organizations

# The MedOANet Project

The Mediterranean Open Access Network is a project funded by the European Commission's 7th Framework Programme. It supports the coordination of open access strategies and, especially the development of policies and structures in six Mediterranean countries. All project outcomes, documents and resources are available at the project's website, [www.medoanet.eu](http://www.medoanet.eu)

## The MedOANet project:

- Set up **national task forces** in order to bring together all open access stakeholders and decision-makers and coordinate efforts in the development of national policies.
- **Performed surveys to map the open access ecosystem** in the six countries. Of special interest were the policies among research funders, research performing organizations and publishers.
- Organized **Open access workshops** in collaboration with the task forces to bring the main stakeholders in each country together, to increase the awareness of open access issues and facilitate future coordinated action.
- Developed the "**Open access Tracker**", a tool that tracks the development of open access policies and initiatives (such funder policies, repositories, etc.), by drawing data from international registries and displaying them for each country, effectively creating a country profile. The tracker provides information and encourages involved stakeholders to register their open access resources with appropriate registries.
- Facilitated regional coordination by bringing policymakers together in a European workshop at the University of Minho and a European Conference at the National Documentation Centre
- Developed **coherent Guidelines and Recommendations** towards implementing open access policies to facilitate the development of national plans and policies aligned to current best practices and the European Commission's policies.

# What is open access?

Open access addresses the problem of limited access to scholarly outputs, usually caused by high subscription rates. It is **the practice of providing online access to scientific information (articles, monographs, research data) that is free of charge to the reader**, and licensed so that they can be further used and exploited by researchers, by the industry, and by citizens.

Milestone definitions of open access include those of the: Budapest Open access Initiative (BOAI) and the Berlin Declaration (October 2003) on Open access.

## How to provide open access

**Self-archiving (the Green route):** the author archives an electronic copy of a peer-reviewed publication in an institutional or subject repository, after which it is freely available to everybody.

A repository allows the institution to manage, preserve and showcase its scientific output. The repository is a valuable tool in an institution's research information system and evaluation process, and one that offers added value services for the scientific community.

**Open access publishing (the Gold route):** Authors publish their scholarship in open access journals or monograph series. These publications are freely available to the end users on the Internet. Copyright is usually retained by their authors. Open access publications follow the same processes as toll access publications (i.e. peer review), but provide open access to the content of the publications. There is no correlation between the quality of a publication and the access to it.

# Why open access?

## The benefits

By removing legal, commercial and technological barriers to access of scientific information the research process becomes more efficient and research results more visible. Furthermore, open access prevents duplication, fosters knowledge and technological transfer and promotes innovation.

Different stakeholders in the scholarly communication system benefit from open access to scientific research and research data:

**Institutions and authors** gain immediate visibility for their research output and thus the dissemination and usage of their results increases. Open access leads to an increase of impact, of international collaboration and it opens ways to new funding sources and opportunities.

**Researchers** save time seeking articles they cannot access through their libraries. Moreover, they can extract information or data from articles, often across diverse field of research, to create new knowledge by using text and data mining technologies that can only work effectively on open research content.

**Funding agencies**, universities and research institutions monitor the quality and transparency of the research process, the return on investment on research, and they benefit of increased visibility at a national and at an international level. They can also adopt new models for research assessment thanks to alternative metrics.

**Libraries** are potential beneficiaries of open access adoption since it enables them to provide their patrons with increased access to scholarly materials and could help to reduce the amount libraries spend on traditional journal subscriptions. With the right investment in skills and infrastructure, it also offers them the possibility to assume new roles as providers of open access services (managing repositories and/or publishing activities) and advisory services for new methods of scholarly communication.

**Publishers** who adopt open access may obtain more exposure for their publications, they become more transparent in their business models and are more open to new opportunities and focus on providing new added-value services to their community.

**Small and Medium Enterprises (SMEs)** can greatly benefit from immediate and open access to groundbreaking research results to innovate by developing and introducing new products and services and to increase their competitiveness. Limited access to subscription-based scholarly outputs is an obstacle to innovation by SMEs.

Finally, widened and improved transparency of the scientific process and the consequent access to knowledge leads to **more science-literate citizens**, better capable of thriving in the complexities of the 21st century.

# The current European policy context

The recent turn of interest worldwide towards open access policies follows many years of work in promoting the concept of open access by researchers themselves and open access advocates. It also follows advances in e-infrastructures, such as repositories and journals, brought forward by developments in information and communication technologies. Improved understanding regarding the benefits of open access by research funders and institutions and the widely supported idea that publicly funded research should be available to all render urgent the development of relevant policies that will secure open access as the standard practice for the dissemination of research.

The European Commission supports open access as the standard way of disseminating publicly funded research in the European Union and includes **open circulation of knowledge as one of the five priorities of the European Research Area** (COM(2012) 392 final). In the summer of 2012 it recommended that Member States develop national policies that will provide open access to publicly funded research and that RFOs and RPOs accordingly develop their own policies, coordinated at the national and European level (C(2012) 4890 final). Further, **open access will be required for all peer-reviewed publications resulting from Horizon 2020 funding**. This decision follows the pilot action on open access, which was implemented in FP7 for part of the funding period. **Horizon 2020 will also include a pilot action on open access to research data**. Open access to research data is a topic that is receiving increased attention recently and for which policies are still overall at an early stage.

The most significant developments at the policy level are the growing numbers of research funders and research performing organizations implementing open access policies throughout the world and in Europe. Major public and private funders are instituting mandatory open access policies, thus effectively building the foundations for open access to become the standard way of communicating research and leading research performing organiza-



tions also to bring about the necessary changes. MedOANet research, however, shows that more action is necessary among the six Mediterranean countries on which the project focuses in developing the relevant policies for research funding organizations and research performing organizations. In view of Horizon 2020 it is urgent that this situation changes and the present guidelines provide a practical tool with the basic information on the process towards developing such policies.

Policy developments and a picture of the growth of open access in the six Mediterranean countries can be followed through the open access tracker tool that the project has developed at [www.medoanet.eu/open-access-tracker-information](http://www.medoanet.eu/open-access-tracker-information).

# Guidelines for policy development for Research Performing Organizations (RPOs)

## a) Major steps in the process of policy development

**A consultation and preparation phase** is significant in implementing an institutional open access policy. RPO policymakers should participate in consultations at the national level, such as deliberations of university rector's conferences, that result in coordinated national positions/strategies aligned to relevant EU policies. Consultations within individual RPOs are essential in order to draft a policy document based on consensus and to foster the support of faculty. The establishment of a working group within the RPO may contribute towards this. In this phase, financial planning and the development of a support mechanism for the implementation of the policy, such as a repository office, is necessary.

**Adopting the policy** includes the development of the relevant institutional regulation (e.g. a proposal voted by the faculty senate or a regulation signed by the rector), which should be mandatory for all faculty/researchers and tied into the professional advancement procedures. The policy should be clearly presented and explained to faculty and staff. Organizational and technical support for its implementation should be offered. The policy should then be registered and made known through the appropriate policy registry, <http://roarmap.eprints.org>.

**An institutional repository** should be developed and operational by the time the policy is adopted or access to repository functions should become available to the RPO and its research staff. The repository is the e-infra-

structure providing access and to and preservation of the scientific output of an RPO and supports the implementation of its self-archiving mandate. Repositories should be developed on software that supports standards of interoperability (OAI-PMH) and should interoperate with the national e-infrastructure and European infrastructures, such as OpenAIRE. Repository operation policies should be developed and regular training provided to researchers.

**Continuous support and advocacy** are critical in securing high compliance rates. An operational structure should be developed within the RPO for this purpose. Studies indicate that the RPO service best suited to perform this task is the library and this mechanism can be developed within it. It should provide researchers with the necessary training for self-archiving, it should offer advocacy within the organization, information on copyright and other relevant issues, technical support for the repository function etc. An important condition for the success of a policy is that researchers understand the benefits -both short and long term-of open access and self-archiving, short and long term, as well as the requirements for it as parts of their working routine.

**Follow up and monitoring** are required for the sustainability of the policy in the medium and long-term, as well as for truly embedding the practice of self-archiving in the daily routine of researchers. Faculty compliance with the open access policy should be measured and incentives for sharing research should be provided to faculty (e.g. tools to showcase research through the repository). The most effective way to ensure compliance is to link self-archiving to research assessment processes. Funding for the maintenance and necessary upgrades of the e-infrastructure and supporting mechanisms in the long term should be secured.

## b| Important points to consider in developing a policy

The most effective policy is a **mandatory immediate self-archiving policy for peer-reviewed research**. Such a policy requires researchers to deposit all peer-reviewed research (journal, conference articles, books/monographs) immediately upon acceptance for publication into the institutional repository of the organization. It also stipulates immediate open access to peer-reviewed research unless there is a publisher embargo. An institutional open access policy should address copyright and licensing, explaining its regulations and position on this issue and providing relevant information resources for researchers.

**A mandatory policy.** In contrast to voluntary policies, mandatory policies result in high compliance rates, if accompanied by an effective support, advocacy and e-infrastructure system. Researchers should be required to deposit their work in the institutional repository. This requirement should be linked to professional advancement and evaluation. Authoritative researcher, departmental and institutional publication lists should be directly drawn from the institutional repository for evaluation purposes, thus making clear to authors that this is the source that will be used for this purpose and that they therefore have a personal interest in making sure their work is fully represented in the repository.

**A self-archiving policy (= green open access policy).** While self-archiving and open access publishing are both valid routes toward open access, it is recommended that RPOs adopt green open access policies because self-archiving offers more benefits to the institution itself that extend beyond open access. Self-archiving is the process of depositing publication metadata and the full-text digital publications that the metadata describe in the online institutional repository for the purposes of recording and preserving the institutional output and providing access to it. Repositories are important tools through which RPOs can manage, disseminate and preserve their research output on their own. Self-archiving is not related to academic publishing and it can be perceived as an obligation of researchers towards

their institution, as well as an action that benefits their own impact. It also does not infringe on the author's choice of where to publish his/her work. MedOANet project work finds that more than 85% of RPOs in the six project countries that participated in relevant surveys already possess institutional repositories and that, therefore, significant resources have already been invested in them. While mandating self-archiving, RPOs may encourage open access publishing (i.e. gold open access) and may make provision of funds to support authors in paying Author Processing Charges for open access publishing venues (journals and monographs). This, however, is a supplementary activity that provides incentives for researchers to experiment with open access publishing and is not related to an RPO's mandatory self-archiving policy.

**Immediate self-archiving and open access.** Self-archiving should be required as soon as a work has been accepted for publication after the peer-review (author's final copy or publisher's, where possible). In this way the metadata of the publication and the publication itself becomes immediately available (where there is no embargo requirement), irrespective of the publication date, which varies. Further, there is no conflict with publisher interests, since the document to be archived and made openly accessible will not be the publisher's version. The latter can also be archived when it becomes available, if the publisher permits it. In fact, some publishers even require that their own, published version is archived as well, because this helps to increase the impact of their journals. Immediate open access upon archiving should be required for publication metadata and the full-text publication itself. However, if a publisher embargo prevents immediate open access, then the publication can remain in the repository with closed access until the embargo period elapses. Institutional repositories should be programmed for an automatic opening of documents after this time elapses so that the author, when depositing, simply enters the embargo period and the software opens the full-text on the relevant date: the author does not have to remember to do this. Additionally, repositories should have the 'request a copy' functionality that allows repository users to ask a copy of embargoed publications directly from their authors. Finally, it should be noted most publishers permit self-archiving. Relevant publisher policies are available at <http://www.sherpa.ac.uk/romeo/>

**Peer-reviewed research.** A policy should be explicit about the content it covers: peer-reviewed research -articles, conference proceedings and books/

monographs- should be the target content for self-archiving. MedOANet project work finds that in the six project countries emphasis is currently placed on PhD and Master's Theses. Despite the significance of this type of scholarship, attention now needs to be drawn to peer-reviewed research. Books are a distinct category within publications: they take long time to produce, authors often obtain royalties and publishers often invest more resources in producing them than in producing journals: these traits make books different to journal articles and require careful treatment in policy terms.

RPOs should therefore mandate self-archiving so that the metadata are available for books and book sections, but not necessarily mandate open access for these types of content. They may alternatively consider permitting long embargo periods to accommodate the different situation that books represent.

Research data are also a significant type of research output, to which recent discussions on open access policies have turned. Open access to research data presents numerous benefits, among which the ability to verify research conclusions and save money from avoiding duplication of data collection efforts: revealing the data on which scientific conclusions are drawn is a matter of proper scientific ethics. Scientific data, however, may also involve sensitive and classified data, while researcher attitudes towards their data are usually proprietary. Additionally there is usually considerable confusion as to ownership of data generated during the course of publicly-funded research. On account of all of these elements that constitute the particular, different, nature of scientific data, open access to them should be addressed extensively in a separate policy document: personal data, as well as other sensitive and classified information should be respected in formulating these policies. As a start, however, open access policies should encourage researchers to deposit data that underpin publications.

## Copyright and licensing

**Copyright.** To secure the future of open access to scientific information, RPO policies should advise authors against transferring their copyright to publishers and encourage the transfer only of those rights necessary for publication. It should explain that it is possible for authors to negotiate with publishers and provide relevant resources to help researchers (e.g. negotiation tools, author's contract addenda). In cases of institutions that wish to take firm steps to ensure that there are no embargoes on their research outputs it will be necessary for the author and/or the institution to retain sufficient rights over publications in order to render them immediately openly accessible through the repository. This is the ideal situation, and makes publisher embargoes irrelevant. To engineer this, the institution may retain enough rights to enable it to provide immediate open access to the work of its research staff or may require its research staff to retain some rights that permit immediate open access. Relevant stipulations can be included in employment contracts if desired.

**Licensing.** A license attached to digital items clarifies to users under what terms these scholarly materials may be used. All items provided through repositories should be licensed to facilitate reuse. Creative Commons licenses are the most widely used throughout the world and clearly explain the rights and obligations of users to humans and machines. An institution may state explicitly in its policy that all items are licensed under Creative Commons licenses.

## c| Model Open access policy

[**Introduction:** - Contextual information on the benefits of Open access, on the global context of the policy - e.g. the EC Open access policies in Horizon 2020, the EUA Open access recommendations, other relevant information or initiatives from the national or international contexts - on the motivations for establishing the policy - wider dissemination, maximizing visibility and impact of the research results of the institution - , on the benefits of Open access, on the intention of the institution to be able fully to manage its research and intellectual output, etc.]

Effective [date] the [institution name]:

1. Requires its members to deposit in the institutional repository [name of repository] an electronic copy of the accepted version (either author final manuscript or publisher version) of all peer reviewed articles, books/monographs and conference proceedings [other types of publications and research documents - such as thesis and dissertations, working papers, technical reports, etc. - to be defined as desired by each institution]
2. Requires that the metadata (title, authors, institutional affiliation, name of journal that has accepted the paper, etc.) of all publications defined in 1. be made immediately openly available at the moment of deposit.
3. Requires that the full text of all publications defined in 1. be made openly available at the time of deposit or as soon as possible thereafter. In the case of publications that cannot be made immediately openly available because of publisher restrictions, the deposit mentioned in 1. remains mandatory, but the access will be set to closed until publisher embargo elapses.
4. Will only consider as publications by faculty/staff those whose metadata and full texts are deposited in the institutional repository for purposes of individual or institutional monitoring, assessment and evaluation of research output.
5. Will monitor compliance with this policy comparing the repository content against what is recorded by literature indexing services.

The above regulations apply for all publications produced after this policy comes into effect.



Further, the [institution name]

Encourages its research staff/faculty to retain ownership of the copyright of their publications wherever possible and only license to publishers those rights necessary for the publication [information on author addendums that can be used to retain rights - like the SPARC addendum [www.sparc.arl.org/resources/authors/addendum](http://www.sparc.arl.org/resources/authors/addendum) - may be included here] .

Encourages its members to deposit in the institutional repository or in another suitable open data repository [suitable repositories should be defined - offers public access to the research data, enables data citation through persistent identifiers (DOI, or others), provides quality metadata (including acknowledgment of research funding) based on accepted guidelines and standards] all research datasets that serve as evidence for publicly available research reports and/or are referenced in peer reviewed publications.

Final Remarks:

The [institution name] is committed to ensuring the curation and long-term preservation of research results deposited in its institutional repository.

The [institution name] is committed to increasing the number of resources, tools and features of the repository, to facilitate the deposit, to train the researchers to use the repository, to provide information on copyright, to investigate data management plans, and to develop a preservation policy plan.

Although this policy applies only to those publications subsequent to the date it comes into effect, the [institution name] strongly encourages its members to deposit into the institutional repository, the publications authored prior to this date and to make them openly accessible whenever possible.

[others topics can be added]

## d| Good practices

There are an increasing number of public universities in the Mediterranean countries that have implemented an open access mandate. The selected ones represent examples that have been widely accepted as good practices, as well as institutions with recent mandates, that represent work in progress:

**The University of Minho** in Portugal has operated an institutional repository since 2003 (Reposit riUM), and an institutional self-archiving policy has been in place since January 2005. Since 2004, OA and Reposit riUM have been supported by top-level management of UMinho and have been considered as an important part of the University strategy in terms of promoting the visibility and impact of UMinho research activities. In 2010 the policy was revised. The new policy requires all researchers to deposit a copy of their scientific articles, communications and other scientific documents into Reposit riUM immediately after publication, and to include a link to the version deposited in Reposit riUM in all official lists of publications. [www.uminho.pt](http://www.uminho.pt)

**The Autonomous University of Barcelona (UAB)** in Spain has had an institutional repository since 2008 (Dip sit Digital Documents - DDD), and an institutional self-archiving policy is in place since January 2012. The library of the Autonomous University of Barcelona (UAB) initiated its efforts to get an OA mandate from the University Rector in 2008. It has been a long bottom-up movement to get the mandate. Since the approval of the open access mandate, teachers and research staff are required to deposit their academic and scientific publications (journal articles, theses, presentations, communications, scientific and technical documents, books, etc...) in DDD. The UAB encourages the deposit of educational resources as well. One of the key elements of the success of the UAB repository is that all management staff, IT staff and librarians have been involved. Also, there has been an important communication campaign to inform researchers about how beneficial it is to deposit all of the institution's scientific documents in the open access repository. [www.uab.es](http://www.uab.es)

**The University of Torino** in Italy developed and published its open access policy in the summer of 2013, which becomes effective as of November 2013. The policy mandates self-archiving of full-text publications and their

metadata upon publication in the institutional repository. It mandates immediate open access, unless the publisher does not permit it, a co-author refuses open access and for reasons of public safety, security and privacy or presence of sensitive information. By depositing in the repository, researchers authorize the University to render the items openly accessible for non-profit uses, with the exceptions noted above. Only publications that have been deposited in the repository are considered for internal evaluation. <http://roarmap.eprints.org/837>

# Guidelines for policy development for Research Funding Organizations (RFOs)

## a | Major steps in the process of policy development

**A preparation/consultation phase** will lead to common principles for the development of policies by the research funders in a country and will involve relevant stakeholders. These common principles may eventually lead to a formal regulation (such as a law) that will set the rules on matters of access to publicly funded research. In the preparation phase it is essential to secure the funds necessary for the implementation phase. The central authority that administers research funding should support financially the development of the relevant e-infrastructures (repositories).

**Implementing the policy.** On the basis of the preparation/consultation phase, a specific policy document regarding open access to research should be drafted and placed in effect by RFOs. Policies and relevant requirements should be made public in the websites of funding agencies and integrated in the grant contracts (specific clauses in grant agreements).

**Follow up and monitoring** are essential for the sustainability of the policy in the medium and long term. Compliance of authors and/or institutions should be monitored and connected to further funding. The policy should be evaluated at regular intervals. Funders should disseminate best practices and success stories widely in order to educate researchers on the practice of opening up access to research, as well as provide explanatory notes (e.g. FAQs) on how their policy works. Provisions should be made for the funding necessary to sustain and further expand e-infrastructures.

## b | Important points to consider in developing a policy

This section discusses the major issues that should be addressed for an effective funder policy.

The most effective policy is **an immediate mandatory self-archiving policy for peer-reviewed research**. In such a policy researchers are required to deposit all peer-reviewed research (journal, conference articles and books) immediately upon acceptance for publication in an appropriate repository, preferably that of the research institution that employs them. Materials become immediately openly accessible, unless there is a publisher embargo period (up to 6 months and to 12 months for social sciences and humanities). A funder open access policy should address copyright and licensing, explaining its regulations and providing relevant information resources for researchers.

**A mandatory policy.** In contrast to voluntary policies, mandatory policies result in high compliance rates, if accompanied by an effective support, advocacy and e-infrastructure system. Researchers should be required to deposit their work in repositories and make the full-text available immediately if possible, or no later than 6 months, or up to 12 months for social sciences and humanities, if there are embargoes from publishers. Funders should monitor compliance rates and non-compliance should be connected to their ability to obtain further funding (for authors and/or institutions).

**A self-archiving policy (=green open access).** Self-archiving does not interfere with the author's freedom of choosing where to publish his/her research. Rather, it enforces the ability of research institutions that have already invested funds in such e-infrastructures as repositories to use them in managing the research produced by their staff. It is therefore appropriate for research funders to encourage this activity by embedding it in their open access policies. Research funders should require deposit in a specific repository, that of the research institution that employs the author or a subject-based repository.

At the same time as mandating open access through repositories, research funders may also encourage open access publishing. To encourage open access publishing, RFOs may render Author Processing Charges for open access publications (articles and books) eligible. This entails developing specific requirements and processes and setting aside the relevant funds. This, however, is a measure for incentivizing researchers to experiment with open access publishing and it is not connected to an RFO's self-archiving policy.

**Immediate self-archiving and open access.** Self-archiving of the publication metadata and full-text should be required as soon as a work has been accepted for publication after the peer-review (author's final copy or publisher's, where possible). In this way peer-reviewed scholarship and its metadata becomes immediately available, irrespective of the publication date, which varies. Further, there is no conflict with publisher interests, since the document to be archived will not be the publisher's version. The latter can also be archived when it becomes available, if the publisher permits it. Open access should be required at the same time with the self-archiving. If a publisher embargo prohibits immediate open access, it should be respected up to a period of 6 months for the natural and medical sciences and up to 12 months for social sciences and humanities (especially on monographs). Institutional repositories should be programmed for an automatic opening of documents after this time elapses. Most publishers permit self-archiving. Relevant publisher policies are available at [www.sherpa.ac.uk/romeo](http://www.sherpa.ac.uk/romeo)

**Peer-reviewed research.** A policy should be explicit about the content it covers: peer-reviewed research -articles, conference proceedings and books/monographs- should be the target content for self-archiving. Within publications, books form a distinct category: they take long time to produce, authors often obtain royalties and publishers often invest more resources in producing them than in producing journals: these traits make books different to journal articles and require careful treatment in policy terms. RFOs should therefore mandate self-archiving so that the metadata are available for books and book sections, but should consider extending the embargo period up to 12 months to accommodate the different situation that books represent. Research data are also a significant type of research output, to which recent discussions on open access policies have turned. Open access to research data presents numerous benefits, among which the ability to verify research conclusions and save money from avoiding duplication of data collection efforts: revealing the data on which scientific conclusions

are drawn is a matter of proper scientific ethics. Scientific data, however, may also involve sensitive and classified data, while researcher attitudes towards their data are usually proprietary. Additionally there is usually considerable confusion as to ownership of data generated during the course of publicly-funded research. On account of all of these elements that constitute the particular, different, nature of scientific data, open access to them should be addressed extensively in a separate policy document: personal data, as well as other sensitive and classified information should be respected in formulating these policies. As a start, however, RFO open access policies should at least encourage (or even mandate) researchers to deposit data that underpin publications in appropriate repositories.

## Copyright and licensing

**Copyright.** Above, the procedure for enabling self-archiving while working around the embargoes imposed by publishers when authors sign copyright over to them was laid out. However, some RFOs may wish to take firm steps to ensure that there are no embargoes on outputs of the research they fund. In these cases, it is necessary for the author and/or funder to retain sufficient rights over publications in order to render them immediately openly accessible through the repository. This is the ideal situation, and makes publisher embargoes irrelevant. The policy should require the author to retain the rights necessary to make the work open access and should deter researchers from the standard practice of transferring their copyright to publishers. It is possible for authors to negotiate with publishers, licensing to them only those rights necessary for the publication, and relevant resources should be provided for researchers (e.g. negotiation tools, author's contract addenda).

**Licensing.** A license attached to digital items clarifies to users under what terms these scholarly materials may be used. Funder policies should encourage the use of licenses, such as Creative Commons. They are widely used all over the world and clearly explain the rights and obligations of users to humans and machines.

## C | Model open access policy

[**Introduction** - Insert some information on the benefits of open access, on the global context of the policy - e.g. the EC open access policies in Horizon 2020, other relevant information or initiatives from the national or international contexts - on the motivations for establishing the policy - wider dissemination, maximizing Return of Investment - on the key principles - e.g. the freedom of researchers to publish wherever they feel is the most appropriate - etc.]

For this purpose, [**Name of funding entity**] has defined the following open access policy, which must be observed by all recipients of research funding.

1. [**Name of funding entity**] requires that a copy of the accepted version (either author final manuscript - post-prints or publisher version) of all peer reviewed articles and books/monographs [if applicable, explicit other types of publications - e.g. reports, thesis and dissertations, etc. - which are covered by the policy], supported, either in their entirety or in part by [**Name of funding entity**] research funding, to be deposited in a suitable open access repository [suitable repositories should be defined here or in a footnote - suggested definition of suitable repositories: institutional repositories, subject repositories widely accepted by the respective research communities, capable of exposing their contents according to the funder requirements] immediately upon acceptance for publication, with the metadata (title, author, affiliation, funder, name of journal, etc.) openly available from the time of deposit.
2. [**Name of funding entity**] requires that all the publications mentioned on 1. are made openly available immediately, but no later than 6 months after the date of publication [and 12 months for social sciences and humanities]. To enable this, the [**Name of funding entity**] requires that in negotiating with publishers grantees retain sufficient rights to enable immediate open access or delayed open access of up to 6 months or up to 12 months for the social sciences and the humanities.
3. [**Name of funding entity**] considers as eligible expenses, which may be supported within the grants budget, Article Processing Charges (or simi-



lar fees) to publish in peer reviewed open access journals and books. In the case that an Article Processing Charge is supported by the grant budget, the article must be openly available from the moment of publication, under a CC-BY license or equivalent [define additional conditions - limits for the value of APCs, or limits to % of APC costs, considering the total budget of the project, etc.].

4. In all publications mentioned on 1. funding recipients must acknowledge [Name of funding entity] and identify the funding [project name, and/or acronym, and/or number] in the standardized prescribed manner [provide the standardized acknowledgement here, or refer to the appropriate document/webpage where this is defined].
5. [Name of funding entity] requires/encourages [choose the appropriate term] that all research data and associated metadata resulting from [Name of funding entity] funded projects, that serve as evidence for publicly available project reports and deliverables and/or are referenced on peer reviewed publications, to be deposited in a suitable open data repository [suitable repositories should be defined here or in a footnote - Suggested definition of suitable data repository: offers public access to the research data, enables data citation through persistent identifiers (DOI, or others), provides quality metadata (including acknowledgment of research funding) based on accepted guidelines and standards].
6. Institutions/grant holders agree that by receiving financing from [Name of funding entity] they have accepted the terms and conditions of this policy. [Name of funding entity] will monitor the compliance with the present terms and conditions and define [the following - use this in case concrete "sanctions" are defined immediately] sanctions [or implications or consequences] in case of non-compliance [possible sanctions/implications/consequences of non-compliance that may be defined here: withheld the transfer of part of the funds until all publications comply; do not approve new projects/funding until full compliance from previous funding; use previous compliance with open access policy as evaluation/selection criteria for new projects].

This policy comes into force from [date] and applies to all publications resulting from grants awarded subsequent to this date.

## d | Good practices

**The new National Spanish Law on Science, Technology and Innovation** was released in 2011 and it contains an article on open access to scientific publications, the Article 37 of the law, which is entitled “Open access dissemination”. It encourages Spanish institutions to stimulate the development of open access repositories for the deposit of the scientific output of their researchers, and to make sure that these repositories are interoperable with national and international initiatives. Also, it mandates that those Spanish researchers who carry out their research mainly funded by the National Government will make public a copy of the final version of the accepted paper as soon as possible, and no later than 12 months after publication. These open access copies will be deposited in an institutional or a thematic repository. National researchers' assessments will take into consideration the availability of open access production of researchers in their evaluation processes. The Ministry will be responsible for providing a centralized access to the Spanish repositories network. It is expected that the Government will develop the open access article into a more detailed regulation. [www.mineco.gob.es](http://www.mineco.gob.es)

**The Regional Government of Madrid** has a harvester for all 7 Universities' repositories based on Madrid. The harvester is called e-ciencia. It was created in 2005. In 2009, the Region launched a regular call for R&D funding, where an open self-archiving mandate was included for technology and biomedicine areas. The Madrid Region is now in the process of evaluating the call and evaluating its open access mandate. Its intention is to extent the self-archiving mandate to further calls. [www.madrid.org](http://www.madrid.org)

**The Regional Government of Asturias**, in Spain, operates a regional repository called RIA, which was created in 2009. Since that date, the Regional Government has included an open access self-archiving requirement in its calls for R&D funding in 2009, 2011 and 2012. The Regional Government is now in the process of evaluating the level of performance of these open access regulations in its public calls for funding. [www.asturias.es](http://www.asturias.es)

**Telethon Foundation** is a private and not-for-profit research funder of genetic diseases in Italy. It adopted an open access policy for research

publications supported by a grant from Telethon in 2010. The policy requires that original publications must be deposited in Europe PubMed Central (previously known as UK PubMed Central) upon acceptance by a publisher. Telethon's research results have a very high international impact. Its average number of citations per paper is remarkable in comparison with top level scientific institutes in molecular biology and genetics. [www.telethon.it](http://www.telethon.it)

**CARIPLO** is an Italian private research funder. In July 2012 CARIPLO approved its brand-new open access policy, which mandates authors to make available funded research output using both OA strategies: self-archiving and publishing in open access journals. Since CARIPLO funds basic research as well as applied research in various highly specialized fields, it leaves the author the option to select the repository for self-archiving. CARIPLO plans to monitor the level of compliance to the policy for further funding. [www.fondazionecariplo.it](http://www.fondazionecariplo.it)

# RESOURCES

## Directories of Open access Policies (Funders and RPOs)

**ROARMAP** | <http://roarmap.eprints.org> : a searchable international registry of open access policies adopted by universities, research institutions and research funders.

**SHERPA/JULIET** | [www.sherpa.ac.uk/juliet](http://www.sherpa.ac.uk/juliet) : a database of research funders' open access policies. Requirements and conditions of self-archiving of research publications and data are summarized allowing comparing the policies of different funding agencies.

**MELIBEA** | [www.accesoabierto.net/politicas/default.php](http://www.accesoabierto.net/politicas/default.php) : a directory of institutional open access policies aiming to identify and analyze the existing policies that encourage, request or require open access to scholarly outputs that arise from projects, in whole or in part, supported by public funds.

## Directories of Open access Policies (Funders and RPOs)

**ROARMAP** | <http://roarmap.eprints.org> : a searchable international registry of open access policies adopted by universities, research institutions and research funders.

**SHERPA/JULIET** | [www.sherpa.ac.uk/juliet](http://www.sherpa.ac.uk/juliet) : a database of research funders' open access policies. Requirements and conditions of self-archiving of research publications and data are summarized allowing comparing the policies of different funding agencies.

**MELIBEA** | [www.accesoabierto.net/politicas/default.php](http://www.accesoabierto.net/politicas/default.php) : a directory of institutional open access policies aiming to identify and analyze the existing policies that encourage, request or require open access to scholarly outputs that arise from projects, in whole or in part, supported by public funds.

## Directories of Publishers Policies

**SHERPA/RoMEO** | [www.sherpa.ac.uk/romeo](http://www.sherpa.ac.uk/romeo) : a searchable database of publishers' copyright and self-archiving policies for pre-prints and post-prints. This service based at the University of Nottingham is available in four languages including English, Spanish, Hungarian and Portuguese. RoMEO summarizes publishers' conditions and categorizes publishers by colors, indicating level of author rights.

**Dulcinea** | [www.accesoabierto.net/dulcinea](http://www.accesoabierto.net/dulcinea) : summarizes editorial policies of Spanish journals towards OA self-archiving. Dulcinea database contains active academic online Spanish journals, including bibliographic data, access policies, self-archiving policies according to their copyright licenses and a classification of the journals following SHERPA/RoMEO colors taxonomy.

**Blimunda** | <http://projecto.rcaap.pt/index.php/lang-en/sobre-o-rcaap/servicos/projecto-blimunda> : contributed to the definition of open access policies from Portuguese scientific publishers and journals towards self-archiving in institutional repositories and consequent inclusion of these policies in the SHERPA/RoMEO database.

**Héloise** | <http://heloise.ccsd.cnrs.fr> : a directory of French publisher policies on author self-archiving,

## Directories, lists and platforms of Open access journals, Open access repositories and Open access Books

**DOAJ** | [www.doaj.org](http://www.doaj.org) : Directory of open access Journals which aims to increase the visibility and ease use of OA scientific and scholarly journals, thereby promoting their increased usage and impact.

**OpenEdition / Freemium**: An innovative economic model for open access | [www.openedition.org](http://www.openedition.org) : CNRS supports the Centre for Open Electronic Publishing (Cléo), a major actor in France to foster the development of open-access academic publishing in the humanities and social sciences. Cléo has developed OpenEdition, an open-access digital resources portal which groups four complementary publication and information platforms: Revues.org, Calenda, Hypotheses, and the upcoming OpenEdition Books. OpenEdition can offer libraries and publishers a means to create a sustainable alliance to promote open-access in the humanities and social sciences.

**HAL, Hyper Articles on Line** | <http://hal.archives-ouvertes.fr> : the HAL platform was designed in 2001 by CNRS and provides access to the scientific output of most French academic and research institutions, on a model developed around ArXiv and the OAI-PMH protocol. HAL has ever since allowed to strengthen and to accelerate the development of open archives in France. An agreement at national level on a coordinated approach to open archiving based on HAL was renewed in 2013. Today HAL provides access to more than 230,000 full-text documents.

**Openarchives.gr** | [www.openarchives.gr](http://www.openarchives.gr) : federated search engine containing directory of OAI-PMH resources in Greece (not exhaustive). Contains lists of open access institutional and subject repositories of the country (exhaustive). Harvests resources on a daily basis.

**OpenDOAR** | [www.opendoar.org](http://www.opendoar.org) : directory of open access repositories allowing searches for repositories or searches repository contents. Additionally, it provides tools and support to both repository administrators and service providers in sharing best practice and improving the quality of the repository infrastructure.

## RECOLECTA - Recolector de CienciaAbierta |

**<http://recolecta.fecyt.es>** : directory of Spanish open access repositories and journals, allowing searches for repositories, journals and their contents. Basic information such as URL and base URL are available for each resource. The directory is under a process of reengineering.

## RCAAP Directory, Filter by Repository or Journal |

**[www.rcaap.pt/directory.jsp](http://www.rcaap.pt/directory.jsp)** : list of Portuguese open access repositories/journals aggregated on the RCAAP Search Portal. All of them are compliant with the DRIVER Guidelines and are harvested daily. Each resource has a public profile with contact information, OAI URL, interoperability and compliance, and also the evolution of the aggregated items.

**DOAB | [www.doabooks.org](http://www.doabooks.org)** : Directory of open access Books which aims to increase discoverability of As books harvesting book's metadata provided by academic publishers in order to maximize dissemination, visibility and impact.

## General Open access Resources

### Open access Tracker |

**[www.medoanet.eu/open-access-tracker-information](http://www.medoanet.eu/open-access-tracker-information)** : gathers information on the growth of different types of open access resources and policies in Greece, Turkey, Italy, Spain, France and Portugal creating a profile of growth for each country.

**OASIS | [www.openoasis.org](http://www.openoasis.org)** : intends to provide training and resources for persons or institutions who wish to provide open access to their research publications, expanding the knowledge base of open access implementation, sharing resources and best practices and demonstrating and recording successful outcomes of open access around the world.

**OAD | [http://oad.simmons.edu/oadwiki/Main\\_Page](http://oad.simmons.edu/oadwiki/Main_Page)** : the open access Directory (OAD) is a wiki where the OA community can create and support simple factual lists about open access to science and scholarship.

