

Open Access policies to publications and research data

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Summary



- ✓ **National Policy:** All *Plan Estatal* beneficiaries have the obligation to provide Open Access to the scientific publications developed within their research projects
- ✓ **European Policy:** All H2020 beneficiaries have the obligation to provide Open Access to the scientific **outcomes** developed within their research projects. This includes both scientific literature and research data

What is Open Access?



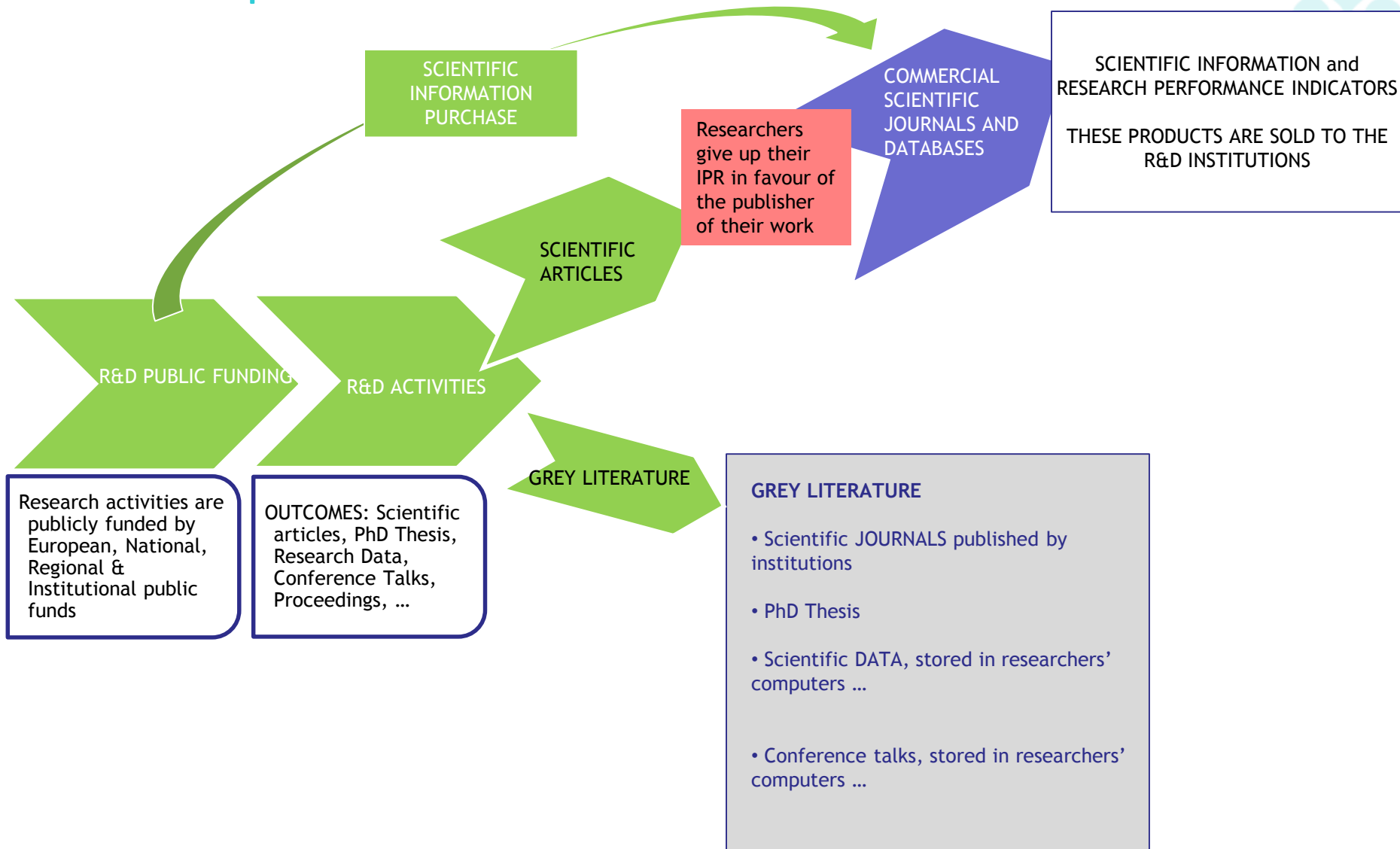
OA = online access at no charge to the user (this includes further distribution and proper archiving)

- to peer-reviewed scientific publications
- to research data

However, open access:

- is not a requirement to publish: researchers are free to publish or not
- does not interfere with the decision to exploit research results commercially e.g. patenting: discussion on open access comes after the decision to publish
- publications are not of a lower quality: they go through the same peer review process as other publications

Scientific production and Science communication track



Malfunctions



DOUBLE EXPENDITURE

- Public funds to support research activities
- Public funds to support access to scientific literature previously funded

LOST GREY LITERATURE

- Research outcomes not published by commercial publishers are lost
- PhD thesis, research data, presentations, reports, non commercial journal papers, etc. cause public expenditure and are not properly disseminated

LACK OF A SCIENTIFIC INFORMATION INFRASTRUCTURE

- Scientific information is not fully offered to the scientific community as a whole
- Scientific information is DISPERSED and not SISTEMATIZED

HIGH DEPENDENCE OF EXTERNAL SUPPLIERS

- R&D institutions and R&D managers are highly dependent on commercial publishers for access to scientific contents and metrics
- Scientific performance evaluation is biased



• National Policy:

- Science, Technology and Innovation Law, June 2011
- Institutional Repositories Network RECOLECTA
- R&D Projects Call for Proposals Plan Estatal
- Regional and institutional policies

• European Policy:

- FP7 (2007-2013)
- H2020 Rules Participation
- Coordination of all ME National Open Access policies



OPEN ACCESS TO SCIENTIFIC PUBLICATIONS

Open Access to scientific publications

Grant Agreement



ARTICLE 29 — DISSEMINATION OF RESULTS — OPEN ACCESS — VISIBILITY OF EU FUNDING

29.1 Obligation to disseminate results

29.2 Open access to scientific publications

Each beneficiary must ensure open access (free of charge, online access for any user) to all peer-reviewed scientific publications relating to its results.

In particular, it must:

- a) as soon as possible and at the latest on publication, **deposit a machine-readable electronic copy** of the published version or final peer-reviewed manuscript accepted for publication in a **repository** for scientific publications;
Moreover, the beneficiary must aim to deposit at the same time the research data needed to validate the results presented in the deposited scientific publications.
- b) **ensure open access to the deposited publication** — via the repository —.....
- c) **ensure open access** — via the repository — **to the bibliographic metadata** that identify the deposited publication.....
The bibliographic metadata must be in a standard format and must include all of the following:
 - the terms ['European Union (EU)' and 'Horizon 2020'] ['Euratom' and Euratom research and training programme 2014-2018'];
 - the name of the action, acronym and grant number;
 - the publication date, and length of embargo period if applicable, and
 - a persistent identifier.

http://ec.europa.eu/research/participants/data/ref/h2020/mga/gga/h2020-mga-gga-multi_en.pdf



- **Article 37. Science, Technology and Innovation Law, June 2011**

explotación sobre la misma, o de las transmisiones y contratos relativos a la propiedad intelectual, se regirá sobre el derecho privado conforme a lo dispuesto en la normativa propia de cada Comunidad Autónoma.

Artículo 37. *Difusión en acceso abierto.*

1. Los agentes públicos del Sistema Español de Ciencia, Tecnología e Innovación impulsarán el desarrollo de repositorios, propios o compartidos, de acceso abierto a las publicaciones de su personal de investigación, y establecerán sistemas que permitan conectarlos con iniciativas similares de ámbito nacional e internacional.

2. El personal de investigación cuya actividad investigadora esté financiada mayoritariamente con fondos de los Presupuestos Generales del Estado hará pública una versión digital de la versión final de los contenidos que le hayan sido aceptados para publicación en publicaciones de investigación seriadas o periódicas, tan pronto como resulte posible, pero no más tarde de doce meses después de la fecha oficial de publicación.

3. La versión electrónica se hará pública en repositorios de acceso abierto reconocidos en el campo de conocimiento en el que se ha desarrollado la investigación, o en repositorios institucionales de acceso abierto.

4. La versión electrónica pública podrá ser empleada por las Administraciones Públicas en sus procesos de evaluación.

5. El Ministerio de Ciencia e Innovación facilitará el acceso centralizado a los repositorios, y su conexión con iniciativas similares nacionales e internacionales.

6. Lo anterior se entiende sin perjuicio de los acuerdos en virtud de los cuales se hayan podido atribuir o transferir a terceros los derechos sobre las publicaciones, y no será de aplicación cuando los derechos sobre los resultados de la actividad de investigación, desarrollo e innovación sean susceptibles de protección.

Artículo 38. *Cultura científica y tecnológica.*

1. Las Administraciones Públicas fomentarán las actividades conducentes a la mejora de la cultura científica y tecnológica de la sociedad a través de la educación, la formación

- **Plan Estatal I+D+i**
- **R&D projects calls**



Investigador decide donde publicar



Comprobar SHERPA JoMEE para ver las opciones disponibles de acceso abierto y auto-archivo www.sherpa.ac.uk/romeo



Publicar en una revista de acceso abierto



Pagar tasas de procesamiento del artículo - *Si se requiere*

VÍA DORADA



Acceso abierto inmediato (a través de editor)



Publicar en una revista de suscripción



Buscar un repositorio <http://service.re3data.org/search> ó <http://opendoar.org/>

VÍA VERDE



Auto-archivo en un repositorio, en base a la política del editor



Acceso abierto inmediato o atrasado según política del editor

SI EXISTE LA POSIBILIDAD por ej. revista "híbrida" (una revista de suscripción con opción a acceso abierto de pago)



Pagar tasas de procesamiento del artículo



Acceso abierto inmediato (a través de editor)



www.fosteropenscience.eu



Example: Elsevier sharing policies



Accepted Manuscript

Authors can share their accepted manuscript:

Immediately

- via their non-commercial personal homepage or blog
- by updating a preprint in arXiv or RePEc with the accepted manuscript
- via their research institute or institutional repository for internal institutional uses or as part of an invitation-only research collaboration work-group
- directly by providing copies to their students or to research collaborators for their personal use
- for private scholarly sharing as part of an invitation-only work group on commercial sites with which Elsevier has an agreement

After the embargo period

- via non-commercial hosting platforms such as their institutional repository
- via commercial sites with which Elsevier has an agreement

In all cases accepted manuscripts should:

- link to the formal publication via its DOI
- bear a CC-BY-NC-ND license – this is easy to do, [click here](#) to find out how
- if aggregated with other manuscripts, for example in a repository or other site, be shared in alignment with our [hosting policy](#)
- not be added to or enhanced in any way to appear more like, or to substitute for, the published journal article

Immediate publication allowed



Embargo periods are above 12/24 months in most Elsevier journals

Choices:

1. Negotiate with the editor self-archiving before publication. May the publisher's policy be inconsistent with GA mandate, researchers can sign an annex to the contract.
2. Pay for APCs. Eligible costs if they are included in the project budget. In Gold OA, around 1500-2000 €.

* Se recomienda considerar las cuestiones sobre acceso abierto / datos en las negociaciones del consorcio.

<https://www.elsevier.com/about/company-information/policies/sharing>

<https://pandelisperakakis.wordpress.com/2015/09/09/how-to-negotiate-with-publishers-an-example-of-immediate-self-archiving-despite-publishers-embargo-policy/>

OA Repositories for Literature



Harvesters and directories:

Recolecta: <https://www.recolecta.fecyt.es/>

OpenAIRE: <https://www.openaire.eu/participate/deposit-publications-data>

OpenDOAR: <http://www.opendoar.org/>

Tematic Repositories:

- ArXiv (<http://arxiv.org>) : física, matemáticas, computación, biología cuantitativa.
- Europe PubMed Central (<http://europepmc.org/>): ciencias de la vida
- Cogprints (<http://cogprints.ecs.soton.ac.uk/>): psicología, neurociencias y biología.
- RePec (<http://ideas.repec.org>): economía.
- ...

Institucional Repositories: universidades, centros de investigación...

Zenodo: <https://zenodo.org/>

OAPEN Library: <http://oapen.org> (monografías)



OPEN ACCESS TO RESEARCH DATA



.....

29.3 Open access to research data

[OPTION for actions participating in the open Research Data Pilot: Regarding the **digital research data** generated in the action ('data'), the beneficiaries **must**:

a) deposit in a research data repository and take measures to make it possible for third parties to access, mine, exploit, reproduce and disseminate — free of charge for any user — the following:

- (i) **the data, including associated metadata, needed to validate the results presented in scientific publications as soon as possible;**
- (ii) **other data, including associated metadata, as specified and within the deadlines laid down in the 'data management plan' (see Annex 1);**

b) **provide information** — via the repository — **about tools and instruments at the disposal of the beneficiaries and necessary for validating the results** (and — where possible — provide the tools and instruments themselves).

This does **not change** the **obligation to protect results** in Article 27, the **confidentiality** obligations in Article 36, the **security** obligations in Article 37 or the **obligations to protect personal data** in Article 39, all of which still apply.

As an exception, the beneficiaries do **not have to ensure open access to specific parts of their research data if the achievement of the action's main objective**, as described in Annex 1, **would be jeopardised** by making those specific parts of the research data openly accessible. In this case, the data management plan must contain the reasons for not giving access.]

http://ec.europa.eu/research/participants/data/ref/h2020/mga/gga/h2020-mga-gga-multi_en.pdf

Open Research Data

Aim:

To make the **research data** generated by selected Horizon 2020 projects **accessible** with as few restrictions as possible, while at the same time protecting sensitive data from inappropriate access.

Pilot Areas:

- Future and Emerging Technologies (FET)
- Research infrastructures – part e-Infrastructures
- LEIT – Information and Communication Technologies (ICT)
- Societal Challenge: 'Secure, Clean and Efficient Energy' – part Smart Cities and Communities (SC 3)
- Societal Challenge: 'Leadership in Enabling and Industrial Technologies' (SC5)
- Science with and for Society

2017: all H2020 areas*

* Excluded: a) co-fund, b) prizes, c) ERC proof of concept instruments, d) those ERA-Nets that do not produce data, and e) the SME instrument phase 1.



Partial / total opting out

- Anytime during projects' lifetime
- Incompatible with the Horizon 2020 obligation to protect results if they can reasonably be expected to be **commercially or industrially exploited**;
- Incompatible with the need for **confidentiality** in connection with security issues;
- Incompatible with existing rules concerning the **protection of personal data**;
- If the project will **not generate / collect any research data**;
- If there are other legitimate reasons to not take part in the Pilot

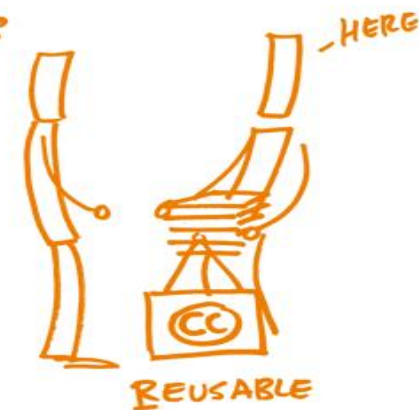
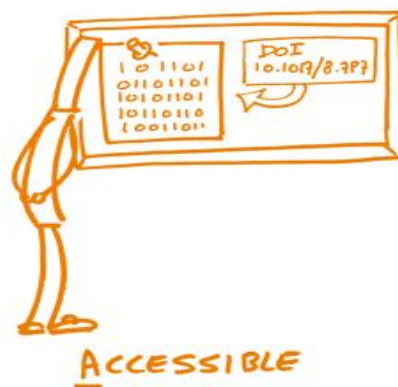
RESEARCH DATA - OPEN BY DEFAULT



Research data and their metadata should be treated for them to be reusable

FAIR DATA PRINCIPLES

AH!



http://ec.europa.eu/research/press/2016/pdf/opendata-infographic_072016.pdf
<https://open-science-training-handbook.gitbooks.io/book/content/>



- **Persistent Identifiers** : DOI, ORCID. They allow us to cite our research data.
- **Standards and metadata**: ¿What are my data about? ¿Who collected them, and why? ¿In what formats are my data available? Metadata answer these questions, so our research data can be found and interpreted.
- **Keywords**, harmonized files' naming, well identified versions .

Accesible



- **Archiving and long-term preserving our research data, benefitting from a repository :**

- Re3data www.re3data.org
- Zenodo www.zenodo.org



- **Data sharing:** use information exchange protocols

- **Criteria for selecting a repository:**

<https://www.openaire.eu/opendatapilot-repository>

<http://ddd.uab.cat/pub/docins/2016/163562/RecomanacionsSeleccionarRepositoriDadesNovembre2016.pdf>

- **Data formats :** <http://www.data-archive.ac.uk/create-manage/format/formats-table>

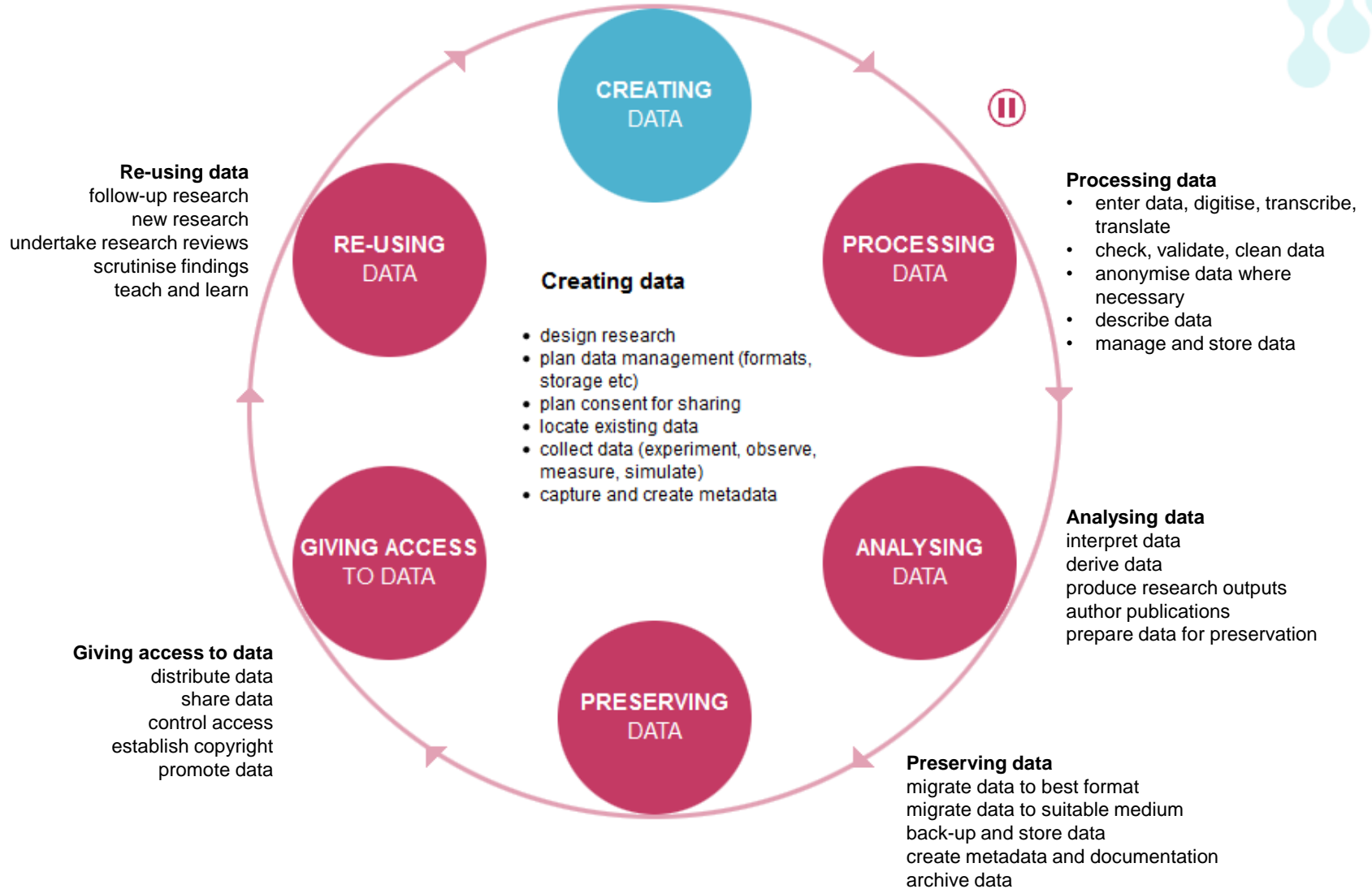
Interoperable, Reusable



- Allow access, **downloading, exploitation and** reproducibility of research data
- License your data clearly
- Specify restrictions, embargos, and access rules to your research data

- ✓ Recommended Open Licenses in directrices H2020: CC-BY/CC-0
- ✓ Open Licenses Guide: <http://www.dcc.ac.uk/resources/how-guides/license-research-data>

Research Data Lifecycle



Costs



- Eligible costs during project length. These costs should be included in the budget and included in the DMP.
- All costs related to research data should be taken into consideration in the DMP: infrastructures, preservation, amount of data, etc.
- Clearly define responsibilities and additional resources for data management.
- More info about associated costs with research data curation and preservation:
 - *UK Data Service - Data management costing tool*: checklist of potential needs throughout data life cycle: <http://www.data-archive.ac.uk/create-manage/planning-for-sharing/costing>
 - Examples: transcription, anonymization, external assessment, software...

What is a Data Management Plan?



- **Data-set:** What data will be collected / generated? For whom will they be useful in the future?
- **Standards and metadata:** What standards will be used / how will metadata be generated? What is data about? Who created them and why? Which formats are available? Metadata reply to all those questions, allowing data to be understood, ideally using specific standards on the research area
- **Sharing data:** What data will be exploited? What data will be shared/made open? Technical requirements, software, tools, access open/restricted, use conditions... the reasons not to share data should be provided through DMP
- **Data curation and preservation:** How will data be curated and preserved? It will be possible to use data in the future if they are correctly stored, but also tools are needed.

How to write a DMP



- Template available from DMPonline <https://dmponline.dcc.ac.uk/>

Upcoming DCC workshop - '[Advanced DMPonline: how to customise the tool for your institution](#)',
23 November 2015, Glasgow

DMP ONLINE Home About Roadmap Help

Welcome.

DMPonline has been developed by the **Digital Curation Centre** to help you write data management plans.

Screencast on how to use DMPonline

Sign in

Email address *

[Forgot your password?](#)

Remember me

Sign in

[Or, sign in with your institutional credentials \(UK users only\)](#)

Sign up

New to DMPonline? Sign up today.

Create a new plan

Please select from the following drop-downs so we can determine what questions and guidance should be displayed in your plan.

If you aren't responding to specific requirements from a funder or an institution, [select here to write a generic DMP](#) based on the most common themes.

If applying for funding, select your research funder.

Otherwise leave blank.

Funder

- Arts & Humanities Research Council
- Biotechnology and Biological Sciences Research Council
- Cancer Research UK
- Economic and Social Research Council
- Engineering and Physical Sciences Research Council
- European Commission (Horizon 2020)**
- Medical Research Council



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If applying for funding, select your research funder.

Otherwise leave blank.

European Commission (Horizon 2020)

[Not applicable/not listed.](#)

To see institutional questions and/or guidance, select your organisation.

You may leave blank or select a different organisation to your own.

Organisation

- University of Durham
- ELXIR**
- Edge Hill University
- Edinburgh Napier University
- University of Edinburgh
- University of Essex
- University of Exeter

Tick to select any other sources of guidance you wish to see.

DCC guidance

Create plan

An initial DMP should be completed within 6 months of starting the project.

The purpose of the Data Management Plan (DMP) is to provide an analysis of the main elements of the data management policy that will be used by the applicants with regard to all the datasets that will be generated by the project.

The DMP is not a fixed document, but evolves during the lifespan of the project.

The DMP should address the points below on a dataset by dataset basis and should reflect the current status of reflection within the consortium about the data that will be produced.

Sections	Questions
For each data set specify the following:	<ul style="list-style-type: none"> - Data set reference and name - Data set description - Standards and metadata - Data sharing - Archiving and preservation (including storage and backup)

Mid-term Review DMP

Final review DMP

Briefly specify

- how data will be captured/created
- how it will be documented
- according to what standards
- who will be able to access it
- where it will be stored
- how it will be backed up, and
- where and how it will be shared and preserved long-term

Deliver the DMP

Test DMP for OpenAire purposes

Plan details

Initial DMP

Mid-term Review DMP

Final review DMP

Share

Export

From here you can download your plan in various formats. This may be useful if you need to submit your plan as part of a grant application. Select what format you wish to use and click to 'Export'.

Initial DMP

Format

pdf

- csv
- html
- json
- pdf
- text
- xml
- docx

Export

ting values)

- ✓ Initial DMP version to the Commission within six months
- ✓ In subsequent reviews the project officer and reviewers may check to see if the DMP is followed

How to write a DMP



- Template available from: <http://www.consorciomadrono.es/pagoda/>

PAGODA

INICIO

CREAR UN PGD

PGDOnline

DOCUMENTOS

FAQs

ASESORAMIENTO

PA GO DA - Plan de Gestión de Datos

Bienvenido a la web del Plan de Gestión de Datos de las bibliotecas del Consorcio Madroño.

El Programa Marco de Investigación e Innovación de la Unión Europea Horizonte 2020 incluye un Piloto de Datos de Investigación en Acceso Abierto cuyo objetivo es garantizar el acceso y la reutilización de los datos generados en el ámbito de proyectos participantes.

El Programa Horizonte 2020 requiere que los proyectos que formen parte del Piloto de Datos de Investigación en Abierto entreguen un Plan de Gestión de Datos completo durante los 6 primeros meses del proyecto.

Un Plan de Gestión de Datos es un documento que describe el tratamiento que van a recibir los datos de investigación recopilados o generados en el curso de un proyecto de investigación.

El consorcio Madroño ha traducido al español y adaptado la herramienta de gestión PGDOnline desarrollada por el Digital Curation Centre del Reino Unido así como también las directrices para la Gestión de Datos en Horizonte 2020. Además le ofrece material de apoyo y un servicio de asesoramiento en cada una de las bibliotecas miembros.



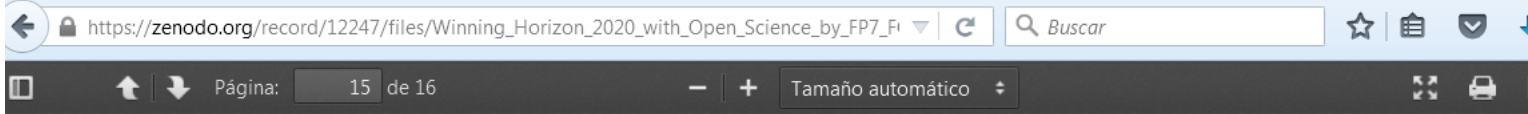


PREPARING A PROPOSAL

Impact section

Winning Horizon 2020 with Open Science?

https://zenodo.org/record/12247/files/Winning_Horizon_2020_with_Open



HOW to write "Section 2.2 IMPACT" *A generic example*

The Project consortium acknowledges that the research and new knowledge generated is of societal benefit, and could potentially contribute toward solutions of societal challenges. As such, the foreground knowledge needs to be disseminated in an optimum way for impact and re-use of results, according to Responsible Research & Innovation (RRI) principles¹⁴.

Currently only 50% of research is freely accessible to the public¹⁵, resulting in measurable loss to the knowledge-based SME sector and slowing down innovation¹⁶. **The Project** consortium will thus optimize on the dissemination and impact of foreground along the full knowledge production chain, and integrate Open Science principles in its Dissemination & Communication Strategy.

In support of the EC Digital Agenda¹⁷ and the Economic Growth agenda of the Innovation Union (Green Action Plan¹⁸), the consortium will fully integrate Grant Agreement Article 29 into its workflow at task level. Foreground data (*state diversity of data generated*) will be permanently archived at generation in **STATE REPOSITORY**¹⁹ and publicly released and/or published²⁰ (*with the exception of Third Party data, national security data, medical/patient data*) during the lifetime of the project²¹.

Software code, tools and interfaces developed as part of the concept will be open source code and full access provided via **STATE REPOSITORY**²². Resulting research publications (*refer to tasks/WP most likely to publish*) will also be made openly available via e-Infrastructure OpenAIRE²³ (DG CONNECT; *request letters of support*), predominantly relying on the Green Open Access strategy (self-archiving) for maximum return on investment for project and funder, and actively linked to underlying data objects, in support of the

European Commission
European Commission > Research & Innovation
HOME FUNDING OPPORTUNITIES

- H2020 Online Manual
- Reference Documents**
- Beneficiary Register
- Financial Capacity Self-Check
- SME Participation

H2020

Other EU programmes

FP7

English

- Legal basis
 - Framework programmes (EC-Euratom)
 - Rules for participation
 - Specific programme
 - European institute of Innovation and Technology (EIT)
- Model grant agreement
 - General Grant Agreement
 - European Research Council (ERC)
 - Marie-Sklodowska-Curie (MSC)
 - SME Instrument
 - ERANET Cofund
 - Pre-Commercial Procurement (PCP)/Public Procurement of Innovative Solutions (PPI)
 - European Joint Programme Cofund
 - Framework Partnerships
 - Lump sum
- H2020 Grants Manual
 - Section on beneficiary registration, validation and financial viability check
 - Section on proposal submission and evaluation
 - Guidance on evaluation of some H2020 aspects
 - Section on grant agreement preparation
 - Annotated Model Grant Agreement
 - Horizontal issues
 - Third country participation
 - Ethics
 - Large Research Infrastructures
 - Open access specific guides
 - [Guidelines on Open Access to Scientific Publications and Research Data](#)
 - [Guidelines on Data Management](#)
 - Gender balance
 - Security issues
- H2020 Prizes Manual
- H2020 Experts Manual
- Specific guidelines
- Work Programmes
- Templates & forms
- Lists of H2020 expert evaluators

REGISTER

ion and

HELPDESK

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zenodo

Research. Shared.

New Version Relaunched (Sept 12)

Find out what's new

Open Science in practice in FP9

OpenAIRE has issued some recommendations for solidifying and advancing open science in FP9.

FP9 is about carrying out research through mission oriented goals, co-creation and co-design, and is about responsible and reproducible research that provides sustainable approaches to societal problems in an ever growing arena of data where fact-checking and evidence policy are in the centre.

It is thus more important than ever to strengthen Open Science in its many incarnations and empower Europe via a collaborative approach to open infrastructures for open science, across all borders and all domains.

[READ MORE](#)

RESEARCHERS

Why Open Access. How to comply. What services to use.

DATA PROVIDERS

How to make your content more visible. What to do to increase quality. How to join.

RESEARCH ADMINS

How to monitor research results. What services to use for your needs.

FUNDERS

Why align policies and practices. How to monitor and analyze results.

Thank you



openairespain@fecyt.es

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

NOADs: <https://www.openaire.eu/contact-noads>

