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Recursos OpenAIRE para apoio e formação na prática da Ciência Aberta



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Pilares da ação da infraestrutura OpenAIRE



OpenAIRE Open Science Helpdesk



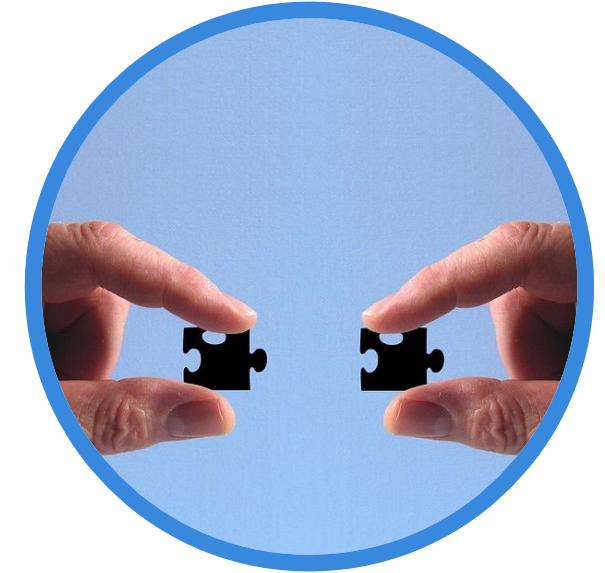
**COORDENAÇÃO DA
ATIVIDADE DE SUPORTE**

**Guias
Factsheets
Sistema de tickets
Apoio nacional**



**FORMAÇÃO EM OPEN SCIENCE,
DADOS ABERTOS & GDI**

**Webinars
Workshops
Formação de formadores**



**FORMAÇÃO PARA USO DOS
SERVIÇOS OpenAIRE**

**Guias para serviços
Sessões demo e tutoriais
Webinars/Community calls**



Suporte & Formação

www.openaire.eu/support

Open Access Basics

An Open Access primer to get you started

An RDM Handbook

A primer on managing your research data

Guides on policies and services

Howto's on practicing open science and using OpenAIRE services

Factsheets

Quick references on open science topics for researchers, administrators, funders, etc.



Helpdesk

FAQ

Find your answers

Ask a question

Contact us via our ticketing system



Training

Webinars

On specific topics

Workshops

Thematic, national, services

Factsheets temáticas (H2020) e sobre serviços OpenAIRE

Horizon 2020 Factsheetswww.openaire.eu

Personal data and the Open Research Data



How can OpenAIRE help?

Briefing paper for researchers, research administrators and project coordinators

The EC Open Research Data Pilot

Open data is data that is free to use, reuse and redistribute. The EC Open Research Data Pilot (ORDP) enables open access to and reuse of research data generated by Horizon 2020 projects. The Pilot applies primarily to the data (and metadata) needed to validate results in scientific publications, as well as other data specified in the Data Management Plan (DMP).

Projects participating in the Pilot are required to deposit their research data in a research data repository and take measures to enable third parties to access, mine, exploit, reproduce and disseminate this data.

However, the concept of the free use of research data within the Pilot may conflict with data protection rules if such data contain personal data.

What is personal data?



"Personal data" means any information relating to a natural person who is either identified or could be identified by that data (e.g., by reference to an identifier such as a name, an identification number, location data, online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that person).

Data protection rules always apply wherever personal data is being processed. Processing here includes practically any operation in connection with personal data – including collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction.

So what's the problem?

Research data

Research data – especially in fields like medicine, biotechnology and the social sciences – often contain personal data. This means that many datasets, in their raw form, cannot be made openly available as required by the ORDP due to conflicts with rules on protection of personal data.

Hence, incompatibility with data protection regulations is one of the major reasons for opting out of the ORDP. However, opting out of the Pilot is not the only way to prevent possible infringements.

Firstly, even if one particular dataset is unsuitable for sharing, the same project might produce other datasets which are. Secondly, even if datasets contain personal data, they might still be able to be shared either through (1) anonymisation, or in limited cases, (2) targeted sharing.

Anonymisation of personal data?

The best way to fulfil the requirements of the **Open Research Data Pilot** and **data protection rules** at the same time is to anonymise personal (research) data before making them openly available.

Anonymised data are no longer personal data, consequently data protection rules are no longer applicable.


Effective **anonymisation** prevents third parties from re-identifying individuals in anonymised datasets, i.e., associating a record to a natural person by using other sources of information. Moreover, anonymisation provides further privacy guarantees that prevent third parties from inferring that a person is associated with a certain property, e.g., a particular health condition, with high probability, or even to infer the participation of a person in a published dataset.

When possible, data anonymisation is the best solution to avert data protection risks.




Dealing with Personal Data

How to balance open access and data protection?

Horizon 2020 Factsheetswww.openaire.eu

Open Access and Open Data in Horizon 2020



How can OpenAIRE help?



Factsheet for Research Administrators and Project Coordinators

The Horizon 2020 Open Access Mandate

In Horizon 2020, the European Commission (EC) requires that all peer-reviewed publications resulting from project funding are Open Access (OA), i.e., freely available online with no restrictions on use.



4 Simple steps for Open Access

Step 1. Submit a paper to a journal of your choice (there is no restriction). Publishing costs (article processing fees for immediate Open Access) are eligible costs and can be reimbursed within the


Step 2. Acknowledge project funding in the article's metadata by including the terms ["European Union (EU)" and "Horizon 2020"] or ["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 (e.g. DOI, handle).

Check the publisher policy on what version you can deposit on: <https://v2.sherpa.ac.uk/romeo/>

Step 3. Deposit the final peer-reviewed manuscript or the publisher's PDF in an institutional or subject repository (or zenodo.org if no other option is available) as soon as possible and at the latest upon publication.

It is not enough to list publications on a project website – they'll go unnoticed!

Step 4. Ensure open access to the deposited publication. An embargo of 6 months (or 12 months for the social sciences and humanities) is acceptable



OpenAIRE: Services for Research Managers

Search for your project at:

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

We maintain a page for every Horizon 2020 project, featuring project information, related project publications and datasets and a statistics section.

OpenAIRE includes an App Box that allows you to generate a project publication list with just one click. Use it to communicate your project results with your collaborators, or dynamically embed it in your project site and automatically keep it up-to-date.

Can't find or see all of your project's publications in OpenAIRE at reporting time?


This means that they are not deposited in an OpenAIRE compliant repository.


Use the Link Service available in our Discovery Portal - <https://explore.openaire.eu/> - to claim your publications that are either deposited and not yet viewable, or not yet deposited at all.

We help you with a few simple steps, but in this case you must ensure that all H2020 rules are followed!

Putting your work into OpenAIRE-compliant repositories automatically ensures that you:


- Comply with the Horizon 2020 Mandate on Open Access to scientific publications.
- Save time as you can import your project publications into the EC's participant portal with a single click of a button!



Horizon 2020 Factsheetswww.openaire.eu

Open Research Data in Horizon 2020

How can OpenAIRE help?



Are you a Researcher, Project Coordinator or Research Manager participating in a EC project? What, where and how to share your Data?

What is the Open Research Data?

Open data is data that is free to use, reuse and redistribute. The Open Research Data enables open access and the reuse of research data generated by Horizon 2020 projects.


Open Access to data underlying their scientific publications.


Participating projects are required to:

- Develop (and keep up-to-date) a Data Management Plan (DMP).
- Deposit their data in a research data repository.
- Ensure that third parties can freely access, mine, exploit, reproduce and disseminate it.
- Make clear what tools are needed to use the raw data to validate research results (or provide the tools themselves).

What's in it for you?

- Be part of the new era of Open Science, integrating transparency, effectiveness and timeliness into all areas of scientific methods and processes.
- Reach more people, have greater impact.
- Avoid duplication of effort and help preserve data for future researchers.
- Simplify final reporting by keeping your DMP up-to-date.





Do you have a Horizon 2020 grant? Do you manage your data in a FAIR way?

Are you still part of the Pilot?

Projects covered by the Work Programme 2017 are part of the Open Data Pilot by default. As of Work Programme 2017, the Pilot has been extended to all areas of Horizon 2020 (except "co-fund" and "prizes" instruments, ERC PoC, SME instrument Ph1 actions, ERA-NET Cofund actions that do not produce data).

If your project started before then and stems from one of following H2020 areas, you are automatically part of the Pilot as well:

- Future and Emerging Technologies.
- Research infrastructures – part e-Infrastructures.
- Leadership in enabling and industrial technologies – Information and Communication Technologies.
- Nanotechnologies, advanced.

How can OpenAIRE help? OpenAIRE provides a range of resources, FAQs, webinars and support pages.

OpenAIRE has local representatives in all EU countries: the National Open Access Desks, or NOADs. Contact them via our helpdesk system at <https://www.openaire.eu/support/helpdesk>

If there is no disciplinary or institutional repository available, researchers are welcome to use the Zenodo repository provided by OpenAIRE and hosted by CERN. www.zenodo.org

Can you opt out?

We hope you won't, but projects may opt out of the Pilot at any stage, partially or completely. See the EC Guide on OA for eligible reasons.

Note that in multi-beneficiary projects it is also possible for specific beneficiaries to keep their data closed if relevant provisions are made in the consortium agreement, which are in line with the reasons for opting out.

- Societal Challenge: Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy.
- Societal Challenge: Europe in a changing world – inclusive, innovative and reflective Societies.
- Science with and for Society.
- Cross-cutting activities - focus areas – part Smart and Sustainable Cities.

Factsheets temáticas (H2020) e sobre serviços OpenAIRE

Services Factsheets
www.openaire.eu



The free, open repository from OpenAIRE and CERN

FACTSHEET FOR RESEARCHERS, SCIENTIFIC COMMUNITIES AND RESEARCH INSTITUTIONS

What is ZENODO?

Zenodo (zenodo.org) is an open, dependable repository for all of scholarship, enabling researchers from all disciplines to share and preserve their research outputs, regardless of size or format.

Free to upload and free to access. Zenodo makes scientific outputs of all kinds citable, shareable and discoverable for the long term.



What is ZENODO for?

a. Zenodo is for all individual researchers, scientific communities and research institutions. It is open to all research outputs regardless of funding source.

b. Don't have an appropriate institutional or thematic repository? Use Zenodo!

c. Zenodo is linked to Horizon 2020 projects and all results are immediately linked to OpenAIRE and the EC portal.

d. With Zenodo you can create and curate a collection for your research group or project, host conference proceedings and even journals.

What can do for you?



Share and link research: Zenodo provides a rich interface which enables linking research outputs to datasets and funding information. All open content is harvestable via OAI-PMH by third parties.

Supports versioning: Via a top-level DOI you can support all the different versions of a file.

Trusted, reliable, safe: Data is stored at CERN, which has considerable knowledge and experience operating large-scale digital repositories. Data files and metadata are kept in multiple online and offline copies.

Reviewing: Research materials can be set to share with reviewers only, and also as embargoed.





High accuracy Data Anonymization

FACTSHEET FOR RESEARCHERS

What is Amnesia?

Amnesia is a tool that helps you to transform personal data to anonymous data that can be used for statistical analysis. Data anonymized with Amnesia are "statistically guaranteed" that they cannot be linked to the original data.

Did you know that you can do your research and share your results complying with GDPR guidelines by using data anonymization algorithms, because:

- Guarantees no links to the original data
- Offers k-anonymity & km-anonymity
- Allows minimal reduction of information quality

Amnesia is GDPR compliant

Create anonymous datasets from data that are treated as statistics by GDPR. By doing so, anonymous data can be used without the need for consent or other actions, reducing the effort needed to do from them.

- Guarantees anonymity
- Goes beyond pseudo-anonymization
- Anonymized data are not constrained by GDPR

How does it work?

Amnesia is an application written in java and JavaScript and **should be used locally for anonymizing a dataset**.

The transformation is guided by user choices and provides an **anonymization guaranty** for the result.

Amnesia has High Usability & Flexibility

Because anonymization is tailored to user needs through a graphical interface. You guide the algorithm and decide trade-offs with simple visual choices. Developers can incorporate Amnesia anonymization engine to their project through a ReST API.

- Easy usage interface
- Adjustable settings
- Visualization of anonymization choices

Amnesia offers the following privacy guaranties:

- k-anonymity, suited for simple relational data and
- km-anonymity, for multi-dimensional data



Research Community Gateway

Build a Gateway to your community's open and linked research outcomes
Customized to your needs

FACTSHEET FOR RESEARCH COMMUNITY MANAGERS AND RESEARCHERS

What is Research Community Gateway?

Is a service developed by OpenAIRE-Connect, which fosters transparent evaluation of results and facilitates reproducibility of science for research communities by enabling a scientific communication ecosystem supporting exchange of research products (publications, data, software, methods) and links between them across communities and across content providers.

A Virtual Research Environment
An overlay platform making it easy to share, link, disseminate and monitor all your publications, data, software, methods. In one place.

Open Science in action
A time-saving bundle of services for researchers to effortlessly practice open science. An integral part of the European Open Science Cloud.

What is for?

Researchers can use the Community Gateway to:

SEARCH - Search & browse your community's research products

- Find recent research results linked to the community
- Search research results, projects and content providers linked to the community

MONITOR - View statistics for your community's research products

- Research results statistics linked to the community

DEPOSIT - Find a repository to deposit your research outcome

- Deposit or publish your research in Open Access
- Find the appropriate repository to deposit your research products of any type (publication, data, software, other) or to include in your data management plan

LINK - Link your research output with your community, funding, and other research products

Research Community manager configure the dashboard

- Which repositories to use (pubs, data, software...)
- Which text mining rules to use for inference
- How to structure community (e.g., ontologies)
- Which statistics and reports to produce


Communities are "owners" of the Dashboard:

- Moderate end-users actions
- Govern the service
- OpenAIRE takes over aggregation, cleaning, inferring, statistics, reporting, APIs...
- Use of interoperability standards by default

Open Science as-a-Service for Research Communities

Facilitate Research Communities adoption of Open Science publishing principles by supporting an affective sharing tools as-a-Service





Plan and follow your data

FACTSHEET FOR RESEARCHERS AND PROJECT COORDINATORS

What is Argos?

Argos (argos.openaire.eu) is the online machine-actionable tool developed by OpenAIRE to facilitate Research Data Management (RDM) activities concerning the implementation of Data Management Plans (DMPs). It is an open, extensible and collaborative tool which follows global standards as endorsed by the Research Data Alliance (RDA).

Argos uses OpenAIRE guides created by the RDM Task Force to familiarize users with basic RDM concepts and guide them throughout the process of describing their data. It also utilises the OpenAIRE pool of services and inferred sources to make DMPs more dynamic in use and easier to be completed and published. Argos is based on the OpenDMP open source software and is available through the OpenAIRE Service catalogue and the EOSC.

Who is Argos for?

Argos can be used by researchers, research communities, project coordinators and students to learn how to write DMPs and to comply with funders' or organisations' RDM policies. Argos applies information literacy methods to familiarise users with the RDM process, the concepts of data management according to the FAIR principles, ethical decisions in science and more. Hence, it can also be used for educational purposes in academic courses or libraries' instructions.

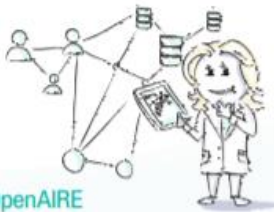
For that, Argos can be configured by institutions, research communities and funders in order to meet their specific requirements.

About OpenAIRE

OpenAIRE fosters the social and technical links that enable Open Science in Europe and beyond. www.openaire.eu

For more information, please contact: info@openaire.eu

Terms of Service <https://argos.openaire.eu/terms-and-conditions>



Conteúdos essenciais sobre acesso aberto e GDI

Open Science Primers: getting you started on good practices



Open Access Basics

An Open Access primer to get you started



An RDM Handbook

A primer on managing your research data

How to implement open access and open science

WHAT IS OPEN ACCESS?

HOW TO PROVIDE OPEN ACCESS?

HOW TO FIND A SUITABLE OPEN ACCESS JOURNAL?

HOW TO BE SURE THAT YOU CAN TRUST A PARTICULAR JOURNAL?

HOW TO FIND A SUITABLE REPOSITORY FOR YOUR PUBLICATIONS

WHAT'S THE DIFFERENCE BETWEEN RESEARCHGATE, ACADEMIA.EDU, AND AN INSTITUTIONAL REPOSITORY?

What is Open Access?

Nick Shockey and Jonathan Eisen take you through the world of open access publishing and explain just what it's all about.



www.openaire.eu/os-primers

OPEN DATA

HOW TO MAKE DATA OPEN?

WHY MANAGE DATA?

RESPONSIBILITIES IN RESEARCH DATA MANAGEMENT

WHICH DATA SHOULD BE PRESERVED AND SHARED?

WHY SHARE DATA?

EXPLORE THE INDICATORS RELATED TO OPEN RESEARCH DATA

WHAT IS A DATA MANAGEMENT PLAN (DMP)?

KEY MESSAGES

VIEW OUR WEBINAR RECORDINGS

Why share data?

It's part of good data practice

"It was *never* acceptable to publish papers without making data available."

- Ewan Birney

#OpenData
#OpenScience



Guides for Researchers

Data formats for preservation

What you need to know when creating a DMP

Guides for Researchers

How do I license my research data?

Learn more about licenses for research data and how to apply it

Guides for OpenAIRE services

Explore - How to report your publication and data to the EC

Guides for OpenAIRE Services

Provide - How to enrich research artifacts

Guides for Funders

Why OpenAIRE Monitor

Benefits in its use

GUIAS

32 Guides

6735 Hits/mês

www.openaire.eu/guides

SUPPORT MATERIALS

Howto's on practicing Open Science
and on using OpenAIRE services

OpenAIRE guides



OpenAIRE Guides for Research Data Management

OpenAIRE Guide to storing sensitive data

Materiais de suporte para GDI:

- ✓ Como tornar os dados FAIR
- ✓ Como criar um PGD
- ✓ Como encontrar um repositório confiável para depósito de dados
- ✓ Como licenciar os dados de investigação
- ✓ Como reutilizar dados de outros
- ✓ Como proteger os dados
- ✓ Como lidar com dados sensíveis



Toolkit sobre políticas de Open Science

Open Science Policy Checklist for
Research Funding Organisations

Open Science Policy Checklist for
Research Performing Organisations

Model Policy on Open Science for
Research Funding Organisations

Model Policy on Open Science for
Research Performing Organisations

Factsheet - OS Policies for RFOs

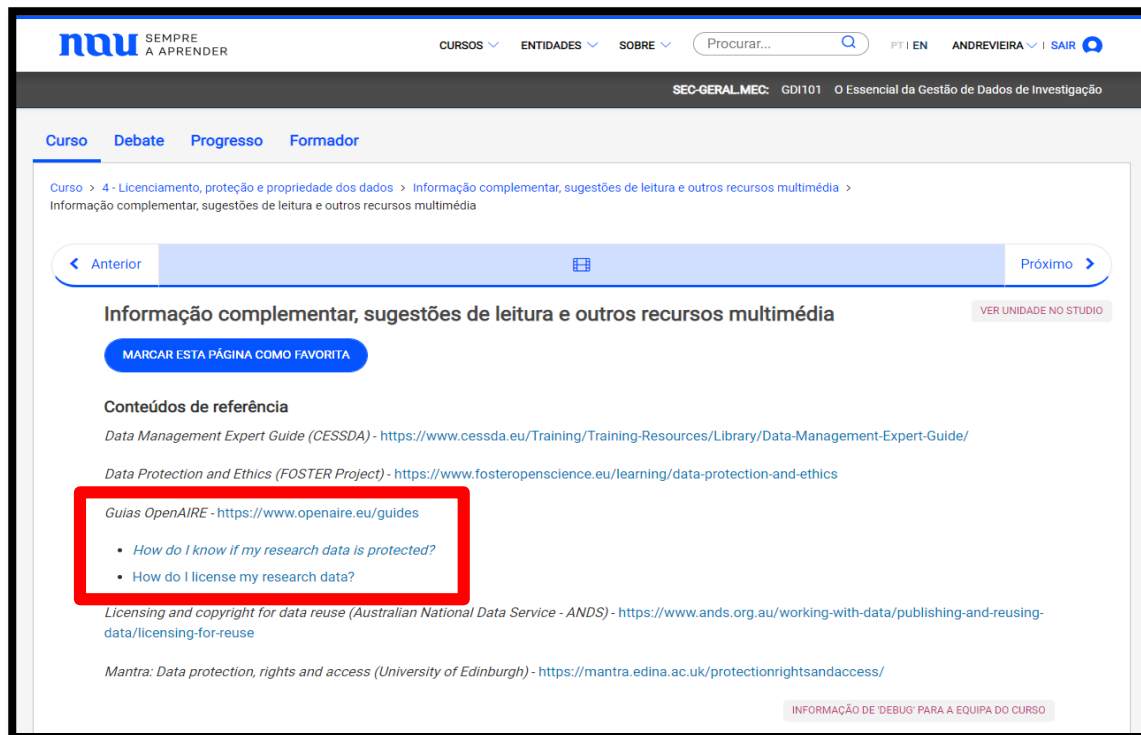
coming soon

Factsheet - OS Policies for RPOs

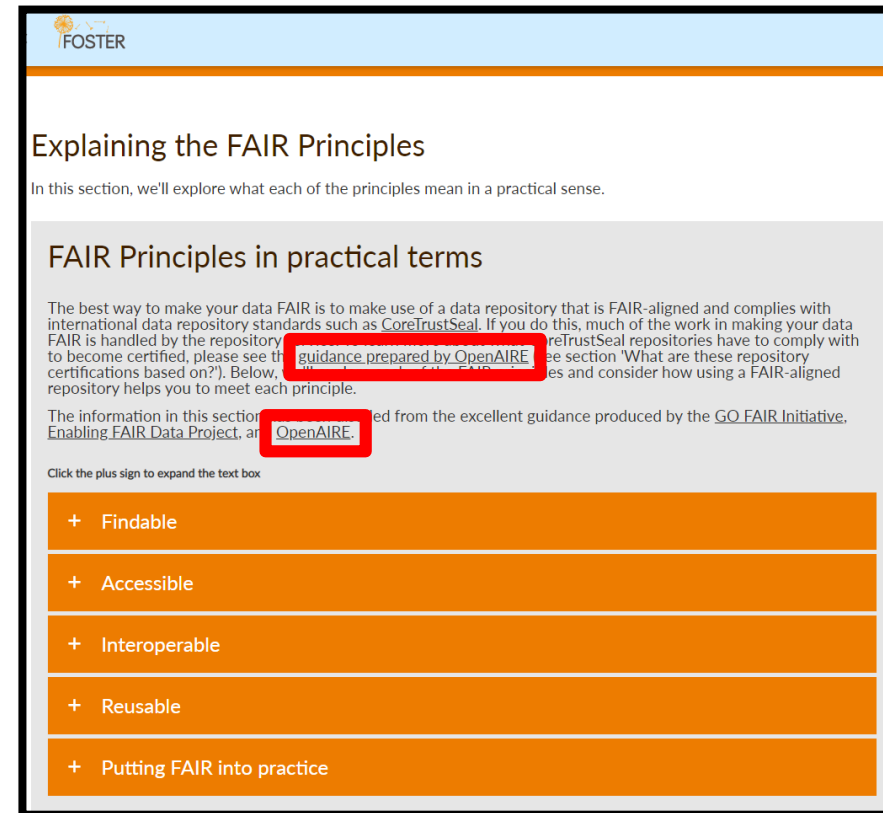
coming soon

REUTILIZAÇÃO DOS MATERIAIS

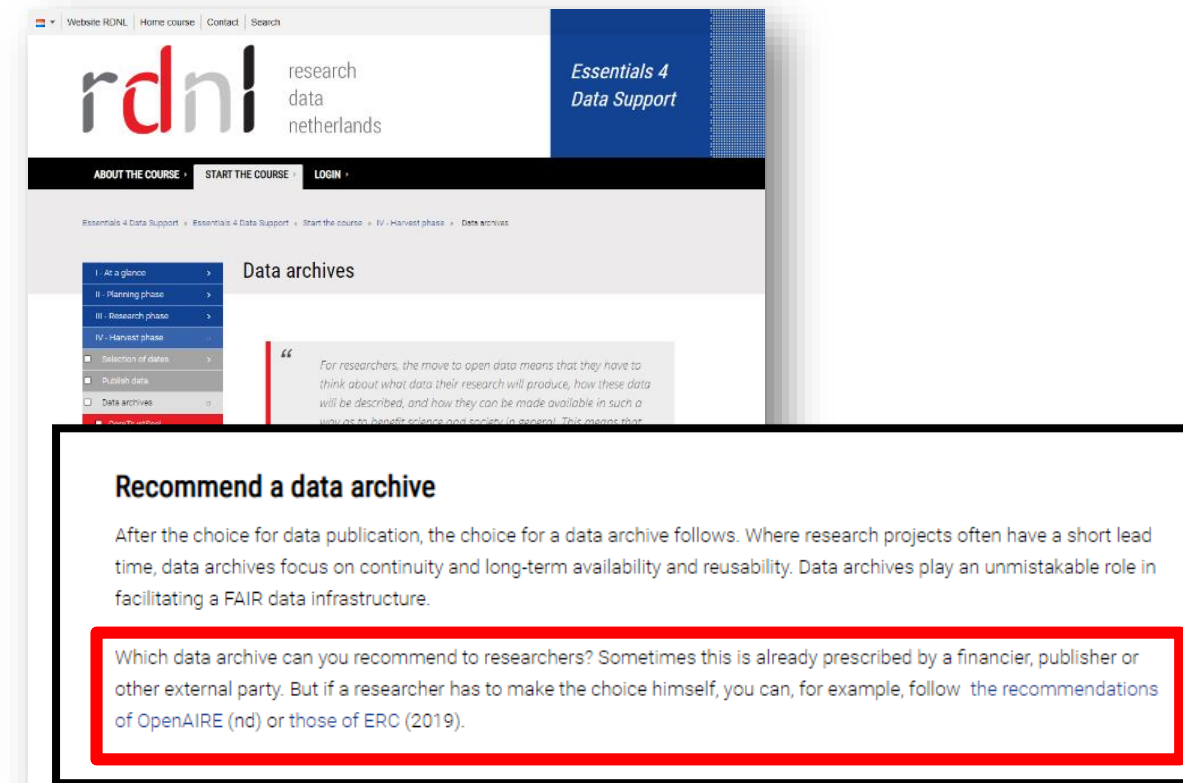
guias e factsheets servem para apoiar atividades de formação



<https://www.nau.edu.pt/curso/o-essencial-da-gestao-de-dados-de-investigacao/>



www.fosteropenscience.eu/learning/assessing-the-fairness-of-data



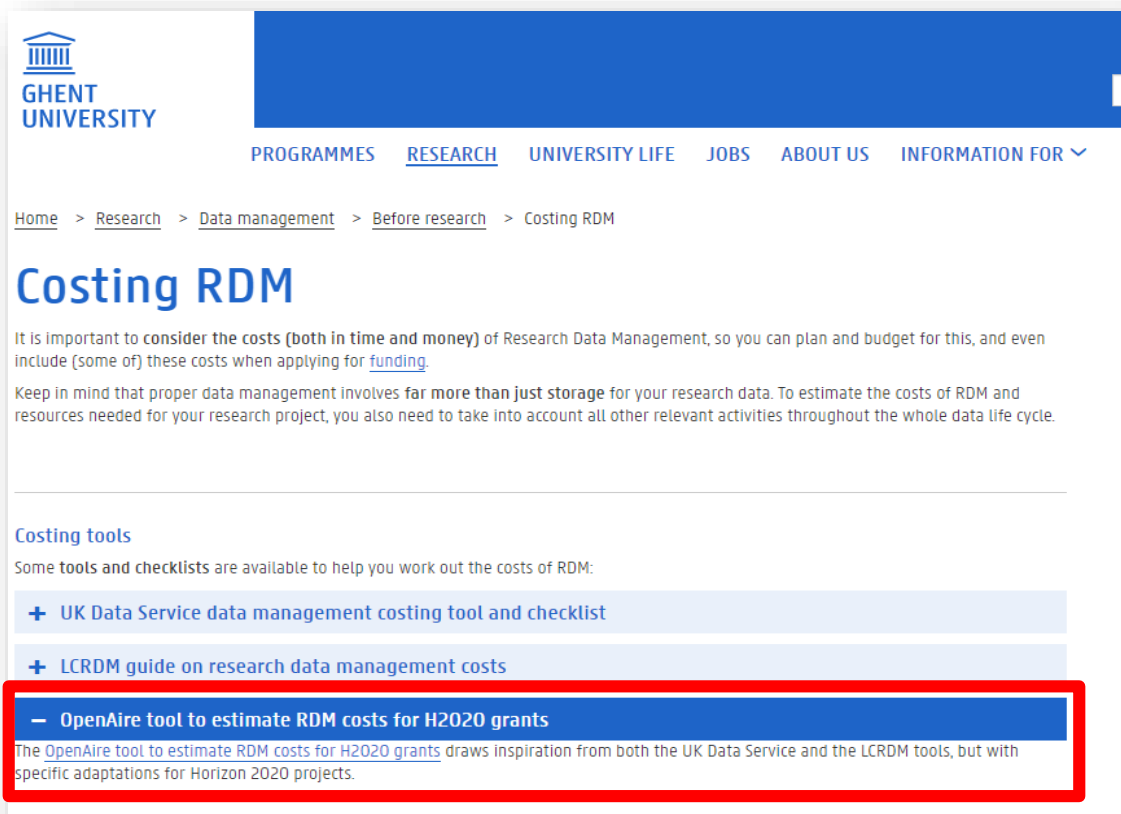
<https://datasupport.researchdata.nl/start-de-cursus/iv-oogstfase/data-archieven>



Exemplo: vários estão incorporados em cursos

REUTILIZAÇÃO DOS MATERIAIS

Em páginas institucionais sobre Open Science ou GDI



Costing RDM

It is important to consider the costs (both in time and money) of Research Data Management, so you can plan and budget for this, and even include (some of) these costs when applying for [funding](#).

Keep in mind that proper data management involves far more than just storage for your research data. To estimate the costs of RDM and resources needed for your research project, you also need to take into account all other relevant activities throughout the whole data life cycle.

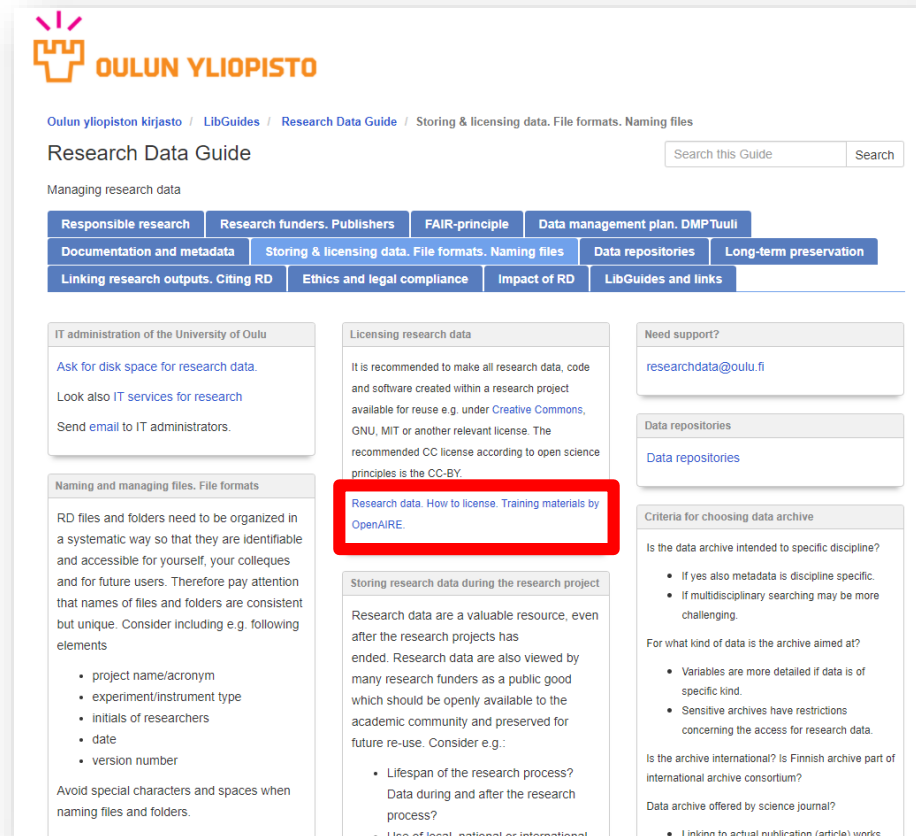
Costing tools

Some tools and checklists are available to help you work out the costs of RDM:

- + UK Data Service data management costing tool and checklist
- + LCRDM guide on research data management costs
- + **OpenAire tool to estimate RDM costs for H2020 grants**

The OpenAire tool to estimate RDM costs for H2020 grants draws inspiration from both the UK Data Service and the LCRDM tools, but with specific adaptations for Horizon 2020 projects.

<https://www.ugent.be/en/research/datamanagement/before-research/costs.htm>



Research Data Guide

Managing research data

Responsible research | Research funders, Publishers | FAIR-principle | Data management plan, DMP Tuuli

Documentation and metadata | Storing & licensing data, File formats, Naming files | Data repositories | Long-term preservation

Linking research outputs, Citing RD | Ethics and legal compliance | Impact of RD | LibGuides and links

IT administration of the University of Oulu

Ask for disk space for research data.

Look also IT services for research

Send email to IT administrators.

Licensing research data

It is recommended to make all research data, code and software created within a research project available for reuse e.g. under [Creative Commons](#), GNU, MIT or another relevant license. The recommended CC license according to open science principles is the CC-BY.

Research data. How to license. Training materials by OpenAIRE.

Naming and managing files, File formats

RD files and folders need to be organized in a systematic way so that they are identifiable and accessible for yourself, your colleagues and for future users. Therefore pay attention that names of files and folders are consistent but unique. Consider including e.g. following elements

- project name/acronym
- experiment/instrument type
- initials of researchers
- date
- version number

Avoid special characters and spaces when naming files and folders.

Storing research data during the research project

Research data are a valuable resource, even after the research projects has ended. Research data are also viewed by many research funders as a public good which should be openly available to the academic community and preserved for future re-use. Consider e.g.:

- Lifespan of the research process? Data during and after the research process?
- Use of local, national or international

Need support?

researchdata@oulu.fi

Data repositories

Data repositories

Criteria for choosing data archive

Is the data archive intended to specific discipline?

- If yes also metadata is discipline specific.
- If multidisciplinary searching may be more challenging.

For what kind of data is the archive aimed at?

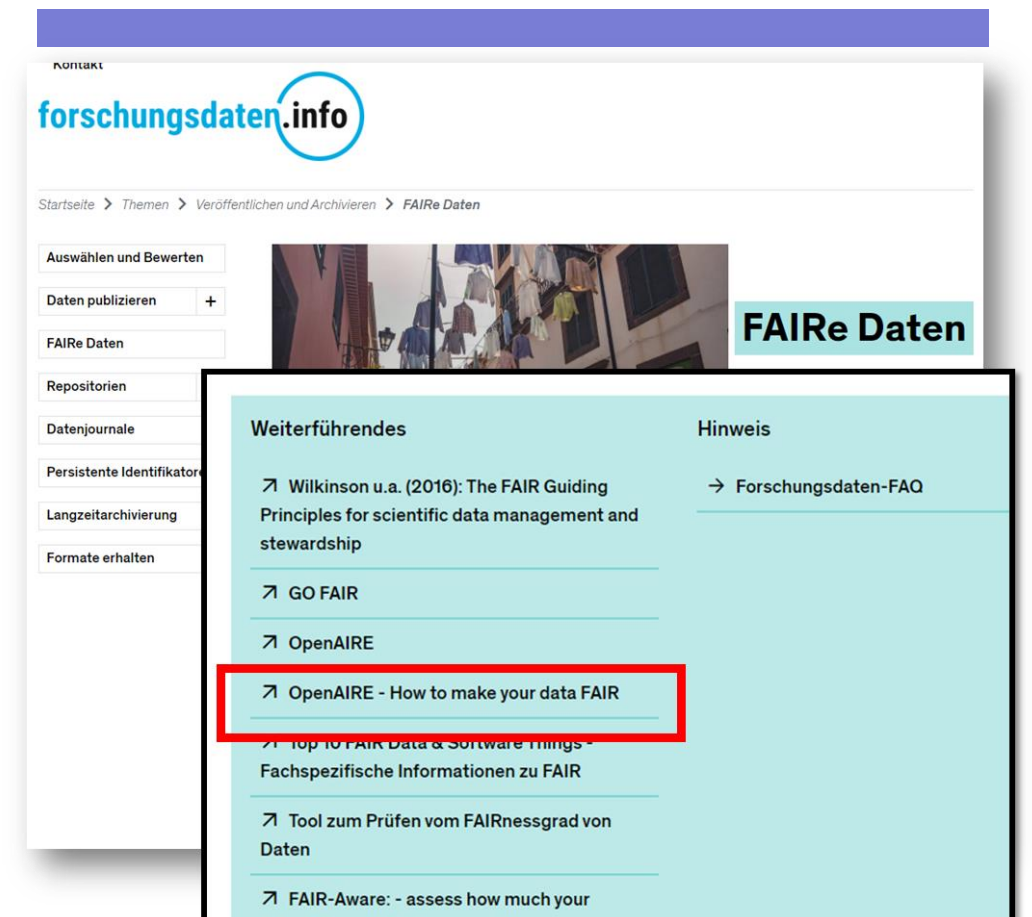
- Variables are more detailed if data is of specific kind.
- Sensitive archives have restrictions concerning the access for research data.

Is the archive international? Is Finnish archive part of international archive consortium?

Data archive offered by science journal?

- Linking to actual publication (article) works

<https://libguides.oulu.fi/Researchdata/Storage>



forschungsdaten.info

Startseite > Themen > Veröffentlichen und Archivieren > FAIRe Daten

Auswählen und Bewerten

Daten publizieren +

FAIRe Daten

Repositorien

Datenjournale

Persistente Identifikatoren

Langzeitarchivierung

Formate erhalten

Weiterführendes

- Wilkinson u.a. (2016): The FAIR Guiding Principles for scientific data management and stewardship
- GO FAIR
- OpenAIRE
- **OpenAIRE - How to make your data FAIR**
- Top 10 FAIR Data & Software Things - Fachspezifische Informationen zu FAIR
- Tool zum Prüfen vom FAIRnessgrad von Daten
- FAIR-Aware: - assess how much your

Hinweis

➔ Forschungsdaten-FAQ

<https://www.forschungsdaten.info/themen/veroeffentlichen-und-archivieren/faire-daten/>

Webinars para vários destinatários e em várias linguas



Webinars

| | | |
|---------------------------|-----------------------------|------------------------|
| NCPs (22) | Project coordinators (61) | Researchers (86) |
| Research Communities (67) | Funders (19) | Content Providers (40) |
| National (36) | Research support staff (66) | Data librarians (41) |

20200721_OpenAIRE Italy: Open Science e COVID-19....
183 visualizações • há 7 meses

20200626_OpenAIRE Webinar: Transformative...
235 visualizações • há 8 meses

20200610_OpenAIRE webinar: Amnesia
389 visualizações • há 8 meses

OpenAIRE Amnesia
66 visualizações • Transmitido há 8 meses

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 facebook.com/groups/openaire

 pedroprincipe@sdum.uminho.pt