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Elli Papadopoulou

OpenAIRE, ATHENA Research & Innovation Center

Gultekin Gurdal

OpenAIRE, Izmir Institute of Technology

Practicing Open Science

workflows, tools and tips for FAIR and ORDM

Turkey in Horizon 2020 | FGT-11: Focus Group
Training on Open Science | 20 April 2021

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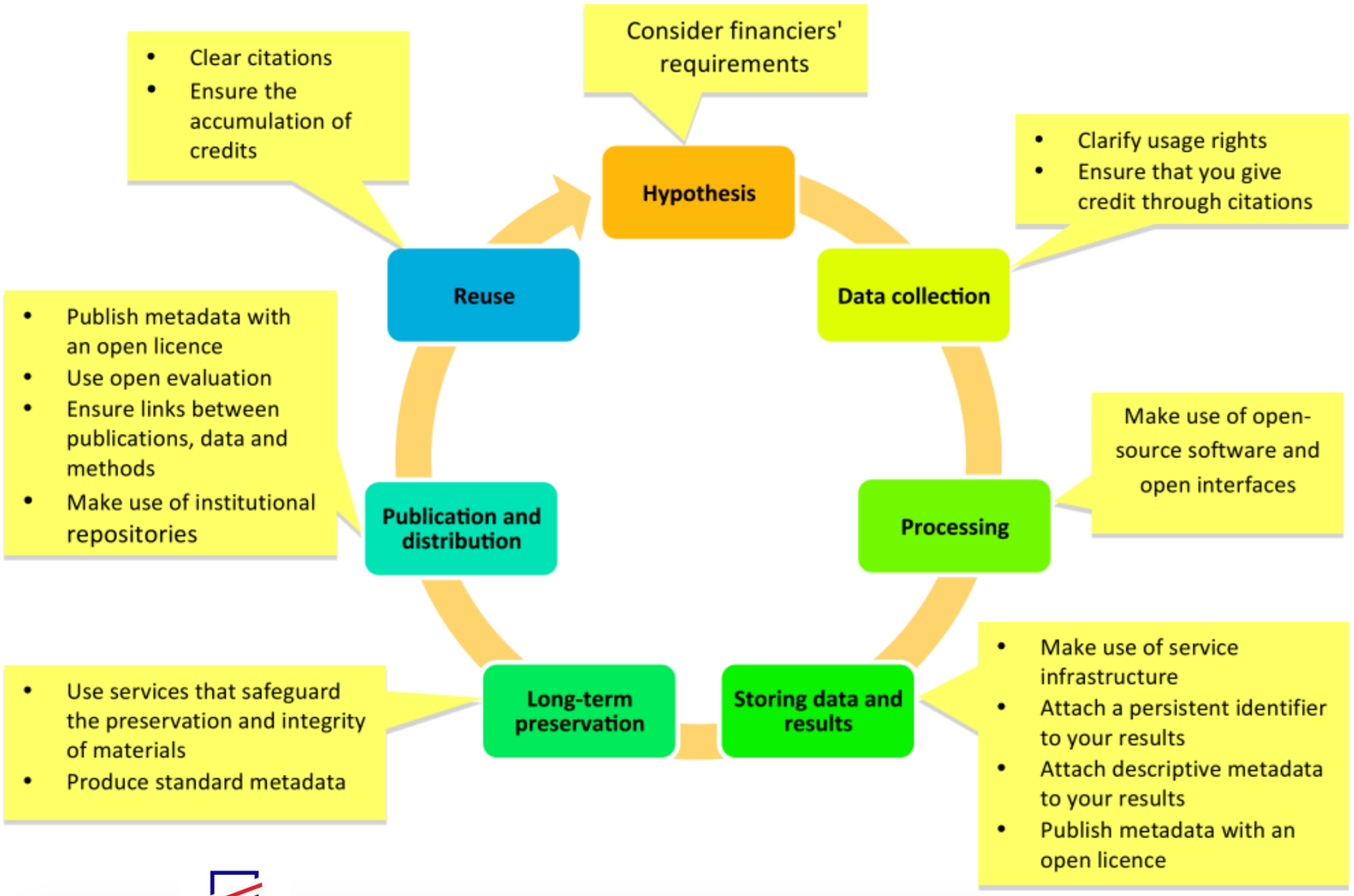
Practices in RDM lifecycles

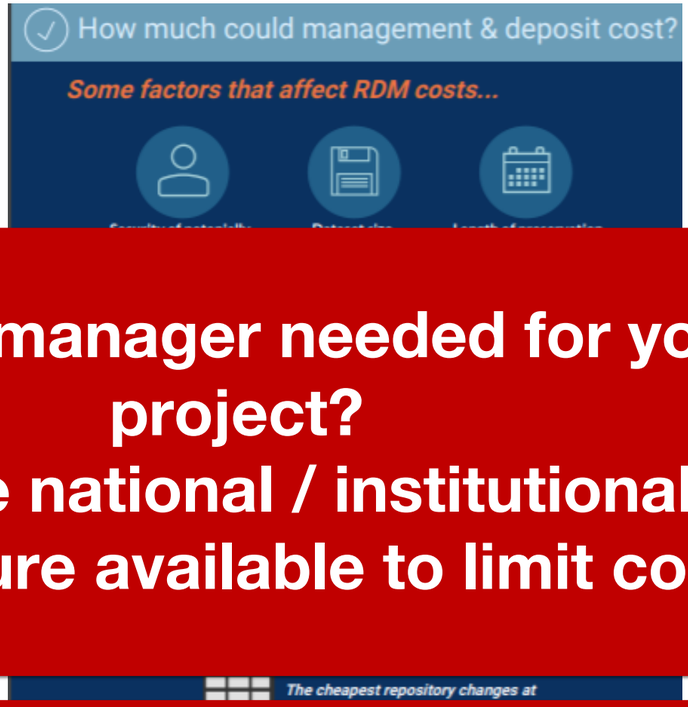


(Open Science and Research Initiative, 2014)

For researchers

Tool for costing RDM

1. Data Collection	**Data transfer** Are special measures needed to transfer data from mobile devices, from fieldwork sites or from home equipment to a central work server?	Is software or hardware needed for data transfer, for encryption of confidential data before transfer, or for synchronisation of data files across sites?	Free encryption or data transfer software (i.e. SurfFileSender) is available in most cases
2. Data Documentation	**Data description and Metadata** Are data in a spreadsheet, database or data warehouse clearly marked with variable, variable labels and value labels, code descriptions, missing value descriptions, etc.? Are validated questionnaires and standard coding used?	If data description is carried out as part of data creation, data input or data transcription – low or no additional cos If needed to be added or harmonized afterwards – higher cost Codebooks for datasets can often be easily exported from software packages	Examples: 4 hrs (120 measurem required metad assistance of a 2* salary Two to three weeks are costed into an average two year application to pre materials for dep More informatio archive.ac.uk/he



- **Is a data manager needed for your project?**
- **Is there national / institutional infrastructure available to limit costs?**

- **Check OpenAIRE in Turkey for repositories**
- **Check EOSC Marketplace**

infographic/view-document

Tool for writing DMPs

Plan and follow your data

Create machine actionable DMPs.
Configure to best fit your discipline.
Link to EOSC components out of the box.
Share easily in your repository.

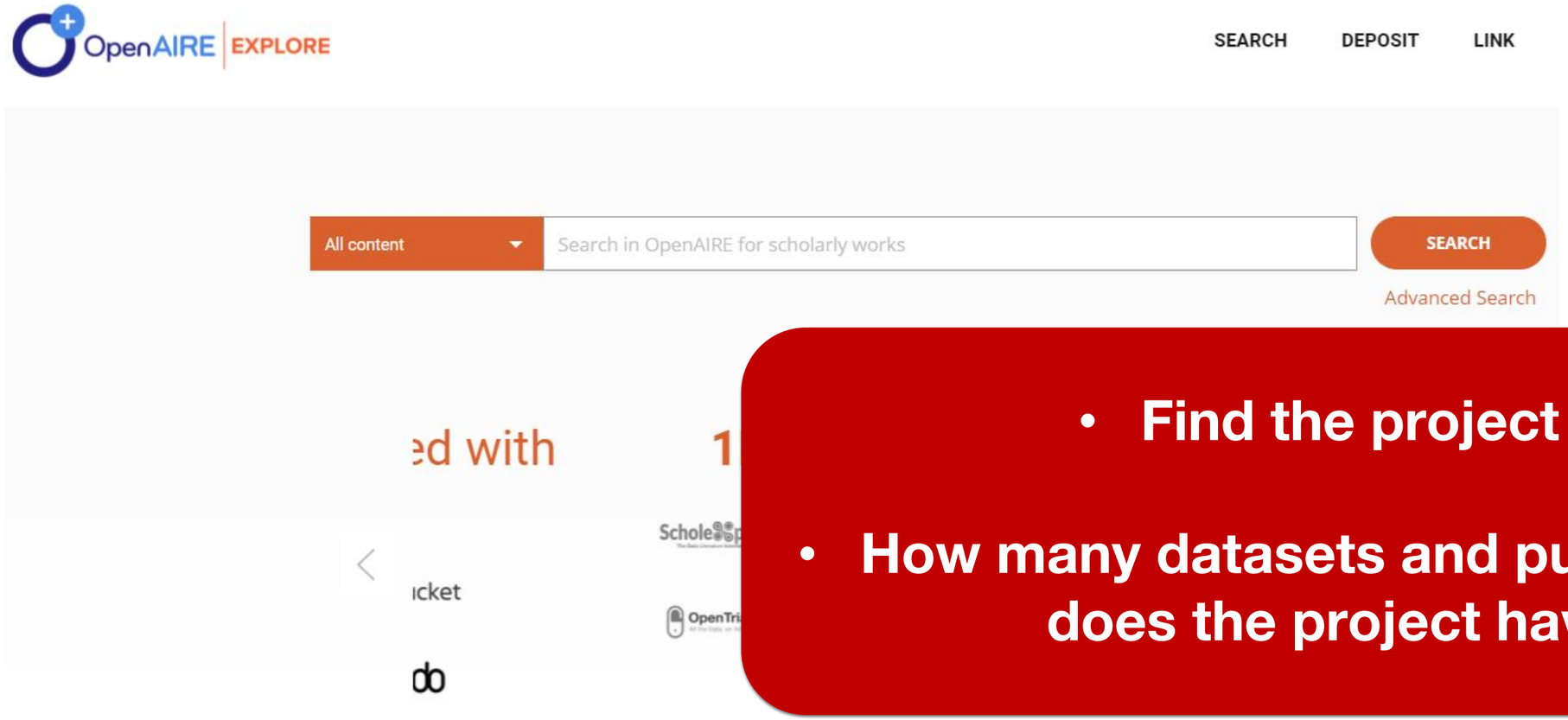
Bring your Data Management Plans closer to where data are generated, analysed and stored.

Start your DMP

- **Start a DMP and share it with a colleague**
- **Describe your dataset with the TUBITAK template**

https://argos.openaire.eu/splash/

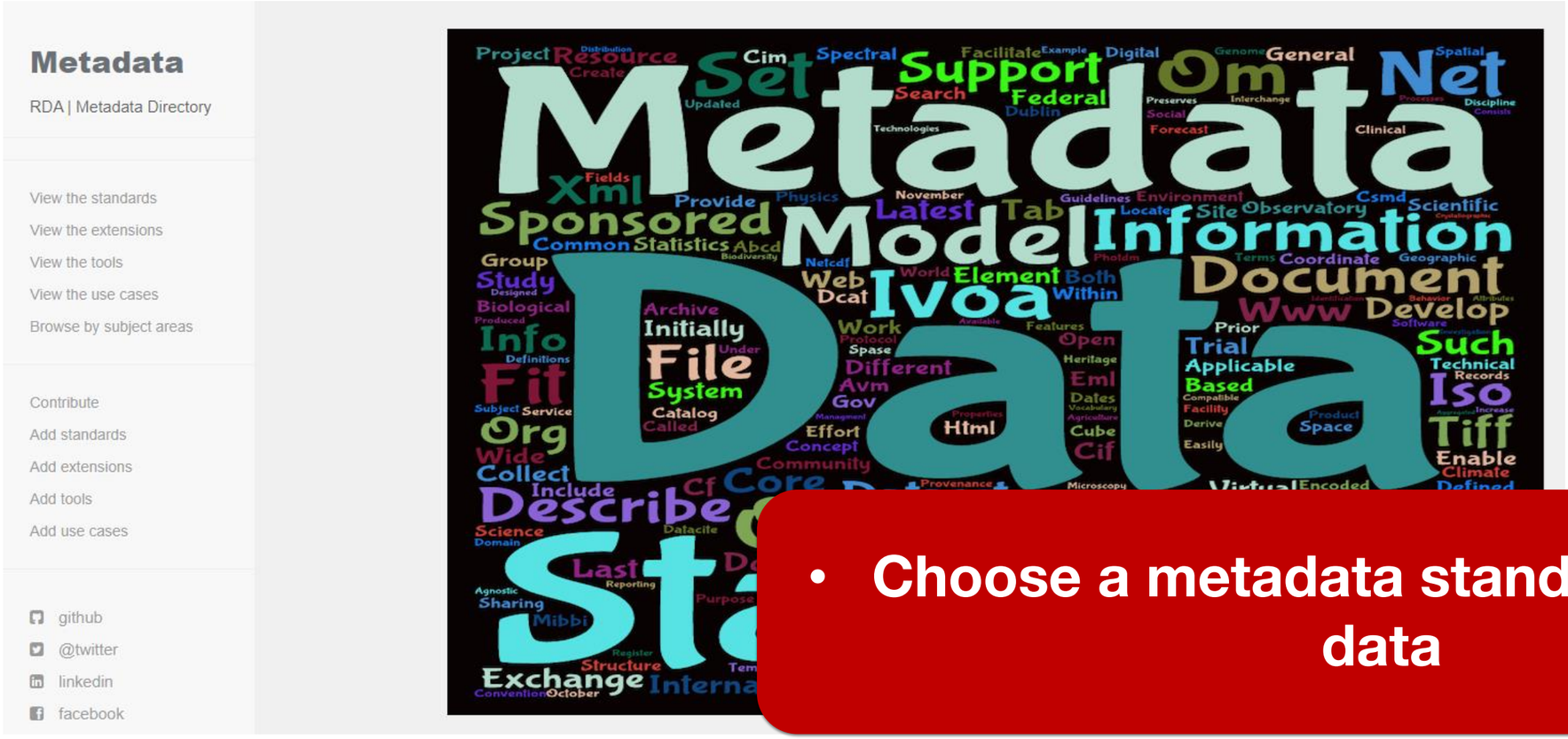
Tool for finding data



- **Find the project**
- **How many datasets and publications does the project have?**

https://explore.openaire.eu/

Tool for finding metadata standards


Metadata
RDA | Metadata Directory
View the standards
View the extensions
View the tools
View the use cases
Browse by subject areas
Contribute
Add standards
Add extensions
Add tools
Add use cases
github
@twitter
linkedin
facebook
Metadata
Data
Model
Information
Standards
Sponsored
Ivoa
Document
Describe
Exchange
File
System
Iso
Tiff
Such
Develop
Www
Trial
Applicable
Based
Fit
Org
Info
Collect
Include
Core
Net
Om
Set
Support
Xml
Dcat
Html
Space
Cube
Cif
Eml
Open
Work
Web
Element
Coordinate
Terms
Geographic
Technical
Records
Enable
Climate
Defined
Encoded
Virtual
Microscopy
Provenance
Structure
Register
Sharing
Agnostic
Mibbi
Purpose
Reporting
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Science
Domain
Datacite
Effort
Concept
Community
Gov
Avm
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Csmd
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Social
Preserves
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Wide
Cf
Work
Protocol
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Available
Software
Behavior
Attributes
Identification
Crystallographic
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Facility
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Product
Space
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Technical
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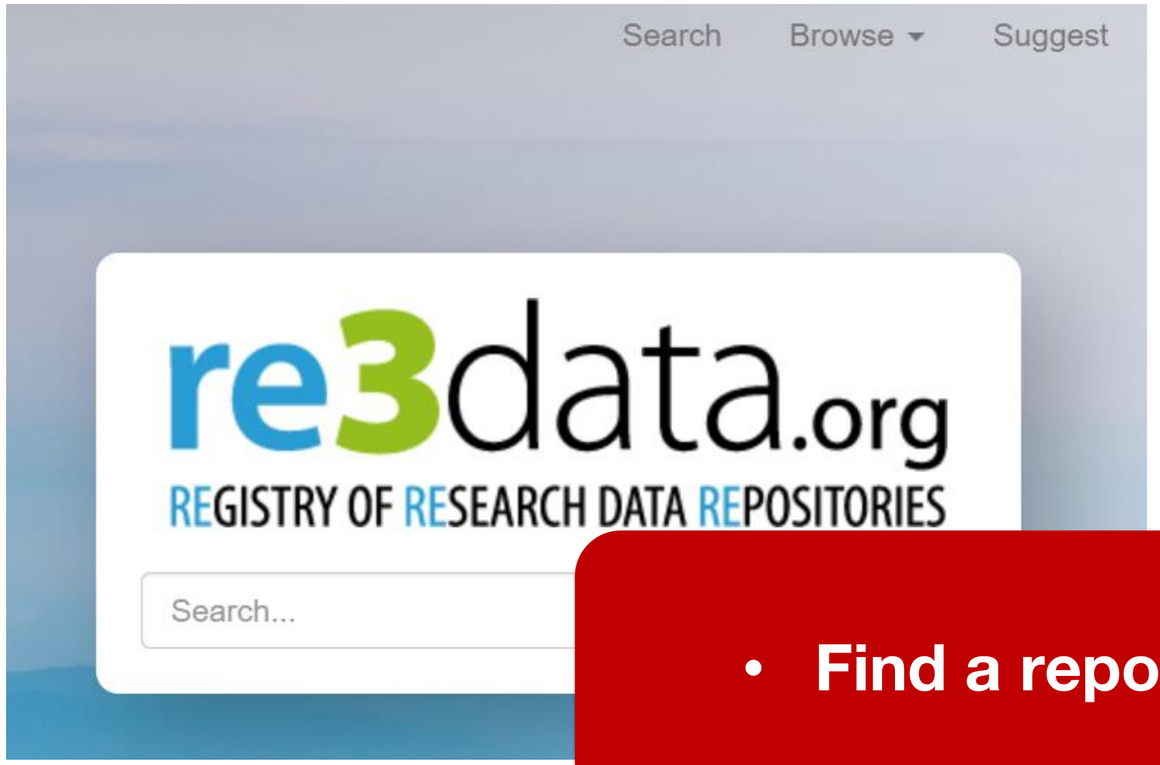
Iso
Tiff
Enable
Climate
Defined
Increase
Aggregation
Properties
Management
Agriculture
Vocabulary
Dates
Eml
Cube
Cif
Html
Effort
Concept
Community
Gov
Avm
Different
Heritage
Open

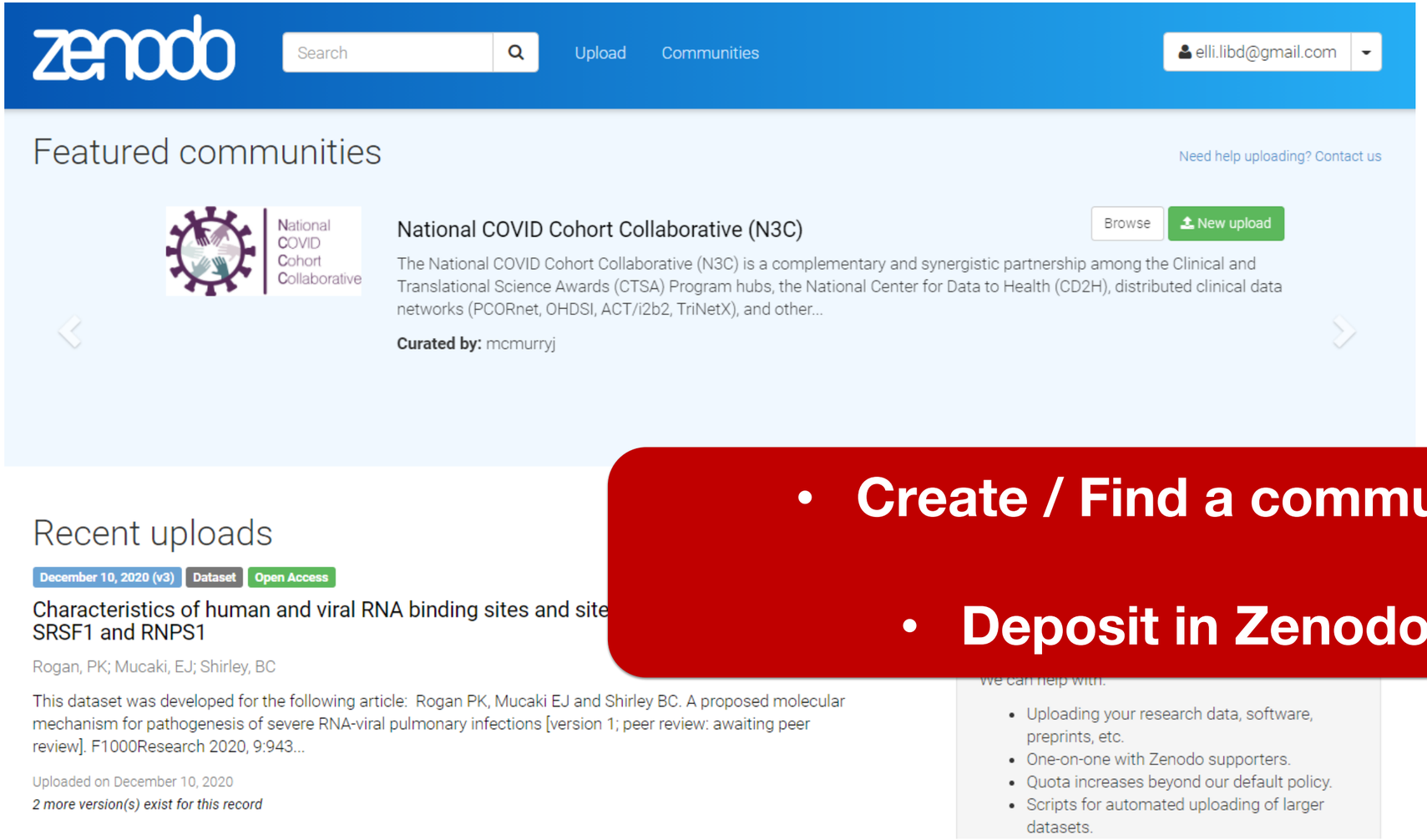
Tool for finding data repositories



- **Find a repository for your data**

https://www.re3data.org/

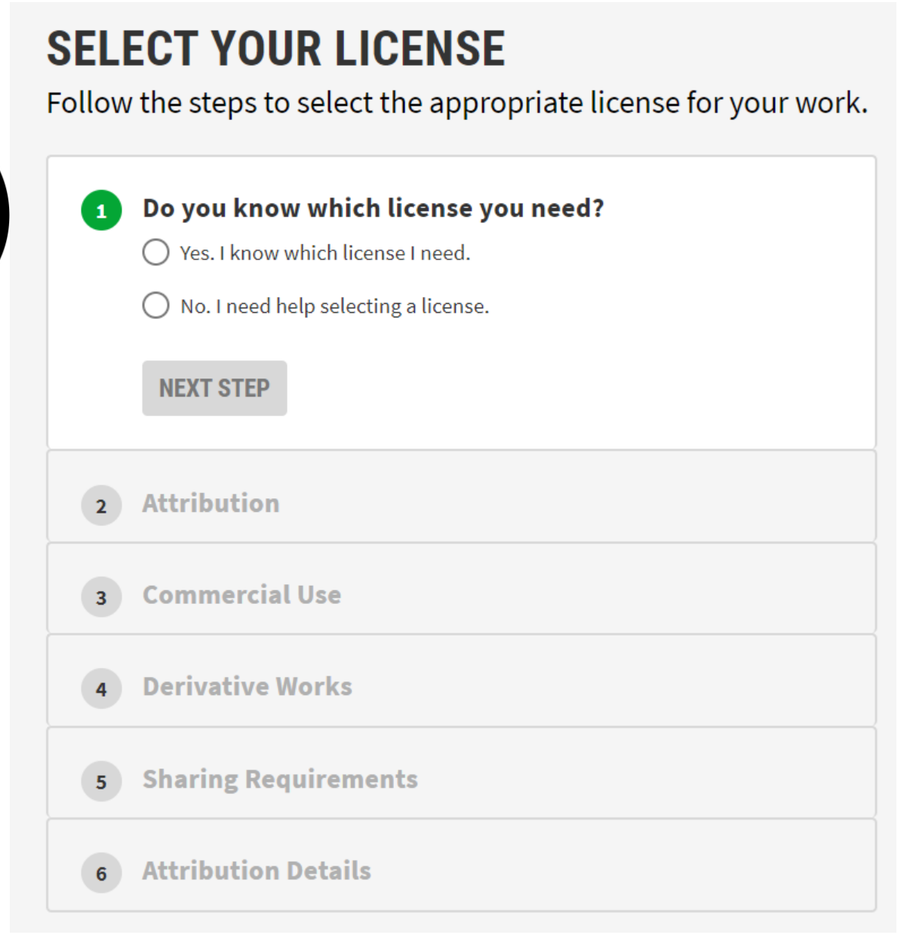
Tool for archiving data & software



- **Create / Find a community**
- **Deposit in Zenodo**

https://zenodo.org/

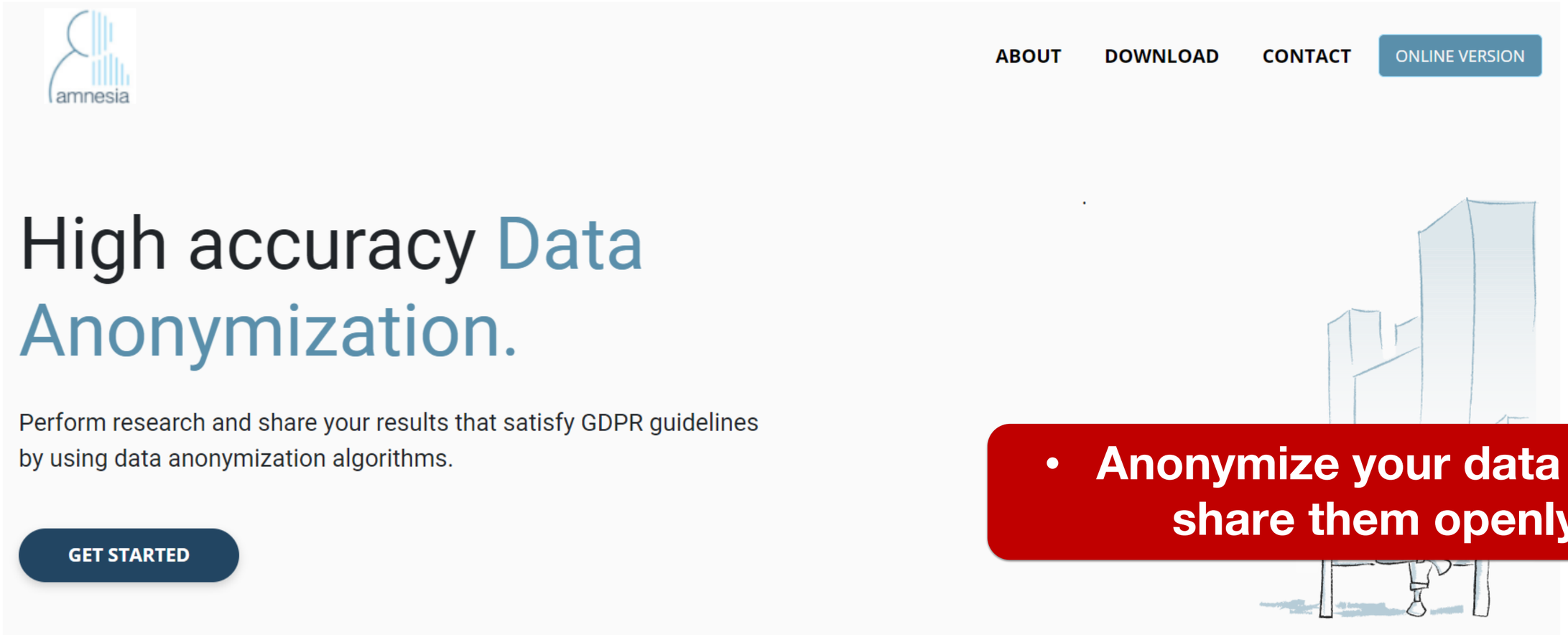
Tools to decide which license to choose



https://chooser-beta.creativecommons.org/

- **Choose a license for your data**
- **Check other researchers' license to know how to re-use their work**

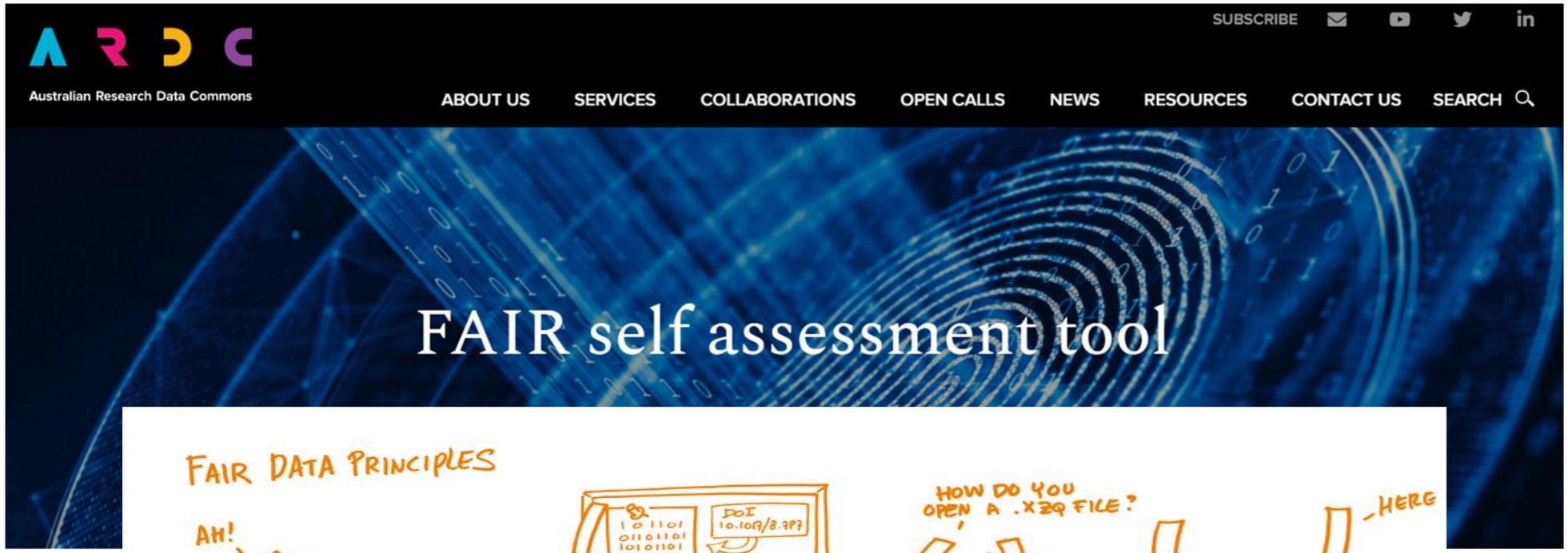
Amnesia tool for anonymization



- **Anonymize your data and share them openly**

https://amnesia.openaire.eu/

FAIR



- **Check how FAIR is your data**

https://ardc.edu.au/resources/working-with-data/fair-data/fair-self-assessment-tool/

For repositories and services

Findability - PID systems

Digital Objects

ARK

Researchers & Organisations

Other activities

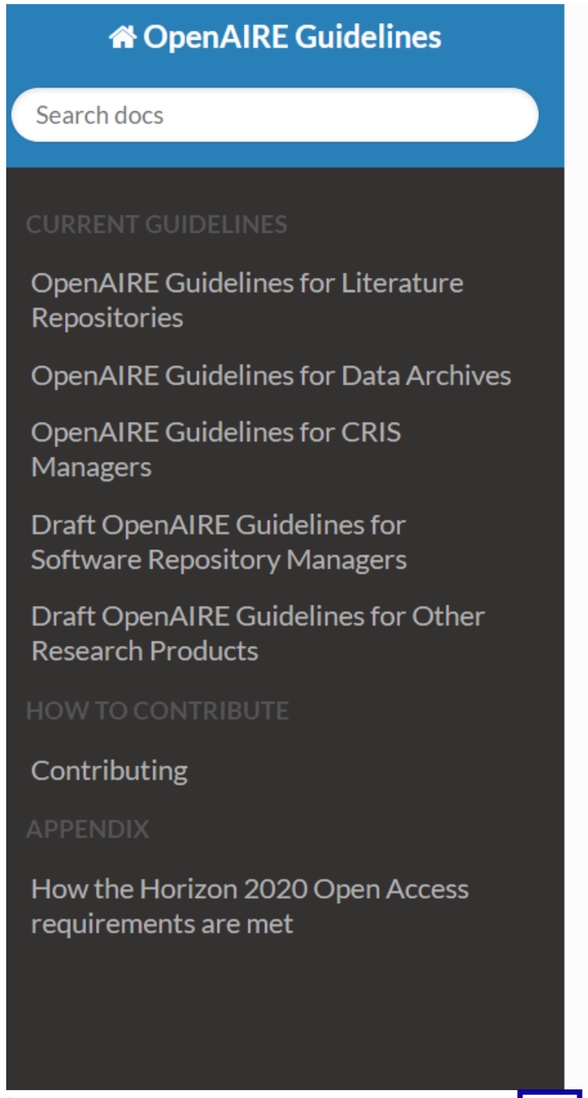
- **Integrate with systems that provide PIDs**

Secure Access

- **Integrate with AAI**

https://op.europa.eu/en/publication-detail/-/publication/d1bc3702-61e5-11eb-aeb5-01aa75ed71a1/language-en/format-PDF/source-188566729

Interoperability - metadata



Docs » OpenAIRE Guidelines View page source

OpenAIRE Guidelines

Welcome to the OpenAIRE Guidelines. The intention of this is to provide a public space to share OpenAIREs work on interoperability and to engage with the community. The OpenAIRE Guidelines helps repository managers expose publications, datasets and CRIS metadata via the OAI-PMH protocol in order to integrate with OpenAIRE infrastructure.

OpenAIRE Guidelines have been released for publication repositories, data archives, CRIS systems, so repositories of other research products resp

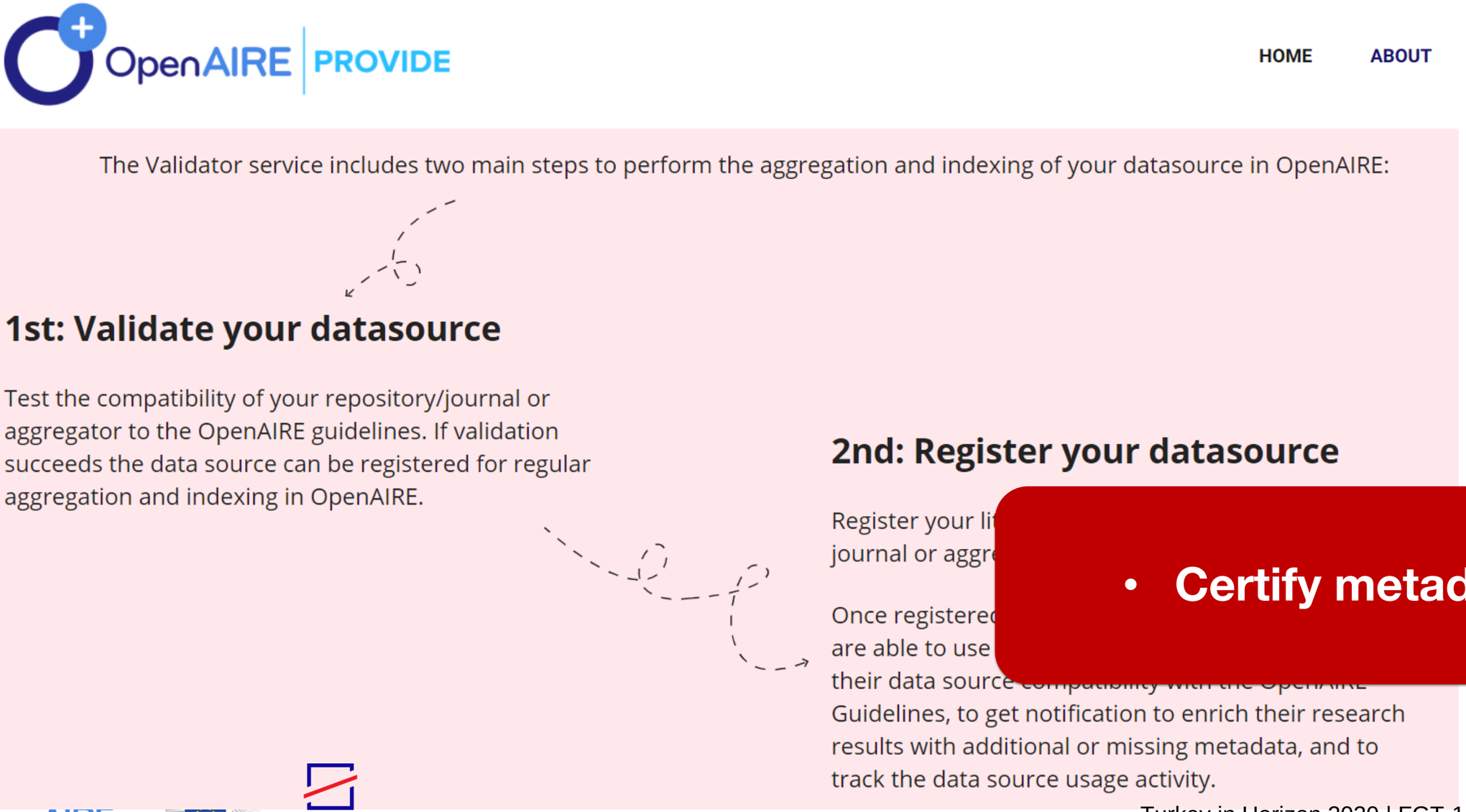
Current Guidelines

- OpenAIRE Guidelines for Literature Repo
- OpenAIRE Guidelines for Data Archives
- OpenAIRE Guidelines for CRIS Managers
- Draft OpenAIRE Guidelines for Software Repository Managers

- **Expose metadata of data catalogues with OAI-PMH open protocol**

https://guidelines.openaire.eu/en/latest/

Compliance



- **Certify metadata**

Gultekin Gurdal

gultekingurdal@iyte.edu.tr

ORCID 0000-0001-7259-8134

Thank you!

Elli Papadopoulou

elli.p@athenarc.gr

ORCID 0000-0002-0893-8509

@elli_lib