



FAIRsFAIR

Fostering Fair Data Practices in Europe



[@FAIRsFAIR_eu](https://twitter.com/FAIRsFAIR_eu)

Want to learn how to be more FAIR? Try FAIR-Aware

27 October 2021

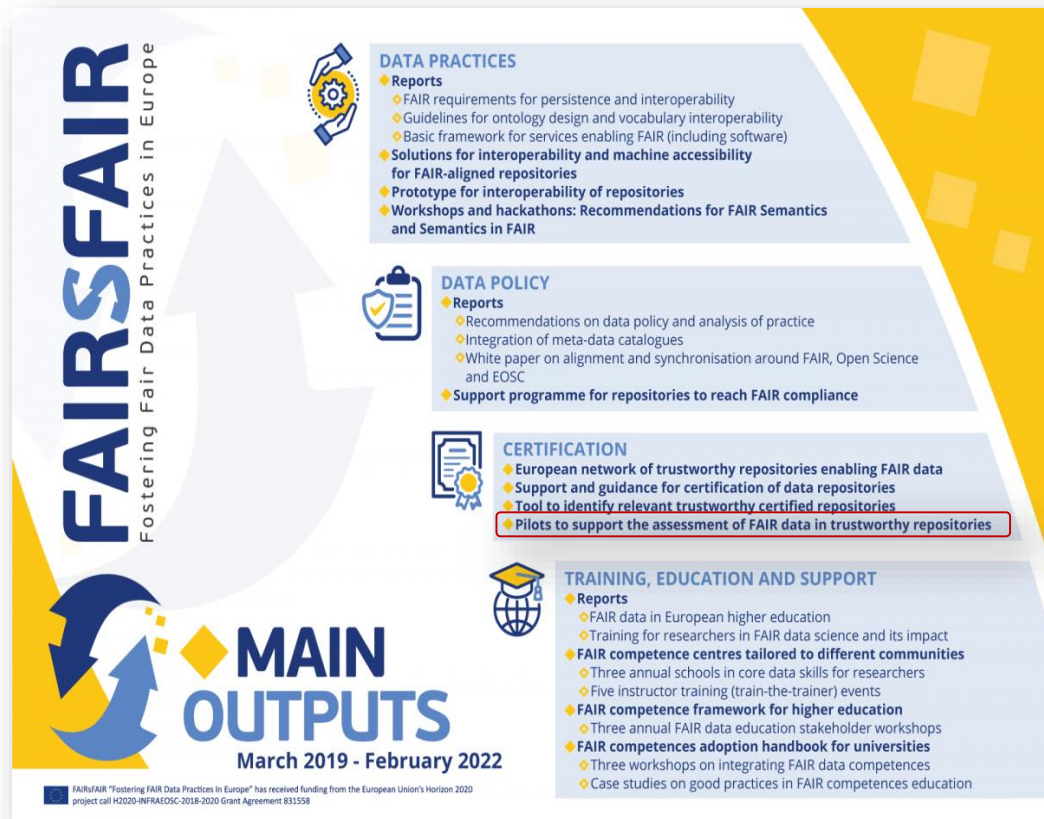
Linas Čepinskas, Policy Officer, DANS, the Netherlands



FAIRsFAIR "Fostering FAIR Data Practices In Europe" has received funding from the European Union's Horizon 2020 project call H2020-INFRAEOSC-2018-2020 Grant agreement 831558

FAIRsFAIR - Fostering FAIR data practices in Europe

- Goal: Practical solutions for the use of FAIR principles throughout the research data life cycle
- Budget: €10 million
- Duration: 2019-2022
- Partners: 22 partners from 8 EU member states





A



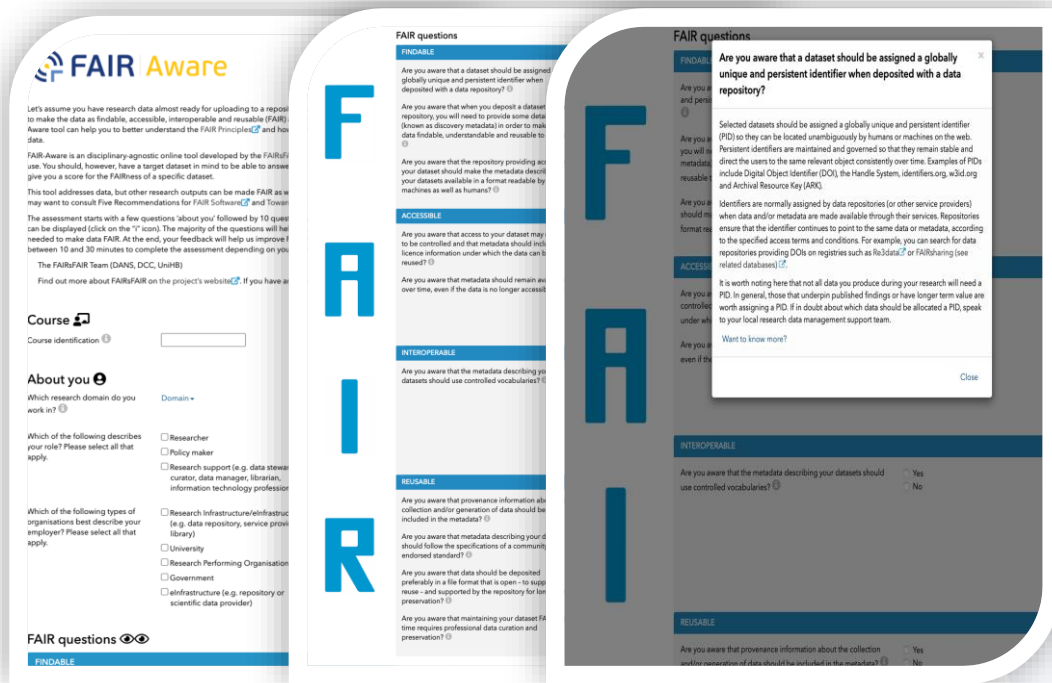
R

F



FAIR-Aware

- For researchers and data stewards & also trainers!
- Online tool to raise awareness and educate on the FAIR data principles
- 10 simple questions with practical tips to improve data FAIRness before deposit

The screenshot shows the FAIR Aware online tool interface. It features a sidebar with navigation links: FINDABLE, ACCESSIBLE, INTEROPERABLE, and REUSABLE. The main content area displays a series of questions related to data FAIRness, with a 'FAIR' graphic in the background. A pop-up window titled 'Are you aware that a dataset should be assigned a globally unique and persistent identifier when deposited with a data repository?' is visible, providing detailed information about Persistent Identifiers (PIDs) and their importance for data discovery and access.

FAIR questions

FINDABLE

Are you aware that a dataset should be assigned globally unique and persistent identifier when deposited with a data repository? ☐

Are you aware that when you deposit a dataset repository you will need to provide some data (known as discovery metadata) in order to make data findable, understandable and reusable to ☐

Are you aware that the repository providing as your dataset should make the metadata describable your datasets available in a format readable by machines as well as humans? ☐

ACCESSIBLE

Are you aware that access to your dataset may be controlled and that metadata should include license information under which the data can't be reused? ☐

Are you aware that metadata should remain as over time, even if the data is no longer accessible? ☐

INTEROPERABLE

Are you aware that the metadata describing your datasets should use controlled vocabularies? ☐

REUSABLE

Are you aware that provenance information about collection and/or generation of data should be included in the metadata? ☐

Are you aware that metadata describing your data should follow the specifications of a community endorsed standard? ☐

Are you aware that data should be deposited preferably in a file format that is open - to support reuse - and supported by the repository for long preservation? ☐

Are you aware that maintaining your dataset for time requires professional data curation and preservation? ☐

FAIR questions

FINDABLE

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Are you aware that metadata should remain as over time, even if the data is no longer accessible? ☐

INTEROPERABLE

Are you aware that the metadata describing your datasets should use controlled vocabularies? ☐

REUSABLE

Are you aware that provenance information about the collection and/or generation of data should be included in the metadata? ☐

Are you aware that metadata describing your data should follow the specifications of a community endorsed standard? ☐

Are you aware that data should be deposited preferably in a file format that is open - to support reuse - and supported by the repository for long preservation? ☐

Are you aware that maintaining your dataset for time requires professional data curation and preservation? ☐

Course identification

Which research domain do you work in?

Which of the following describes your role? Please select all that apply.

☐ Researcher

☐ Policy maker

☐ Research support (e.g. data steward, data manager, librarian, information technology professor)

☐ Research Infrastructure/Infrastructure (e.g. data repository, service provider, library)

☐ University

☐ Research Performing Organisation

☐ Government

☐ Infrastructure (e.g. repository or scientific data provider)

FAIR questions

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Are you aware that metadata describing your data should follow the specifications of a community endorsed standard? ☐

Are you aware that data should be deposited preferably in a file format that is open - to support reuse - and supported by the repository for long preservation? ☐

Are you aware that maintaining your dataset for time requires professional data curation and preservation? ☐

Key topics

F

Globally unique and
persistent identifier (PID)

Discovery
metadata

Format readable by machines and
humans

A

Access control

Licence information

Availability of metadata over time

I

Use of semantic vocabularies

R

Provenance information

Open file format

Community endorsed standard





Professional data curation and preservation (TDRs)

Helpful tips presented with each question




FAIR questions



FINDABLE

- 
1. Are you aware that a dataset should be assigned a globally unique persistent and resolvable identifier when deposited with a data repository? 
 2. Are you aware that when you deposit a dataset with a data repository you will need to provide some details (known as discovery metadata) in order to make the data findable, understandable and accessible to others? 
 3. Are you aware that the repository providing access to your data should make the metadata describing your datasets available in a machine-readable format readable by machines as well as humans? 

ACCESSIBLE

1. Are you aware that a dataset should be assigned a globally unique persistent and resolvable identifier when deposited with a data repository? 

Selected datasets should be assigned a globally unique, persistent and resolvable identifier (PID) so they can be located unambiguously by humans or machines on the web. Persistent identifiers are maintained and governed so that they remain stable and direct the users to the same relevant object consistently over time. Examples of PIDs include Digital Object Identifier (DOI), the Handle System, identifiers.org, w3id.org and Archival Resource Key (ARK).

Identifiers are normally assigned by data repositories (or other service providers) when data and/or metadata are made available through their services. Repositories ensure that the identifier continues to point to the same data or metadata, according to the specified access terms and conditions. For example, you can search for data repositories providing DOIs on registries such as Re3data  or FAIRsharing (see related databases) .

It is worth noting here that not all data you produce during your research will need a PID. In general, those that underpin published findings or have longer term value are worth assigning a PID. If in doubt about which data should be allocated a PID, speak to your local research data management support team.


[Want to know more?](#)


[Close](#)


Asks researchers to think about their current practices

FAIR questions

FINDABLE

1. Are you aware that a dataset should be assigned a globally unique persistent and resolvable identifier when deposited with a data repository? 

2. Are you aware that when you deposit a dataset with a repository, you will need to provide some details (known as discovery metadata) in order to make the data findable, understandable and reusable to others? 

3. Are you aware that the repository providing access to your dataset should make the metadata describing your datasets available in a format readable by machines as well as humans? 

ACCESSIBLE

☐ Yes To what degree do you intend to comply with this?
☒ No Very likely ☐ 5 ☐ 4 ☐ 3 ☒ 2 ☐ 1 Very unlikely

☒ Yes To what degree do you intend to comply with this?
☐ No Very likely ☐ 5 ☒ 4 ☐ 3 ☐ 2 ☐ 1 Very unlikely

☒ Yes To what degree do you intend to comply with this?
☐ No Very likely ☐ 5 ☐ 4 ☒ 3 ☐ 2 ☐ 1 Very unlikely

Provides an overview of awareness and willingness and suggestions for improvement.



Thank you for your participation!



Awareness:

High (8/10)



Willingness to comply:

Low (27/50)

Guidance:

Based on your answers, you can find the guidance below to improve your awareness on some FAIR issues.

1. Are you aware that a dataset should be assigned a globally unique persistent and resolvable identifier when deposited with a data repository?

Selected datasets should be assigned a globally unique, persistent and resolvable identifier (PID) so they can be located unambiguously by humans or machines on the web. Persistent identifiers are maintained and governed so that they remain stable and direct the users to the same relevant object consistently over time. Examples of PIDs include Digital Object Identifier (DOI), the Handle System, identifiers.org, w3id.org and Archival Resource Key (ARK).

Identifiers are normally assigned by data repositories (or other service providers) when data and/or metadata are made available through their



How can you make new data more FAIR?

- Use resources to increase your knowledge and practical understanding (develop FAIR skills!)
- Leave feedback about your experience and how the tool can be improved
- Spread the word!

Feedback

Please answer the four questions below to help us improve the tool and make it even more relevant for the community.

- Which of the following issues do you find hard to understand and/or to answer?

1. Globally unique persistent identifier (PID) ☐



2. Metadata for citation and discovery ☐

Thank you for your participation!



Awareness:

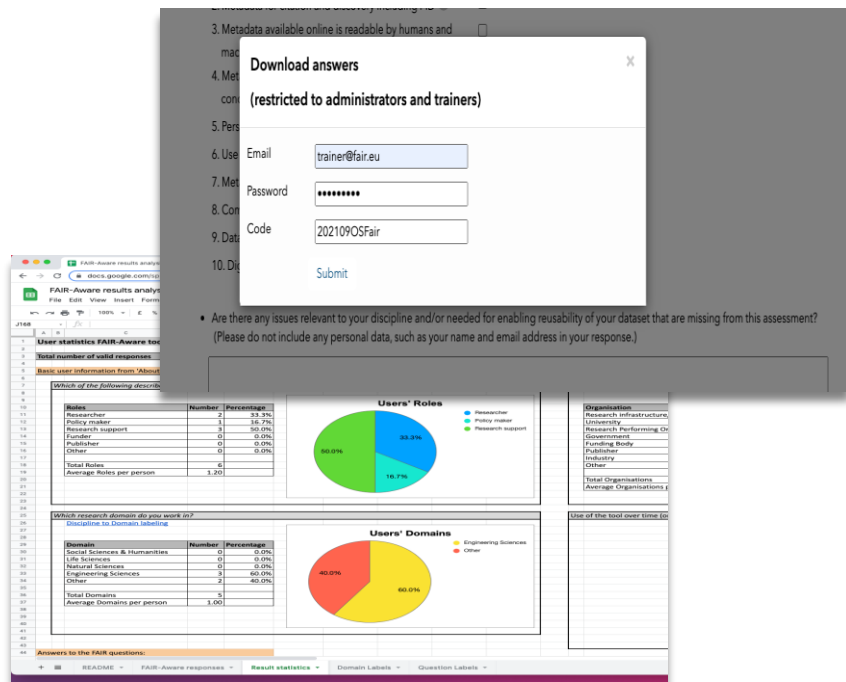
High (8/10)



Willingness to comply:

Low (27/50)

FAIR-Aware for training & research



Download answers
(restricted to administrators and trainers)

Email:

Password:

Code:

Submit

Are there any issues relevant to your discipline and/or needed for enabling reusability of your dataset that are missing from this assessment?
(Please do not include any personal data, such as your name and email address in your response.)

Roles	Number	Percentage
Researcher	2	33.3%
Policy maker	1	16.7%
Research support	3	50.0%
Funder	0	0.0%
Publisher	0	0.0%
Other	0	0.0%
Total Roles	6	
Average Roles per person	1.70	

Users' Roles

Domains	Number	Percentage
Central Sciences & Humanities	0	0.0%
Life Sciences	0	0.0%
Medical Sciences	0	0.0%
Engineering Sciences	3	50.0%
Other	3	50.0%
Total Domains	6	
Average Domains per person	1.00	

Users' Domains

Ready-made template to analyse results:

1. Overview of users' roles
2. Overview of users' domains
3. Overview of users' organisation types
4. Timeline
5. Indication of awareness per question
6. Indication of willingness to comply per question
7. Difficult topics indicated
8. Assessment of FAIR-Aware tool
9. Difficulty per FAIR letter
10. Difficult topics split by domain

Current status

- Continuous development throughout FAIRsFAIR
- Focus on improving user-friendliness, guidance information, new functionalities
- Dissemination in different communities

Image source: [DANS](https://fairaware.dans.knaw.nl/) (June 2021)



Thank you

Questions?

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