



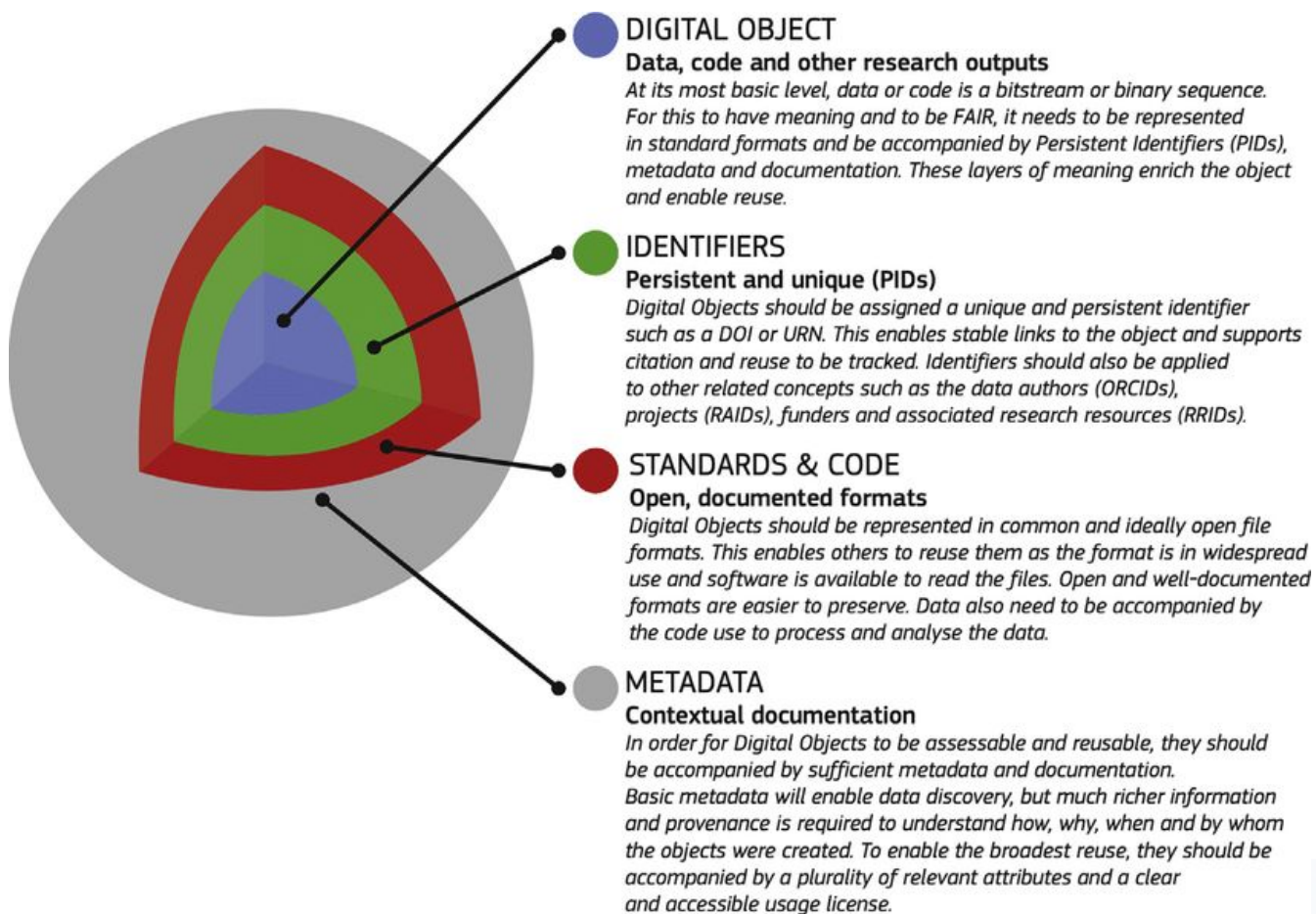
# Trust and FAIR Digital Objects: awareness

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#IASSIST2022 | #FAIRAwareTool

# FAIR Digital Objects



- The units which can actually be FAIR
- Can only exist in a FAIR ecosystem
- Creates the expectation of services that are **FAIR-enabling**

## FAIR-enabling services

- Services that influence the FAIRness of the objects in their holdings
  - Assigning persistent identifiers, facilitating metadata, connecting to related objects, allow objects to be found and reused by others, etc.
- Expectations:
  - **Make** objects FAIR
  - **Keep** objects FAIR over time

FAIR-Enabling trustworthy digital repositories

### FAIR+Time: Preservation for a Designated Community



L'Hours, Hervé, Kleemola, Mari, von Stein, Ilona, van Horik, René, Herterich, Patricia, Davidson, Joy, Rouchon, Olivier, Mokrane, Mustapha, & Huber, Robert. (2021). FAIR + Time: Preservation for a Designated Community (01.00). Zenodo. <https://doi.org/10.5281/zenodo.4783115>

## FAIR tools

Expectations → Monitoring and evaluation → Metrics and tools

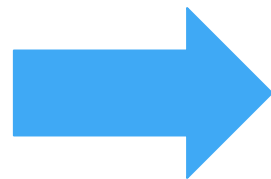
- Different aims, purposes, target objects, audiences, execution types, etc.
- Assessment of FAIR-enabling qualities | Assessment of holdings | Educating

[FAIRassist.org](https://fairassist.org)

## Background



**FAIRsFAIR**  
Fostering Fair Data Practices in Europe



- March 2019 - February 2022
- Goal: Practical solutions for the use of FAIR principles throughout the research data life cycle

- June 2022 - May 2025
- Goal: Support the implementation of FAIR-enabling practices across scientific communities and research outputs
- Takes forward FAIRsFAIR outputs

# FAIR assessment tools



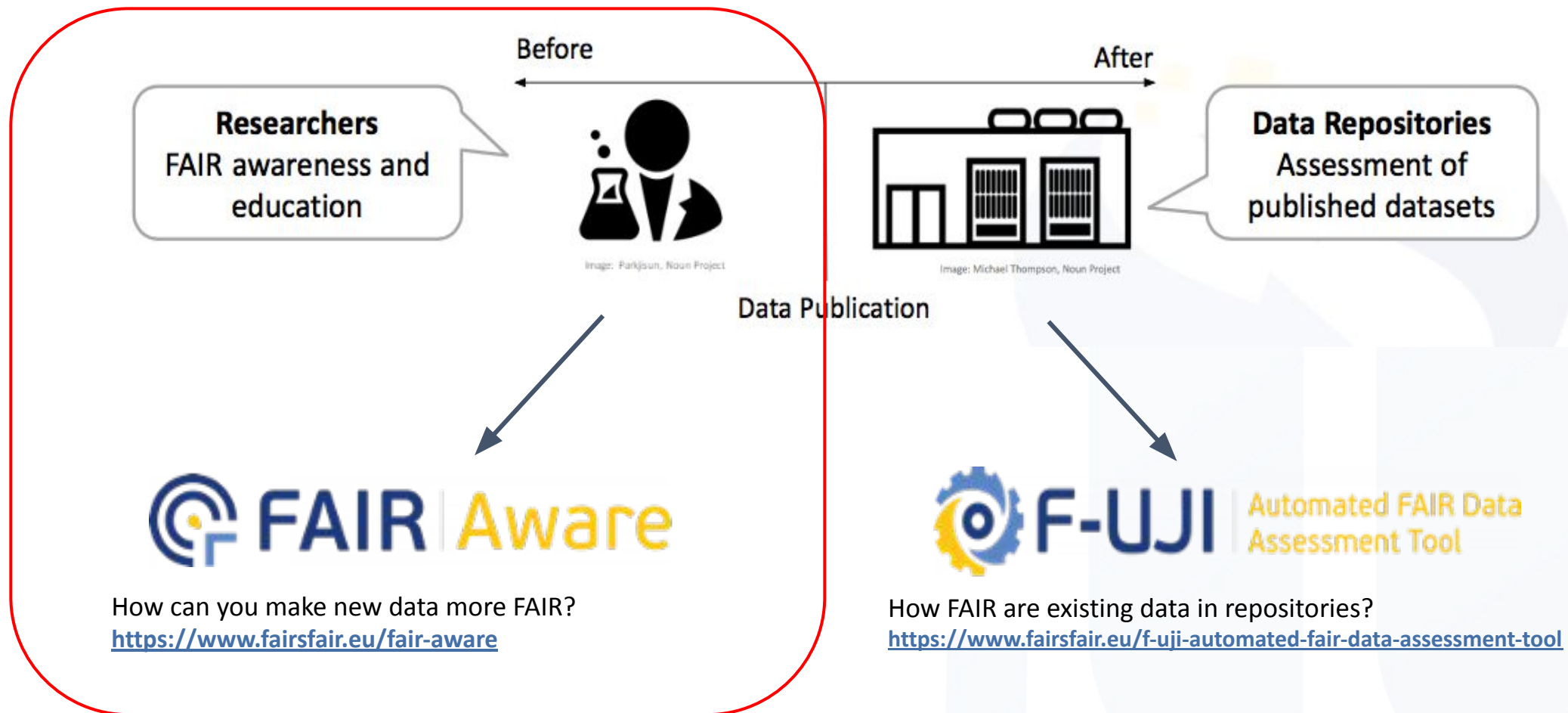
How can you make new data more FAIR?  
<https://www.fairsfair.eu/fair-aware>




How FAIR are existing data in repositories?  
<https://www.fairsfair.eu/f-uji-automated-fair-data-assessment-tool>

# FAIR assessment tools

## Awareness



- 10 FAIR practices
- Simple questions
- Extensive guidance texts
- Aim: help researchers and data professionals create more FAIR data before deposit

**FAIR questions** 

**F**

**A**

**FINDABLE**

1. Are you aware that a data(set) should be assigned a globally unique persistent and resolvable identifier when deposited with a data repository?  Yes  No
2. Are you aware that when you deposit a data(set) in a data repository, you will need to provide discovery metadata in order to make the data(set) findable, understandable and reusable to others?  Yes  No
3. Are you aware that the data repository providing access to your data(set) should make the metadata describing your data(set) available in a format readable by machines as well as humans?  Yes  No

**ACCESSIBLE**

4. Are you aware that access to your data(set) may need to be controlled and that metadata should include licence information under which the data(set) can be reused?  Yes  No
5. Are you aware that metadata should remain available over time, even if the data(set) is no longer accessible?  Yes  No

**INTEROPERABLE**

6. Are you aware that the metadata describing your data(set) should use controlled vocabularies?  Yes  No

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

**What does this mean?**

A **persistent identifier** is a long-lasting reference to a resource. The **data(set)** you deposit in a **data repository** should be assigned a globally unique, persistent and resolvable identifier (PID) so that both humans and machines can find it. 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), Handle, and Archival Resource Key (ARK).

**Why is this important?**

If your data(set) or metadata does not have a PID, you run the risk of "link rot" (also known as "link death"). When your data(set) or metadata is moved, updated to a new version, or deleted, older hyperlinks will no longer refer to an active page. Without a PID, others will not be able to find or reuse your data(set) or metadata in the long-term.

**How to do this?**

When you upload your data(set) or metadata to a data repository, the data repository (or other service providers) usually assigns a PID. Repositories ensure that the identifier continues to point to the same data or metadata, according to access terms and conditions you specified.

There are many different types of PIDs, each with their own advantages, disadvantages, and disciplines they are typically used in. Generally speaking, the data repository will have thought about these aspects before deciding which PID type to use. In case you have to choose the PID type yourself, you can visit the Knowledge Hub on the PID Forum for guidance. Some disciplines or organisations also provide tools to help you make this choice, see for example this Persistent Identifier Guide for cultural heritage researchers. Once you have chosen a PID type, you can search for data repositories providing that specific PID in registries such as Re3data or FAIRsharing (see related databases).

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 or the data repository.

**Want to know more?**

Did you know that a PID can refer to any kind of resource? Besides publications or datasets, a PID can also refer to, for example, a person, a scientific sample, a funding body, a set of geographical coordinates, an unpublished report, or a piece of software. Depending on what you find important to link to, you might want to consider using a PID for one or more of these resource types.

Persistent identifiers may point to a data file, a web service response that contains data values, or ideally to an online page that contains metadata for context and the link to access the actual data or details about how to request access. The technical process of translating the identifier to a location is called 'resolving' an identifier.

Close



## FAIR-Aware

- Assesses knowledge, not objects
- Manual self-assessment



- When implemented leads to more FAIR data being deposited
- Details responsibilities of different stakeholders and what expectations to have of repositories
  - **Choose trustworthy repositories that show FAIR-enabling qualities**

 FAIR | Aware

Your first step towards your FAIR data(set)



A French translation of the tool is available.

Other translations are being worked on to bring FAIR closer to different communities.



Users can ask questions or come together to discuss issues and ideas on the dedicated space at the FAIR Data Forum



The trainer functionality allows others to quickly access the results of a group of people. FAIR-Aware can be employed as a collective learning tool.



In FAIR-IMPACT, the tool will be further developed and focus will be put on bringing the tool closer to disciplinary-specific contexts



[@fairimpact\\_eu](https://twitter.com/fairimpact_eu) /company/fair-impact-eu-project



Funded by  
the European Union