



**HAL**  
open science

## **SO-DRIIHM: promoting Open Science within the LabEx DRIIHM and improving its Research Data Infrastructure**

Emilie Lerigoleur, Fanny Arnaud, Pascal Dayre, Aurore Defays, Priscilla Duboz, Arnaud Jean-Charles, Iwan Le Berre, Corinne Pardo, Jean-Claude Raynal, Marie-Laure Trémélo

### ► To cite this version:

Emilie Lerigoleur, Fanny Arnaud, Pascal Dayre, Aurore Defays, Priscilla Duboz, et al.. SO-DRIIHM: promoting Open Science within the LabEx DRIIHM and improving its Research Data Infrastructure. International Symposium of LabExDRIIHM 2019, Oct 2019, Lyon, France. , 2019, 10.5281/zenodo.3504565 . hal-02322991

**HAL Id: hal-02322991**

**<https://hal.science/hal-02322991v1>**

Submitted on 21 Oct 2019

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution 4.0 International License



# SO-DRIIHM: promoting Open Science within the LabEx DRIIHM and improving its Research Data Infrastructure



Emilie Lerigoleur<sup>1</sup>, Fanny Arnaud<sup>2</sup>, Pascal Dayre<sup>3</sup>, Aurore Defays<sup>4</sup>, Priscilla Duboz<sup>5</sup>, Arnaud Jean-Charles<sup>6</sup>, Iwan Le Berre<sup>7</sup>, Corinne Pardo<sup>6</sup>, Jean-Claude Raynal<sup>6</sup>, Marie-Laure Trémélo<sup>8</sup>

<sup>1</sup> UMR GEODE Toulouse (OHM Haut Vicdessos), <sup>2</sup> UMR EVS Lyon (OHM Vallée du Rhône), <sup>3</sup> UMR IRIT Toulouse, <sup>4</sup> Makina corpus Toulouse, <sup>5</sup> UMI ESS (OHM Tébessékéré), <sup>6</sup> FR ECCOREV (DRIIHM / OHM Bassin minier de Provence), <sup>7</sup> Univ. Bretagne Occ. UMR LETG (OHM Littoral Caraïbe), <sup>8</sup> UMR ESPACE (OHM Littoral méditerranéen)

## In a nutshell

- ANR SO-DATA 2019 Flash call / 8 partners
- 6 Human-Environment observatories (OHMs)
- Keywords: Open Science, e-infrastructure, interdisciplinarity, awareness, FAIR data
- 2 years (May 2020 - April 2022)

The DRIIHM community (1000 researchers from 13 OHMs) produces amount of geospatial and tabular data, textual resources and iconographies. The complexity of socio-ecosystems is understood through a broad disciplinary spectrum covering the Natural and Life Sciences and the Human and Social Sciences.

**How to better share and reuse these valuable data?**

## SO-DRIIHM main objectives

1. Promote Open Science and encourage Open Science practices, showing the benefits and challenges of structuring, accessing, sharing and opening data
2. Enhance the DRIIHM existing Research Data Infrastructure (RDI) to a more user-friendly and interoperable e-infrastructure with new functionalities that will be prioritized according to users' expectations

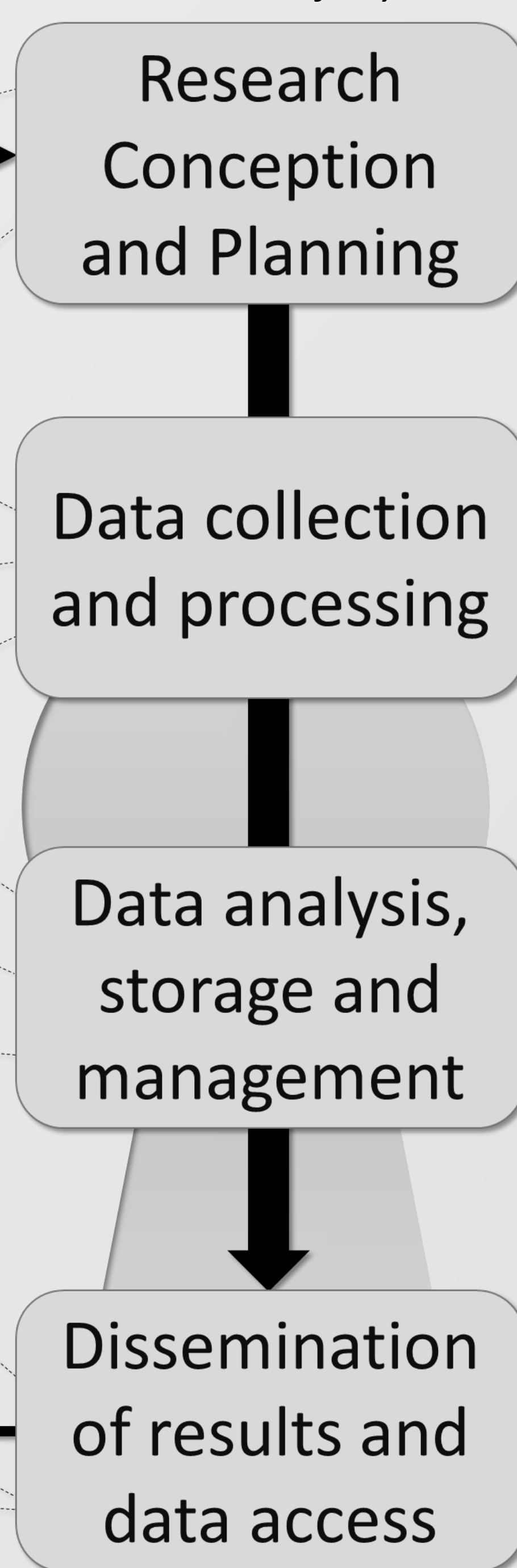
**"as open as possible, as closed as necessary"**

(H2020 EU Commission)

## 1. Awareness campaigns and How-to guides

- What is a **Data Management Plan (DMP)**? How to create a DMP for my DRIIHM project?
- What about **protected data** in accordance with the EU General Data Protection Regulation?
- What is **FAIR** and how to ensure that the datasets are compatible with the FAIR data principles?
- How to **manage** my research datasets using the DRIIHM e-infrastructure?
- How to **deposit** my dataset in an external data repository (e.g. Pangaea, Zenodo)?
- How to **share** my datasets? how to **open** their access?
- How to archive scientific publications in **HAL open archive**?

Research life-cycle



## 2. New intended functionalities of the DRIIHM e-infrastructure\*

\* depending on researchers' expectations

Use a DMP model using the **DMP OPIDoR** tool developed by CNRS-INIST

Make my datasets **as FAIR as possible**

Manage my datasets using a **dashboard**

Use a powerful **search engine**

Use **dataviz** web interfaces

**Download** easily datasets

Generate a **data paper** draft

### FAIR tool

- ✓ Create metadata
- ✓ Add license for access and re-use
- ✓ Add DOI

### + Data dashboard

- ✓ Change metadata
- ✓ Change license ...



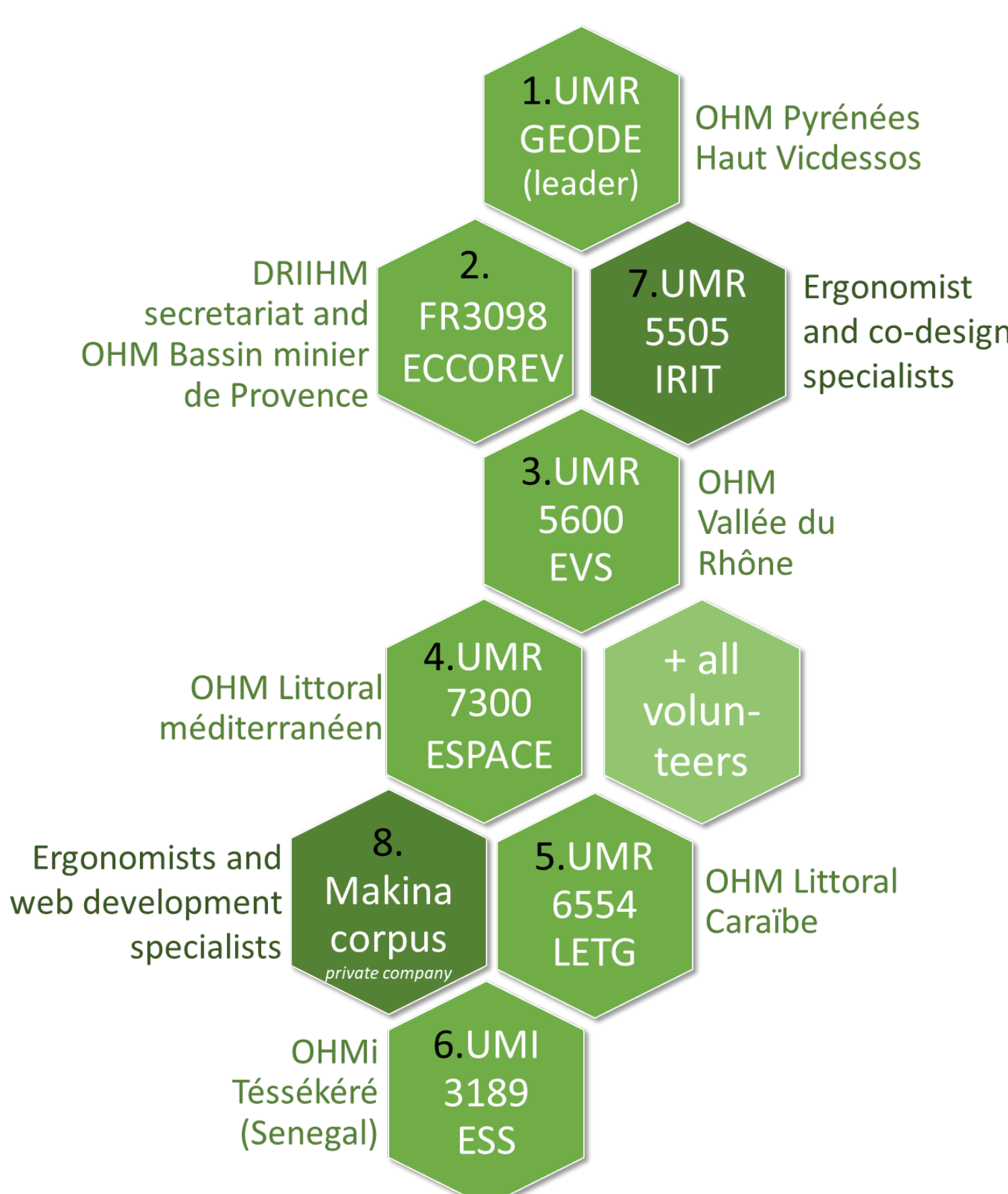
## SO-DRIIHM consortium

Partners 1-6 are project owners, playing the role of data managers/producers/users

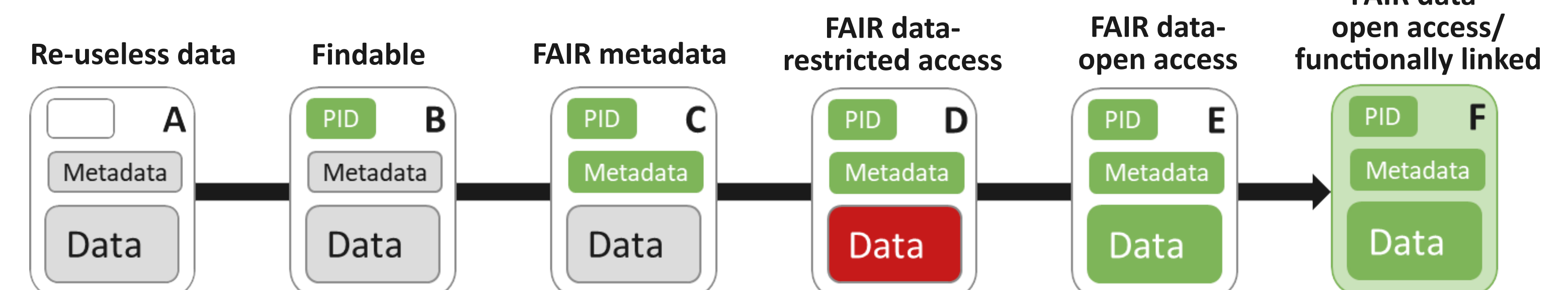
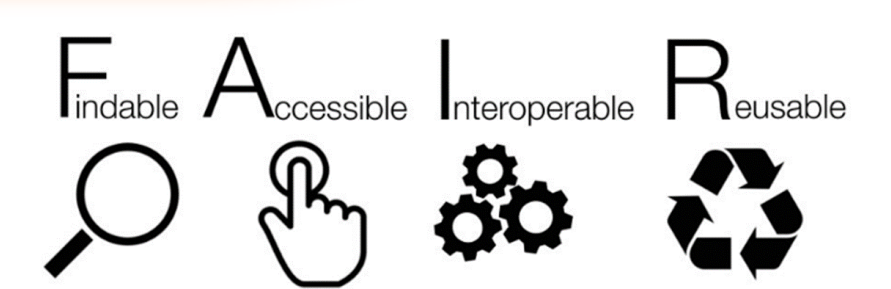
Partners 2 and 8 are involved in the e-infrastructure technical implementation

Partners 1 and 7 play a transversal role

All DRIIHM volunteers among researchers, engineers and OHM directors



## What does "as FAIR as possible" mean?



Indicators will be used to assess the level of FAIRness of the data  
Green elements are FAIR and open / Red ones are FAIR and closed / PID = Persistent identifier  
Adapted from Mons et al, 2017

→ Co-design of an e-infrastructure implementing the FAIR Principles

→ A close collaboration between members of the DRIIHM RDI group, ergonomists, web developers and researchers of the community

Contact: Emilie.Lerigoleur@univ-tlse2.fr

