



HAL
open science

Toward a generic and integrated FAIR data management platform

Nathalie Aussenac-Gilles, Michelle Sibilla, Christophe Baehr, Marianna Braza, Pascal Dayre, Pascal Gaillard, Emmanuel Courcelle, Etienne Gondet, Jessica Eynard, Thierry Louge, et al.

► To cite this version:

Nathalie Aussenac-Gilles, Michelle Sibilla, Christophe Baehr, Marianna Braza, Pascal Dayre, et al.. Toward a generic and integrated FAIR data management platform. 18th Plenary Meeting Research Data Alliance (RDA 2021), Nov 2021, On line, United Kingdom. hal-03761701

HAL Id: hal-03761701

<https://hal.science/hal-03761701v1>

Submitted on 26 Aug 2022

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.

18th Research Data Alliance Plenary Poster session (#13)

Toward a generic and integrated FAIR data management platform

dataNOOS

Steering Committee and dataCore experts group

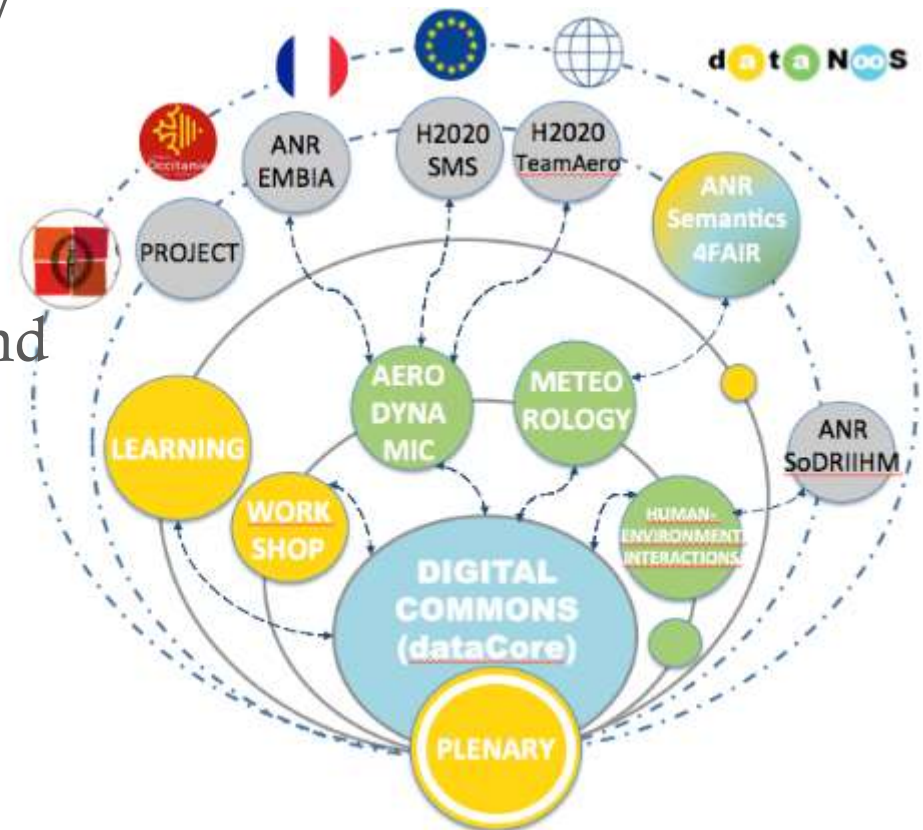


Towards Open Science

- ◆ Gather the academic community in Toulouse area
- ◆ Facilitate cross-disciplinary data sharing
- ◆ Promote scientific data exposition
- ◆ Identify needs and threats about open science
- ◆ Boost and impulse new research/projects

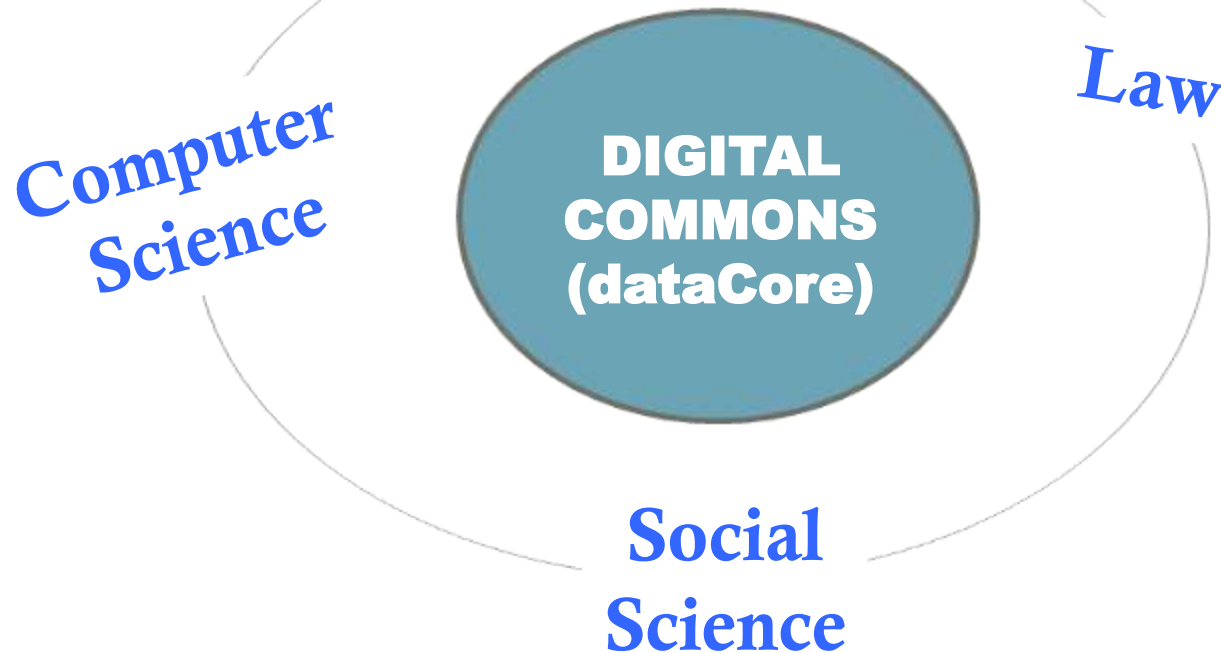
An academic agora

- ◆ Interdisciplinary methodology
- ◆ Collaborative approach (workshops, plenary)
- ◆ Anchored to local, regional and national institutions
- ◆ Attentive to European and international works



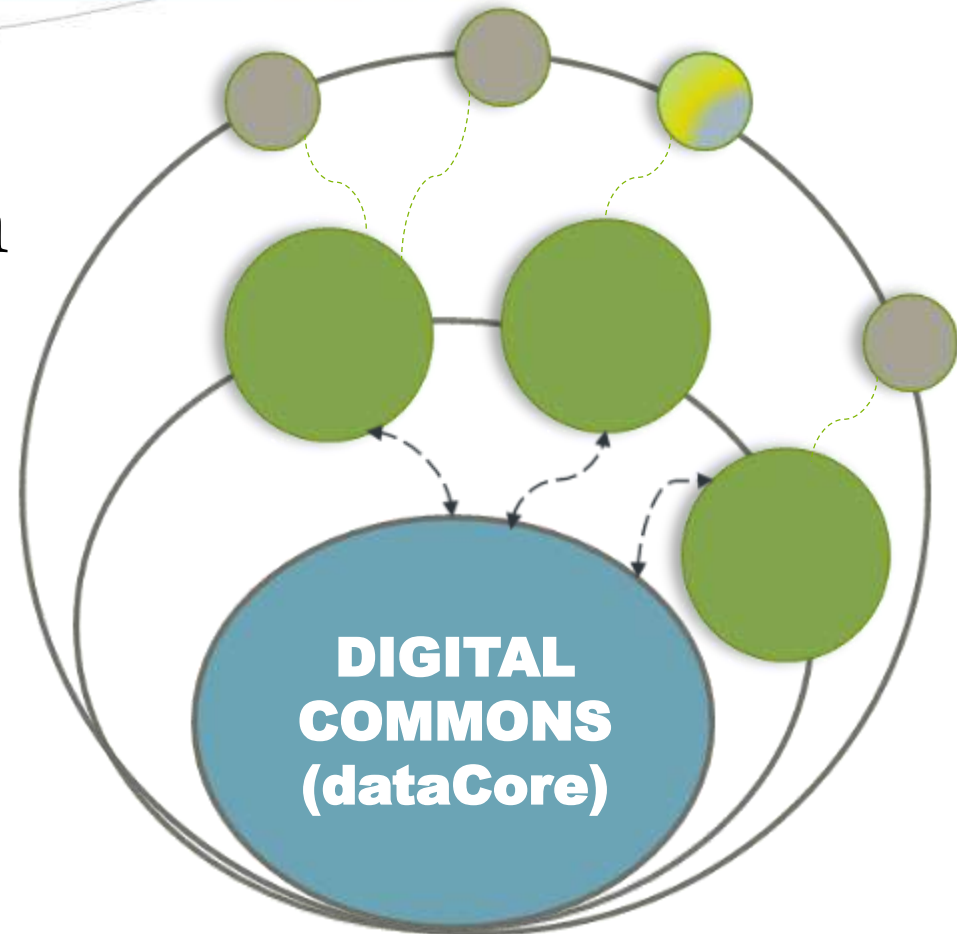
How to build digital commons?

1. To create a multidisciplinary experts group (dataCore) to deal with issuers about commons



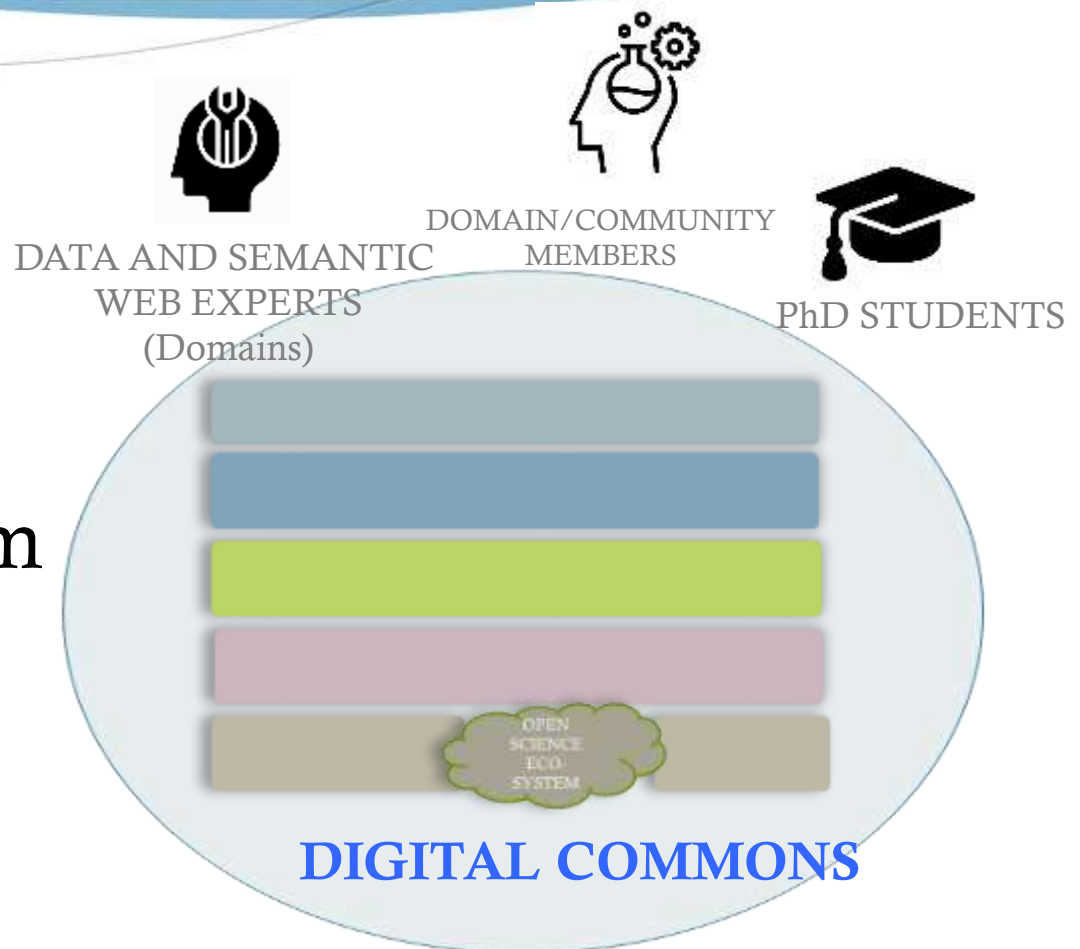
How to build digital commons?

2. To collect feedback/issues from researchers through **use-cases** (linked to projects) and in regard with the data life cycle



How to build digital commons?

3. Capitalize by prototyping an end-user platform



Some Use Cases

(see RDA posters 4 & 15)

FAIR Meteorological data

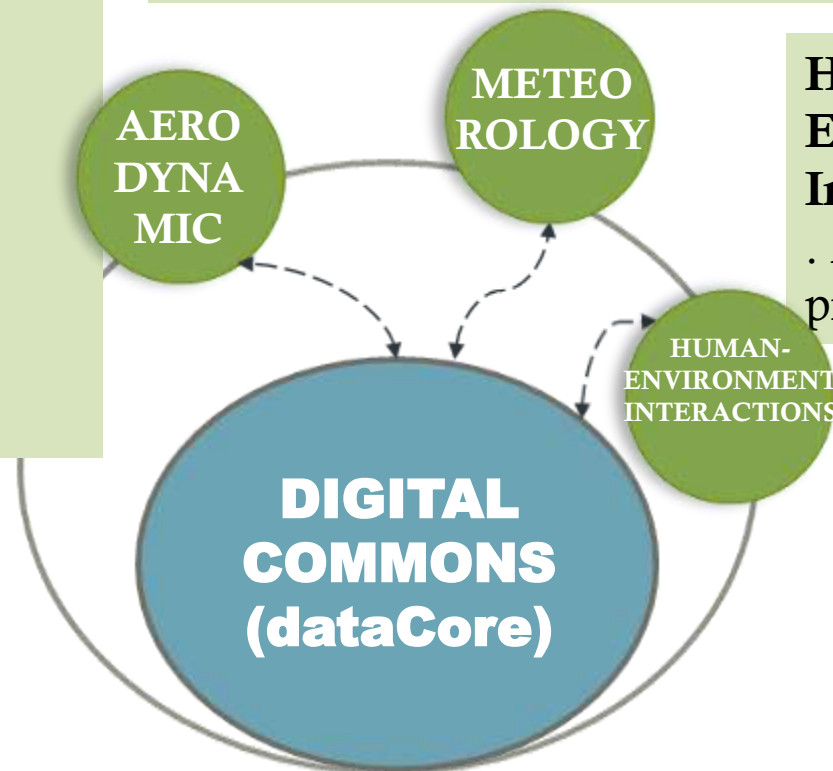
- . Meteorology, AI, biology
- . ANR Semantics4FAIR project

Enhanced & intelligent aerodynamic data modeling

- . Hydrodynamics, computer science, law, environment, material sciences.
- . H2020 projects (SMS, TeamAero) + ANR EMBIA project

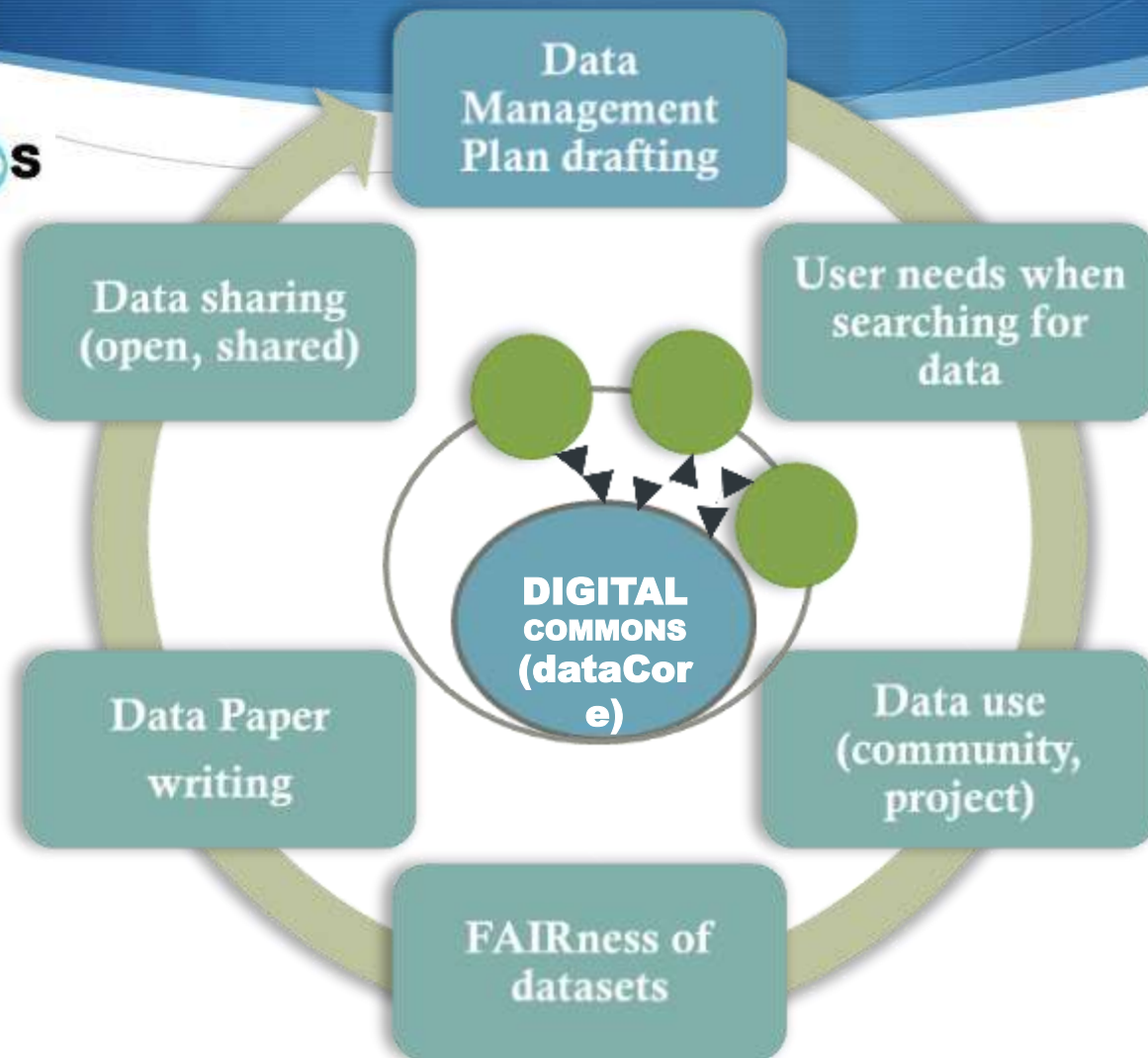
Human-Environment Interactions

- . ANR So-DRIIHM project



Some issues in the data life cycle

dataNOS



A platform for dataset management

dataNOOS



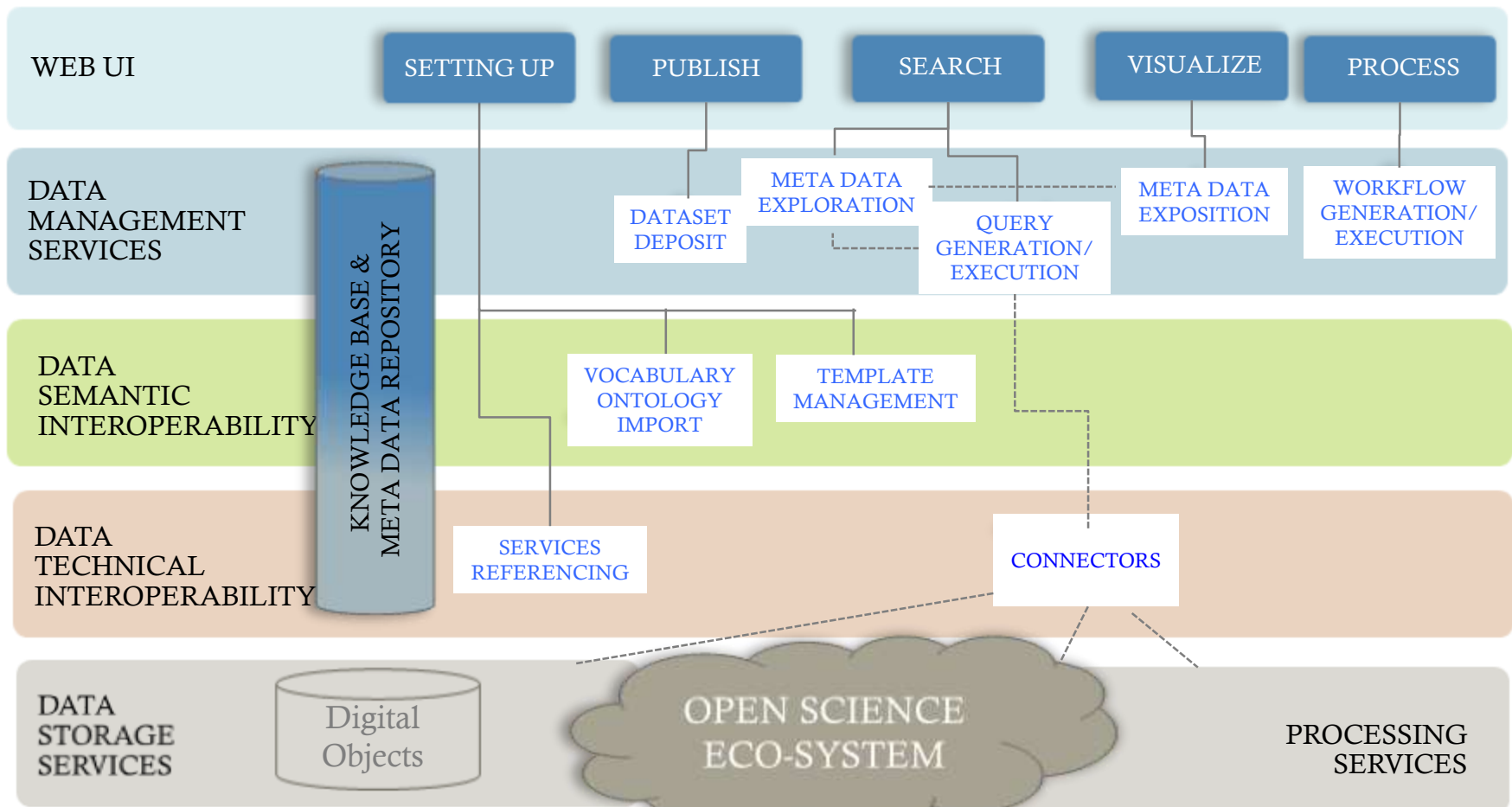
DATA AND SEMANTIC WEB EXPERTS
(Domains)



DOMAIN/COMMUNITY MEMBERS

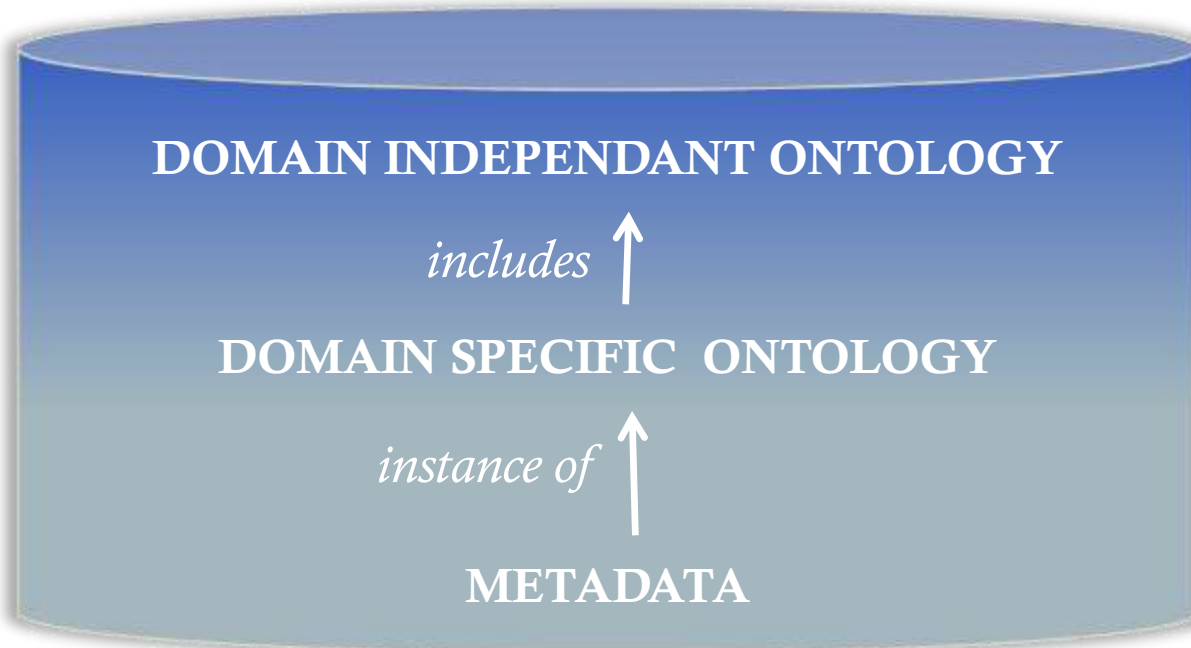


PHD STUDENTS

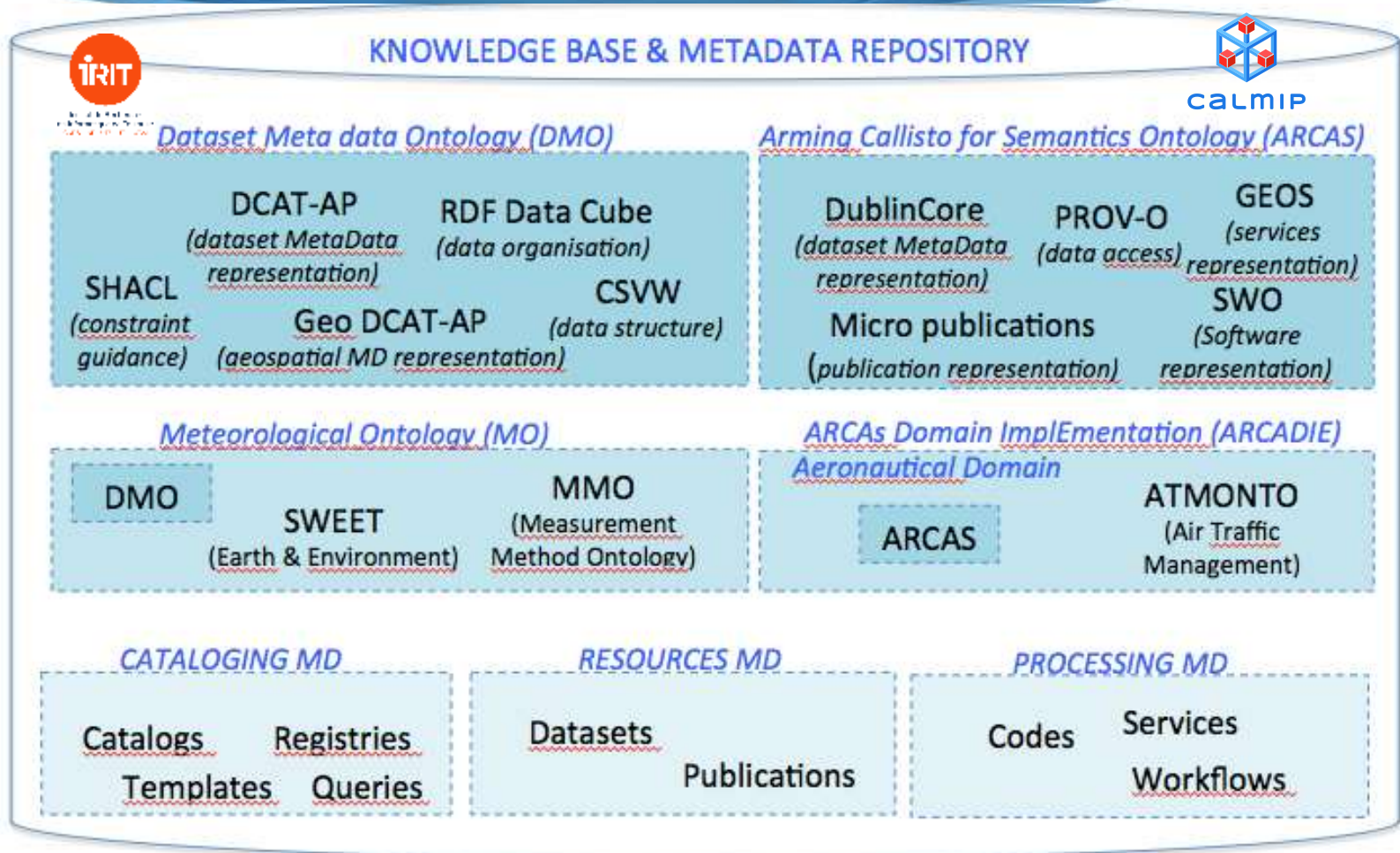


Ontology based approach for FAIR digital objects

We use ontologies for building a knowledge base and metadata repository for FAIR digital objects



Focus to the Knowledge Base and Metadata Repository



DOMAIN INDEPENDANT ONTOLOGY

includes

DOMAIN SPECIFIC ONTOLOGY

instance of

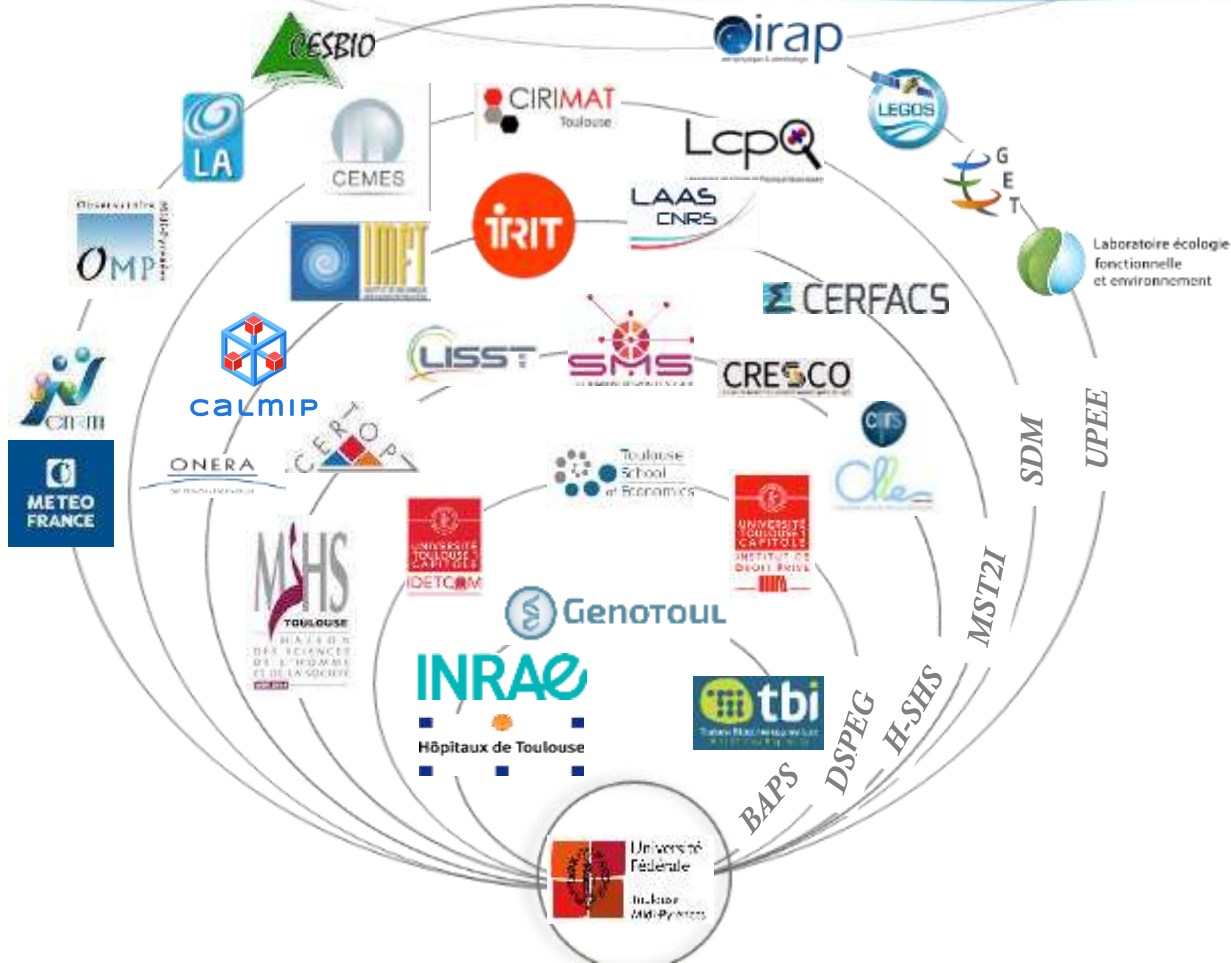
METADATA

Link to RDA WGs

- ◆ Link to the Research Data Repository Interoperability WG :
 - ◆ FAIR principles and standards adoption
 - ◆ an integrated platform for connecting Open Science ecosystem
- ◆ Link to the FAIR Data Maturity Model WG :
 - ◆ a generic platform for domain and community specializations
 - ◆ Data quality checking
- ◆ Link to RDA for interdisciplinary research
 - ◆ a generic platform to manage cross-disciplinary datasets

PARTNERS

dataNoos



30 research units

covering the 6 research coordination hubs in the Toulouse University :

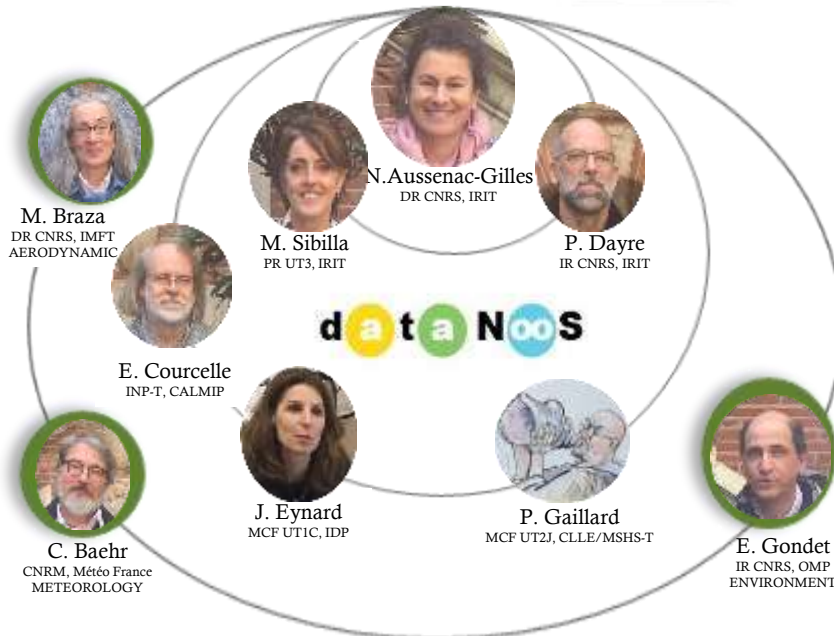
- BAPS : Biology, Agronomy, Biotechnology, Health
- DSPEG : Law, Political Science, Economics, Management
- H-SHS : Humanities, Social Sciences and Society
- MST2I : Mathematics, Sciences and Technology of Information and Engineering
- SDM : Sciences of matter
- UPEE : Universe, Planets, Space, Environment

(around 120 members)

CONTRIBUTORS



Steering Committee



dataCore experts group

- N. Aussenac-Gilles (DR CNRS, IRIT)
- J. Aligon (MCF UT1C, IRIT)
- P. Dayre (IR CNRS, IRIT)
- J. Eynard (MCF UT1C, IDP)
- P. Gaillard (MCF UT2J, CLLE/MSHS-T)
- E. Lerigoleur (IE CNRS, GEODE, OHM Pyrénées)
- T. Louge (IR CNRS, CALMIP)
- F. Ravat (PR UT1C, IRIT)
- M. Sibilla (PR UT3, IRIT)
- J. Thomazeau (IR CNRS, IRIT)
- C. Trojahn (MCF HDR UT2J, IRIT)
- Post-Doc : A. Aanane, B.-H. Tran

Thanks to students :

- PhD : V.-N Dang
- Master : R. Amal, A. Champagne, L. Kleiber, L. Mendy, G. Robert, W. Xu



Visit our web site :

<https://datanoos.univ-toulouse.fr/en/>

Visit the CALLISTO platform :

<https://callisto.calmip.univ-toulouse.fr>

Contact : AUSSENAC-GILLES Nathalie
(senior researcher CNRS à l'IRIT)
aussenac@irit.fr