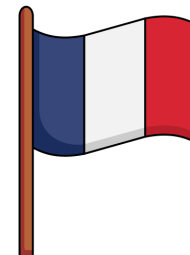


FAIR-IMPACT in a nutshell

Clement Jonquet

MISTEA (INRAE, SupAgro)
LIRMM (Univ. Montpellier, CNRS)

WP4 leader



Journées EOS-France,
Montpellier 13-14 juin 2023

Expanding FAIR Solutions across EOSC

**Call HORIZON-INFRA-
2021-EOSC-01-05**

*Enabling discovery and
interoperability of federated
research objects across scientific
communities*

**Expanding FAIR
solutions in Europe**

**Partly following up on
FAIRsFAIR**

EU funded project

**Coordination and
Support Action**

10 million euro

**36 months, starting
1 June 2022**

**28 partners and
affiliate entities**

**From 10 EU
member states:
NL, FI, FR, DK,
IT, DE, ES, NO,
BE, RO**

and the UK

FAIR-IMPACT overall objective



WHAT:

to realise a FAIR EOSC by **supporting the implementation** of FAIR-enabling practices across scientific communities and research outputs at a European, national, and institutional level;

HOW:

- **identifying** current and emerging components for enabling FAIR (practices, policies, tools & technical specifications);
- **translating** viable solutions, guidelines and frameworks that have been developed for one domain or research output and **supporting** their application in others;
- taking the next step in implementation by **defining** the support, governance, and coordination mechanisms required to ensure the continuous function of FAIR-enabling practices in the EOSC.

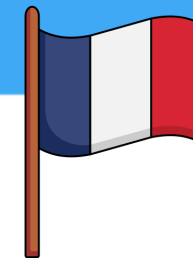
FAIR-IMPACT project design



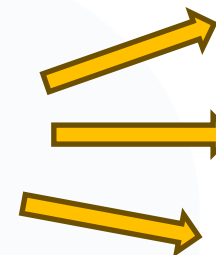
The Consortium



France in FAIR-IMPACT and synergies with the French open science roadmap



inventeurs du monde numérique



Initiative d'excellence



Deuxième Plan
national pour la
science ouverte

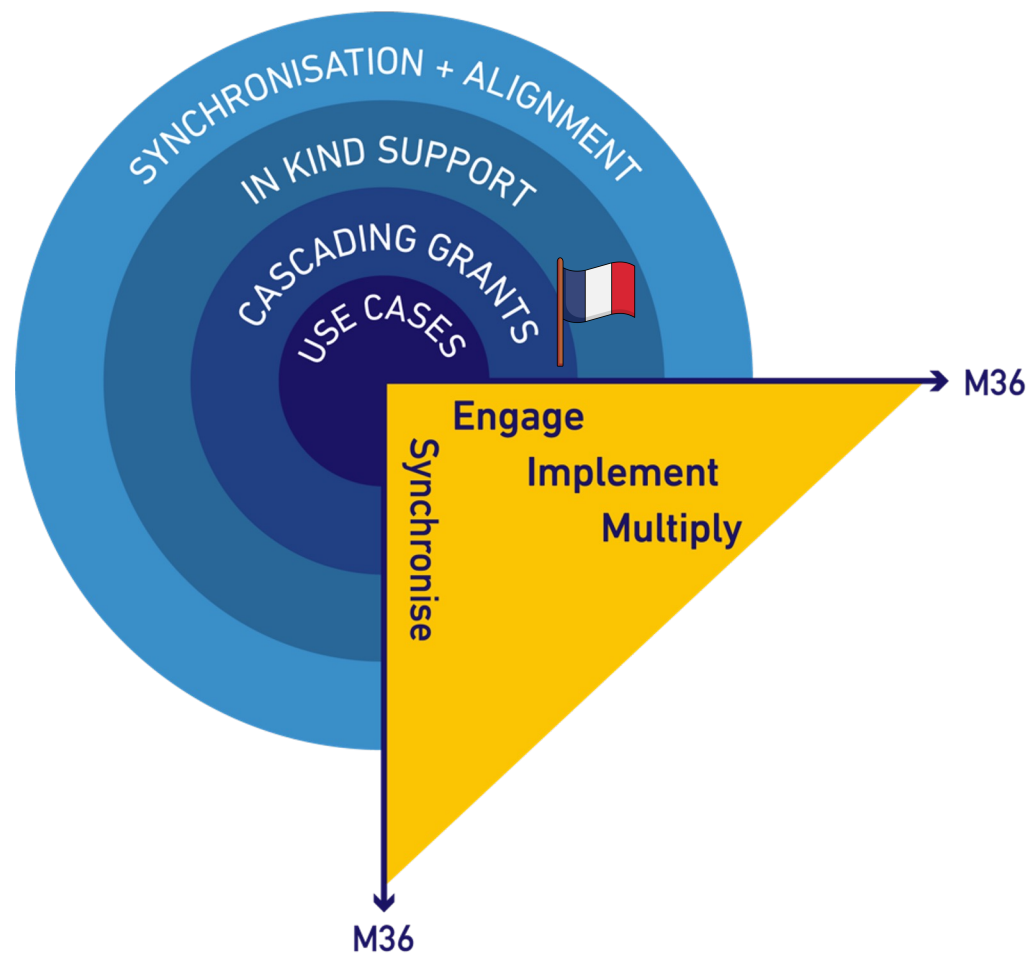
2021

- One use case with national's Research Data Gouv initiative
- Fully align with Software Heritage
- FAIR data, FAIRification, FAI
- Experience from the labs on semantics and ontologies
- No work related to open publishing (Axe 1)

Practical implementation of the FAIR principles starting with integrated use cases on four scientific domains



Project methodology: Tier 2 and 3 cascading grants and in-kind support



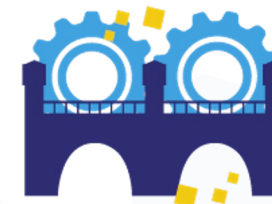
Cascading grants: open calls 500 K€;

In kind support: open calls 500 K€



Coordination mechanisms

a [Technical Bridging Team](#), leading and ensuring the technical alignment between FAIR-IMPACT and other strategic initiatives in EOSC



a [FAIR Implementation Team](#), supporting adoption and implementation of FAIR-enabling practices, policies, tools or technical specifications

the [Synchronisation Force](#), in charge of establishing a dialogue among the various projects, initiatives and actors in both EOSC and FAIR ecosystems to reduce redundancy and ensure that solutions are more widely promoted, sustainable and can be transferred to the relevant EOSC Partnership and current and future EOSC stakeholders.



a group of [12 FAIR Champions](#) act as ambassadors for FAIR, engage their communities, and advocate for adoption of the project results.

France's participation in multiple WPs



- Metadata and ontologies (INRAE, CNRS, e-SDF, INRIA, OBS-PARIS)
- Engaging and supporting adoption at the national level (CNRS, INRAE)
- Semantic interoperability (INRAE, CNRS, e-SDF)
- Legal and organizational interoperability (CNRS)
- Interoperability within the EOSC ecosystem (CNRS)
- PIDs in data production workflow (INRAE, INRIA)
- FAIR metrics for research software (INRIA)

WP4 Metadata and Ontologies

Semantic artefacts are a key elements to achieving FAIR and these artefacts and their catalogues have to be FAIR too

- Partners include: DANS, UEDIN, INRAE, INRIA, UPM, CNRS, DataCite, eSDF, LifeWatch, CNR, STFC, UNIMAN



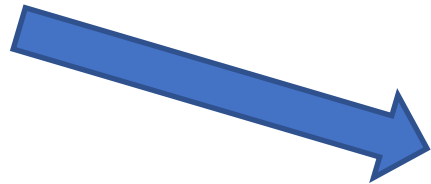
WP4

Greater and more harmonised
use of **semantic artefacts**
throughout the EOSC
ecosystem, leading to semantic
interoperability **within and
between disciplines.**

*WP4 will develop and foster the uptake of a semantic framework for the governance, creation, mapping, sharing, reuse, FAIRness assessment and interoperability of **semantic artefacts** for EOSC.*

- ➔ Broader and more harmonized use of semantic artefacts in EOSC.
- ➔ Guidelines to collect and curate research software metadata.
- ➔ A framework for metadata crosswalks and mappings between semantic artefacts.
- ➔ Use of semantic artefacts within data repositories for better data search and indexing.

*...implementation
of FAIR-enabling
practices across
communities and
research outputs*



WP4's use case include

- Agri-food (INRAE with AgroPortal, EMPHASIS, ANAEE)
- Ecology/biodiversity (LifeWatch with EcoPortal)
- Earth sciences (CNRS with DataTerra EarthPortal)
- Physics (STFC)
- Social sciences (DANS)
- Astronomy (OBS-PARIS)

*...projecting the
FAIR principles
to other types
of research
objects*



WP4's research objects

- *semantic artefacts, research software,
crosswalks & mappings*

WP4's tasks leads



T4.1 (governance)

Nicola Fiore



T4.2 (lifecycle and catalogues)

Daniel Garijo +
Clement Jonquet +
Alejandra Beltran



T4.3 (for research software)

Morane
Gruenpeter



T4.4 (crosswalks and mappings)

Yann Le Franc



T4.5 (in-use in data repos)

Sophie Aubin



Synergies



→ Especially T5.2 (FAIR metrics for research software) and T5.3 (Semantic artefact FAIRness assessment) and T6.1 (Semantic and technical core interoperability)



→ Vocabulary and Semantic Services Interest Group



→ Partnership for AgroPortal, EcoPortal, EarthPortal to come and maybe more...



→ T4.2 EOSC Metadata Schema and Cross-walk Registries
→ More tasks?



→ ???

Example of synergy FAIR-IMPACT <> France <EOSC>

- AgroPortal is a semantic artefact catalogue developed and maintained by INRAE (originally launch by CNRS & Univ. Montpellier)

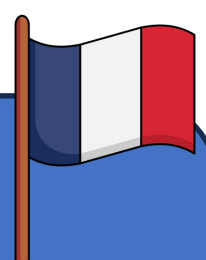


- Research Data Gouv will use AgroPortal to semantically enhance the search for datasets

- AgroPortal is based on a generic technology (OntoPortal) reused by DataTerra (EarthPortal) and ENIT Tarbes (IndustryPortal) ...



- Also LifeWatch ERIC, NFDI, SMEs, TotalEnergy in Europe



Can we provide a
generic solution
for managing
semantic artefacts
for EOSC?

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@fairimpact_eu /company/fair-impact-eu-project



Funded by
the European Union