eosc | FAIR-IMPACT
Expanding FAIR solutions across EOSC

FAIR-IMPACT in a nutshell

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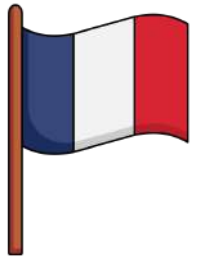
WP4 leader



Journées EOS-France,
Montpellier 13-14 juin 2023

Funded by
the European Union

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;

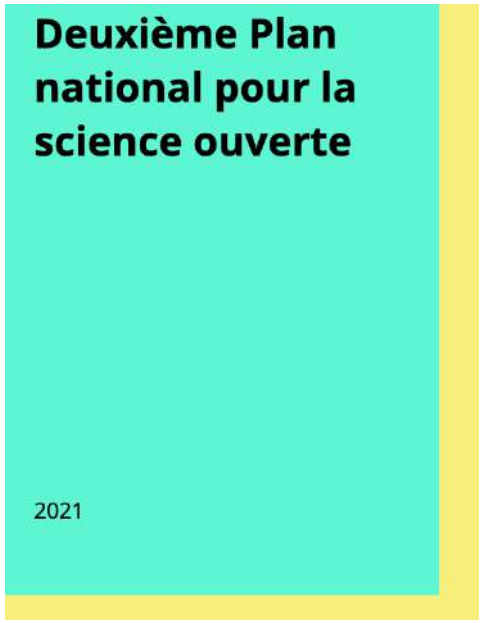
HOW:

- 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

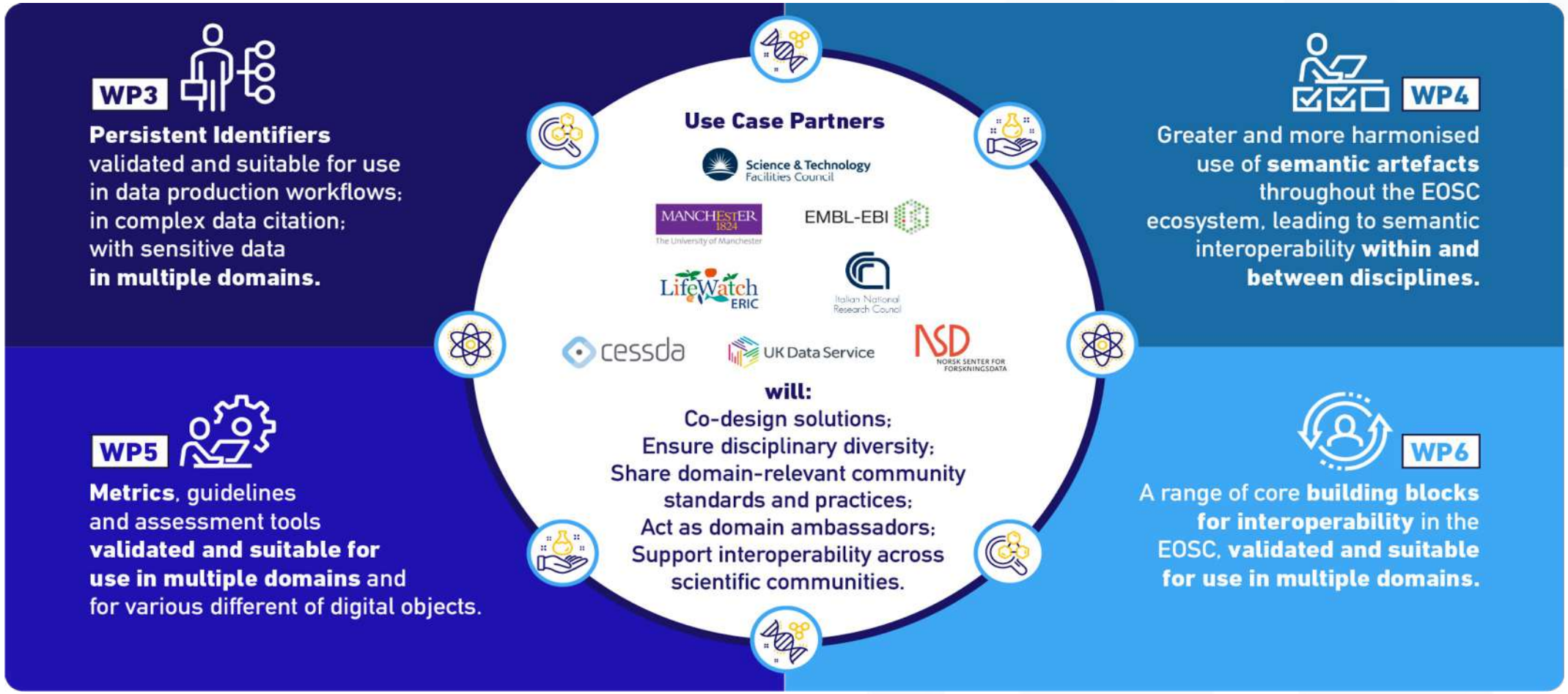
The Consortium

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

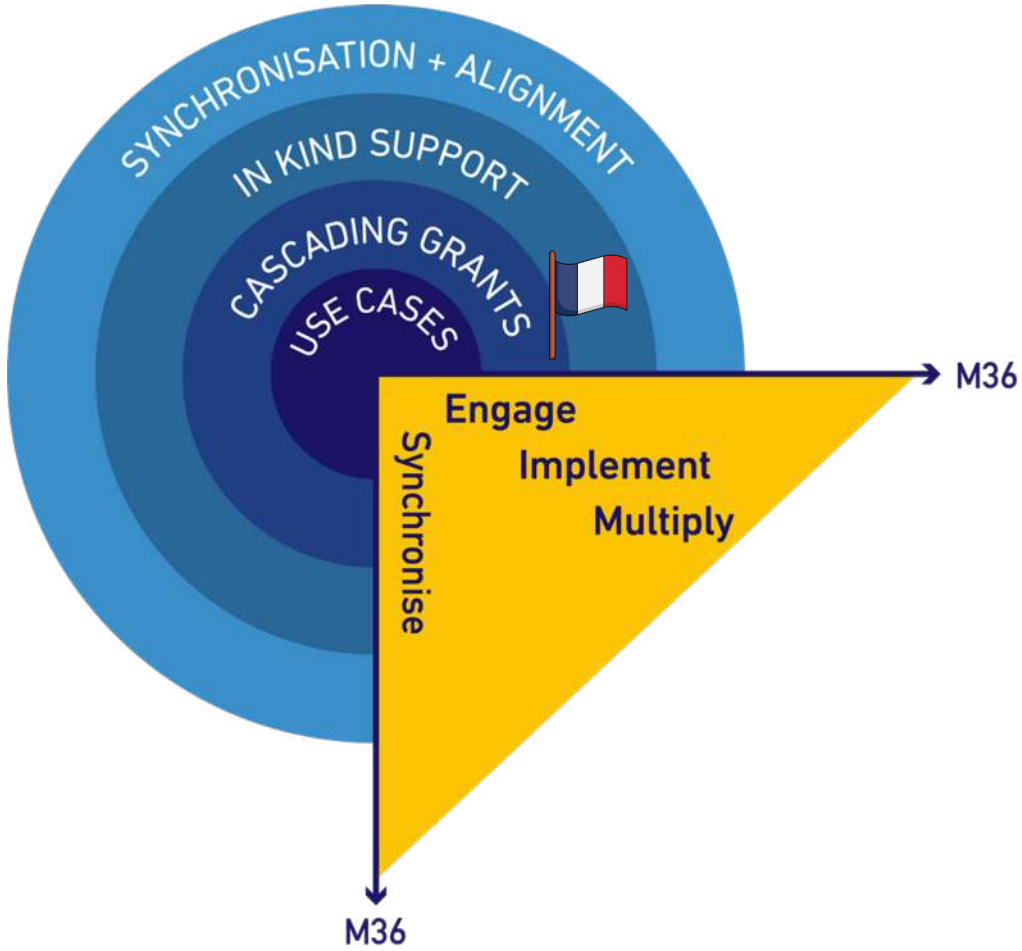


- One use case with national's Research Data Gouv initiative
- Fully align with Sofware Heritage
- FAIR data, FAIRification, FAI
- Experience from the labs on semantics and ontologies
- No work related to open publishing (Axe 1)

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)

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WP4 Metadata and Ontologies

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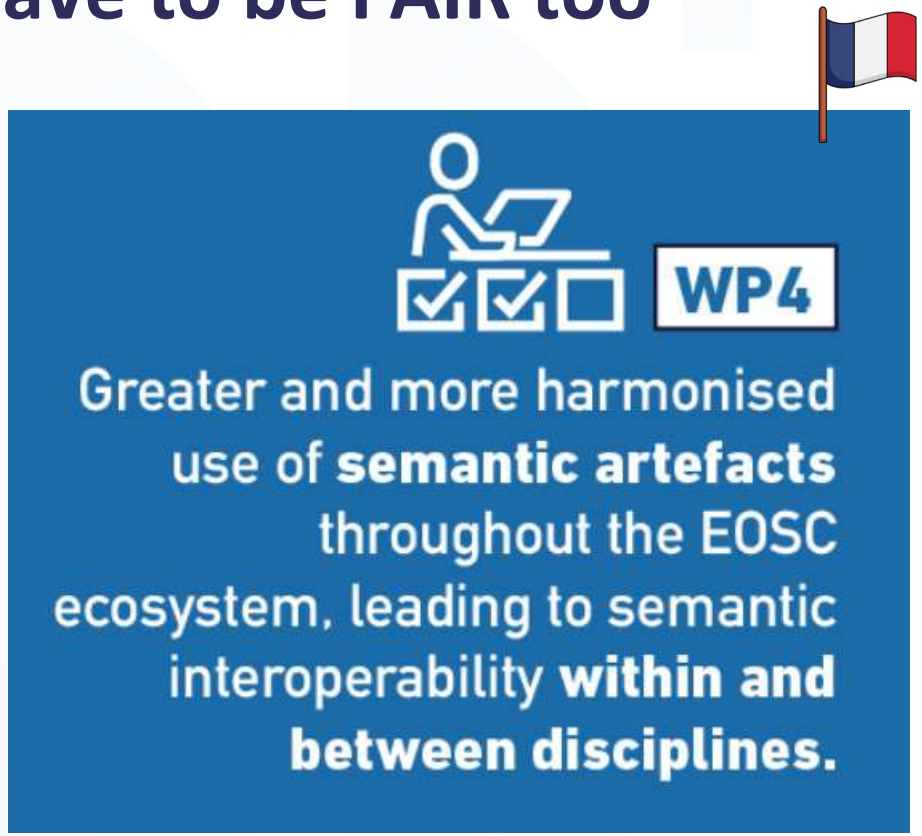
Semantic artefacts are a key elements to achieving FAIR and these artefacts and their catalogues have to be FAIR too

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



WP4 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.

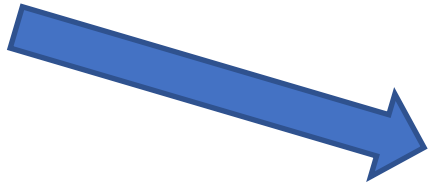
➔ Broader and more harmonized use of semantic artefacts in EOSC.

➔ 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)	T4.2 (lifecycle and catalogues)	T4.3 (for research software)	T4.4 (crosswalks and mappings)	T4.5 (in-use in data repos)
Nicola Fiore	Daniel Garijo + Clement Jonquet + Alejandra Beltran	Morane Gruenpeter	Yann Le Franc	Sophie Aubin

Synergies

➔ *Vocabulary and Semantic Services Interest Group*

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

➔ *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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