FAIR-IMPACT: Expanding FAIR solutions across EOSC

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Funded by the European Union

The Consortium

Expanding FAIR Solutions across Europe

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

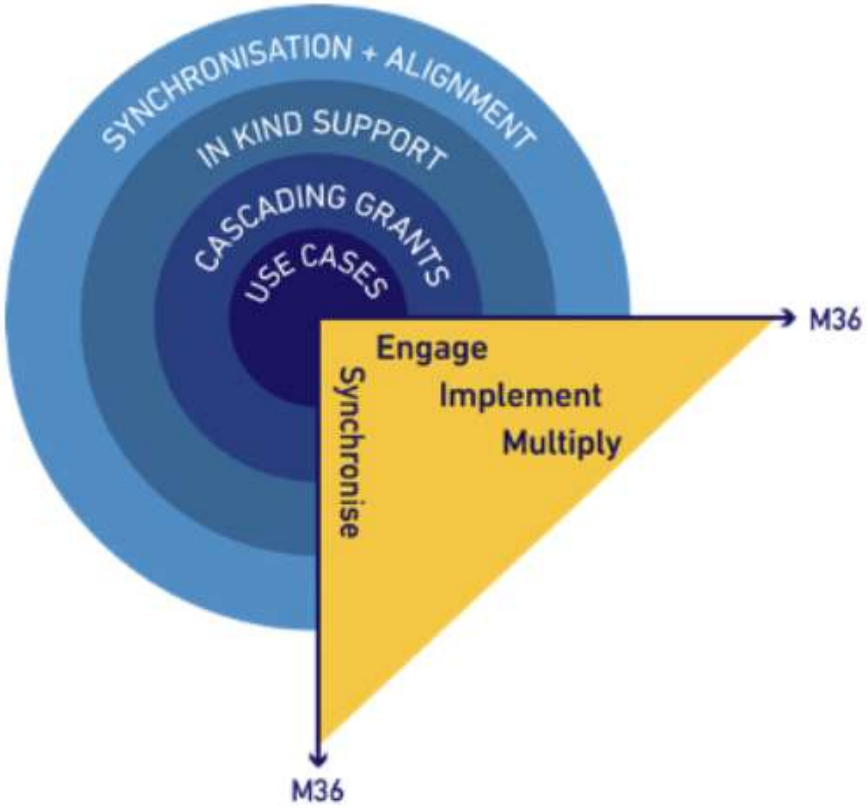
WHAT:
to realise a FAIR EOSC by supporting the implementation of FAIR-enabling practices across scientific communities and research outputs at a European, national, and institutional level;

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 Work Packages

Expected outcomes



Improved FAIRness of data and other research outputs by **coordinating the alignment of FAIR data practices and the implementation of frameworks**

Tier 1: integrated use cases

- Act as a **bridge** to the four scientific domains
- **Provide expertise**
- **Translate** what works for them

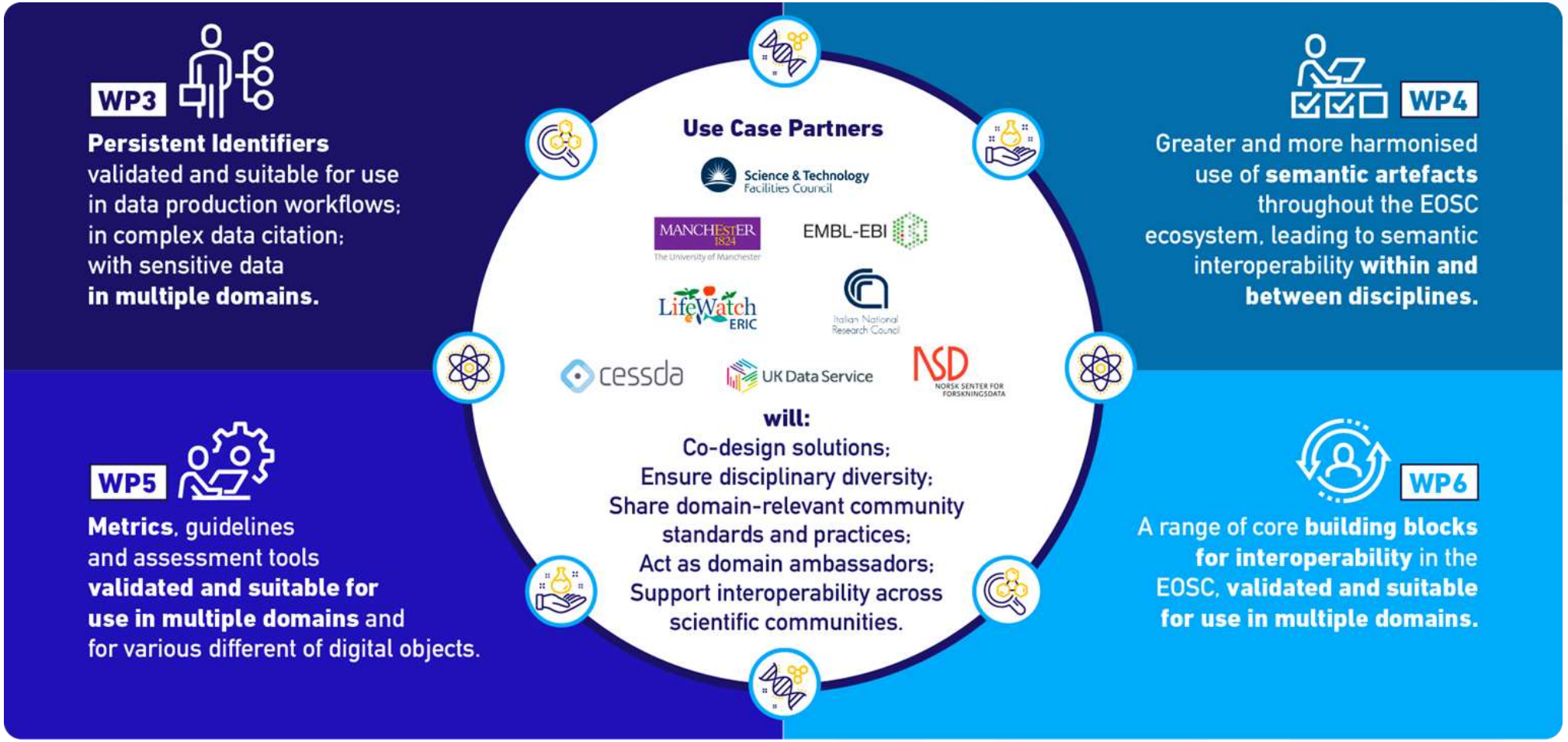
Social Sciences and Humanities

Photon and neutron science

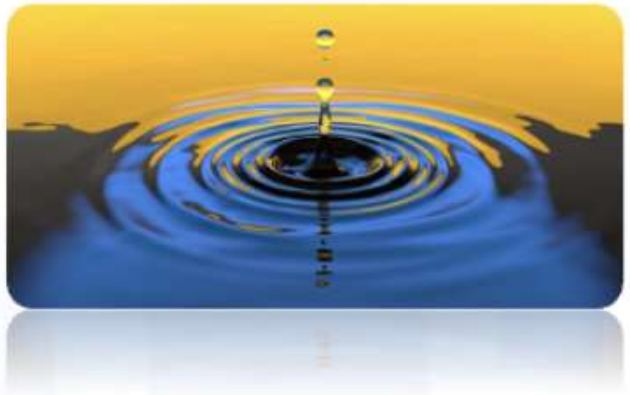
Life science

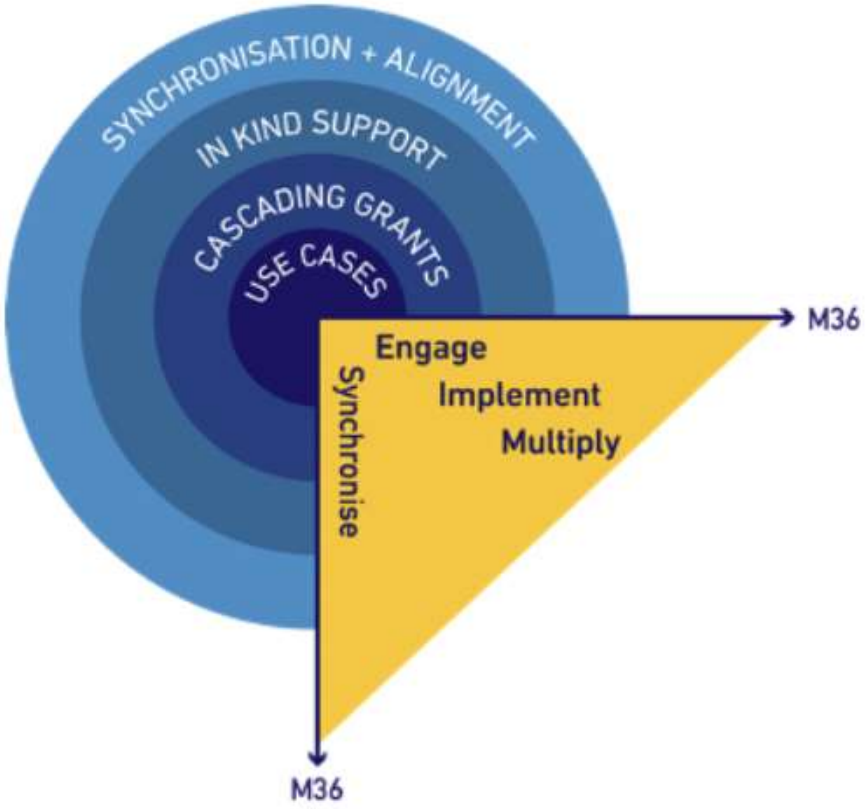
Agri-food Environmental

Tier 1: integrated use cases



Expected outcomes





Wide uptake of and compliance with FAIR data principles and practices by national and European research data and metadata providers and repositories

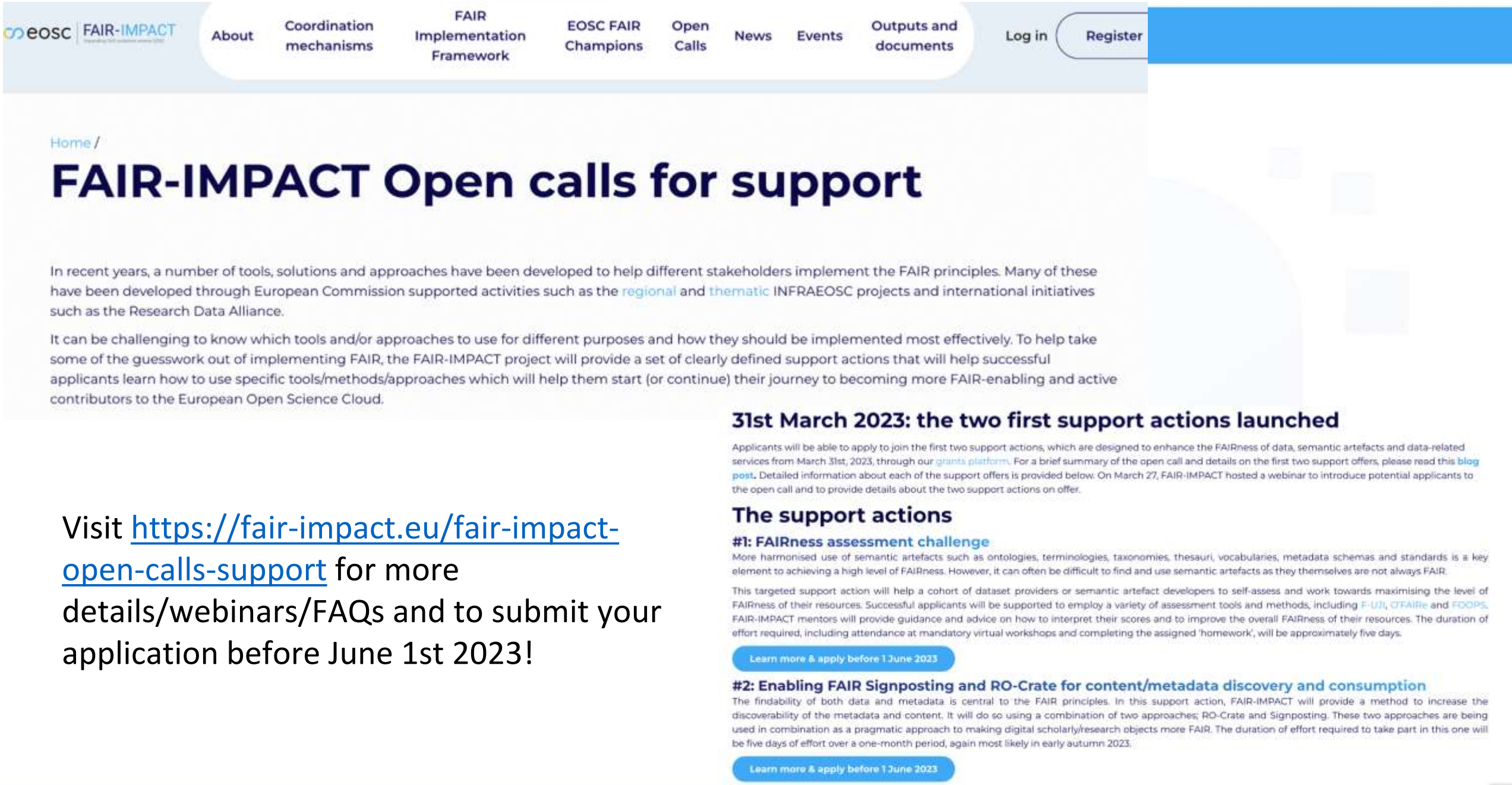
Tier 2 and 3: cascading grants and in-kind support

Cascading grants

- open calls to support
- €500,000
- ca 50 organisations

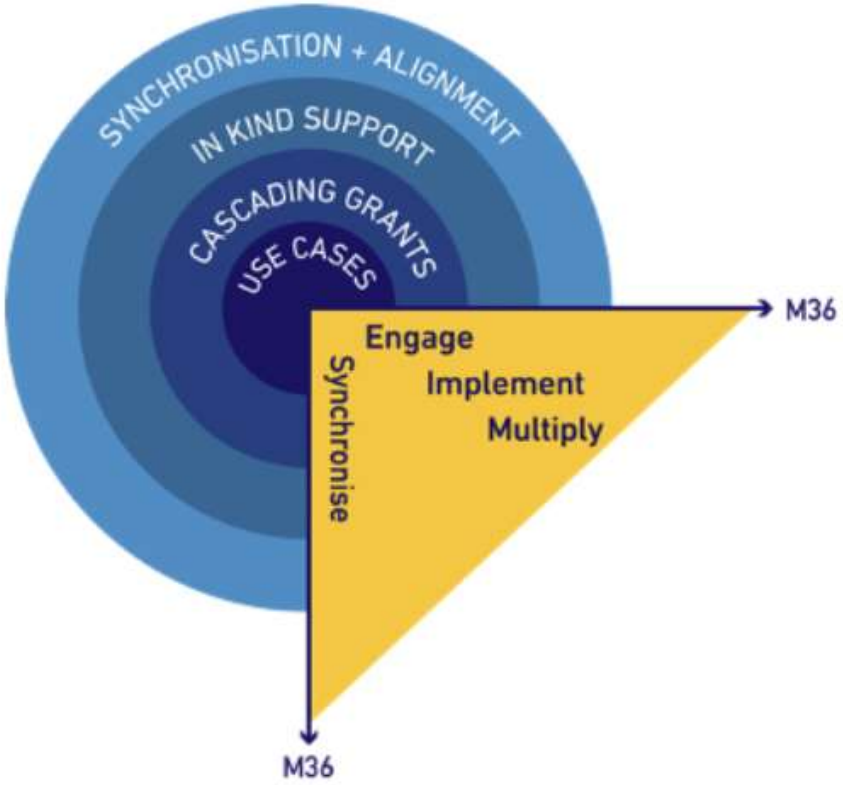
In-kind support

Provision of in-kind support by the partners through open calls



Visit https://fair-impact.eu/fair-impact-open-calls-support for more details/webinars/FAQs and to submit your application before June 1st 2023!

Expected outcomes



Contribution to the Horizon Europe Partnership

Technical Bridging

Synchronisation Force 1st Workshop - November 2022

The workshop aims to discuss common challenges and priorities related to turning the FAIR principles into practice.

Four online collaborative sessions between the 21st and 24th of November 2022 assessed the implementation of selected recommendations and ambitions from the Turning FAIR into Reality Report (2018), the FAIRsFAIR White Paper (2021), the SRIA (version June 2021) and EOSC Multi-Annual Roadmap (2023-2024).

They were opened by an **introductory session on the 8th of November** and concluded with a **discussion session on December the 12th.**

More than 120 people registered for the series; attendance in individual sessions ranged from 40 to over 60 people. Based on the workshop input and discussions, a report was produced providing supporting recommendations for each topic.

Download and read the report

Synchronisation Force events

- 12 EOSC FAIR Champions, selected via an Open Call
- Ambassadors for FAIR, engage their communities, advocate for adoption of the project results
- National roadshows in their country

EOSC FAIR Champions

Visit: https://fair-impact.eu/eosc-fair-champions
to meet our EOSC FAIR Champions!

Expected key results to look forward to:

1. A range of governance, coordination and collaboration mechanisms necessary for a functioning FAIR research ecosystem;

2. Adoption of FAIR-enabling components and mechanisms at multiple levels among a diverse group of stakeholders using a wide range of tools and Support Tiers

3. A persistent identifier support programme and guidance for the provision of PID services in EOSC, incl. mechanisms for adoption and implementation;

4. A semantic framework for the governance, creation, mapping, sharing, reuse, FAIRness assessment and interoperability of semantic artefacts for EOSC;

5. Guidelines and prototypes to support both enabling FAIR and assessing the FAIRness and trustworthiness of different types of digital objects in multiple domains.

6. Components and services for increased legal, organisation, semantic and technical interoperability within and across disciplines.

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Expanding FAIR solutions across EOSC

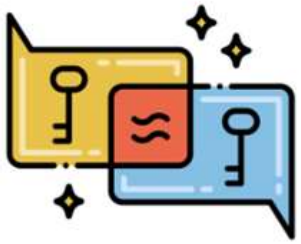
Metadata and Ontologies

Funded by
the European Union

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

*ontologies, terminologies, taxonomies, thesauri, vocabularies, metadata schemas and standards…

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.



WP4

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

Semantic Framework

- Semantic Artefact governance
- Semantic Artefact Life Cycle and Catalogues
- Minimum metadata for Semantic Artefacts and Common API
- FAIR Mappings and Crosswalks
- Harmonisation of FAIRness evaluation of Semantic Artefacts

…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)
- Astronomy/materials science/physics (UKRI-STFC)

…projecting the FAIR principles to other types of research objects

WP4's research objects

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

Minimum metadata schema for Semantic Artefacts

F2 - Data are described with rich metadata

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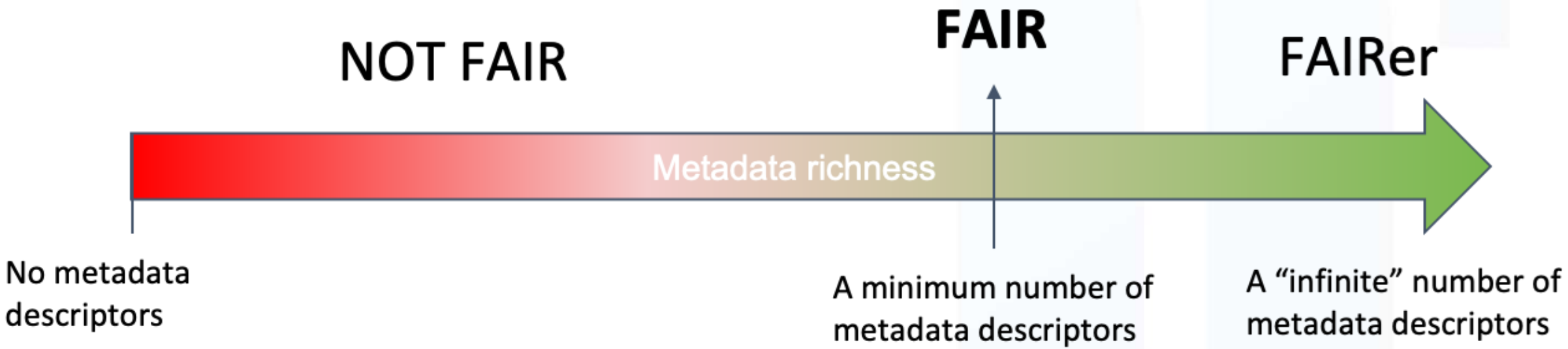

Minimum metadata schema for Semantic Artefacts

Workshop jointly organised by FAIRsFAIR and RDA VSSIG

- 76 participants from 17 different communities
- Were presented the MOD2 new proposition
- Discussed a minimum metadata profile for Semantic Artefacts
- Voted on most important metadata properties for artefacts and their catalogues

⇒ Initial DCAT profile using standards metadata properties and enriched with 12 properties from MOD

⇒ Profile formalisation (OWL/SHACL) on its way

Minimum metadata schema for Semantic Artefacts in FAIR Impact

- Extend the first version proposed by FAIRsFAIR
- Define Common API structure based on this model.
- Implement API in Semantic Artefact catalogues

FAIR Mappings and Crosswalks

Home / Events /

Why Mappings Matter and how to make them FAIR?

When: Thursday 13 April 2023 14:00 – 18:00 CEST

Semantic artefacts – a broader term to include ontologies, terminologies, taxonomies, thesauri, vocabularies, metadata schemas and standards – are key to achieving data interoperability and are therefore essential to the implementation of the FAIR principles. With the growing number of semantic artefacts and their diversified uses, interconnecting these artefacts becomes critical but also more challenging. To achieve interoperability and integration, one solution is to identify/generate mappings/crosswalks between different artefacts of the same domain or used to represent the same type of information. This process, known in the semantic web domain as ontology matching or ontology alignment, should be applied to the whole spectrum of semantic artefacts.

As any other type of data, we need a strategy to deal with mappings and ensure mappings are made available following the FAIR principles in relevant mapping repositories where they can be curated, integrated and rendered for reuse. Recent initiatives like the SEMAF study or the SSSOM format or the activities within the FAIR-IMPACT and FAIRCORE4EOSC projects have highlighted the needs of communities to find, access and reuse mappings and crosswalks in a machine actionable format which is not currently addressed.

FAIR-IMPACT is starting a series of workshops to discuss issues around mappings and crosswalks and how they can become shareable and reusable, i.e. FAIR, elevating them to "first class" citizens in the FAIR data world.

FAIRIMPACT events

When

Thu, Apr 13 2023

Online

We'll stay in touch:

wp4@fair-impact.eu

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Expanding FAIR solutions across EOSC

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