




FAIR-IMPACT

Expanding FAIR solutions across EOSC

FAIR-IMPACT in a nutshell

euroCRIS Strategic Membership Meeting
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Mission: enhancing the reusability of research data and thus the quality of scientific research



National Centre of Expertise and Repository for Research Data



Institute of Dutch Academy and Research Funding Organisation (KNAW & NWO) since 2005



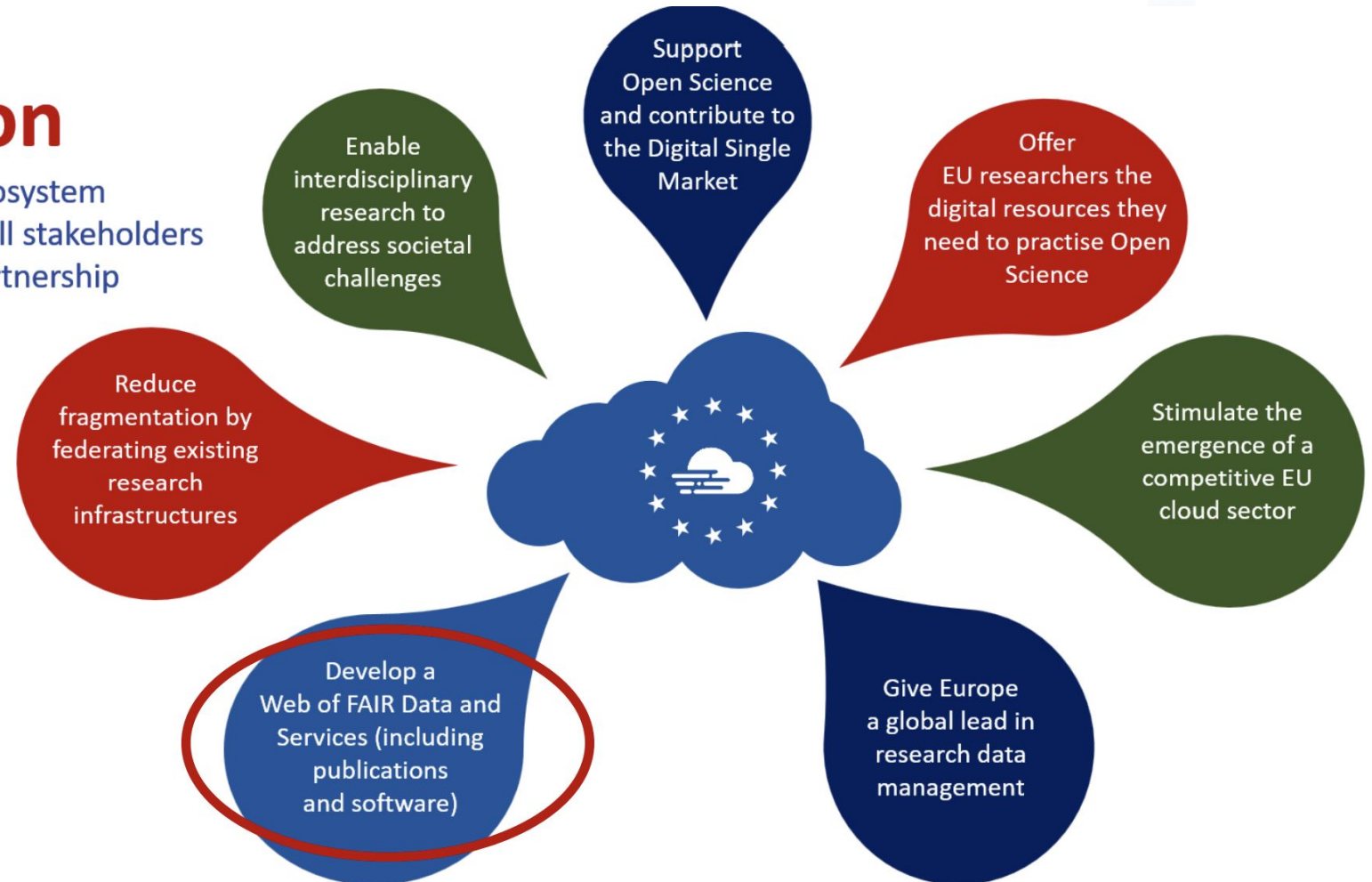
First predecessor dates back to 1964 (Steinmetz Foundation), Historical Data Archive 1989



Web of FAIR data and services

The Vision

Building the EOSC ecosystem collaboratively with all stakeholders through the EOSC Partnership



Survey European Research Data Landscape



- 15,000 European researchers
- 31 European repositories

<https://op.europa.eu/en/publication-detail/-/publication/03b5562d-6a35-11ed-b14f-01aa75ed71a1>

<https://zenodo.org/communities/erdl21?page=1&size=20>

FAIR awareness

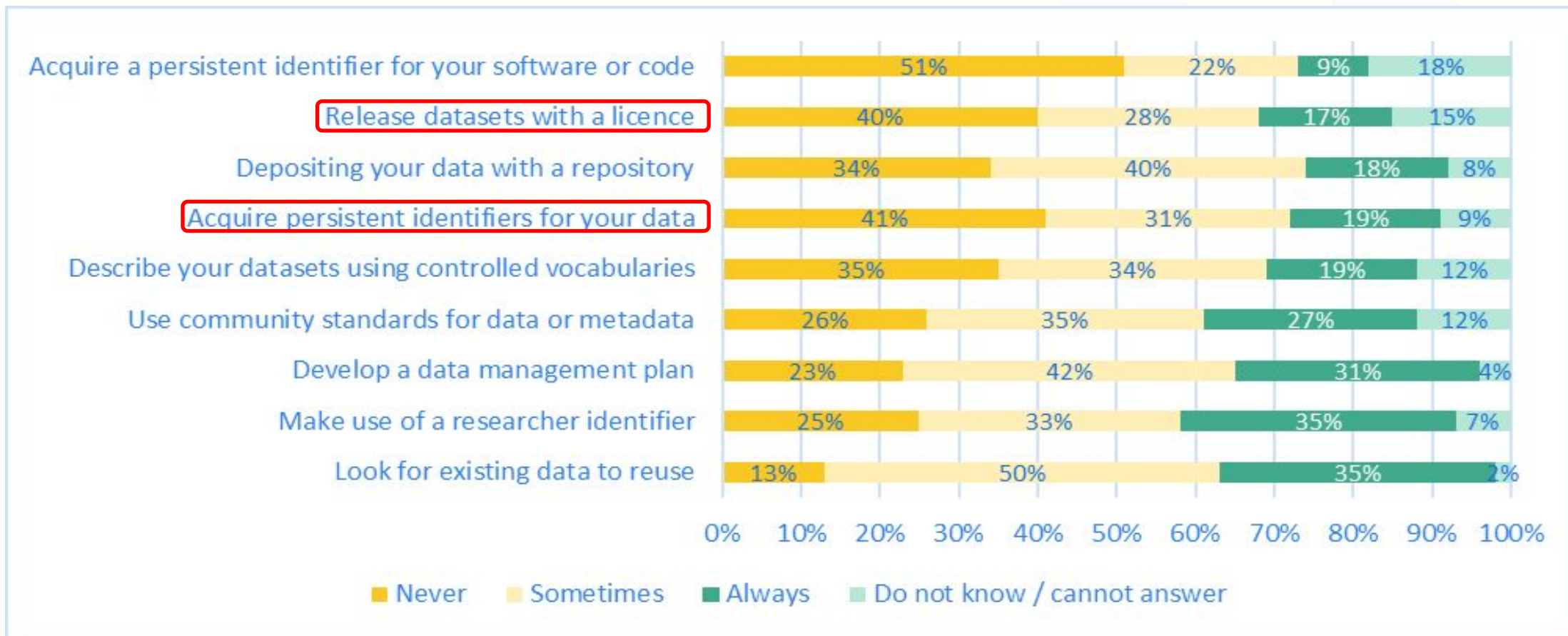


- About two thirds have some level of familiarity with the FAIR principles
- More than a third have never heard of them
- Less than 1 out of 5 puts them into practice

<https://op.europa.eu/en/publication-detail/-/publication/03b5562d-6a35-11ed-b14f-01aa75ed71a1>

FAIR aligned practices

<https://op.europa.eu/en/publication-detail/-/publication/n/03b5562d-6a35-11ed-b14f-01aa75ed71a1>

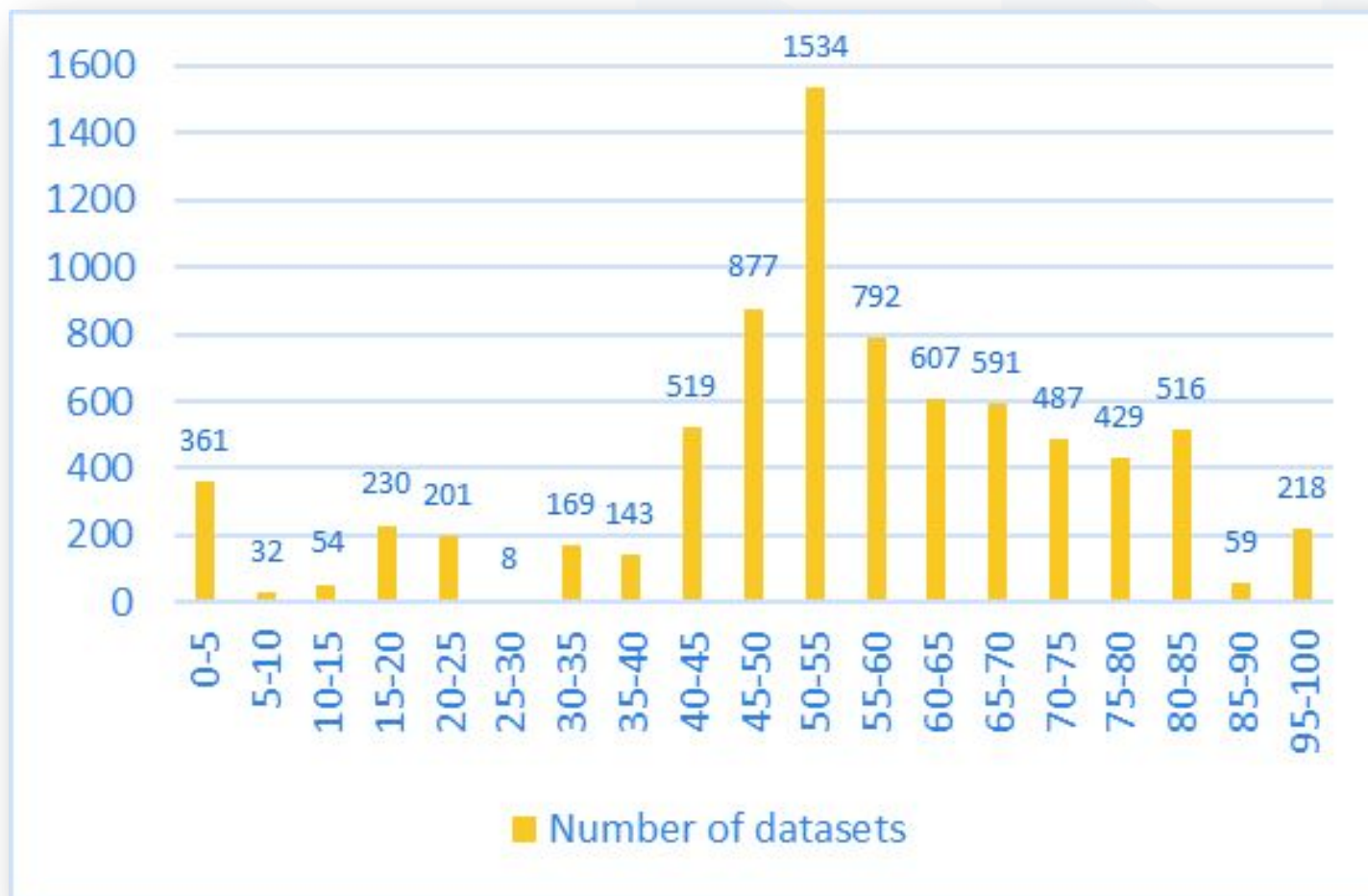


Data FAIRness in Europe



Automated FAIR Data Assessment Tool

Average FAIR score 54.6%



<https://op.europa.eu/en/publication-detail/-/publication/03b5562d-6a35-11ed-b14f-01aa75ed71a1>

<https://www.fairsfair.eu/f-uji-automated-fair-data-assessment-tool>

Motivators

- Well known among policymakers, funders, data service providers
- Less known among researchers

Motivators:



- clear policies
- support for compliance

FAIRsFAIR

Practical solutions for the use of FAIR principles throughout the data life cycle

We foster a FAIR data culture and the uptake of good practices.

[Read our FAIR stories](#)

Your tailored support for FAIR adoption



Support programme for Data repositories



FAIR practices for Data Stewards



Policy enhancement support



Handbook & good practices for universities



Resources for Research Performing Organisations



FAIR-Aware

An online tool which helps researchers and data managers assess how much they know about the requirements for making datasets findable, accessible, interoperable, and reusable (FAIR) before uploading them into a data repository.



FAIRsFAIR Data Object Assessment Metrics

Developed by the FAIRsFAIR work team, the metrics are based on indicators proposed by the RDA FAIR Data Maturity Model Working Group.

Read all the metrics listed and their details.



F-UJI

Based on 16 out of 17 core FAIR object assessment metrics developed within FAIRsFAIR, the source code of F-UJI tool is now available with a free license through Github. Read here how to send any feedback on improving the tool.



ACME-FAIR

ACME-FAIR is a 7-part guide for Research Performing Organisations (RPO) to help those managing and delivering relevant professional services to self-assess how they are enabling researchers and their colleagues to do just that



Repository Discovery in DataCite Commons

FAIRsFAIR further advanced the repository discovery and linking by integrating repositories into DataCite Commons to support researchers in finding a suitable repository and enhance the discoverability of FAIR-enabling repositories. Reshaped and merged into DataCite Commons, repository metadata from re3data is embedded in the PID-graph to allow for machine-readable context information on research data.



CoreTrustSeal+FAIRenabling Capability Maturity Model

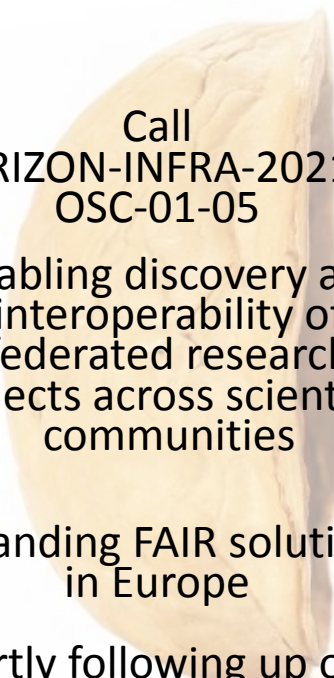
The CoreTrustSeal+FAIRenabling Capability Maturity Model aligns the CoreTrustSeal Requirements with the FAIR Data Principles and provides guidance on the levels of capability-maturity on achieving them.



FAIRsFAIR
Fostering Fair Data Practices in Europe

FAIR-IMPACT in a nutshell

Expanding FAIR Solutions across Europe



Call
HORIZON-INFRA-2021-E
OSC-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

Complementary instruments

FAIRCORE4EOSC - Realisation of EOSC-Core components,

Research and Innovation Instrument: development of technical components

FAIR-IMPACT - Realisation of a FAIR EOSC

Coordination and Support Instrument: supporting FAIR implementation



Shared partners

DANS

SURF

CSC

INRIA

TrustIT

DataCite

Alignment instruments

Technical
Bridging
Team

Regular
PMO-PCO
Meetings

Regular
Comms
Meetings

The consortium



FAIR-IMPACT overall objective



WHAT:

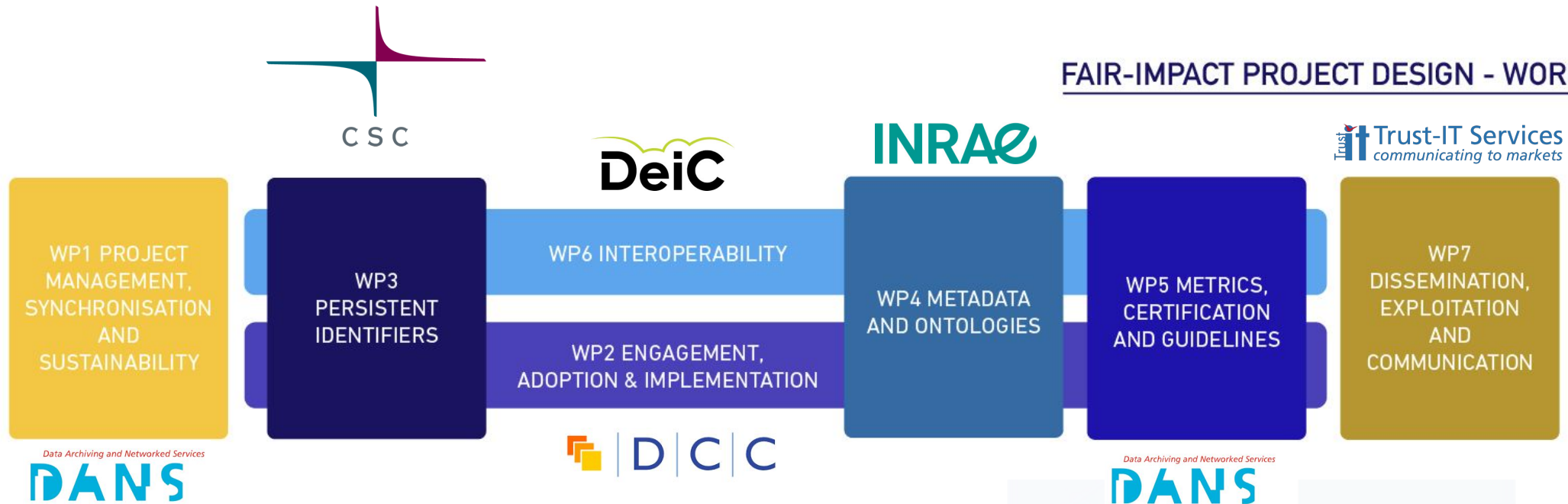
to realise a FAIR EOSC by **supporting the implementation** of FAIR-enabling practices *across scientific communities and research outputs at a European, national, and institutional level*;

How:

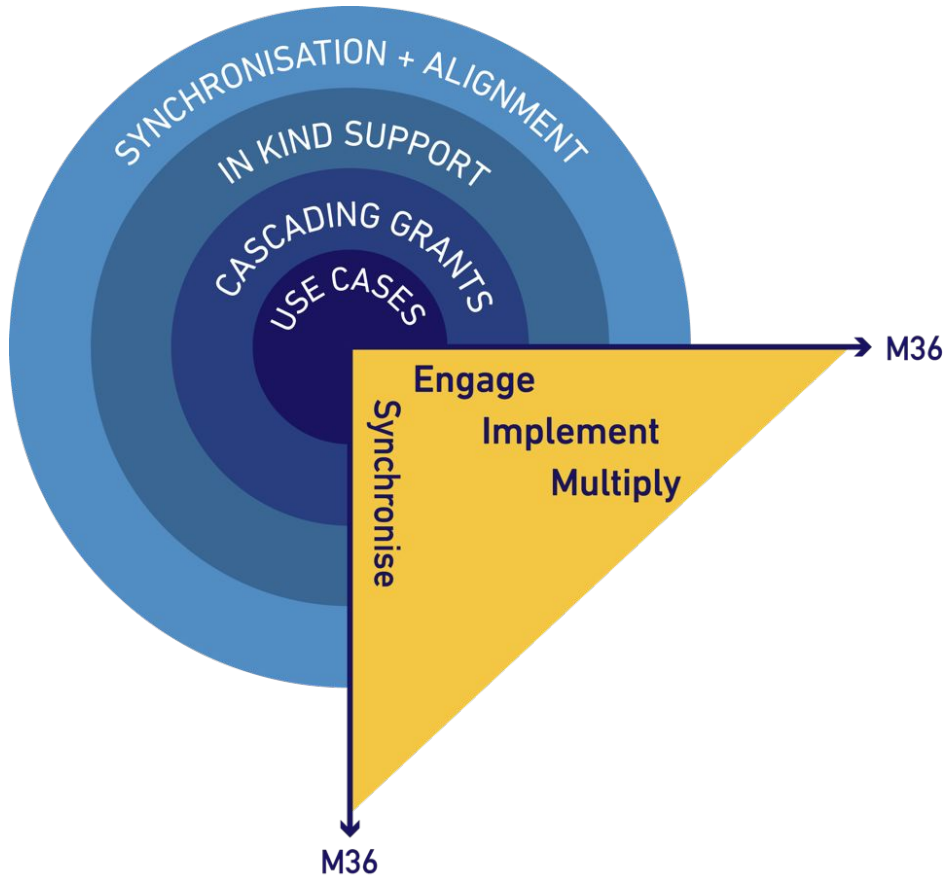
- ★ **Engaging** a wide range of stakeholders early and using a matrix of **coordination and support** mechanisms => Optimising cross-collaboration and alignment
- ★ **Identifying** current/emerging FAIR-enabling components (practices, policies, tools, technical specs)
- ★ Translating viable solutions, 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

FAIR-IMPACT PROJECT DESIGN - WORK PACKAGES



Expected outcomes



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



WP3
Persistent Identifiers
 validated and suitable for use in data production workflows; in complex data citation; with sensitive data in multiple domains.



WP5
Metrics, guidelines and assessment tools validated and suitable for use in multiple domains and for various different of digital objects.



WP4
 Greater and more harmonised use of **semantic artefacts** throughout the EOSC ecosystem, leading to semantic interoperability **within and between disciplines**.



WP6
 A range of core **building blocks for interoperability** in the EOSC, **validated and suitable for use in multiple domains**.

The “bridge” to four scientific domains

Provide **expertise** in defining requirements, identifying gaps and implementation opportunities across the FAIR-IMPACT focus areas

Being involved in **translating** what works for them and support adoption beyond their original domains, stakeholder groups and output types

Four use cases to implement the FAIR principles

FAIR-IMPACT will identify practices, policies, tools and technical specifications towards a FAIR data management cycle starting with real-life use cases in four different domains.



Social Sciences and Humanities

The F-UJI tool will be adapted to fit SSH relevant community standards for FAIR



Photon & Neutron science

A range of components for cross-domain research data description will be tested



Life science

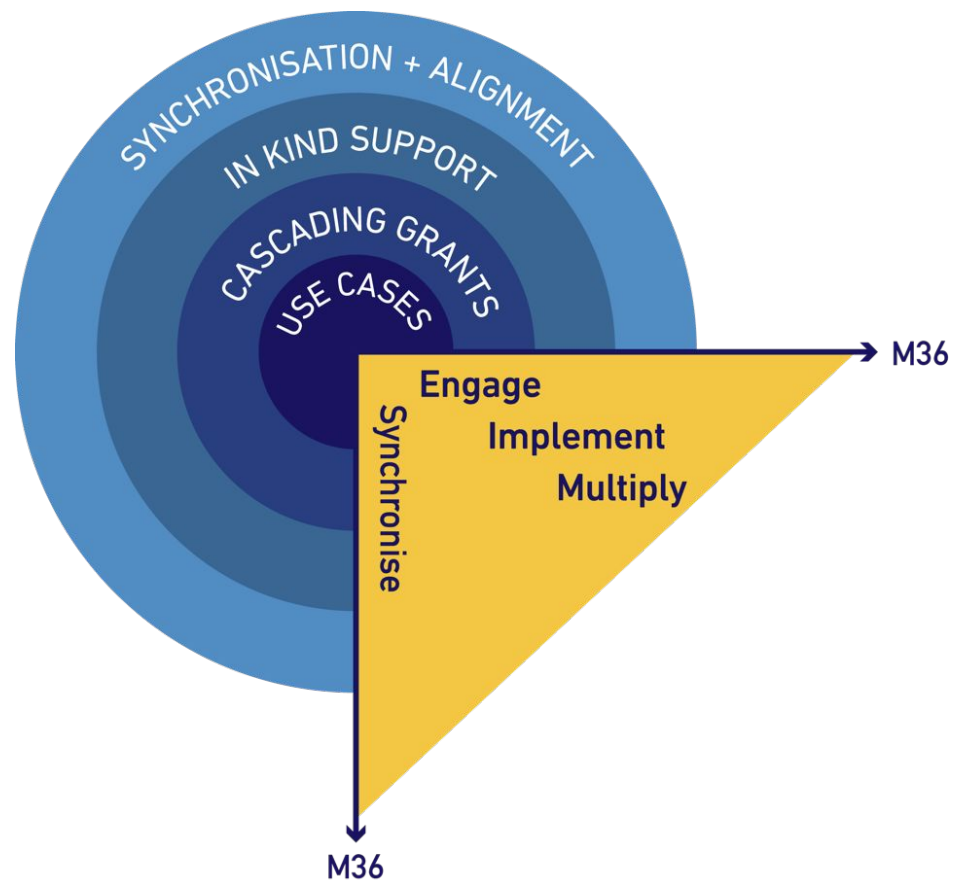
Data provenance will be better documented by extending RO-Crate to practices on PID usage



Agri-food

Metadata providers will implement a common API for federating access to semantic artefacts

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

FAIR-IMPACT open calls

Adoption & implementation support

FAIR-IMPACT will boost the uptake of FAIR data principles and practices by research performing organisations, data service providers and repositories through a dedicated support programme. Through a series of open calls, interested parties can apply to implement a selection of current tools and methods and receive financial support to enable their participation. We aim to support around 50 organisations over the life of the project ensuring that different domains, geographic areas and stakeholder groups are represented.

[Contribute to the FAIR Implementation Framework](#)



Cascading grants:

open calls to support ~ 50 organisations;

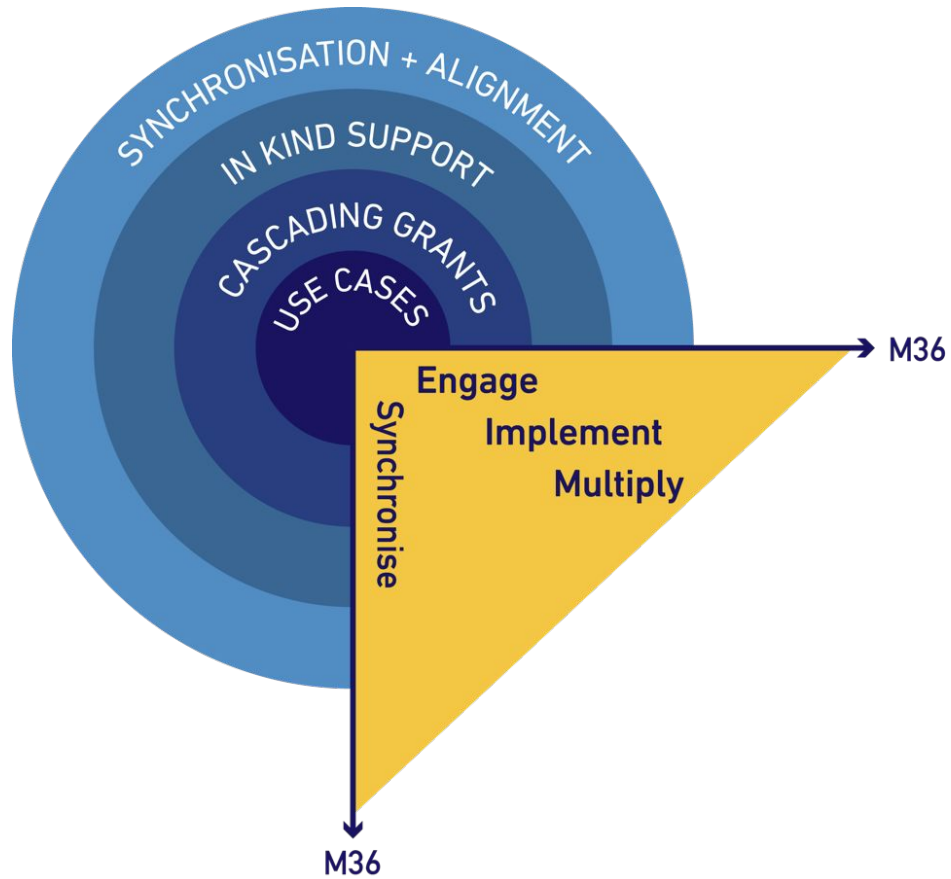
total available budget 500 Keuro

In kind support:

provision of in-kind support from the project partners via open calls;

total available budget 500 Keuro

Expected outcomes



Contribution to the Horizon Europe Partnership

Tier 4 Synchronisation and alignment

FAIR-IMPACT Synchronisation Force

- Target audience: all relevant projects and activities in the EOSC and FAIR ecosystems as well as the EOSC Partnership (including the EOSC-A TFs)
- Lead WP1



Promotion of interoperability between EOSC and the other Data Spaces

- Lead WP6

European Group of FAIR Champions

- Ambassadors for the project; cross domain engagement
- Lead WP7



Technical Bridging Team

- With 03 project and EOSC Future
- Lead WP1



National FAIR-IMPACT Roadshows

- Lead WP7



A range of **governance, coordination and collaboration mechanisms** necessary for a functioning FAIR research ecosystem:

1. **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
2. A **persistent identifier support programme** and guidance for the provision of PID services in EOSC, incl. mechanisms for adoption and implementation;
3. A **semantic framework** for the governance, creation, mapping, sharing, reuse, FAIRness assessment and interoperability of semantic artefacts for EOSC;
4. **Guidelines and prototypes** to support both enabling FAIR and assessing the FAIRness and trustworthiness of different types of digital objects in multiple domains.
5. Components and services for increased **legal, organisation, semantic and technical interoperability** within and across disciplines.

Thank you for listening!



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<https://fair-impact.eu/>
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