

eosc FAIR-EASE

In a Nutshell



A **consortium** composed of 26 partners (3 affiliated entities) in 8 EU member states and one associated country :

Coordination:

3-years project:

01 | 01 | 2022 by Author

Building Interoperable Earth System and Environmental Services

HORIZON-INFRA-2021-EOSC-01-04: “Innovative and customizable services for EOSC”

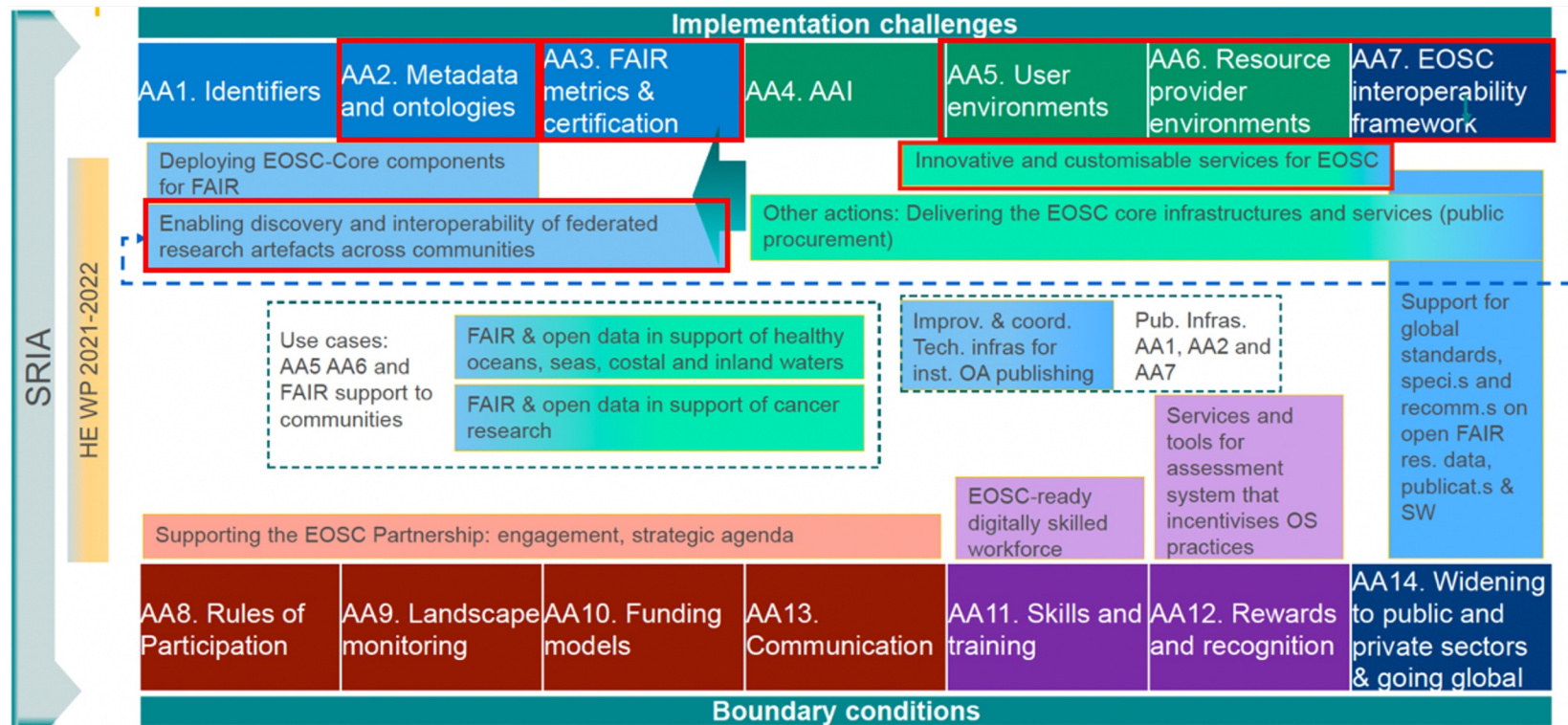


Start date: 01/09/2022

End date: 31/05/2025

eosc Key Contributions to EOSC SRIA

Contribution of FAIR-EASE to the SRIA implementation challenges



eosc Key Contributions to EOSC SRIA

Contribution of FAIR-EASE

METADATA AND ONTOLOGIES

GAP/CHALLENGE: Harmonized discovery of multidisciplinary data infrastructures, missing cross-discipline vocabularies/ontologies.

RESULTS: Interdisciplinary Data Discovery and Access Service: (IDDAS) : Harmonised data discovery services of selected data infrastructures in EU and beyond; Discovery support by I-ADOPT smart mapping solutions.

FAIR METRICS AND CERTIFICATION

GAP/CHALLENGE: Ensure that the FAIR principles are fully endorsed and implemented in the project's target communities (Earth & Environmental communities).

RESULTS: Guidelines for the improvement of the FAIRness of research output from the communities involved in the project.

USER ENVIRONMENTS

GAP/CHALLENGE: Integration of Virtual labs/Pilots services : distributed thematic and regional community services and resources, cross-domain analysis.

RESULTS: Unified entry point to discover (IDDAS), access and process datasets (Earth Analytic Lab).

RESOURCE PROVIDER ENVIRONMENTS

GAP/CHALLENGE: Interoperability and integration of data discovery, access and processing services, Unify Data Access Layer to facilitate data access/download/process.

RESULTS: Data lakes: (i) data discovery services; (ii) catalogue of (direct) data access services; (iii) subsetting services for direct targeted data access.

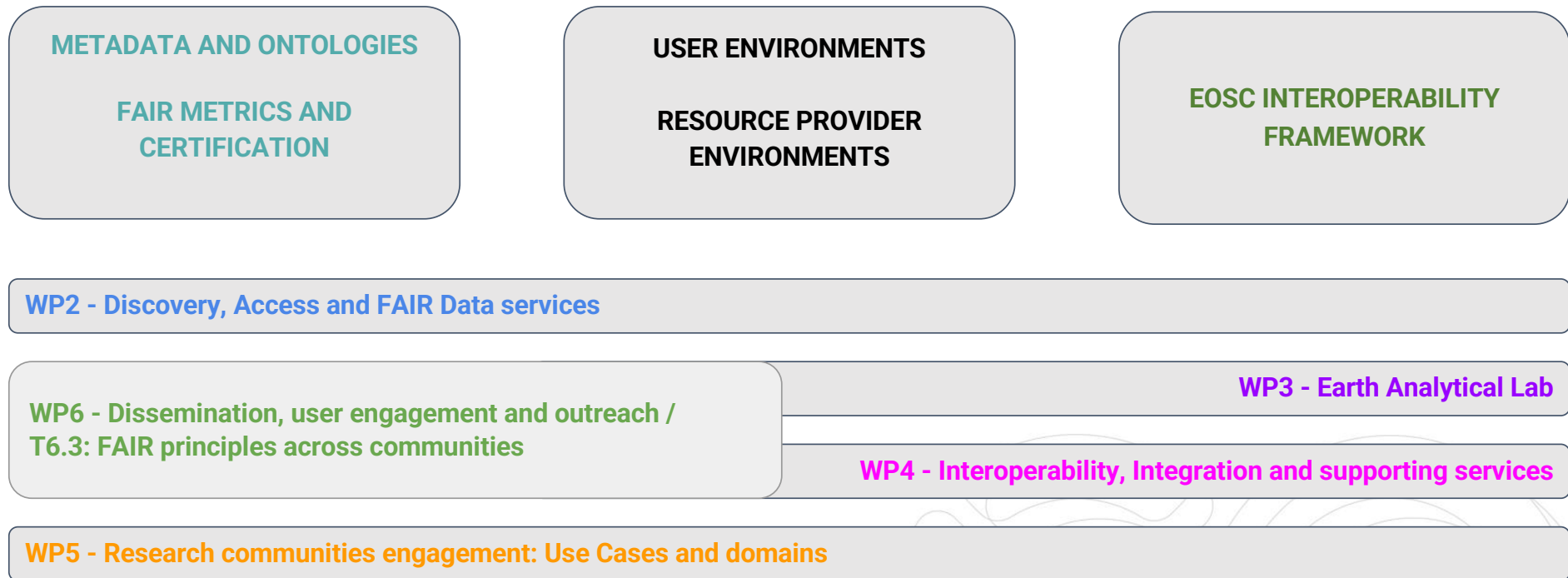
EOSC INTEROPERABILITY FRAMEWORK

GAP/CHALLENGE: Harmonisation across domain.

RESULTS: Semantic mappings; Services FAIRness; Improvement of good practices for real involvement and engagement with research communities.

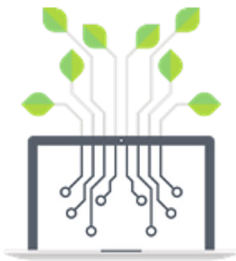
eosc Key Contributions to EOSC SRIA

Contribution of FAIR-EASE: *Key Focus Areas & WPs*



eosc Key impacts and deliverables

FAIR-EASE



The FAIR-EASE **Interdisciplinary Data Discovery and Access Service** will provide users with an easy and FAIR service for discovery of and access to multidisciplinary and aggregated data sets (D2.3: FAIR-EASE semantic brokerage service M16; D2.4: FAIR-EASE Data Discovery Access Service - First release M18)



The FAIR-EASE **Earth Analytic Lab** will provide users with an easy way to visualise, analyse and process environmental data on-demand, that is, according to their specific objectives, thematic, geographical areas and time periods of interest (D3.1: Specification of FAIR-EASE Earth Analytical Lab and implementation plan M12; D3.2: FAIR-EASE Earth Analytical Lab services M28).

eosc Dependencies and Collaborations

FAIR-EASE

eosc | EuroScienceGateway

The projects are already working together to extend the open-source Galaxy platform for FAIR data analysis to a broader group of scientific user communities. The cooperation includes shared compute resources, joint workshops and training, and a merging of tools and workflows from FAIR-EASE to be run via the distributed computing network being developed by the ESG project. The aim is also to evaluate if FAIR-EASE Earth Analytical Lab (EAL) can be based on the ESG.

eosc | Blue-Cloud2026

The FAIR-EASE IDDAS is based on the Blue-Cloud (BC) DDAS that presents the latest evolution of a federation of Blue Data Infrastructures (BDIs) in the European Ocean domain that allows for discovery and access to a set of BDIs, managed by Research Infrastructures (RIs) and leading European Union (EU) initiatives.

eosc | FAIR-IMPACT Expanding FAIR solutions across EOSC

The collaboration with FAIR-EASE allows to include the earth and environmental sciences communities in order to extend and thus adapt existing FAIR metrics for assessing data objects and FAIR assessment tools. A particular attention will be paid on incorporating geo-specific metadata standards, covering data formats and semantic artefacts within FAIR metrics.

FAIR-EASE

Coordination among projects towards a “philosophy” change in science: re-use first, re-do later!

EOSC, European infrastructures and open science local infrastructures: how can we connect the dots?

Research communities’ engagement is a building block for OS and FAIR initiatives/projects such as FAIR-EASE since their early beginning until the results validation (test and acceptance)... but we need to demonstrate the added-value of FAIR principles and the way to apply their criteria within targeted communities.

... and probably the most relevant:

Technically, one concern is the harmonization of access services description to improve the cross-domain usages of data-infrastructures.

eosc Thank you... merci!

