

Reading list: FAIR Assessment & Alignment

EOSC Association

The EOSC Association is the legal entity established to govern the European Open Science Cloud (EOSC). It was formed on 29th July 2020 with four founding members and has since grown to more than 250 Members and Observers. The Association membership is jointly responsible for delivering the objectives agreed in the Memorandum of Understanding signed by the European Union and EOSC Association to form the official Partnership.

Webpage: <https://eosc.eu/>

Strategic Research and Innovation Agenda (SRIA) of the European Open Science Cloud (EOSC) - Version 1.2

The overall purpose of the EOSC Strategic Research and Innovation Agenda, or SRIA, is to define the general framework for future research, development and innovation activities in relation to the European Open Science Cloud. The current version of the SRIA (1.2), including MAR 2025-2027, was approved by the EOSC Partnership Board at their 5th meeting on 06 December 2023.

Link: https://eosc.eu/wp-content/uploads/2023/12/20231114_SRIA_1.2_final2.pdf

EOSC Task Forces

The EOSC Task Forces address key areas in the implementation of the European Open Science Cloud (EOSC), providing feedback on developments, identifying strategic gaps, and suggesting areas for investment.

Webpage: <https://eosc.eu/eosc-task-forces/>

List of EOSC-related Projects (Horizon Europe Projects)

This list includes European projects that support the implementation and development of the EOSC.

Link: <https://eosc.eu/horizon-europe-projects/>

Task Force: FAIR metrics and Data Quality

The FAIR metrics and Data Quality Task Force will implement the proposed FAIR metrics for EOSC by assessing their applicability across research communities and testing a range of tools to enable uptake.

Recommendations will be made to update metrics and adopt tools as appropriate. In addition, the group will undertake a state of the art to understand measures of data quality, conducting several case studies to identify common features and dimensions to define an approach for EOSC.

Webpage: <https://eosc.eu/advisory-groups/fair-metrics-and-data-quality>

TOWARDS A DATA QUALITY FRAMEWORK FOR EOSC

Informed by the results of a systematic literature review and community consultation utilising surveys, presentations, and case studies, this TF identified key concepts and formulated recommendations.

Link: <https://zenodo.org/records/7515816>

FAIR Assessment Tools: Towards an "Apples to Apples" Comparisons

This report explains the rationale of the approach of Apples-to-Apples" (A2A1) benchmarks to evaluate compliance with this (meta)data publishing approach for metadata provision that



could be implemented by data publishers such as databases, repositories, and data catalogue managers, describes the current status, and then discusses desirable next steps.

Link: <https://zenodo.org/records/7463421>

Community-driven Governance of FAIRness Assessment: An Open Issue, an Open Discussion

This whitepaper identifies three high-level stakeholder categories and provides examples outlining specific stakeholders' needs. It also examines possible models for governance based on the existing peer efforts, standardisation bodies, and other ways to acknowledge specifications and potential benefits.

Link: <https://zenodo.org/records/7390482>

Task Force: Long Term Data Preservation

Long-term open data archives and preservation services are required to enable a sustainable EOSC and the sustainable access to data.

The possibility to reproduce, replicate and re-use scientific results depends on the long-term findability and accessibility of the underlying data. The EOSC Strategic Research and Innovation Agenda (SRIA) underlines the importance of long-term data preservation, but an explicit strategy has not been formulated.

The Long-Term Data Preservation Task Force will provide recommendations on the vision and sustainable implementation of long-term data preservation policies and practices, as well as suggestions to later strategy execution. It will address the roles and responsibilities of the different stakeholders, the financial aspects of long-term preservation and the necessary service infrastructure.

Webpage: <https://eosc.eu/advisory-groups/long-term-data-preservation>

Recommendations Consultation. EOSC-A Long Term Data Preservation Task Force

The initial consultation draft of the Task Force Long Term Data Preservation outcomes.

Link: <https://zenodo.org/records/10014698>

How a European network of FAIR-enabling Trustworthy Data Repositories can align to the vision of EOSC

This paper is a response from the EOSC Association Long Term Data Preservation Task Force to the working paper "Toward a European network of FAIR-enabling Trustworthy Digital Repositories". In this response the EOSC LTDP Task Force addresses the proposals in the paper and elaborates on how the suggested functions can contribute to realising the EOSC.

Link: <https://zenodo.org/records/7568400>

EOSC Preservation: Overview Discussion Paper

The Long-Term Data Preservation Task Force (LTDP TF) of the EOSC Association has worked on mapping the status and further clarification of the meaning of long-term preservation within the EOSC. This work has resulted in an overview and discussion paper to presents the context, activities and ongoing issues surrounding the EOSC Association Long Term Data Preservation Task Force.

Link: <https://zenodo.org/records/7516259>

FAIR-IMPACT (project)



FAIR-IMPACT identifies practices, policies, tools and technical specifications to guide researchers, repository managers, research performing organisations, policy makers and citizen scientists towards a FAIR data management cycle. The focus will be on persistent identifiers (PIDs), metadata, ontologies, metrics, certification and interoperability, starting with real-life use cases on social sciences and humanities, the photon and neutron sciences, life sciences and agri-food and environmental sciences.

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

D5.2 - Metrics for automated FAIR software assessment in a disciplinary context

The deliverable defines 17 metrics that can be used to automate the assessment of research software against the FAIR4RS Principles, and provides examples of how these might be implemented in one exemplar disciplinary context of the social sciences.

Link: <https://zenodo.org/records/10047401>

D5.1 Implementing metrics for automated FAIR digital objects assessment in a disciplinary context

This deliverable provides the first set of discipline specific tests and metrics developed in cooperation with FAIR-IMPACT Social Sciences and Humanities (SSH) use case partners. We present an analysis of SSH community FAIR-aligned habits and practices carried out using available literature and whitepapers, data collected using standard interfaces provided by the community, as well as FAIR Implementation Profiles (FIPs) from a number of SSH data repositories. Based on this analysis we identified an appropriate SSH sub-community, the social sciences, for which we defined a set of discipline specific metrics and tests derived from the FAIRsFAIR data assessment metrics which are also presented in this deliverable.

Link: https://fair-impact.eu/deliverables-milestones?field_wp_target_id%5B65%5D=65

M5.3 - Semantic artefact assessment methodology

Semantic artefacts (i.e., ontologies, vocabularies and SKOS taxonomies, among others) define the structure, guide the construction of, and help validate many existing Knowledge Graphs. In the last years, a number of guidelines have been proposed to align semantic artefact best practices against the Findable, Accessible, Interoperable and Reusable principles (FAIR principles). Based on these guidelines, new validators and assistants have been developed in order to guide users assessing their own semantic artefacts against the FAIR principles. In this document, we propose a methodology by taking an ontology development perspective, dividing semantic artefacts into smaller parts (their code, content, ontology metadata, etc.) that can be individually assessed at different stages of their development process. We build on the Linked Open Terms (LOT) methodology, adding a "FAIR assessment" module, and, for each activity, we validate our approach by mapping to two existing semantic artefact FAIR assessment validators: FOOPS! and O'FAIRe .

Link: <https://zenodo.org/records/8305173>

