

FAIR Data and AI Task Force

Charter

1 Task Force background and scope

The FAIR Data and AI Task Force (2027–2028) succeeds the current FAIR Metrics and Digital Objects Task Force (2024-2026), building on its results. Merging the work of OAEF 1 (Persistent Identifiers) and, in part, OAEF 3 (FAIR Assessment and Alignment), it brings together under a single advisory body the areas of FAIR assessment, machine-actionable metrics, persistent identifiers and FAIR Digital Objects.

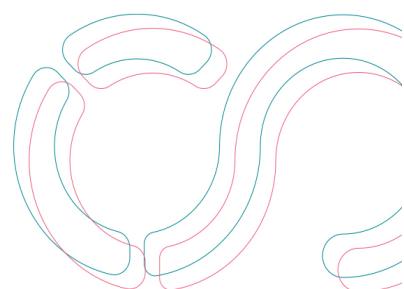
The purpose of the Task Force (TF) is to identify suitable FAIR policies and machine-actionable metrics — including PID frameworks — for the federation of EOSC data. Through exploring the dual potential of FAIR for AI and AI for FAIR, the TF aims to expand traditional metrics to ensure and evaluate the AI readiness of datasets for open science and support the automation of FAIRness creation and assessment across the Federation using AI. Particular attention is given to AI-supported machine-actionable FAIR, FAIR digital objects and automated FAIR assessment approaches.

In line with the mandate set by the EOSC-A Board of Directors, the TF is expected to deliver, in particular: a report identifying tools and metrics to evaluate the FAIRness of EOSC Federation resources; a landscape analysis of AI trends in relation to FAIR; and recommendations on FAIR practices to boost AI-ready EOSC data.

The TF is a strategic, time-bound body that works in direct service of the EOSC Federation. Its single annual output is a concise paper that identifies a specific problem, sets out possible solutions, and formulates actionable recommendations addressed to the relevant Federation Working Groups or to the EOSC Nodes more broadly, anchored wherever possible in one or more EOSC use cases, so that recommendations are grounded in real Federation needs.

2 Potential areas of work for the annual deliverable

The current TF's deliverable, "[Report on Repository Support for Data-Level Interoperability / Reusability](#)", surveyed 39 European research data repositories and established a first empirical baseline of FAIR practice and EOSC Federation readiness. It found that foundational capabilities — dataset-level PIDs, licensing, metadata validation and broad EOSC alignment — are widely implemented, while significant gaps remain at the level of data reusability. This suggests potential, single-paper-sized problems for a follow-up annual deliverable. The TF is invited to select and sharpen at least one of them (or a comparably scoped problem):



a) FAIR and AI

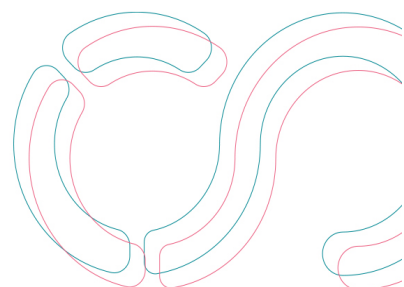
- **FAIR for AI:** creating and curating AI-ready data. A paper could address how data should be created, curated and described so that they are readily exploitable by AI applications such as machine-learning models and large language models: which granularity, documentation, provenance and quality signals make a dataset genuinely AI-ready, and how existing FAIR metrics should be extended to capture AI-readiness.
- **AI for FAIR:** AI-assisted FAIRification and metadata quality. A deliverable could explore how AI can support FAIRification at scale – improving and enriching metadata, suggesting controlled-vocabulary terms and links, detecting quality and completeness issues, and assisting automated FAIR assessment – while keeping humans in control of the results and safeguarding trust.
- **Investigating the Role of Data Labs in the EOSC Federation.** This deliverable could investigate the role of Data Labs as an emerging component of the European research and AI ecosystem and assess how they can complement the EOSC Federation. It will analyse opportunities for aligning Data Labs with EOSC in terms of governance, interoperability, standards, and service integration, and identify how they can support secure, AI-enabled research based on FAIR and AI-ready data. The deliverable will provide recommendations for integrating Data Labs into the broader EOSC ecosystem and maximising synergies with AI Factories and other European initiatives.

b) FAIR assessment, metrics and policies

- **Machine-actionable metrics and automated FAIR assessment.** Building on the repository baseline, a paper could define which machine-actionable metrics and automated assessment approaches (for example FAIR maturity indicators and evaluation services) are fit for the EOSC Federation, and how the Federation moves from discovery-oriented FAIR towards the reuse-ready practices that its services require.
- **Closing the data-level reusability gap.** The survey highlighted limited machine-actionable licensing, low adoption of standardised provenance and minimal machine-readable policy exposure. A deliverable could recommend concrete practices and metrics for machine-actionable rights, provenance interoperability, and transparent, machine-readable repository policies.

c) Persistent identifiers and FAIR Digital Objects

- **A PID framework for the Federation.** Dataset-level PIDs are widely adopted, but file-level and object-level PID support remains incomplete. Drawing on the former OAEG 1, a paper could specify a PID framework for the Federation that addresses object-



level granularity and the full range of entities that need identifiers — datasets, files, samples, instruments, organisations and semantic artefacts.

- **FAIR Digital Objects as the unit of reuse.** A deliverable could articulate how FAIR Digital Objects bind persistent identifiers, typed metadata and access or operation information into a coherent unit, and what this implies for repositories and Nodes that wish to expose reuse-ready, machine-actionable objects.

These areas are illustrative, not prescriptive. The elected Co-Chairs, in consultation with the relevant Federation stakeholders, will define the precise problem, scope and use-case anchor in the first month of the mandate.

3 Expected membership

We are looking for members who are willing to contribute actively to an output of the kind described above, in line with the proposed structure (problem – solutions – actionable recommendations). Concretely, prospective members should be ready to:

- Research, analyse and write specific sections of the annual deliverable, within agreed deadlines.
- Critically review and provide constructive feedback on the contributions of fellow members.
- Incorporate feedback received from reviewers and other Federation bodies into the draft.
- Engage with the relevant EOSC Federation Working Groups and, where applicable, wider communities and initiatives (including on AI and open science), to keep the deliverable connected to real needs.
- Commit to consistent and continuous participation throughout the mandate.

Expertise should be relevant to the chosen disciplinary scope — for example: FAIR metrics and automated FAIR assessment; persistent identifiers and FAIR Digital Objects; metadata quality, provenance and machine-actionable policies; the AI-readiness of research data; the application of AI and machine learning to metadata enrichment and FAIRification; or the governance dimensions of FAIR across Nodes and Data Spaces.

Applicants are asked to submit a short statement of relevant expertise, a CV, and an endorsement letter from their organisation; gender balance and broad representation across the community are taken into account in the selection.

