23 March 2020

Input is now sought by FAIRsFAIR on the report **D3.2 FAIR Data Practice Analysis**. The report documents a comprehensive, multidisciplinary study of practices to support FAIR data production across a broad range of research disciplines and research data repositories in Europe. The report also identifies priority themes for initial work in FAIRsFAIR to support ESFRI cluster and EOSC projects in FAIR culture change.

The aim of the report, compiled by experts from FAIRsFAIR project partners DCC, the University of Goettingen, and the Science and Technology Facilities Council, is to inform the priorities of policy makers and FAIR champions looking to embed FAIR principles in research communities, and of data librarians and others providing data services to those communities. Its contents will underpin further work to build capabilities, describe good practice, and address a perceived lack of awareness and information about FAIR within the research community.

Disciplinary Groupings

To characterise research communities the analysis adopts the disciplinary groupings used for the ESFRI roadmap, and associated cluster projects (funded under the European Commission's INFRAEOSC- 04 call):

- Physical science and engineering
- Energy

- Environment
- Health and food
- Social and cultural innovation
- Data computing and digital research infrastructures

FAIR Data Practice Framework

FAIR data enabling practices are described in terms of the [FAIR4S data lifecycle framework](#) developed in the EOSCpilot project:

- Plan and design
- Collect and process
- Integrate and analyse
- Appraise and preserve
- Publish and release
- Expose and discover

The framework also includes three areas of organisational practice which sustain the production of FAIR outputs: govern and assess; scope and resource; advise and enable.

Key Findings

- Self-assessment frameworks: Given the challenges inherent in effectively and comprehensively analysing the data practice landscape at disciplinary level, further work is needed to develop self-assessment frameworks for particular research infrastructures and institutions. Such frameworks should be co-designed with FAIRsFAIR so that research infrastructures and institutions can accurately identify, and share best practice in the communities they serve, and measure their progress.
- Inventory of FAIR practice: Given that disciplines are a necessary but not very useful unit of analysis for data practices, a conceptual framework such as the "research repertoire" may be helpful in defining an inventory of good practice incorporating the infrastructure provider, the community it supports - including data stewards, research software engineers, data scientists and domain researchers, and the instruments available for deployment. The latter include plans, protocols, standards, tools and repositories.
- Priority Themes for Future Work in FAIRsFAIR: In terms of future priorities for work within FAIRsFAIR, the following themes emerge from the analysis and will be tackled in collaboration with other EOSC projects and communities:
- Methods for building consensus on metadata and interoperability frameworks within and across communities
- Machine-actionable DMP templates and guidelines on using them to inform downstream data management activities
- Using instruments to assign PIDs at the point of data creation
- Terminology for competence centres to annotate and retrieve training materials on enabling FAIR
- Managing FAIR support costs and resources – models for coordinating data stewards and research software engineers
- Good practice for researchers, repositories and ethics committees on selecting and preparing sensitive data to be FAIR

Your Feedback Invited

Feedback received will inform discussions and further work within FAIRsFAIR as well as collaborations with other relevant projects. To access the report on FAIR Data Practice Analysis and offer your

comments and suggestions before 17 April 2020, click here.