



FAIRSFair

Fostering Fair Data Practices in Europe

FAIRSFair 3rd Synchronisation Force Workshop TFIR Pillar 2: FAIR culture

Marjan Grootveld (DANS), Simon Hodson (CODATA),

Online, 19th May 2021, 10:00 - 11:30 CEST

Agenda

Welcome (5 mins)

Recommendations 4-6, 18-19 (50 mins)

Break (5 mins)

Recommendations 20-21 (15 mins)

Whole Pillar Questions (10 mins)

Wrap-Up (5 mins)

Resources:

- [Collaborative notes](#)
- [Spreadsheet](#)
- [Turning FAIR into Reality](#)

- [2020 workshop report](#)

Indication of activities
per TFiR
recommendation:

many



some



hardly any




FAIR culture



Rec. 4: Develop Interoperability frameworks



Rec. 5: Ensure data management via DMPs



Rec. 6: Recognise & reward FAIR data & stewardship



Rec. 18: Cost data management



Rec. 19: Select and prioritise FAIR digital objects



Rec. 20: Deposit in Trusted Digital Repositories



Rec. 21: Incentivise reuse of FAIR outputs

TFiR Pillar 2: FAIR Culture

Rec. 4: Develop interoperability frameworks for FAIR sharing within disciplines and for interdisciplinary research

Rec. 5: Ensure Data Management via DMPs

Rec. 6: Recognise and reward FAIR data and data stewardship

Rec. 18: Cost data management - financial resources; guidelines, examples

Rec. 19: Select and prioritise FAIR Digital Objects (FDO) - processes and criteria for output that will be retained long & FAIR

Rec 20: Deposit in Trusted Digital Repositories

Rec. 21: Encourage and incentivise reuse of FAIR outputs

Rec. 4: Develop Interoperability frameworks



Research communities need to be supported to develop interoperability frameworks that define their practices for data sharing, data formats, metadata standards, tools and infrastructure.

To support interdisciplinary research, these interoperability frameworks should be articulated in common ways and adopt global standards where relevant. Intelligent crosswalks, brokering mechanisms and semantic technologies should all be explored to break down silos.

Action 4.1: Enabling mechanisms must be funded and implemented to support research communities to develop and maintain their disciplinary interoperability frameworks. This work needs to be recognised and incentivised to reward stakeholders for enabling FAIR sharing.

Stakeholders: Funders; Standards bodies; Data service providers; Coordination fora; Research communities.

Action 4.2: Examples of FAIR use cases and success stories should be developed to convince reluctant research communities of the benefits in defining their disciplinary interoperability framework.

Stakeholders: Funders; Coordination fora; Research communities.

Action 4.3: Disciplines and interdisciplinary research programmes should be encouraged to engage with international collaboration mechanisms to develop interoperability frameworks. Common standards, intelligent crosswalks, brokering mechanisms and semantic technologies should all be explored to break down silos between communities and support interdisciplinary research.

Stakeholders: Funders; Policymakers; Institutions; Data stewards; Coordination fora

Action 4.4: Mechanisms should be facilitated to promote the exchange of good practices and lessons learned in relation to the implementation of FAIR practices both within and across disciplines. Case studies for cross-disciplinary data sharing and reuse should also be collected, shared and used as a basis for the development of good practice.

Stakeholders: Data service providers; Research communities; Coordination fora.

Action 4.5: The components of the FAIR ecosystem should adhere to common standards to support disciplinary frameworks and to promote interoperability and reuse of data across disciplines.

Stakeholders: Data service providers; Research communities; Coordination fora; Publishers.

Related recommendations: [Rec. 7: Support semantic technologies;](#)

**Rec. 5: Ensure data management via DMPs**

Any research project producing or collecting research data must include data management as a core element necessary for the delivery of its scientific objectives, and should address this in a Data Management Plan. The DMP should include all the relevant project outputs and be regularly updated to provide a hub of information on FAIR Digital Objects.

Action 5.1: Research communities must be required, supported and incentivised to consider data management and appropriate data sharing as a core part of all research activities. They should establish a Data Management Plan at project outset to consider the approach for creating, managing and sharing all research outputs (data, code, models, samples etc.)

Stakeholders: Funders; Institutions; Data stewards; Publishers; Research communities.

Action 5.2: Data Management Plans should be living documents that are implemented throughout the project. A lightweight data management and curation statement should be assessed at project proposal stage, including information on costs and the track record in FAIR. A sufficiently detailed DMP should be developed at project inception. Project end reports should include reporting against the DMP.

Stakeholders: Funders; Institutions; Data stewards; Research communities.

Action 5.3: Data Management Plans should be tailored to disciplinary needs to ensure that they become a useful tool for projects. Research communities should be inspired and empowered to provide input to the disciplinary aspects of DMPs and thereby to agree model approaches, exemplars and rubrics that help to embed FAIR data practices in different settings.

Stakeholders: Funders; Coordination fora; Data service providers; Data stewards; Research communities.

Action 5.4: The harmonisation of DMP requirements across research funders, universities and other research organisations, as has been initiated by Science Europe and some RDA groups, should be further stimulated.

Stakeholders: Funders; Institutions; Coordination fora.

Related recommendations: Rec. 22: Use information held in DMPs; Rec. 18: Cost data management; Rec. 19: Select and prioritise FAIR Digital Objects.

Rec. 6: Recognise & reward
FAIR data & stewardship



FAIR data should be recognised as a core research output and included in the assessment of research contributions and career progression. The provision of infrastructure and services that enable FAIR data must also be recognised and rewarded accordingly.

Action 6.1: Policy guidelines should recognise the diversity of research contributions (including publications, data sets, code, models, online resources, teaching materials) made during a researcher's career and explicitly include these in templates and schema for curricula vitarum, for researchers' applications and activity reports.

Stakeholders: Funders; Institutions.

Action 6.2: Credit should be given for all roles supporting FAIR data, including data analysis, annotation, management and curation, as well as for participation in the definition of interoperability frameworks, whether contributing to existing resources or developing new.

Stakeholders: Funders; Institutions; Research communities; Data stewards.

Action 6.3: Evidence of past practice in support of FAIR data should be included in assessments of research contribution. Such evidence should be required in grant proposals (for both research and infrastructure investments), among hiring criteria, for career advancement and other areas where evaluation of research contribution has a legitimate role to play. This should include assessment of graduate students.

Stakeholders: Funders; Institutions; Research communities.

Action 6.4: Contributions to the development and operation of certified and trusted infrastructures that support FAIR data should be recognised, rewarded and appropriately incentivised in a sustainable way.

Stakeholders: Funders; Institutions; Research communities.

Related recommendations: Rec. 10: Professionalise data science and data stewardship roles; Rec. 26: Support data citation and next generation metrics.

Rec. 18: Cost data management

Research funders should require data management costs and other relevant costs to be considered and included in grant applications where relevant. To support this, detailed guidelines and worked examples of eligible costs for FAIR data should be provided.

Action 18.1: Questions about the costs of data management, curation and publication should be included in all DMP templates. Information from existing and completed projects should be used to retrospectively identify costs and develop examples and guidelines based on these. Funders, institutions and data services should collaborate on retrospective analysis, including the cost of long-term curation.

Stakeholders: Funders, Institutions, Data service providers; Coordination fora.

Action 18.2: Research institutions and research projects need to take data management seriously and provide sufficient resources to implement the actions required in DMPs, while ensuring that financial resources are written into proposals as eligible costs.

Stakeholders: Institutions; Funders; Data stewards; Research communities.

Action 18.3: Guidelines should be provided for researchers and reviewers to raise awareness of eligible costs and reinforce the view that data management, long term curation and data publication should be included in project proposals. Funders should collaborate to enhance guidance.

Stakeholders: Funders; Institutions; Coordination fora.

Action 18.4: Funders should trial different mechanisms for supporting the costs of FAIR data management and stewardship, such as having a separate dedicated budget in the grant scheme. Apportioning specific costs for FAIR data should help to encourage researchers to budget for these and not fear their proposals will be uncompetitive.

Stakeholders: Funders; Institutions.

Related recommendations: [Rec. 15: Provide sustainable funding.](#)

Rec. 19: Select and prioritise
FAIR digital objects



Research communities and data stewards should develop and implement processes to assist the appraisal and selection of outputs that will be retained for a significant period of time and made FAIR.

Action 19.1: Research communities should be encouraged and funded to make concerted efforts to develop and refine appraisal and selection criteria and to improve guidance and processes on what to keep and make FAIR and what not to keep.

Stakeholders: Policymakers; Funders; Data service providers; Coordination fora.

Action 19.2: The appraisal and selection of research outputs that are likely to have future research value and significance should reference current and past activities and emergent priorities. Established archival principles and the importance of unrepeatable observations of natural and human phenomena should be taken into account.

Stakeholders: Research communities; Data stewards; Data service providers.

Action 19.3: When data are to be deleted as part of selection and prioritisation efforts, metadata about the data and about the deletion decision should be kept. If data deletion is carried out routinely, the underlying protocols for selection and prioritisation need to be made FAIR.

Stakeholders: Research communities; Data stewards; Data service providers.

Related recommendations: [Rec. 20: Deposit in Trusted Digital Repositories](#)

Second Synchronisation Force workshop (2020): “We recommend that the EOSC Governance should analyse why there is little activity regarding TFiR recommendations (...) **19**, **21** (...) and which actions should remedy this.”

Break (10:55 - 11:00)



Rec. 20: Deposit in Trusted Digital Repositories



Research data should be made available by means of Trusted Digital Repositories, and where possible in those with a mission and expertise to support a specific discipline or interdisciplinary research community.

Action 20.1: Policy should require data deposit in certified repositories and specify support mechanisms (e.g. incentives, structural funding and/or funding for deposit fees, and training) to enable compliance.

Stakeholders: Policymakers; Funders; Publishers.

Action 20.2: Mechanisms need to be established to support research communities to determine the optimal data repositories and services for a given discipline or data type.

Stakeholders: Data service providers; Institutions; Data stewards; Coordination fora.

Action 20.3: Concrete steps need to be taken to ensure the development of domain repositories and data services for interdisciplinary research communities so the needs of all researchers are covered.

Stakeholders: Data service providers; Funders; Institutions; Research communities.

Action 20.4: Outreach is required via scholarly societies, scientific unions and domain conferences so researchers in each field are aware of the relevant disciplinary repositories.

Stakeholders: Data service providers; Research communities.

Related recommendations: Rec. 13: Develop metrics to certify FAIR services; Rec. 17: Align and harmonise FAIR and Open data policy.



Rec. 21: Incentivise reuse
of FAIR outputs



Funders should incentivise the reuse of FAIR outputs when appropriate by promoting this in funding calls and requiring research communities to seek and build on existing content wherever possible.

Action 21.1: Researchers – including graduate students – should be required to demonstrate in research proposals and in DMPs that existing FAIR data resources have been consulted and used where appropriate, before proposing the creation of new data.

Stakeholders: Policymakers; Funders; Research communities.

Action 21.2: Research funders and the academic reward system should ensure that research that reuses data and other outputs is valued as highly as research that creates new content.

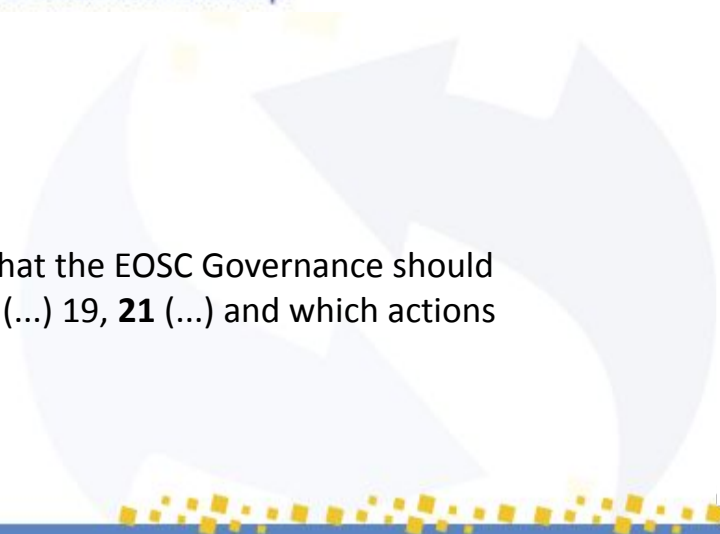
Stakeholders: Funders; Institutions; Research communities.

Action 21.3: Appropriate levels of funding should be dedicated to reusing existing FAIR outputs by initiating schemes that incentivise and stimulate reuse of data and code.

Stakeholders: Funders; Institutions.

Related recommendations: [Rec. 6: Recognise and reward FAIR data and data stewardship.](#)

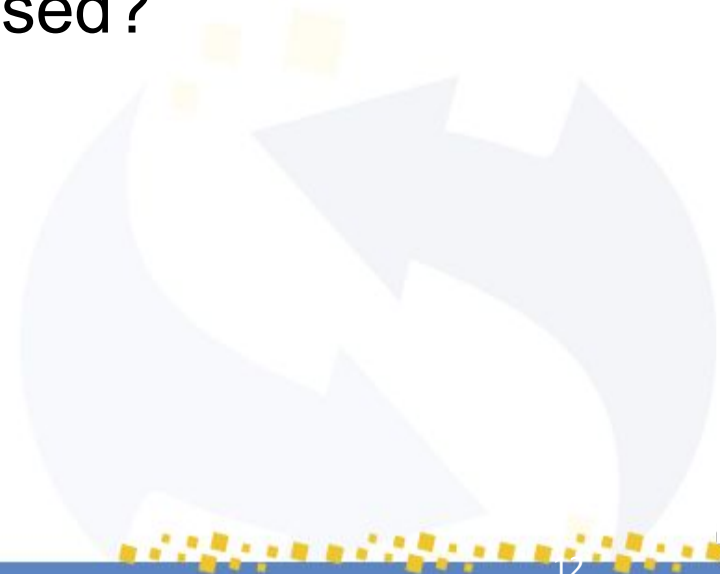
Second Synchronisation Force workshop (2020): “We recommend that the EOSC Governance should analyse why there is little activity regarding TFiR recommendations (...) 19, **21** (...) and which actions should remedy this.”



TFiR Pillar 2: Overall Questions

What's missing in the recommendations and actions in this pillar?

Any recommendations not addressed?



Wrap-Up

- Thank you!
- Notes & spreadsheet will remain open until May 24
- Input will be used for a report & ultimately feed into a White Paper
- Engage via the FAIR Data Forum

