

Second report of the FAIRsFAIR Synchronisation Force - summary overview -

31 July 2020

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The second FAIRsFAIR Synchronisation Force workshop was organised online as a series of eight sessions between 29 April and 11 June 2020. The objective of these sessions was to measure the progress towards implementing the recommendations outlined in the The European Commission Expert Group report *Turning FAIR into Reality* (TFiR, 2018¹). To do this, FAIRsFAIR brought together representatives of the **Working Groups of the EOSC Executive Board, INFRAEOSC5 projects, ESFRI clusters, and the FAIRsFAIR European Group of FAIR Champions** to share information on the progress of their FAIR-oriented activities and to discuss commonalities and priorities.

The 27 Recommendations 2 years later. The uptake in the EOSC framework

TFiR makes a series of structured recommendations, and provides an Action Plan for delivering FAIR data. The structure in which those recommendations are presented provides a useful and appropriate framework for discussing and comparing FAIR-oriented activities of a wide range of projects and initiatives across Europe. The recommendations are clustered under six pillars:

- 1. Core Concepts: FAIR Digital Objects and technical components of the FAIR ecosystem
- 2. FAIR Culture: agreements on data availability and description, data management plans, recognition and rewards
- 3. FAIR Ecosystem: key services, semantic technologies, trust and certification of services
- 4. Skills for FAIR: data science and data stewardship, curriculum frameworks
- 5. Incentives and Metrics for FAIR data and services: citation, metrics and monitoring
- 6. Investment in FAIR: investment, sustainability and governance

The original 27 TFiR recommendations are still very relevant and constitute a useful benchmark for measuring how projects and EOSC Working Groups progress towards turning FAIR into reality. During the workshop, participants agreed that the EOSC-related projects, working groups, and FAIR Champions are contributing in significant degree to the implementation of many of the TFiR recommendations. The projects show less activity in relation to Pillar 6 recommendations on the investment in FAIR and sustainability. This is understandable given the temporary nature of the projects and the fact that these recommendations on funding and sustainability primarily aim at other stakeholder groups.

Overall, the focus of the activities within the EOSC-related projects is on the TFIR priority recommendations.

¹ European Commission Expert Group on FAIR data, 2018. Turning FAIR into Reality: Final Report and Action Plan from the European Commission Expert Group on FAIR data. https://doi.org/10.2777/1524





Figure 1 Overview of the implementation per each of the 27 recommendations by the EOSC-related projects, from the second report of the FAIRsFAIR Synchronisation Force. This is a snapshot in time based on input from many but obviously not all EOSC-related initiatives. July 2020

Going a step further

In TFiR, a lot of the crucial detail for implementation is expressed in the actions associated with each recommendation. The workshop findings allowed to propose **additional actions** that address some gaps in the TFiR Action Plan that were identified by the workshop discussions.







PILLAR 1: CONCEPTS FOR FAIR IMPLEMENTATION

Define PID services (*Action 3.1bis*). The TFiR recommendations and actions do not address the need to develop policies and guidance for possibly the most mature part of the FAIR ecosystem, PID services, including their precise functions and criteria for assessment. Work in this area is already underway in the EOSC Architecture and FAIR Working Groups.

PILLAR 2: FAIR CULTURE

Support the application of FAIR for data that needs to be protected (*Recommendation 4bis or Action 4.6*). A useful addition to the TFIR structure would recognise the need to provide support and guidelines around making data and other outputs FAIR even if for legitimate reasons they cannot be openly shared. Important components include leveraging existing ethics expertise, frameworks and processes, community agreements and guidelines, clear expression of legal and ethical frameworks, and the provision of training in FAIR for protected data.

PILLAR 3: FAIR ECOSYSTEM

In this area three additions were proposed:

- Ensure the purpose and effectiveness of automated assessment is regularly reviewed (Action 9.4bis)
- Prepare a priority list of services that would benefit from FAIR assessment and certification (Action 9.2bis)
- Develop guidelines (and where useful) metrics for FAIR software (Action 9.3bis)

It was also proposed that Recommendation 23 'Develop FAIR components to meet research needs' be positioned as a priority rather than as a supporting recommendation.

PILLAR 4: SKILLS FOR FAIR

Professionalise FAIR training for all support staff (*Action 10.5*). The FAIR and data related training needs of **all** research personnel including laboratory and research/university libraries staff, technicians, research software engineers and similar support roles should be professionalised. This requires the adaptation of data related curricula for the needs of these roles.

PILLAR 5: INCENTIVES AND METRICS

The purpose and effects of FAIR metrics should be regularly reviewed with active input from research communities. (Action 12.4). The importance of TFiR Action 12.3 'Metrics need to be regularly reviewed and updated to ensure they remain fit-for-purpose' cannot be sufficiently emphasised, particularly as regards clearly defining the purpose of each metric and evaluating whether its implementation is achieving that purpose. Additionally, there needs to be continual interaction between an evolving map and catalogue of the FAIR ecosystem and the criteria by which any metrics and incentives are devised.

PILLAR 6: INVESTMENT IN FAIR

Strategic investment needs to consider the whole FAIR ecosystem (Action 14.4). Evidence and expertise need to be mobilised in support of neglected parts of the FAIR ecosystem (including







semantics, stewardship, and software) which typically rely on the efforts of research communities and where costs and importance are underestimated.

Sustain a range of funding models for distributed services and centralised facilities (Action 15.4). Given that centralised and distributed infrastructures have unique vulnerabilities from the perspective of sustainability, sustainability strategy should accommodate the full range of models.

Next steps: the third workshop

On 3 September 2020 Ingrid Dillo and Marjan Grootveld presented the report at the <u>EOSC FAIR</u> <u>Working Group meeting</u>. The document was well received by the WG, and will be taken into consideration in the writing of the <u>Interim recommendations for FAIR metrics and service</u> certification report, currently in its final phase.

The third Synchronisation Force Workshop is planned to take place during the first half of 2021, to take another and final snapshot of the status of the implementation of the recommendations from the *Turning FAIR into Reality* report. In preparing for that workshop, FAIRsFAIR will also consider how better to engage the horizontal e-infrastructure projects and the ESFRI cluster projects as well as the (successors of the) EOSC Working Groups.

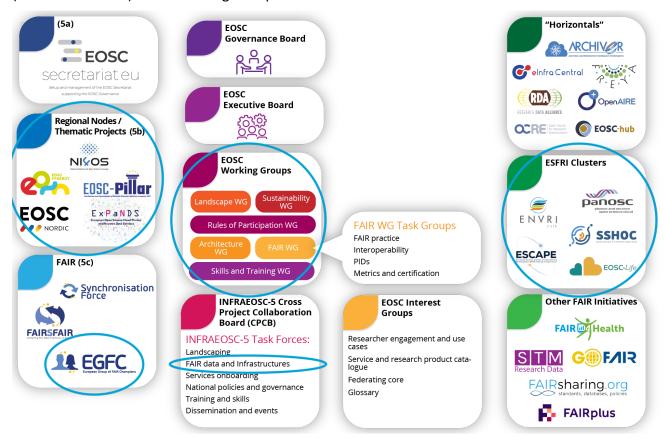


Figure 2FAIRsFAIR primary stakeholders within the EOSC ecosystem; invitees highlighted



