



WEBINAR, 2 JUNE 2021

**Q&A: JOINTLY TOWARDS
SUSTAINABLE RESEARCH DATA**



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Introduction

On 2 June 2021, Science Europe presented its [Practical Guide to Sustainable Research Data](#) during a [webinar](#) with more than 100 participants.

This document presents a summary of the questions asked to Science Europe and the webinar speakers, and the respective answers.

Questions & Answers

The following questions were asked by participants during the webinar through the webinar's Q&A tool. They were partially answered by speakers and panellists and partially answered in writing.

Practical Guide to Sustainable Research Data

Q: The matrices focus strongly on FAIR¹ data. Why do they not also promote open data?

A: Science Europe promotes FAIR data according to the principle 'as open as possible, as closed as necessary'. Data should be open whenever possible, but it needs to be acknowledged that not all data are suitable to be shared openly. As do other Science Europe activities on research data, the Practical Guide therefore focuses on FAIRness, rather than openness.

Q: The definitions in the matrices also strongly underline the matter of quality. Who is responsible to present the data in such a way its quality can be assessed by evaluators from research funding and research performing organisations?

A: Quality assurance of both data and metadata is an important aspect of research data management (RDM). Science Europe's [Practical Guide to the International Alignment of RDM](#) complements the new Practical Guide and supports researchers, their institutions, and their funders in defining the necessary RDM actions. It also helps evaluators to assess whether the actions undertaken are sufficient to guarantee high-quality research data.

Q: In the maturity matrices, is international collaboration only considered the last step ("further advancement") after an organisation has already solidified its policies and practices at an organisational level? Should this not be part of planning at an early stage?

A: Collaboration is essential from the basic level onwards and certainly needs to be considered from the very beginning. But inter-organisational and international collaboration will advance as the level of maturity at organisational level advances. With their guidance on 'further advancement' the matrices aim to support additional efforts towards a common level playing field which goes beyond what each individual organisation can achieve by itself.

¹ Findable, Accessible, Interoperable, Re-usable

Q: Can it be expected that big national computing facilities paid with public funding could contribute to long-term data storage and collaboration with data repositories to decrease the cost of infrastructures for data management?

A: The role of the different actors depends on their mandates, mission, and national contexts. These differences are part of the complexity of research data management and do not allow for a comprehensive answer. It can be the case in certain contexts that national publicly funded computing facilities support long-term data storage. It could, for example, be an option for disciplines with large data volumes. The maturity matrices will hopefully provide good guidance to identify the best options for specific cases.

FAIRsFAIR's ACME-FAIR tool

Q: During the presentation of the ACME-FAIR² tool, there was a focus on 'assessment'. Should ACME be seen as primarily an assessment tool?

A: The ACME-FAIR tool, once it will be published, is meant to support self-assessment by the organisations who will use it. It should also be considered a learning tool, based on the idea that self-assessment gives useful input for learning. The tool will complement the Science Europe maturity matrices, that are meant to inform decisions on a strategical level, by providing guidance to the operational level in organisations that will be tasked to implement strategic decisions on RDM.

Implementation and role of different stakeholders

Q: What would be the best incentives that research performing organisations (RPOs) can provide to early-career researchers, especially those engaged in doctoral thesis, to practice RDM and share FAIR data?

A: Good RDM practices and FAIR data are essential components of Open Science. Transformation towards Open Science is critical to all three types of organisations addressed in the maturity matrices (research funding organisations, research performing organisations and research infrastructures), and it should be incorporated in their respective missions and strategies.

Incentives to foster Open Science Practices are a critical aspect, as individual researchers need to see direct benefits for their extra efforts to make their results available as open as possible. Both RFOs and RPOs can play an important role. Funders can reward researchers for being open and FAIR. RPOs can take into account Open Science practices for career-progression decisions.

In future project proposals under the Horizon Europe Framework Programme, researchers can already showcase their previous Open Science practices in their project proposals. This will support a gradual development of making Open Science the 'new normal'.

² Assessing Capability Maturity and Engagement with FAIR-enabling practices

Q: It was stressed that research infrastructures should not be too fragmented. Yet, a danger of the European Open Science Cloud (EOSC) seems to be a too monolithic approach. It should not be forgotten that science and scholarship themselves are very dendritic or spread out. Some degree of co-ordination is useful, but we must be wary of the EOSC's services becoming too centralised and too far removed from the work floor of the researcher.

A: There seems to be a misconception among certain stakeholders of the EOSC vision. EOSC is not one single data research infrastructure. The aim of the EOSC is to federate and connect many data infrastructures and to bring different systems together to add value to a European system of research data. Researchers will be able to access all data sharing services connected to EOSC via their respective institution or domain repository as they are used to.

Q: There is a long-lasting concern among many researchers and RPOs that money spent on Open Access to publications and on RDM would be better spent on doing research. There seems to be a change in mindset regarding this issue, but is this change happening fast enough?

A: Transition to Open Science is unavoidable as the use of public funds should benefit society as a whole. The willingness to practice Open Science is increasing among researchers. However, changing a mindset takes time. Research Funders and Performers can play an important role to promote this change:

- First, it is important that funders make money available for Open Science practices, such as Open Access and RDM. Funders cannot mandate Open Science practices without providing funding for them.
- Second, Open Science practices cannot be only mandated, funders also need to provide supporting policies and appropriate infrastructure to follow up on their implementation.
- Third, changing the mindset towards Open Science and the reward and incentive system is probably the biggest change that is ahead. The change will happen gradually. Maybe it should be better emphasised how Open Science practices contributed to tackling the COVID-19 crisis, for example. While there is still room for improvement, research during such crises has clearly benefitted from more openness.

Questions on European Commission's Open Science activities

Q: Recently, the first version of the RDM requirements for Horizon Europe projects were published. Why do they not follow the harmonised Science Europe requirements, while the alignment process was actually requested and encouraged by the former European Commission Director-General for Research & Innovation?

A: The Horizon Europe RDM requirements are structured along the FAIR principles to emphasise the need of making data FAIR. The Science Europe RDM Guide is not structured around the FAIR principles but follows the chronological flow of the research process. The European Commission aimed at an evolution from H2020 requirements with additional questions that point at the indicators of the FAIR data maturity model working group. These indicators have already been used by FAIRsFAIR and other initiatives. The Commission recognises the usefulness of harmonised approaches among funders and remains open for dialogue to explore how the approaches could be more aligned in the future.

Q: The European Commission is considering to provide a data repository at European level. What are the concrete plans and how would such a repository be different from Zenodo?

A: The discussions are still in a very early stage. The Commission has recently launched '[Open Research Europe](#)' as an Open Access publishing platform to support the beneficiaries of the Framework Programmes. Its first ideas for a data repository follow the same line: to explore whether and how the Commission could offer its beneficiaries a means to store data for the long term without additional costs.