



WEBINAR, 27 JANUARY 2021

Q&A: ALIGNING RESEARCH DATA MANAGEMENT ACROSS EUROPE



1. Introduction

On 27 January 2021, Science Europe presented the second, extended version of its [Practical Guide to the International Alignment of Research Data Management](#). The extended version contains a new chapter with guidance on the evaluation of Data Management Plans (DMPs), a so-called DMP evaluation rubric. The new, extended version of the guide was presented during a [webinar](#) with more than 260 participants.

As it was unfortunately not possible to address all questions participants asked during the launch event, this document presents the answers to the questions asked to both Science Europe and the webinar speakers.

2. Questions & Answers

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

2.1 Questions on the Science Europe DMP Evaluation Rubric

Q: Would it be helpful for the community to consider the value of adding a column to the evaluation rubric to help evaluate end-stage DMPs? This could provide some examples of acceptable evidence to help assess actual actions against planned activities. This could also be used by data stewards locally to help ensure projects are wrapped up effectively and could also be useful for funding bodies to be able to monitor compliance to some extent.

A: The rubric has been developed in a way that it can be used throughout the different stages of a DMP to follow its development throughout the life cycle of a project. We also strongly encourage adaption of the guidance to improve compliance with organisational or disciplinary circumstances. Adaptable templates can be found at scieur.org/rdm.

Q: Has it been envisaged to have more levels of compliance (other than the two currently used in the rubric)?

A: Yes, originally we did consider having more than two levels and discussed a three-level approach in detail. The decision to opt for a two-level approach was taken based on the practical experiences by Science Europe members and feedback they received from data stewards. Data stewards considered a three-level approach less practical as there was too much overlap between the definition of a 'detailed' and 'sufficient' DMP and it was difficult for reviewers to use. Moreover, a description of a 'detailed' level also risks to give a wrong impression of what is expected from researchers (researchers might think that more details were requested than actually are).

Q: Does the guide foresee a ranking of questions depending on their emphasis on FAIR? The annex of the guide that maps the FAIR principles to the DMP questions could be used to rank questions according to their impact on FAIR.

A: The rubric is a set of conditions to support research organisations in evaluating data management plans. It is not meant to establish a ranking. Organisations are encouraged to adapt the guidelines to their particular needs or policy priorities.

Q: Has any tool associated to the rubric been envisaged, such as an app for evaluation?

A: We do not currently foresee a tool such as an app, as our goal was to provide general guidance while allowing flexibility for research organisations to adapt their requirements according to their institutional and/or discipline-specific needs and particularities.

Q: Science Europe's Criteria for the Selection of Trustworthy Repositories refer to and strongly recommend the use of certified trustworthy data repositories when they are available. However, in the DMP evaluation rubric sections on data sharing and preservation, there is no indication about the trustworthiness of the repository to be used or certification status.

A: This is correct. The DMP evaluation rubric is based entirely on the DMP Core Requirements and the respective guidance for researchers. It does not include the Criteria for the Selection of Trustworthy Repositories which are explained in the second chapter of the same guide. Science Europe strongly recommends adapting all elements of the guide to have a comprehensive approach to RDM.

Q: Our organisation has a slightly different DMP template, which is not based on the Science Europe Guide. Nevertheless, the rubric would still work for evaluation processes in our organisation. One of the differences our organisation encounters is that we incorporate lists of datasets in DMPs rather than describing project data in a single lump. Do you have any advice/experience on the DMP granularity when this does not fit that of the project, for example if a project is going to produce several distinct datasets with different issues?

A: This is an example where an adaptation of the guidance would be useful. In case this refers to several projects dealing with the same kind of datasets, it could be useful to agree on the level of granularity requested at a given stage for these kinds of projects within one organisation. If this concerns a single project, we would recommend working closely with the researchers to explore the most efficient approach, keeping in mind that the aim of the DMP is to support the researcher(s) with the planning of data management from an early stage.

2.2 Questions on evaluation processes

Q: What kind of review/evaluation procedures have been designed and/or implemented by institutions and funders? Is there any example to learn from?

A: Science Europe currently does not have an overview of the review/evaluation procedures in different organisations. We will however monitor the implementation of

review procedures and aim to publish an overview once a critical number of examples are available.

Q: How accurate were the costings in the DMPs that were reviewed at HRB in Ireland?

A: HRB experienced a very varied response on costing in DMPs: some researchers followed the institution's single costing model; some did not provide costings despite availability of funding; some under-costed; and a minority provided very accurate detailed costing.

Guidance is provided to HRB funding applicants on FAIR data management costs. This allows applicants to justify costing for the following aspects: people, storage and computation, data access, deposition and re-use, and others. At contract negotiation stage researchers can adjust costs. HRB will look at providing more detailed examples/expectations on costs and working with data stewards on budgets.

Q: One of the problems we have faced with DMPs and evaluating them, has been the difference between science fields. Is there a website that provides information that would help to evaluate DMPs from different fields, such as mathematics, IT, or technology?

A: There is no dedicated website for the different disciplines unfortunately, but as Peter Doorn explained in his presentation, there are disciplines that do develop their own protocols. For the time being, we suggest establishing contact with the respective discipline representatives, such as infrastructures specialised in certain fields, as they can provide more discipline-specific information. There is also a new [RDA working group](#) that is looking into providing discipline-specific guidance based on the Science Europe Guide.

2.3 Questions on Research Data Management

Q: We all agree that DMPs are of great use, partly because they sit in the middle of the research process: before and while scientists are conducting the research, and before they publish results. Therefore, the value of a high-quality DMP spills over the whole research process and increases integrity and reproducibility. But what else, beyond FAIR data as the embodiment of a DMP, is needed to ensure intentions translate into re-usable practice?

A: There are certainly other aspects that need to be taken into account. Those that are regularly referred to as potential next elements to address include software management which can already be included in the templates based on the Science Europe Guide, protocols and processes, metadata standards, guidance on costing, and tools to capture and structure data throughout the research process and to prepare the data for sharing already at an early stage.

Q: Are there any plans to address what happens when a researcher does not comply with the data management intentions laid out in the DMP, such as storing the data in a way that is not in accordance with the DMP?

A: This is a topic that will indeed need to be addressed by individual organisations requesting DMPs. Science Europe will explore whether this is a topic that can be addressed jointly by its Member Organisations and possibly develop common guidelines.

2.4 Technical questions on the Science Europe resources

Q: Have you thought of persistent URLs/DOIs for the adaptable templates for organisational or disciplinary use - e.g. if we want to link specific resources from the RDM Guidance for Organisations - e.g. Core Requirements for Data Management Plans or Criteria for the Selection of Trustworthy Repositories in our RDM guides?

A: Science Europe is currently looking into attributing DOIs to publications when relevant.

Q: There is a guiding software called Data Stewardship Wizard (<https://ds-wizard.org/>) helping with writing DMPs. Does Science Europe have plans to integrate collaborate with ds-wizard?

A: Science Europe has already been in contact with ds-wizard and they have integrated the template via the possibility to export the completed/answered questions in the wizard into the Science Europe template format.

2.5 General questions

Q: Why does Plan S not include a research data sharing (+RDM) principle? Especially when the community is aware of the importance of data sharing, as the speakers have stated during this webinar.

A: Plan S addresses Open Access to research publications as one very special aspect of Open Science. It recognises the importance of data sharing principles as another important aspect, but given the complexity of the Open Access developments, it has decided for the time being to focus on one key element of the transition to Open Science.

Q: Will Brexit make UK-based research organisations use their own DMP template or are they already aligned with Science Europe's guidelines?

A: DMPs should be independent of geographical borders and associated restrictions. It makes sense for DMP requirements to be aligned across Europe. In the specific case of the UK research councils under the umbrella of UK Research and Innovation (UKRI), many of the councils already had requirements in place before the Science Europe Guide was published. They are not yet aligned with the Science Europe guidance but are similar and future alignment is probable.

Q: What RDM initiatives in other parts of the world are known?

A: Other countries are undertaking similar efforts on RDM, such as in the US, Japan, and China where funders started to request DMPs similar to those in Europe. In China, the Chinese Academy of Science is working on an Open Science Cloud and is in contact with the European Open Science Cloud (EOSC) and partners in Canada, the US, and Australia to realise and align the project. The G7 Open Science Working Group, co-chaired by the EU and Japan, addresses data management issues and the OECD has reviewed its guidelines on data sharing.

