



**FAIRSFair**  
Fostering Fair Data Practices in Europe

Based on the FAIR-Aware tool

# Additional guidance to the Science Europe DMP assessment rubric

Authors  
Maaïke Verburg and Marjan Grootveld  
(DANS)



## Related FAIRSFair recommendation<sup>1</sup>

### Recommendation B1:

Formalise and support appropriate data management plans (DMPs) for FAIR data  
*Researchers, data stewards and academic journals can use FAIR data criteria to review whether a DMP includes steps needed to make the data FAIR.*

## Introduction

One way to support data management planning for FAIR data is to incorporate FAIR criteria more explicitly in data management plan (DMP) templates. As DMPs hold an important position in the planning phase of a research project, the inclusion of FAIR data criteria at this stage will facilitate a greater understanding of the necessary steps needed to make data FAIR as well as an increase in the number of FAIR datasets produced as a result. In this output of the FAIRSFair project, FAIR guidance has been added to the Science Europe DMP evaluation rubric to help researchers and data stewards better plan for FAIR data. This guidance is based on FAIR-Aware<sup>2</sup>, the FAIR learning tool developed in the FAIRSFair project.

As the association representing public research performing and funding organizations throughout Europe, **Science Europe** offers resources to accommodate the implementation of data management and FAIR data practices as one of their priorities. One of the resources offered by Science Europe is a 'Practical Guide to the International Alignment of Research Data Management'<sup>3</sup>. This resource offers targeted guidance for organisations, scientific communities, and individual researchers, to organise research data and preserve it appropriately. The FAIRSFair team has taken this practical guide as a basis and proposed additional guidance related to FAIR data based on FAIR-Aware. This guidance material is meant to complement, rather than replace the guidelines of the original guide, wherever possible.



1. FAIRSFair D3.4 Recommendations on practice to support FAIR data principles <https://doi.org/10.5281/zenodo.5357329>

2. FAIR-Aware <https://www.fairsfair.eu/fair-aware>

3. Science Europe. Practical Guide to the International Alignment of Research Data Management - Extended Edition. <https://doi.org/10.5281/zenodo.4915861> In addition, Science Europe published a Practical Guide to Sustainable Research Data. <https://doi.org/10.5281/zenodo.4769702>

## Additional guidance to the Science Europe DMP assessment rubric



FAIR-Aware is an online self-assessment tool developed in the FAIRsFAIR project to help users take their first steps in creating FAIR Data. In ten simple questions, users are asked about their level of awareness and compliance with some FAIR practices. Rich guidance text accompanies each question to inform users about the importance of each practice and how to implement them in a dataset. This guidance can be of excellent use during the research planning phase to plan for FAIR data. Specific elements of the FAIR-Aware guidance texts that relate to the topics in the Science Europe DMP template have been extracted and integrated in the evaluation rubric to enrich it with more FAIR specific guidance. The resulting rubric can be found below<sup>4</sup>.

FAIR-Aware also covers other FAIR topics and practices that are relevant during other stages of the research data lifecycle, such as the depositing of data in a repository. To do the full assessment, you can find the FAIR-Aware tool on its webpage<sup>5</sup>, as well as on the Science Europe list of suggested external tools<sup>6</sup>.

### Output

DMP Question	DMP Guidance	FAIRsFAIR Additional Guidance	Performance Level	
Guidance for Researchers			Sufficiently Addressed The DMP...	Insufficiently Addressed The DMP...
Administrative information			<ul style="list-style-type: none"><li>contains the minimal information required to identify the applicant and the references of the project.</li></ul>	<ul style="list-style-type: none"><li>provides no or limited information, which makes it hard to identify who is responsible for the project.</li></ul>

4. FAIR-Aware guidance texts refer to depositing in repositories. Use whichever repository or community resource is best able to add to and maintain the FAIRness of your data. Keep in mind that some may be more capable than others to deal with findability, others accessibility, interoperability or reusability. Using a repository certified as trustworthy makes your choice easier, as it means a balanced approach is taken, but any repository or community resource is better than none. Registries used to pick repositories index all types of relevant and available resources.

5. <https://fairaware.dans.knaw.nl/>

6. <https://www.scienceeurope.org/our-priorities/research-data/research-data-management>

# Additional guidance to the Science Europe DMP assessment rubric



## Output

### 1. DATA DESCRIPTION AND COLLECTION OR RE-USE OF EXISTING DATA

DMP Question	DMP Guidance	FAIRsFAIR Additional Guidance	Performance Level	
Guidance for Researchers			Sufficiently Addressed The DMP...	Insufficiently Addressed The DMP...
<b>1a.</b> How will new data be collected or produced and/or how will existing data be re-used?	<ul style="list-style-type: none"> <li>Explain which methodologies or software will be used if new data are collected or produced.</li> <li>State any constraints on re-use of existing data if there are any.</li> <li>Explain how data provenance will be documented.</li> <li>Briefly state the reasons if the re-use of any existing data sources has been considered but discarded.</li> </ul>	<ul style="list-style-type: none"> <li>With respect to data provenance: Document the provenance for example by including it in the metadata record (e.g., using persistent identifiers), or via a linked provenance record (e.g., when you are familiar with using <a href="#">PROV-O</a>, <a href="#">PAV</a>, or <a href="#">VoID</a>).</li> <li>Supply at least the following information: <ul style="list-style-type: none"> <li>Sources of data generation or collection (e.g., model, instrument, methodology)</li> <li>The date of data creation or collection</li> <li>The contributor(s) involved</li> <li>Data versioning information (indicate relations to other versions and describe changes)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>gives clear details of where the existing data come from and how new data will be collected or produced. It clearly explains methods and software used.</li> <li>explains, if existing data are re-used, how these data will be accessed and any constraints on their re-use.</li> <li>explains clearly, if applicable, why new data must be collected, rather than re-using existing data.</li> </ul>	<ul style="list-style-type: none"> <li>provides little or no details on where the data come from and what data will be collected or re-used.</li> <li>does not, if applicable, provide sufficient rationale for generating new data.</li> </ul>
<b>1b.</b> What data (for example the kind, formats, and volumes) will be collected or produced?	<ul style="list-style-type: none"> <li>Give details on the kind of data: for example, numeric (databases, spreadsheets), textual (documents), image, audio, video, and/or mixed media.</li> <li>Give details on the data format: the way in which the data is encoded for storage, often reflected by the filename extension (for example pdf, xls, doc, txt, or rdf).</li> <li>Justify the use of certain formats. For example, decisions may be based on staff expertise within the host organisation, a preference for open formats, standards accepted by data repositories, widespread usage within the research community, or on the software or equipment that will be used.</li> <li>Give preference to open and standard formats as they facilitate sharing and long-term re-use of data (several repositories provide lists of such 'preferred formats').</li> <li>Give details on the volumes (they can be expressed in storage space required (bytes), and/or in numbers of objects, files, rows, and columns).</li> </ul>	<ul style="list-style-type: none"> <li>With respect to data formats or file formats: Make data available in a file format that is accepted by your research community to enable data sharing, interoperability, and reuse, and by the repository to enable long-term preservation. When in doubt, check a couple of potentially relevant data repositories to find out what they expect, and include your findings in the DMP.</li> </ul> <p>For guidance about how to search for repositories, see 6a.</p>	<ul style="list-style-type: none"> <li>clearly describes or lists what data types will be generated (for example numeric, textual, audio, or video) and their associated data formats, including, if needed, data conversion strategies.</li> <li>explains why certain formats have been chosen and indicates if they are in open and standard format. If a proprietary format is used, it explains why.</li> <li>provides information about the estimated data volume.</li> <li>clearly states, if applicable, that no new data will be produced or generated by the project.</li> </ul> <p>NB. Information derived from previously existing data sources (namely output, processed, and analysed data) are to be considered new data under this question.</p>	<ul style="list-style-type: none"> <li>provides no or little details on what data types will be generated and does not provide a valid reason for this omission (for example a statement that no data will be produced or generated).</li> <li>only lists/describes the kinds of data without specifying their formats.</li> <li>only lists formats, without specifying the kinds of data.</li> <li>does not provide an estimate of data volume.</li> </ul>

# Additional guidance to the Science Europe DMP assessment rubric



## Output

### 2. DOCUMENTATION AND DATA QUALITY

DMP Question	DMP Guidance	FAIRsFAIR Additional Guidance	Performance Level	
Guidance for Researchers			Sufficiently Addressed The DMP...	Insufficiently Addressed The DMP...
<b>2a.</b> What metadata and documentation (for example the methodology of data collection and way of organising data) will accompany the data?	<ul style="list-style-type: none"> <li>Indicate which metadata will be provided to help others identify and discover the data.</li> <li>Indicate which metadata standards (for example DDI, TEI, EML, MARC, CMDI) will be used.</li> <li>Use community metadata standards where these are in place.</li> <li>Indicate how the data will be organised during the project mentioning, for example, conventions, version control, and folder structures. Consistent, well-ordered research data will be easier to find, understand, and re-use.</li> <li>Consider what other documentation is needed to enable re-use. This may include information on the methodology used to collect the data, analytical and procedural information, definitions of variables, units of measurement, and so on.</li> <li>Consider how this information will be recorded (for example in a database with links to each item, a 'readme' text file, file headers, code books, or lab notebooks).</li> </ul>	<ul style="list-style-type: none"> <li>With respect to the metadata standards: Find a suitable community-endorsed metadata standard in metadata registries (e.g., <a href="#">RDA</a>, <a href="#">DCC</a>). Preferably use domain and discipline-specific repositories to deposit your data in when using community-endorsed metadata standards (use <a href="#">Re3data</a> to find a suitable repository).</li> <li>Confer with your local research data management specialist to determine the best metadata standard to use when no community-endorsed metadata standards are developed in your domain.</li> <li>Use controlled vocabularies for your metadata (and other documentation) to create unambiguous, reusable, and machine-interpretable information. Choose your vocabulary based on community standards and information you have on the use and openness. When available in your domain, choose a repository to deposit your data in based on whether they support your preferred vocabulary (find a suitable repository on <a href="#">FAIRsharing</a>).</li> </ul>	<ul style="list-style-type: none"> <li>clearly outlines the metadata that will accompany the data, with reference to good practice in the community (for example uses metadata standards where they exist).</li> <li>clearly outlines the documentation needed to enable data re-use, stating where the information will be recorded (for example a database with links to each item, a 'readme' text file, file headers, code books, or lab notebooks).</li> <li>indicates how the data will be organised during the project (for example naming conventions, version control strategy and folder structures).</li> </ul>	<ul style="list-style-type: none"> <li>provides little or no details on the metadata that will accompany the data.</li> </ul>
<b>2b.</b> What data quality control measures will be used?	<ul style="list-style-type: none"> <li>Explain how the consistency and quality of data collection will be controlled and documented. This may include processes such as calibration, repeated samples or measurements, standardised data capture, data entry validation, peer review of data, or representation with controlled vocabularies.</li> </ul>		<ul style="list-style-type: none"> <li>clearly describes the approach taken to ensure and document quality control in the collection of data during the lifetime of the project.</li> </ul>	<ul style="list-style-type: none"> <li>provides no information or only a vague mention on how data quality is controlled and documented during the lifetime of the project.</li> </ul>

## Additional guidance to the Science Europe DMP assessment rubric



### Output

#### 3. STORAGE AND BACKUP DURING THE RESEARCH PROCESS

DMP Question	DMP Guidance	FAIRsFAIR Additional Guidance	Performance Level	
Guidance for Researchers			Sufficiently Addressed The DMP...	Insufficiently Addressed The DMP...
<b>3a.</b> How will data and metadata be stored and backed up during the research?	<ul style="list-style-type: none"> <li>Describe where the data will be stored and backed up during research activities and how often the backup will be performed. It is recommended to store data in least at two separate locations.</li> <li>Give preference to the use of robust, managed storage with automatic backup, such as provided by IT support services of the home institution. Storing data on laptops, stand-alone hard drives, or external storage devices such as USB sticks is not recommended.</li> </ul>		<ul style="list-style-type: none"> <li>clearly (even if briefly) describes:               <ul style="list-style-type: none"> <li>the location where the data and backups will be stored during the research activities.</li> <li>how often backups will be performed.</li> <li>the use of robust, managed storage with automatic backup (for example storage provided by the home institution).</li> </ul> </li> <li>or</li> <li>explains why institutional storage will not be used (and for what part of the data) and describes the (additional) locations, storage media, and procedures that will be used for storing and backing up data during the project.</li> </ul>	<ul style="list-style-type: none"> <li>provides no information or very vague reference to how data will be stored and backed up during the project.</li> </ul>
<b>3b.</b> How will data security and protection of sensitive data be taken care of during the research?	<ul style="list-style-type: none"> <li>Explain how the data will be recovered in the event of an incident.</li> <li>Explain who will have access to the data during the research and how access to data is controlled, especially in collaborative partnerships.</li> <li>Consider data protection, particularly if your data is sensitive (for example containing personal data, politically sensitive information, or trade secrets). Describe the main risks and how these will be managed.</li> <li>Explain which institutional data protection policies are in place.</li> </ul>		<ul style="list-style-type: none"> <li>clearly explains how the data will be recovered in the event of an incident.</li> <li>which institutional and/or national data protection policies are in place and provides a link to where they can be accessed.</li> <li>who will have access to the data during the research.</li> <li>clearly describes the additional security measures (in terms of physical security, network security, and security of computer systems and files) that will be taken to ensure that stored and transferred data are safe, when sensitive data are involved (for example personal data, politically sensitive information, or trade secrets).</li> </ul>	<ul style="list-style-type: none"> <li>provides little or no details on how the data will be recovered in the event of an incident, which institutional data protection policies are in place, and who will have access to the data during the research.</li> <li>provides little or no details about data protection and risk management, or the explanation is too vague, when sensitive data are involved (for example personal data, politically sensitive information, or trade secrets).</li> </ul>

# Additional guidance to the Science Europe DMP assessment rubric



## Output

### 4, LEGAL AND ETHICAL REQUIREMENTS, CODES OF CONDUCT

DMP Question	DMP Guidance	FAIRsFAIR Additional Guidance	Performance Level	
Guidance for Researchers			Sufficiently Addressed The DMP...	Insufficiently Addressed The DMP...
<b>4a.</b> If personal data are processed, how will compliance with legislation on personal data and security be ensured?	<ul style="list-style-type: none"> <li>Ensure that when dealing with personal data, data protection laws (for example GDPR) are complied with:</li> <li>Gain informed consent for preservation and/or sharing of personal data.</li> <li>Consider anonymisation of personal data for preservation and/or sharing (truly anonymous data are no longer considered personal data).</li> <li>Consider pseudonymisation of personal data (the main difference with anonymisation is that pseudonymisation is reversible).</li> <li>Consider encryption which is seen as a special case of pseudonymisation (the encryption key must be stored separately from the data, for instance by a trusted third party).</li> <li>Explain whether there is a managed access procedure in place for authorised users of personal data.</li> </ul>	For guidance on access, see 5a.	<ul style="list-style-type: none"> <li>clearly indicates if personal data will be collected/ used as part of the project, and, if applicable, how compliance with applicable legislation will be ensured (for example by gaining informed consent, considering encryption, anonymisation, or pseudonymisation).</li> <li>describes the procedure to manage access to only authorised users.</li> </ul>	<ul style="list-style-type: none"> <li>provides little or no details to demonstrate that personal data, if any, will be managed in compliance with applicable legislation.</li> </ul>
<b>4b.</b> How will other legal issues, such as intellectual property rights and ownership, be managed? What legislation is applicable?	<ul style="list-style-type: none"> <li>Explain who will be the owner of the data, meaning who will have the rights to control access:</li> <li>Explain what access conditions will apply to the data? Will the data be openly accessible, or will there be access restrictions? In the latter case, which? Consider the use of data access and re-use licenses.</li> <li>Make sure to cover these matters of rights to control access to data for multi-partner projects and multiple data owners, in the consortium agreement.</li> <li>Indicate whether intellectual property rights (for example Database Directive, sui generis rights) are affected. If so, explain which and how will they be dealt with.</li> <li>Indicate whether there are any restrictions on the re-use of third-party data.</li> </ul>	For guidance on access, see 5a.	<ul style="list-style-type: none"> <li>clearly explains, if applicable, who will have the rights to control access to which part of the data.</li> <li>what access conditions and re-use licenses will apply to the data.</li> <li>clearly explains, if applicable, how intellectual property rights will be managed.</li> <li>explains for multi-partner projects and multiple data owners how these matters are addressed in the consortium agreement.</li> <li>Alternatively, there is a clear statement that there are no such restrictions on the data.</li> <li>indicates, if applicable, whether there are any restrictions on the re-use of third-party data.</li> </ul>	<ul style="list-style-type: none"> <li>does not address legal issues (or only for a subset of the data), and does not provide good reason or explanation for not doing so.</li> <li>does not address matters of rights to control access to the data in case of a multi-partner project and does not provide good reason or explanation for not doing so.</li> </ul>

## Additional guidance to the Science Europe DMP assessment rubric



### Output

DMP Question	DMP Guidance	FAIRsFAIR Additional Guidance	Performance Level	
Guidance for Researchers			Sufficiently Addressed The DMP...	Insufficiently Addressed The DMP...
4c. What ethical issues and codes of conduct are there, and how will they be taken into account?	<ul style="list-style-type: none"><li>Consider whether ethical issues can affect how data are stored and transferred, who can see or use them, and how long they are kept. Demonstrate awareness of these aspects and respective planning.</li><li>Follow the national and international codes of conducts and institutional ethical guidelines, and check if ethical review (for example by an ethics committee) is required for data collection in the research project.</li></ul>	<ul style="list-style-type: none"><li>Explicitly state in your metadata when access to the data needs to be limited due to ethical reasons. Include information on how to request access when this is possible and mention the contact details of the rights holder.</li><li>In case data cannot be publicly shared due to ethical reasons, make sure you do still publish the accompanying metadata.</li></ul> <p>For more guidance on licensing and access, see 5a.</p>	<ul style="list-style-type: none"><li>provides details of what ethical issues have been considered that may affect data storage, transfer, use, sharing and/or preservation, and demonstrates that adequate measures are in place to manage ethical requirements.</li><li>mentions, if applicable, whether ethical review is being pursued. If ethical approval has been obtained, refers to the relevant committee and documents.</li><li>refers to relevant ethical guidelines and/or codes of conduct or alternatively provides a clear statement that explains why ethical issues have not been considered.</li></ul>	<ul style="list-style-type: none"><li>provides little or no details to demonstrate that ethical implications and codes of conduct have been considered, and does not explain why they did not need to be considered.</li></ul>

# Additional guidance to the Science Europe DMP assessment rubric



## Output

### 5. DATA SHARING AND LONG-TERM PRESERVATION

DMP Question	DMP Guidance	FAIRsFAIR Additional Guidance	Performance Level	
Guidance for Researchers			Sufficiently Addressed The DMP...	Insufficiently Addressed The DMP...
<b>5a.</b> How and when will data be shared? Are there possible restrictions to data sharing or embargo reasons?	<ul style="list-style-type: none"> <li>Explain how the data will be discoverable and shared (for example by deposit in a trustworthy data repository, indexed in a catalogue, use of a secure data service, direct handling of data requests, or use of another mechanism).</li> <li>Outline the plan for data preservation and give information on how long the data will be retained.</li> <li>Explain when the data will be made available. Indicate the expected timely release. Explain whether exclusive use of the data will be claimed and if so, why and for how long. Indicate whether data sharing will be postponed or restricted for example to publish, protect intellectual property, or seek patents.</li> <li>Indicate who will be able to use the data. If it is necessary to restrict access to certain communities or to apply a data sharing agreement, explain how and why. Explain what action will be taken to overcome or to minimise restrictions.</li> </ul>	<ul style="list-style-type: none"> <li>With respect to licensing: Clearly and explicitly license your data, no matter which access level the data has. Find a suitable license (either standard such as <a href="#">Creative Commons</a>, or bespoke) and find a repository that supports it on <a href="#">Re3data</a>. Preferably use a standard, machine-readable licence. Include the license information in the metadata.</li> <li>With respect to access: Consider and define the access levels of your data early on (public, restricted, embargo, closed, or a combination). Include this information in your metadata, including possible related conditions for reuse.</li> <li>With respect to discoverability and preservation planning: Deposit your data in a trustworthy data repository.</li> </ul> <p>For guidance on trustworthy repositories, see 6a.</p>	<ul style="list-style-type: none"> <li>clearly describes how the data and/or metadata will be made discoverable and shared.</li> <li>specifies when data will be shared and under which licence.</li> <li>includes the name of the repository, data catalogue, or registry where data will or could be shared.</li> <li>includes information on how long the data will be retained and gives precision on its timely release.</li> <li>clearly explains, if applicable, why data sharing is limited or not possible, and who can access the data under which conditions (for example, only members of certain communities or via a sharing agreement).</li> <li>explains, where possible, what actions will be taken to overcome or to minimise data sharing restrictions.</li> </ul>	<ul style="list-style-type: none"> <li>provides little or no details on how and when data will be shared, or the explanation is not adequate or technically viable.</li> </ul>
<b>5b.</b> How will data for preservation be selected, and where data will be preserved long-term (for example a data repository or archive)?	<ul style="list-style-type: none"> <li>Indicate what data must be retained or destroyed for contractual, legal, or regulatory purposes.</li> <li>Indicate how it will be decided what data to keep. Describe the data to be preserved long-term.</li> <li>Explain the foreseeable research uses (and/or users) for the data.</li> <li>Indicate where the data will be deposited. If no established repository is proposed, demonstrate in the data management plan that the data can be curated effectively beyond the lifetime of the grant. It is recommended to demonstrate that the repositories policies and procedures (including any metadata standards, and costs involved) have been checked.</li> </ul>	<ul style="list-style-type: none"> <li>With respect to data destruction: Figure out early on by conferring with research data management and ethics specialists if (parts of) your data need to be destroyed (e.g., after a certain amount of time). If this is the case, include general statements about data destruction in the consent forms you use during your study. Make sure that the repository you deposit your data in can handle such destruction and will continue to maintain your metadata afterwards.</li> </ul> <p>For guidance on trustworthy repositories, see 6a.</p>	<ul style="list-style-type: none"> <li>provides details of what data collected or created in the project will be preserved in the long term and clearly indicates for how long. This should be in alignment with funder, institutional, or national policies and/or legislation, or community standards.</li> <li>provides details of which (versions of) data and accompanying documentation will be retained or destroyed, and explains the rationale (for example contractual, legal requirements, or regulatory purposes).</li> <li>provides details of how the selection is made, and what possible interest there would be for re-use (or not).</li> <li>provides details on how the data, accompanying documentation, and any other required technology such as copies of software in specific versions will be archived in the long term.</li> <li>explains how data will be managed in a sustainable way beyond the lifetime of the grant.</li> <li>provides the name of the archive or trustworthy repository – or the way to curate and preserve data – that will be used to make data available for re-use.</li> </ul>	<ul style="list-style-type: none"> <li>provides no further information or lacks adequate explanation on what provisions would be made for data preservation.</li> </ul>

## Additional guidance to the Science Europe DMP assessment rubric



### Output

DMP Question	DMP Guidance	FAIRsFAIR Additional Guidance	Performance Level	
Guidance for Researchers			Sufficiently Addressed The DMP...	Insufficiently Addressed The DMP...
5c. What methods or software tools are needed to access and use data?	<ul style="list-style-type: none"><li>Indicate whether potential users need specific tools to access and (re-)use the data. Consider the sustainability of software needed for accessing the data.</li><li>Indicate whether data will be shared via a repository requests handled directly, or whether another mechanism will be used?</li></ul>	<ul style="list-style-type: none"><li>Include the tools and/or code needed to reuse your data in the metadata of your dataset, as well as meaningful and explicit links to other kinds of research output (e.g., previous versions, other relevant datasets, related publications, data sources, data creators, data collectors, funding organizations, host institutions) to increase potential for reuse.</li></ul> <p>For guidance on access, see 5a.</p>	<ul style="list-style-type: none"><li>clearly indicates which specific tools or software (for example specific scripts, codes, or algorithms developed during the project, version of the software) potential users may need to access, interpret, and (re-)use the data.</li><li>provides information, if relevant, on any protocol to access the data (for example if authentication is needed or if there is a data access request procedure).</li></ul>	<ul style="list-style-type: none"><li>provides little or no details on which software developed during the project will be necessary to access and interpret the data, how it will be made available, or why that may not be possible.</li></ul>
5d. How will the application of a unique and persistent identifier (such as a Digital Object Identifier (DOI)) to each data set be ensured?	<ul style="list-style-type: none"><li>Explain how the data might be re-used in other contexts. Persistent identifiers (PIDs) should be applied so that data can be reliably and efficiently located and referred to. Persistent identifiers also help to track citations and re-use.</li><li>Indicate whether a persistent identifier for the data will be pursued. Typically, a trustworthy, long-term repository will provide a persistent identifier.</li></ul>	<ul style="list-style-type: none"><li>Choose a data repository to deposit your data in that assigns your desired persistent identifiers (e.g., a DOI, Handle, or ARK for the data, or an ORCID for the researchers). Use <a href="#">Re3data</a> or <a href="#">FAIRsharing</a> to find a suitable repository.</li></ul>	<ul style="list-style-type: none"><li>specifies how the data can be re-used in other contexts.</li><li>clearly indicates if and which persistent identifiers (PIDs) are provided for all datasets, individual datasets, data collections, or subsets. If PIDs will not be used, it explains why.</li><li>clearly presents the approach, and the choice of identifiers is justified and refers to international standards.</li></ul>	<ul style="list-style-type: none"><li>makes no mention of PIDs nor provides a valid reason for not providing them.</li><li>provides no clear information on what type of PID will be assigned to the data and whether individual datasets and/or collections or datasets will be issued with PIDs.</li></ul>

# Additional guidance to the Science Europe DMP assessment rubric



## Output

### 6. DATA MANAGEMENT RESPONSIBILITIES AND RESOURCES

DMP Question	DMP Guidance	FAIRsFAIR Additional Guidance	Performance Level	
Guidance for Researchers			Sufficiently Addressed The DMP...	Insufficiently Addressed The DMP...
<b>6a.</b> Who (for example role, position, and institution) will be responsible for data management (i.e. the data steward)?	<ul style="list-style-type: none"> <li>Outline the roles and responsibilities for data management/stewardship activities for example data capture, metadata production, data quality, storage and backup, data archiving, and data sharing. Name responsible individual(s) where possible.</li> <li>For collaborative projects, explain the co-ordination of data management responsibilities across partners</li> <li>Indicate who is responsible for implementing the DMP, and for ensuring it is reviewed and, if necessary, revised.</li> <li>Consider regular updates of the DMP.</li> </ul>	<ul style="list-style-type: none"> <li>Determine the role of the data repository in your data management and stewardship. Choose an adequate repository to archive or share your data in that can meet or surpass your desires. Trustworthy Digital Repositories (TDRs) are repositories that provide support and take responsibility for data curation and digital preservation. TDRs can be officially certified (e.g., by the <a href="#">CoreTrustSeal</a>, <a href="#">DIN31644/NESTOR</a>, or <a href="#">ISO163638</a> standard). Use <a href="#">Re3data</a> to find certified TDRs to deposit your data in.</li> </ul>	<ul style="list-style-type: none"> <li>clearly outlines the roles and responsibilities for data management/stewardship (for example data capture, metadata production, data quality, storage and backup, data archiving, and data sharing), naming responsible individual(s) where possible.</li> <li>clearly indicates who is responsible for day-to-day implementation and adjustments to the DMP.</li> <li>explains, for collaborative projects, the co-ordination of data management responsibilities across partners.</li> </ul>	<ul style="list-style-type: none"> <li>does not discuss responsibility for data management/stewardship activities and/or does not indicate who is responsible for day-to-day implementation and adjustments to the DMP.</li> <li>provides no description, in case of a collaborative project, on how data management responsibilities will be co-ordinated across partners.</li> </ul>
<b>6b.</b> What resources (for example financial and time) will be dedicated to data management and ensuring that data will be FAIR (Findable, Accessible, Interoperable, Re-usable)?	<ul style="list-style-type: none"> <li>Explain how the necessary resources (for example time) to prepare the data for sharing/preservation (data curation) have been costed in.</li> <li>Carefully consider and justify any resources needed to deliver the data. These may include storage costs, hardware, staff time, costs of preparing data for deposit, and repository charges.</li> <li>Indicate whether additional resources will be needed to prepare data for deposit or to meet any charges from data repositories. If yes, explain how much is needed and how such costs will be covered.</li> </ul>	<ul style="list-style-type: none"> <li>Determine any costs that your chosen repository charges for depositing the data.repository. Data repositories, especially TDRs will perform (some) data curation and digital preservation. This is an active and ongoing process of data management to ensure discovery, reuse, and long-term FAIR durability. Contact the repository of your choice to learn about these costs and make them explicit in your DMP.</li> </ul>	<ul style="list-style-type: none"> <li>provides clear estimates of the resources and costs (for example storage costs, hardware, staff time, costs of preparing data for deposit, and repository charges) that will be dedicated to data management and ensuring that data will be FAIR and describes how these costs will be covered. Alternatively, there is a statement that no additional resources are needed.</li> </ul>	<ul style="list-style-type: none"> <li>provides no answer or is vague about the resources required for data management and ensuring that data will be FAIR (for example resources are not listed or costed inappropriately), and/or does not describe how the costs will be covered.</li> </ul>

## ■ FAIRsFAIR - Fostering FAIR Data Practices in Europe

---

European Commission Grant Agreement No. 831558  
H2020-INFRAEOSC-2018-4  
[www.fairsfair.eu](http://www.fairsfair.eu) - [support@fairsfair.eu](mailto:support@fairsfair.eu)

## ■ Acknowledgements

---

This report has been produced by the FAIRsFAIR (GA No. 831558) project, which received funding from the European Union's Horizon Programme call H2020-INFRAEOSC-05-2018-2019.

## ■ Disclaimer

---

The content of this document does not represent the opinion of the European Commission, and the European Commission is not responsible for any use that might be made of such content. **February 2022**

## ■ Copyright rests with the authors

---



This work is released under a Creative Commons Attribution License, version 4.0.  
For details please see <https://creativecommons.org/licenses/by/4.0/>

**JOIN OUR COMMUNITY!**

 @FAIRsFAIR\_eu

 /company/fairsfair

[www.fairsfair.eu](http://www.fairsfair.eu)



FAIRsFAIR "Fostering FAIR Data Practices In Europe" has received funding from the European Union's Horizon 2020 project call H2020-INFRAEOSC-2018-2020 Grant agreement 831558. The content of this document does not represent the opinion of the European Union, and the European Union is not responsible for any use that might be made of such content.