🡨 Expand for Explanatory Notes

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| Notes on data management section |
| Responsible data management is part of good research. To promote effective and efficient data management, data sharing and data reuse, NWO expects researchers to carefully manage data resulting from NWO-funded research and prospectively plan for which data will be preserved and shared.  With the data management section, NWO mainly wants to raise awareness about the importance of responsible data management. The section is therefore not included in a committee's decision about whether or not a proposal should be awarded funding. NWO does, however, submit this section to the committee and referees for advice.  **It is recommended that you seek advice from a data steward or research support office at your home institution** **to complete this section.** They will be able to recommend suitable storage facilities and repositories for your data, and to advise on data management costs.  After a proposal has been awarded funding, grantees are required to elaborate the data management section into a detailed data management plan explaining how research data and other results emerging from the NWO-funded research will be stored and made findable, accessible, interoperable and reusable (FAIR).  **What does NWO understand as research data?**  Research data are the evidence that underpin the answer to research questions, and can be used to validate findings. Data can be quantitative information or qualitative statements collected by researchers in the course of their work by experimentation, observation, modelling, interview or other methods, or information derived from existing evidence.  For the purpose of NWO’s data management policy, the definition of research data does not include physical objects such as scientific and archaeological collections, physical arts works or biobanks; however, digital information extracted from such objects are to be regarded as research data.  Software is also not included in the definition of research data. NWO recognizes that software (algorithms, scripts and code developed by researchers in the course of their work) may be necessary to access and interpret data. In such cases, the data management plan will be expected to address how information about such items will be made available.  **What data does NWO expects you share and preserve?**  Research results should be stored in such a way that they can be retrieved and reused in the long term, also by researchers in disciplines and organisations other than those in which the research took place. The operating principle is that all stored data are, in principle, freely accessible and that access is only limited if needed for reasons such as privacy, public security, ethical restrictions, property rights and commercial interests.  NWO expects researchers to preserve the data resulting from their projects for at least ten years, unless legal provisions or discipline-specific guidelines dictate otherwise. As much as possible, research data should be made publicly available for reuse, unless there are valid reasons not to do so. As a minimum, NWO requires that the data underpinning research papers should be made available at the time of the article’s publication. Any tools or software (algorithms, scripts and code developed by researchers in the course of their work) necessary to access and interpret data should be made available alongside the data.  **The costs of data management are eligible for funding and should be included in the project budget.**  Important factors that determine the costs are:   * the type of data; * the capacity needed for storage and backup; * the amount of work needed to allocate metadata and the compilation of other documentation such as codebooks and the queries used in the statistical package; * the extent to which the data needs to be protected; * the hiring in of external data management expertise or other expertise. |

Questions Data management section

1. **Will this project involve re-using existing research data?** (Or: will data be collected or generated that are suitable for reuse? – see question 2 below for answers)

Yes: Are there any constraints on its re-use?

No: Have you considered re-using existing data but discarded the possibility? Why?

If no, please briefly explain why; if yes, state any constraints on re-use of existing data if there are any.

*Please explain briefly if you will be re-using any datasets from third party sources or why you choose not to reuse data (for example, the data needed to address your projects research questions is currently not yet available).*

1. **Will data be collected or generated that are suitable for reuse?** (Or: Where will the data be stored during the research?)

Yes: Please answer questions 3 and 4.

No: Please explain why the research will not result in reusable data or in data that cannot be stored or data that for other reasons are not relevant for reuse.

Note that explaining that your datasets will be useful for re-use by the community, will make your proposal look more impactful. In addition, consider mentioning any models, code or software which will be created, generated or used to process the data.

During the course of the research project, all data will be stored on TU Delft maintained storage solutions, such as network drives (Project Drive) or SURFdrive. The data will be automatically backed up.

1. **After the project has been completed, how will the data be stored for the long-term and made available for the use by third parties? Are there possible restrictions to data sharing or embargo reasons? Please state these here.**

All datasets will be published at [4TU.ResearchData](http://researchdata.4tu.nl/en/home/), which is a trusted and certified research data repository (Data Seal of Approval certification). All datasets will be accompanied by metadata, compliant with DataCite/schema.org and Dublin Core metadata schema, to ensure that all datasets are findable and accessible online. All datasets will be publicly available to anyone for re-use under an open licence. Every dataset will be also assigned a Digital Object Identifier (DOI), to make them citable and persistently available. 4TU.ResearchData preserves and maintains the data for at least 15 years.

**4. Will any costs (financial and time) related to data management and sharing/preservation be incurred?**

Yes: Then please be sure to specify the associated expenses in the budget table of this proposal.

No: All the necessary resources (financial and time) to store and prepare data for sharing/preservation are or will be available at no extra cost.

*If No:* Data management activities in the project will be carried out by the project members and no additional personnel costs are expected. All the facilities discussed above are readily available to use, for example: 1TB of data can be archived free of charge (per year, per TU Delft author) on 4TU.ResearchData.