

RDM Checklist PhD agreement (3 months)

This checklist intends to be a guide and/or a reminder of research data and software management topics that you could choose to include in your discussions of the 'PhD agreement' meeting. The list also provides relevant links that you can make available to the PhD candidate for their guidance.

- Make sure to discuss research data and software when formulating the research design/description, for example:
 - Is there data available for reuse to get started with the research or for drafting the research plan.
 - Take into consideration the candidate's interests in quantitative and/or qualitative data when discussing research design. This might influence the training requirements depending on their previous expertise.
 - Already think and discuss together about potential data-related challenges when formulating the research topic/plan.
- Make sure to discuss expectations about publication of research data, software/code and other relevant research outputs (design sketches, protocols, hardware documentation, etc.) when defining expectations about article publications.
 - Remember that [TU Delft Research Data Framework Policy](#) requires **all PhD candidates who started on or after 1 January 2019 to deposit research data (and code) supporting their theses in a research data repository before they can graduate** (unless there is a valid reason why this is not possible).
 - In principle, for most research done at TU Delft, it is suitable to make the data and software/code underpinning research findings available in a data repository. Typically, this is done no later than when publishing the related papers, theses or reports.
 - Valid reasons for not publishing research data and software/code could be: working with confidential data and/or software, working/collecting personal data that cannot be anonymized or pseudonymized, working/collecting data or developing software that can be severely misused or falls under special regulations, for example, export control.

Doctoral Education planning:

- Encourage the PhD candidates to explore the relevant Research Data and Software training opportunities offered at TU Delft. In [this website](#) you find an overview.

- [SURF](#) and the [NL eScience center](#) also offer training on data, software and digital skills provided for researchers in The Netherlands. PhD candidates normally can request an attendance certificate and consult with the Faculty Graduate School if it can be admitted in the Doctoral Education programme as external training with the approval of the supervisor.
- Faculty Data Stewards organise training/information sessions at the faculty as well. PhD candidates are always encouraged to contact [Faculty Data Stewards](#) to ask about training opportunities at a faculty level.

Agreements on supervision with supervisory team

- Make sure that it is clear who will guide the PhD candidate on research data and software practices.
- Make sure that the topic of research data and software management is part of your or other supervisors regular meetings with the PhD candidate.

Data Management Plan

- Introduce the PhD candidate to the requirements of preparing a Data Management Plan (DMP). PhD candidates must submit a DMP as part of their Go/No Go meeting, in accordance with the [TU Delft Research Data Framework Policy](#).
- If you have a filled-out project DMP related to the PhD project of the candidate that they can build upon, share it with them.
- Recommend the PhD candidate to use the [DMPOnline](#) tool (accessible with institutional credentials) to prepare the DMP, and the TU Delft DMP template as it is more comprehensive and better integrated into our internal services.
- **For supervisors at the Faculty of Industrial Design Engineering (IDE).** You might find [these templates](#), designed by your Faculty Data Steward, more appropriate for the PhD candidates you supervise.
- Encourage the PhD candidate to ask for the [Faculty Data Steward](#) assistance to draft the DMP or by requesting their feedback using the "Request Feedback" button on [DMPOnline](#) once the DMP is drafted.
- The data stewards are experts in research data management and can help a lot, but there are questions and topics in the DMP that need your attention and where you can help the PhD candidate a head start:
 - Inform them about any best practices already established in your research group regarding research data or software storage, documentation, and/or publication.
 - Inform them about any agreements with regards to IP rights, contractual obligations regarding data reuse/sharing drafted in a consortium agreement, collaboration with industry/commercial partners or project proposal where their project is part of.

- If the reuse is contemplated of research data or software from publicly available sources, articles, books, work together with the PhD candidate to figure out any copyright issue as early as possible. TU Delft Library provides a tool that can help: <https://www.tudelft.nl/library/copyright>.
- Discuss with the PhD candidate if there are any foreseen costs associated with research data or software management (e.g. (cloud)storage, HPC, software licences, etc.). You can find [more information here](#).
- If the PhD candidate will collect/work with personal data and/or human subjects, make sure to share with them information about the '[TU Delft Personal Data workflow](#)'. You might also want to encourage them to follow the course [Personal Data & Human Subjects in Research](#).

Educational activities (i.e. teaching, supervising, assisting in courses, etc.)

- Encourage the PhD candidate to become an assistant (helper) in one of the Software Carpentry workshops organised at TU Delft to learn by helping others.
 - If the PhD candidate has skills in software programming and development can participate as an assistant in a Software Carpentry workshop and can earn up to 2 GS points as part of the learning-on-the-job activities (Teaching & Supervision). They need the agreement of their supervisors. [More information here](#).

Other arrangements (i.e. conference, visits, budget, etc.)

- Start discussions about any foreseen costs associated with research data or software management (e.g., (cloud) storage, HPC, software licences). You can find [more information here](#).
 - To be drafted in detail by the PhD candidate in the DMP to be submitted for the Go/no GO meeting, but you can give a head start to this discussion to facilitate the PhD candidate's task.