

# RDM Checklist Yearly progress meeting at 24/36 (48 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 'Yearly Progress' meeting. The list also provides relevant links that you can make available to the PhD candidate for their guidance.

## About evaluating the progress:

- Make sure you review the evolution of data management and software development practices throughout the year, acknowledging both successes and areas needing improvement
- If the PhD candidate has developed individual methodologies/practices/skills for research data and software management, great! You can just guide them on how to integrate these effectively with standard practices, enhancing their professional growth and the integrity of the research
- At 24 months - Check progress on data collection and aim at not extending that process for much longer. Especially when working with personal data, consider that the collection of any new dataset needs to follow the ['TU Delft Personal Data workflow'](#) and this process might be time consuming and affect the culmination of the PhD trajectory in time.
- Depending on your agreements during the Go/no Go meeting, check on the status of publication of data and software/code (or other relevant research output) together with research articles.

## Planning for the upcoming years:

- Encourage PhD candidates to share their research data and software management practices/workflows in group/team meetings, so they can improve their practices and learn from each other
- Discuss and strategize for the preservation and long-term accessibility of research data, software/code and/or other relevant research outputs (design sketches, protocols, hardware documentation, etc.) to ensure that all outputs are published in time and/or archived correctly in a way that they can be utilised in future research:
  - On this guide you find a summary of an information session '[Publishing requirements for data and code for TU Delft PhD candidates](#)' run by the Faculty Data Stewards together with the Graduate School where publication, but also internal archiving of research data and software/code is discussed.

## About Doctoral Education program, skills and support:

- Make sure that the PhD candidate has explored all the relevant Research Data and Software training opportunities offered at TU Delft or outside. [In this website](#) you find an overview.
- Suggest other research data and software support opportunities available at TU Delft for researchers besides training:
  - [Faculty Data Stewards](#): First contact point for any research data management questions at the faculties.
  - [TU Delft Digital Competence Center \(DCC\) calls](#): 2-3 times per year call for hands-on support for projects with software development and/or data management components for a period of 3-12 months.
  - [TU Delft Code & Data Office Hours](#): Book a Data Manager or Research Software Engineer from the TU Delft DCC for 40-minute consultations to get advice on solving your code and data issues.
  - Communities of learning: TU Delft communities of practices, which through mentoring and gatherings provide relevant digital skills and open science skills to make research more reproducible and reusable:
    - [R café](#)
    - [Open Hardware Academy](#)
- [FAIR data funds](#): 4TU.ResearchData offers researchers an opportunity to apply for financial aid to cover the costs of making their datasets FAIR.

## About the Data Management Plan:

- Make sure to revise the Data Management Plan to keep it current with the project's needs and compliance requirements. Having an updated DMP can help you a lot as a supervisor at the end of the PhD trajectory:
  - as an inventory of the datasets that should be made (or not) publicly available to comply with the requirements of the [TU Delft Research Data Framework Policy](#).
  - as documentation of the organisation, storage location, documentation of the research data and software of the PhD project in case a new PhD candidate will continue the research.
  - as documentation that the [TU Delft Personal Data workflow](#) has properly been followed during the project involving the collection and usage of personal data or work with human subject in case of auditing.

- Make sure to discuss the questions of the DMP about research data and software/code publication. There might be questions that require some discussions between you and the PhD candidate, for example:
  - What data will be publicly shared?
    - 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).
    - If there are reasons for not making research data software/code openly available, for example, personal data, confidentiality agreements, IPR, etc; make sure that the PhD candidate is well informed about those exceptions
  - How will you share your research data (and code)?
    - It is advised to choose a trusted data repository with clear terms and conditions such as [4TU.ResearchData](#), [Zenodo](#), [DANS](#), [Figshare](#).
    - When choosing a repository, it is also important to take publishing costs into account. For instance, TU Delft researchers (including Ph candidates) can deposit up to 1TB of data and/or code free of charge per year to 4TU.ResearchData.
    - On this guide you find a summary of an information session '[Publishing requirements for data and code](#)' which includes information about 'How to choose a data repository'
    - If you are unsure about the choice of repository, you can contact your Faculty Data Steward for advice
  - Under what licence will be the data/code released?
    - [Creative common licences](#) are the standard open licences used for research data.
    - For Software there are many more licences options. The website '[Choose a License](#)' offers a great overview of them
    - Here you find the [standard open licences offered by 4TU.ResearchData](#) for research data and software
    - **Please be aware that when publishing research software (code)**, researchers, including PhD candidates, have to comply with the requirements of the [TU Delft Research Software Policy](#) where copyright and licensing are part of:
      - Make sure you are allowed to make the software/code openly available answering the questions of the decision tree you find in the Chapter 4 of the '[Guidelines on Research Software Licensing, Registration and Commercialisation at TU Delft](#)'

- Take notice that TU Delft is transferring the copyright to the authors/developers that are employed by TU Delft.
- Apply one of the TU Delft pre-approved Open Source Software licences (you can choose others upon discussion with the TU Delft Innovation and Impact Center)
- Make the software openly available
- Register the software by publishing it on [4TU.ResearchData](#) or by registering the DOI in [TU Delft PURE](#).
- Your first point of contact for questions about licensing is your [Faculty Data Steward\(s\)](#).