

Checklist for Data Management Plan



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Introduction to the SND Checklist for Data Management Plans

Data management

Data management signifies how to handle, organize, and structure research data and documentation throughout the research process. In order to make it easier to manage large amounts of research data, and to avoid time-consuming work after the data collection process, it is important to have a structured plan for how to manage the data during and after the research project.

Data management plan, DMP

One way to make data management easier is to create a data management plan, or DMP, early in the research process. A DMP is a formal document that provides a framework for how to handle the data material during and after the research project. What a DMP contains depends on the research discipline, type of data material, and phase of the research process. How you manage a data material develops over time in a project as changes are made or new situations occur. This means that a DMP needs to be *a living document* to remain relevant. We recommend that you start working on a DMP as early as possible in the process, before the data collection begins, but you can of course also create a DMP for a project that is already under way. It's never too late.

Why create a data management plan?

By making early decisions about various aspects of data management, researchers can ensure that the material is well-managed during the research. To create a DMP is one way that a researcher can gain control over how to manage data during the research process, and to make sure that there are adequate resources to manage the data well, e.g. by budgeting for data management during and after the project. As a support in designing a DMP, this document presents the SND checklist in some detail. After this introduction, you will find the actual checklist, where you can check the fields that are relevant to you and fill them out during the project. There are help texts that describe each field.

Data management plan to research funders

Internationally, many research funders require that grants applications contain a data management plan. This is also getting more common in Sweden, where e.g. the Swedish Research Council and Formas require a DMP for projects that are granted funding. This may also become mandatory from other Swedish research funders. What the requested DMP should contain varies between funding organizations and can subsequently differ from the SND DMP checklist. However, you can still use this checklist as support when you write the data management plan, or data publication plan, that you're required to write for a certain funder.

FAIR

The FAIR data principles – *Findable, Accessible, Interoperable, and Reusable*¹ – are increasingly common in the research community. The main purpose of FAIR is to make research data possible to find, understand, and use for those who may benefit from the material. In order to make data and/or metadata FAIR, you need to put in a bit of work when you prepare them, but also to continue to work with the data/metadata until you make them accessible. This will be easier if you write a DMP and follow it, as that type of systematic approach makes it more likely that data will become FAIR. Bear in mind that a data material can be more or less FAIR, meaning that you can achieve different degrees of “FAIRness”. You should strive to make the data material as FAIR as possible, e.g. by having plenty of documentation and metadata that a search system can use to help secondary users² find the material.

Writing a data management plan

Start by reading through the checklist to get an overview of what it contains. Identify which parts of it that are relevant to your research project, and then start writing your project's DMP by entering the information you already know. As the project progresses, you can add to, expand, and revise the DMP accordingly. Parts of the DMP that don't seem relevant or necessary to include at the beginning of a project may be needed later, so remember to revisit the checklist

¹ <https://www.go-fair.org/fair-principles/>

² Secondary user is a common term from data archives/data repositories. In this case, a secondary user is someone who uses digital data from a previous/another research project, or digital data produced by e.g. a public authority and which may be used for research.

several times during the project. You can use the SND checklist as a template for the project's data management plan or as support when you outline your own DMP structure.

The SND checklist and other checklists/templates

We have based this DMP checklist on several international resources, such as templates, online tools, and recommendations from other research infrastructures, universities, and research funders. The checklist is updated regularly, and now complies with the recommendations from Horizon 2020 and Science Europe, which the Association of Swedish Higher Education Institutions (SUHF) and the Swedish Research Council also follow. The SND checklist may differ from the recommendations in, for instance, design and terminology, but contains the same information.

Checklist for data management plans

Version and date

[At some points during the research project, you may be required to send a copy of the DMP to funders or parties outside of the research group. It is advisable to add a date and, with each update, a version number to the DMP, as well as to make a note of to whom you have sent which version and why. Make sure to save a copy of each DMP that you send.]

1. Overview

Project name

[The name of the existing or planned research project.]

		Checklist
1.1 Project description	<p>[A brief description of the project. For example, the purpose of the project and what research questions will be addressed.]</p> <p><i>Why is this important?</i> If you collect all information about a project in a single document, old and new project members can more easily find the information they need, instead of having to search for the information or try to find out who may have it.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
1.2 Primary investigator/researcher (person, institution, or organization)	<p>[The person, institution, or organization responsible for the material and the intellectual content of the project. Enter a researcher ID if possible, e.g. ORCID (http://orcid.org).]</p> <p><i>Why is this important?</i> It's important to know who is behind a project, and responsible for its material and intellectual content. This also means that data that are made accessible can be cited correctly.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
1.3 Contributing researcher(s) and/or organization(s) and their roles	<p>[Other organizations and/or person(s) who are or will be involved in the project. Describe how responsibilities are assigned in the research group (e.g. between the project leader, research staff, and technical staff), and who is responsible for what (who creates and updates the DMP, who is the project's representative, etc.).]</p> <p><i>Why is this important?</i> If the data will be made accessible after the project, it's important to know who has contributed to the project. If you assign and document roles and responsibilities it is clearer what is expected from each person, easier to follow up work done during the process, and for new co-workers to learn who does what, etc.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>

1.4 Research principal	<p>[Who or what organization that is responsible for the research, and for making sure that an application for ethical approval is/has been made.]</p> <p><i>Why is this important?</i> A research principal is the physical or legal person in whose organization the research is carried out, e.g. a university, city council, regional council, government agency, or private corporation. The research principal has the ultimate responsibility for the research and applies for ethical approval from the Swedish Ethical Review Agency. If a research project has several research principals, one of them is responsible for applying for ethical approval.</p> <p>Definition of Research principal according to the Swedish Ethical Review Agency, in Swedish only.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
1.5 Responsible department/unit	<p>[The organization with administrative responsibility for the project, e.g. a department at a university.]</p> <p><i>Why is this important?</i> This is administrative information that may be of interest for a funder or data repository. This information makes it possible to trace a project to someone responsible within an organization.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
1.6 Funding	<p>[Information about the research funding, e.g. funder(s), project title on the funding application, and the funder's reference number for the application.]</p> <p><i>Why is this important?</i> If the DMP contains information about project funding, it's easier to find the information when needed. Enter information about submitted applications and funding that's been received in the DMP or add references to the documents and where to find them.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
1.7 Guidelines	<p>[Information about relevant guidelines from funders or the principal HEI, preferably with references to where those documents can be found, as well as the document version used. Make sure that the documents can be accessed even after the project ends. If information later in the DMP relates to these guidelines, make a reference to this paragraph.]</p> <p><i>Why is this important?</i> Many HEIs/research organizations have local rules and guidelines that are important to be aware of. Some examples are IT security policies, guidelines for information classification, or a handbook for research documentation. By complying with these guidelines, you get some assistance in e.g. how to adapt the technical, physical, and administrative environments so that the</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>

research material is securely handled. One way to make sure that these documents can be accessed even after the project has ended is to save them in the project's document folder.

2. Protect the research data

2.1 Ethical review

[Does the project need [ethical approval](#) or has it been approved? Enter the reference number here.]

Why is this important?

Research that falls under the scope of the Act (2003:460) concerning the Ethical Review of Research Involving Humans (the Ethical Review Act, updated 2020-01-01) can only be carried out after ethical approval, which is applied for by the research principal. Without ethical approval, the research is illegal and subject to legal consequences. Ethical approval is also needed for research that involves animal testing.

Relevant to the project?

- Yes
 No
 Don't know

2.2 Information security and classification

[Refer to the information security guidelines and policies in your university/organization and define what implications they have. What information classification level does the data material have and what security measures are needed to protect the material? Who should have access to the project data during the project and how do you plan to protect the data from unauthorised access?]

Why is this important?

Access to the data material must be restricted so that authorised people can access it, but it is protected from unauthorised access. Secure work and storage environments can include access restriction (e.g. passwords), encryption, and virus and access protection. You may need to contact your organization's IT security office to make sure that you have addressed all questions regarding information security before the data collection begins.

Relevant to the project?

- Yes
 No
 Don't know

2.3 Confidential information

[Does the material contain confidential information (e.g. personal data and data with security classification) that requires special treatment and/or limits the access to the material during/after the project?]

Why is this important?

If the material contains confidential information, you must guarantee that it's protected from unauthorised access. Contact your organization's IT security office to make sure that data are handled correctly for their information classification level (see the paragraph above).

Relevant to the project?

- Yes
 No
 Don't know

<p>2.4 Information about personal data processing</p>	<p>[If the research project will include processing of personal data, the research subjects need to receive thorough and transparent information about the data processing. The legal basis for processing personal data for research purposes is, for the most part, public interest. This means that the researcher can process personal data, but that a data controller is required to supply thorough information about how the data are processed.]</p> <p><i>Why is this important?</i> The General Data Protection Regulation (GDPR) regulates on which legal grounds personal data can be lawfully processed. One requirement is that the research subjects receive thorough information about which personal data will be processed and how they will be processed in the project. This means that the research subjects are informed about for what purpose and on what legal grounds the processing will be made. By giving the research subjects information about the personal data processing, they gain insight into and control over what information about them is processed.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
<p>2.5 Protection of participant identity</p>	<p>[How will the research subjects' identities be protected?]</p> <p><i>Why is this important?</i> Protecting the personal integrity of research subjects (see the General Data Protection Regulation, GDPR) is a fundamental principle in research and an important ethical responsibility to the participants in a research project. During the project, data that contain personal information need to be securely stored, in compliance with the guidelines at your university/organization.</p> <p>Research material may also contain special category personal data that need to be classified to protect the integrity of research subjects. Therefore, it's important to have routines for how to handle requests to access personal data in accordance with the principle of public access to information. When the project is finished and the data material shall be made accessible, it's also important to guarantee that the individuals in the study cannot be re-identified (i.e. identified through indirect identifiers in the data material). This can be done by de-identification measures or pseudonymisation of the data, such as coding or encryption.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
<p>2.6 Data protection officer</p>	<p>[Has the personal data processing been reported to the data protection officer, in compliance with the research principal's policies?]</p> <p><i>Why is this important?</i> Research material that will contain personal data has to be reported to the data protection officer. The research principal is</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>

legally obligated ([GDPR, Article 30](#)) to keep a record of all projects where personal data are processed.

2.7 Intellectual property rights/copyright	<p>[Are there any copyright and/or intellectual property rights to consider? Do you need permission to collect the material that is going to be used?]</p> <p><i>Why is this important?</i> Copyright is protected in the Swedish constitution (Chapter 2, Article 19) and regulated in the Act (SFS 1960:729) on Copyright in Literary and Artistic Works. Copyright sets out a number of rights for the creator (author) of a work, and a number of limitations for the user. The Swedish Copyright Act regulates when and how the author's work can be used. Permission to use copyright-protected material includes consent, agreements, licenses, and the permission to use material after the duration of copyright has passed (>70 years).</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
2.8 Agreements with other parties	<p>[Do you need to sign agreements with other parties?]</p> <p><i>Why is this important?</i> In some cases, you may need to sign agreements with other parties, e.g. if you are going to use data from another organization than your university. If you enter into any agreements, please enter information about with which parties and where the agreements are stored. By documenting all agreements and what they mean, you can show funders and project members the conditions in your research project.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
2.9 Limitations to access	<p>[Will there be any limitations to access other than those mentioned? Will there be any other rules for access?]</p> <p><i>Why is this important?</i> Data producers, or the organizations where the research is carried out, may have policies that limit access to the data during and after the project. It's important to be aware of these limitations and if any measures need to be taken to comply with them.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
2.10 Embargo	<p>[Are there any embargos on the material, or parts of it?]</p> <p><i>Why is this important?</i> If a data material, or parts of it, is subject to an embargo (a period during which data cannot be made accessible), you need to make sure that the embargo isn't violated during that time. If you enter the embargo duration and reason for the embargo in the DMP, that information is accessible for all who work with the data material. An embargo can be temporary, e.g. while you wait for the outcome of a patent application, during which the material is confidential.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>

3. Collect or produce the research data

3.1 Type of data	<p>[Describe which type(s) of data that will be used in the project, and whether they will be generated, collected, or reused data. Also describe the scope, quantity and, if possible, the file format of the material.]</p> <p><i>Why is this important?</i> Information about the data material makes it easier to plan for necessary hardware and software, and for possible staff needed to collect and process the material. Different types of data, such as numerical data (databases, spreadsheets), text, audio, image, video, geospatial, software, 3D data, etc., require different resources for handling and storing the data.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
3.2 Existing data	<p>[Give a brief description of existing data in the field, i.e. data collected in previous research (including data from other researchers and research groups). If there are existing data, can they be reused in the project? How will you document the origin of existing data? If you cannot use existing data, enter the reason why.]</p> <p><i>Why is this important?</i> You should include an overview of existing data in the DMP, as there could already be material that can be used to answer the research questions, or some of them, but also to make sure that you don't duplicate a data collection. For a research funder, it may be relevant to know whether it's possible to use existing data material. If there aren't any existing data, it's vital to explain the value of collecting a new data material. If you will be using both existing and new data, describe how you will combine them.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
3.3 Data collection	<p>[If you are going to collect new data, how will they be collected (questionnaires, interviews, observations, measurements, recordings, etc.), where, and during what period? Who will be responsible for the data collection? What resources will be needed during the collection process, in terms of staff, instruments, and software?]</p> <p><i>Why is this important?</i> Data collection is a central, and often resource-heavy, part of the research process. By planning for how to collect the data, when they will be collected, and the scope of the data collection, you can assess and budget for various resources. If you pay consideration to this in good time, a reviewer can more easily understand what type of data that will be collected.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>

4. Document the research data

4.1 Documentation	<p>[What type of documentation will be produced during the research project, and how will the information be structured? (E.g. in logbooks, variable lists, analysis plans, and protocols.)]</p> <p><i>Why is this important?</i> A research project produces large amounts of documentation, such as descriptions of the methods used, decisions, activities during the data collection, and detailed descriptions of the data. A systematic documentation of the data material creates conditions where data can more easily be published, found, understood, cited, and reused.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
4.2 Metadata	<p>[What metadata are needed to make sure that both the research group and future users can understand the data material, reproduce the results, or reuse the data in future analyses? Will the metadata be machine-readable?]</p> <p><i>Why is this important?</i> Structured information with the purpose to define, explain, describe, and localise data are called metadata. Metadata also make information machine-readable, so that it possible to search for and identify it. The metadata documentation should be as thorough as possible and contain all the information that may be needed to understand the data material. You should also consider how metadata are created and/or collected (laboratory notes, handheld GPS trackers, auto-saved files in various tools etc.).</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
4.3 Terminology, ontologies, standards, controlled vocabularies etc.	<p>[Will the project use any established terminologies, ontologies, standards, or similar, to describe and document the material? Which ones? If you create your own terminology, will it be mapped against established terminologies?]</p> <p><i>Why is this important?</i> Many scientific disciplines have established terminologies, ontologies, and vocabularies (e.g. MeSH, ISCED, AAT, and ELSST) that can be used to categorize and document data materials. There are various standards that are recommended to follow (e.g. ISO 8601 for date, time, and time intervals). The use of standards and established terminologies simplifies the communication between people who belong to the same scientific field but can also make it easier to find material in, for example, journals. Sometimes, it may be necessary to create project-specific terminology lists if the existing ones aren't sufficient or suited for the project. If you create a project-specific</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>

list, you should do a mapping, where you show which terms that mean exactly or almost the same thing as in other lists, but also which terms that are unique for your list. Mapping terms against other terminologies will improve the findability of the data material.

5. Organize the research data

5.1 Folder structure	<p>[Enter guidelines for how you will structure the project's folders and refer to a map of the folder structure.]</p> <p><i>Why is this important?</i> A carefully considered folder structure with intuitive folder names is essential for a well-organised research material. This makes it easier for the project group members to find files, which will save time.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
5.2 File naming convention	<p>[How will you give files names in a systematic and consistent way, so that it's easier to find what you need? Enter guidelines that make it intuitive to tell files apart.]</p> <p><i>Why is this important?</i> As the number of files increases rapidly, it's good to think about and decide on a system for file names, which can then be followed throughout the project. A file naming convention makes it easier to tell which files have been used for what, and what they contain. If there are several people working on a project, it's important to be clear right from the start, so that created files are given names in a systematic and intuitive way.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
5.3 File formats	<p>[What file format(s) will be used in the project? If possible, choose formats that are recommended for long-term preservation. Recommended formats are commonly used, well-documented, non-proprietary, and have an open technical specification.]</p> <p><i>Why is this important?</i> If you choose a file format that is non-proprietary and platform-independent right from the start, chances are that you can avoid later problems with format conversion. It isn't always possible to choose a format that meets these criteria, as specific instruments, analysis tools, or developed software can affect the choice of data formats. However, bear in mind that every time a file is converted from one format to another, you risk losing information in the process.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>

5.4 Versioning	<p>[What guidelines for file versioning will you have in the project? Who will be responsible for maintaining, updating, documenting, and versioning a “master file” according to the guidelines? How will you be able to tell different versions of a data file apart?]</p> <p><i>Why is this important?</i> Create guidelines for when and how to create new versions of data and documentation files at an early stage of the research process, to make sure that all project members follow the same principles. If the guidelines are clear from the beginning, you will have to spend less time trying to figure out which version of the data is the latest, which data that have been used for a certain analysis, etc.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
5.5 Storage and backup	<p>[Where and how will the data material be stored, and how do you make sure that it is securely stored? Will you do regular backups of the files? How will the data be recovered in the event of an incident?]</p> <p><i>Why is this important?</i> Losing a data material is something you want to avoid. Secure storage with regular backups of the data is essential. You may want to consult with the university's/organization's IT security office about storage and backups before you begin the data collection/project.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
<p>6. Budget for managing the research data</p>		
6.1 Staff	<p>[Estimate what resources you will need to collect and document the data material during the project. This includes the cost of staff to collect, process, manage, and document the data during the project, as well as to prepare the data and documentation for long-term preservation and possible dissemination, which will improve the FAIRness of the data.]</p> <p><i>Why is this important?</i> Handling and documenting data tends to require more resources than planned. By planning for and documenting staff costs for documentation and data management during the project, as well as for the work needed to archive and make the data accessible after the project, you are more likely to have sufficient resources.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>

6.2 Hardware and software	<p>[Possible costs for obtaining necessary hardware and software (e.g. systems for data collection and processing, but also for backups, security, and documentation software).]</p> <p><i>Why is this important?</i> With detailed and thorough budgeting and planning, you can procure adequate systems and software ahead of the project, or make sure that they're in the budget.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
6.3 Storage	<p>[Possible costs for storing the data material during the project.]</p> <p><i>Why is this important?</i> Data storage, for shorter and longer duration, can be costly, so it's important to budget for those costs as early as possible.</p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>

7. Preserve and make the research data accessible

7.1 Prepare data and documentation	<p>[Before you preserve the data material and make it accessible, you may want to prepare the material. What file formats are suitable for long-term preservation? What documentation should be included with the data material after the project has ended? Are there any ethical and legal restrictions on the material, which mean that the data need to be processed (e.g. de-identified) before they can be made accessible? Where do you plan to archive and/or make the data accessible? Contact them in good time for assistance in how to prepare the material.]</p> <p><i>Why is this important?</i> Digital file formats run the risk of becoming obsolete. If this should happen, future software may not be able to read and present the information in the files correctly, and valuable research data could be lost. Therefore, you should choose file formats that are more likely to remain usable in the future, i.e. formats that are commonly used, non-proprietary, and have an open technical specification. Another benefit of choosing those formats is that you won't have to convert the file formats at the end of the project. It isn't always possible to choose a format that meets all criteria, as specific instruments, analysis tools, or developed software can affect the choice of data formats. If that's the case, it's important to plan for how to guarantee that the data material can be preserved.</p> <p><i>When the project is finished and the data material shall be made accessible, it may, due to ethical and legal restrictions, be important to guarantee that the individuals in the study cannot</i></p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
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	<i>be re-identified (i.e. identified through indirect identifiers in the data material).</i>	
7.2 Metadata and keywords	<p>[Think about which metadata and keywords you can use to make it easier for others to identify and find the project data, after they have been made accessible.]</p> <p><i>Why is this important?</i> <i>If you use plenty of well-considered metadata and adequate keywords, you increase the chances that the data material can be found and understood by others for secondary use and new research. See 4.2 Metadata for more information about metadata.</i></p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
7.3 Preserve and make the data accessible	<p>[How do you plan to preserve the research material? Find out what rules your university/organization has for preservation and destruction of research records and decide who in the research team is responsible for making sure that the official records from the project are archived.</p> <p>What data will be preserved and/or made accessible, and how do you make that selection? Are there any local regulations? If it is possible to make the data accessible: when, where, and to whom? Will the data be made accessible in a data repository, a subject-specific database, at the university, or by the research group?]</p> <p><i>Why is this important?</i> <i>Digital data materials need to be actively administered over time, to make sure that they remain accessible and usable.</i></p> <p><i>Research materials that are created at a university/public agency must be archived there, in accordance with the Swedish Archives Act (SFS 1990:782). As a rule, official documents at universities and other higher education institutions shall be archived and it is, in principle, unlawful to destroy official documents unless specifically allowed by law, i.e. if there is a right to dispose of records. Raw data files, ethical approvals, research data documentation, and published results must be archived. If you have questions regarding archiving or destruction of documents, please consult with your organization's archive.</i></p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
7.4 Responsible organization	<p>[Who/what organization is responsible for making data accessible?]</p> <p><i>Why is this important?</i> <i>The responsibility usually lies with the research organization or university where the research/study has been carried out, or where the researcher was employed at the time. In projects where several organizations/public agencies are involved, decide</i></p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>

	<i>who will be responsible for making data accessible, if the material can be made accessible.</i>	
7.5 Local research data support unit	<p>[Contact your local data support unit for assistance in making data accessible. These units can go by different names in different organizations. Who in the project is responsible for contacting them, and when will you contact them?]</p> <p><i>Why is this important?</i> <i>Many universities and other research organizations have established local data support units (Data Access Units, DAU) in collaboration with SND. These units can help researchers make their data accessible, e.g. before publication of articles in journals that require that the research data are accessible, or at a later stage in the project, when you want to make larger amounts of data accessible. They can provide advice and support in where you can make the data accessible, what you should think about, and what information you may need to provide.</i></p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
7.6 Certified data repository	<p>[If you're planning to preserve or make data accessible in a certified data repository (such as SND), decide who will be the project's contact for the repository, and get in touch with them in good time to find out how you need to prepare the data material.]</p> <p><i>Why is this important?</i> <i>A data repository can give you advice about suitable file formats, documentation and metadata, and other things that you want to consider when you prepare to make the data material accessible. If the data material and related documentation is in a format that the repository can accept, and in a format suited for long-term preservation, the material can be made accessible faster. Data that are made accessible in a certified repository (e.g. certified with CoreTrustSeal) are made accessible in accordance with the FAIR data principles.</i></p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
7.7 Limitations due to guidelines or legal/ethical restrictions	<p>[Will the entire data material, or only parts of it, be made accessible? Are there any limitations, such as guidelines or legal/ethical restrictions that prevent the entire material from being made accessible? Do these limitations mean that you must take specific measures before the material can be made accessible?]</p> <p><i>Why is this important?</i> <i>It is essential to sort out any limitations that may mean that only parts of the data material can be made accessible. Apart from the guidelines from funders and research principals, there may be ethical or legal factors that restrict access. Making a data material accessible in the wrong way can be a breach of contract</i></p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>

	<p><i>or unlawful, but it can also violate ethical regulations. For instance, if the material is confidential, individuals may suffer harm if their information is disclosed.</i></p>	
<p>7.8 Limitations due to hardware and software</p>	<p>[Will a specific software or tool be required to use the data material? If it is: is it possible to add the software or tool to the data material, and if so, what documentation is required for someone to be able to use it? If it isn't possible to add the software/tool, what is required to be able to use the data material?]</p> <p><i>Why is this important?</i> <i>To make it possible to continue using the data material, it's important to enter information about what software or tools that are needed, as non-proprietary software isn't always sufficient. Some tools may also be based on a certain software and, if possible, it's of great help to include the software with the material, e.g. by open source code.</i></p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
<p>7.9 Data access rules and/or licenses</p>	<p>[Will there any specific rules or licenses for accessing the material? If you will be using a Creative Commons license, what level and version?]</p> <p><i>Why is this important?</i> <i>A license can be used to clarify the rights of the author of the material, and under which conditions a work can be used. SND recommends that you choose/enable access that is as open as possible, in line with the efforts from the Swedish Research Council to promote open access to research data. Access may be restricted if the data material contains personal data or other information that needs to be protected.</i></p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>
<p>7.10 Persistent identifier (PID)</p>	<p>[Will the material receive a persistent identifier (PID), and what type of PID? Enter the PID here if you have one, or when you get one.]</p> <p><i>Why is this important?</i> <i>A persistent identifier is a unique digital ID that refers to one or more objects, digital or physical. In research, it's common practise to issue a PID to publications or research data that are preserved for a long time and made accessible through digital resources. It's important to enter this information to show funders that you have thought about essential factors around the access to data. As there are different types of PID, depending on e.g. field of research or where the data material is preserved, you may want to explore which PID is most suited for your material. Data that are made accessible through SND receive a persistent identifier called a DOI (Digital Object Identifier).</i></p>	<p>Relevant to the project?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Don't know</p>