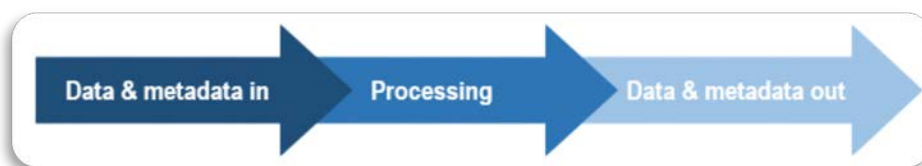


## Guidelines to submit data to the Swedish National Data Service (SND)

EfD asks all researchers who receive EfD funding for research to deposit the primary data collected during the project in a public repository. For this purpose, we work together with the Swedish National Data Service (SND): [www.snd.gu.se/en](http://www.snd.gu.se/en).

When you deposit your data at the SND repository, it is important to keep in mind that the data should be made useable for secondary analysis. This requires a good description of the content of data and metadata so that people can understand and use it for further research. By describing your research data at SND, your data will become visible and searchable. In addition, if you submit a copy of your data, the data will be stored in a secure and sustainable manner.



Submitting data and metadata is easy and you have control over the entire process. Click on the headings on the left of the submission form to read more about preparations for submitting data to SND, how to submit data and/or metadata, what happens after you submit data and/or metadata, and how data and metadata are made available.

EfD provides the following general guidelines or checklist to guide you step by step through the process of submitting your data to the SND repository.

### 1. Prepare study documentation

Before submitting your data, make sure that you have all the necessary study documentation required for submission ready. These may include the following:

- a) Questionnaire.
- b) Data in standard format.
- c) Study documentations/description.
- d) Data collection methods, sampling, spatial coverage, etc.
- e) Any other relevant documentation.

Please note that:

- If you have all the information about the dataset you want to submit, you will spend less time during the actual submission process.
- It's good that the person submitting datasets has been involved in the data collection process, or has good knowhow about the project.
- More information should be gathered in advance if the person submitting the dataset is not the PI.

## 2. Data ownership issue

- Before starting the data submission, make sure that there isn't any conflict of interest among parties involved in the data collection process, including funders.
- Ensure that there is no national legislation prohibiting data sharing through a third party repository system.

## 3. Prepare the data for submission

- a) List down the number of datasets generated from the study.
- b) Make sure that the naming of the variables are understandable and easy to link with the questionnaire.
- c) Label all the variables in the datasets. Preferably, these names coincide with the questionnaire text.
- d) Label the values of the variables if necessary.
- e) Computed variables for specific research purposes should be avoided.

## 4. Data anonymization

- It is the responsibility of the person submitting the dataset to make sure that any personal or confidential information is excluded or put in an anonymized form.
- According to the General Data Protection Regulation (GDPR), personal data are all kinds of information that is directly or indirectly referable to a natural person who is alive.
- Any tool or software can be utilized to anonymize datasets. If needed, technical assistance can be requested from the DAU. As an example, ARX Data Anonymization Tool can be used, which is an open source software for anonymizing sensitive personal data.

## 5. Abstract description

Provide a brief description of the dataset. Keep the description to 3 to 5 full sentences and try to describe the measurements, location, and purpose of the dataset. Include relevant keywords, such as the geographic area or field program name.

Example:

*We performed systematic mapping of EPC data applications by time, geographical spread, data features & auxiliary data used, problem domains addressed and complexity of employed data analysis. This mapping work was intended to answer the following questions: Q1. Which research studies have used EPC data (hereafter "applications")? Q2. What input data were used by the EPC data applications? Q3. Which problem domains were addressed by the EPC data applications? Q4. How did the EPC data applications change within the study period?*

## 6. DOIs of all publications using the dataset

Including the list of publications while submitting datasets increases the importance and visibility of the data and publications. Make sure that you have the DOIs, titles and abstracts of these publications.

## 7. SND sign in credentials

To sign in, you have two options: either use your university login credentials if you have one or use your Google or Facebook account login details. Go to <https://snd.gu.se/en/user/login> to login to the SND service. Most EfD researchers are expected to login via Google or Facebook.

## 8. Submission to the SND form

- a) Go to [www.snd.gu.se/en](http://www.snd.gu.se/en), navigate to the 'describe and submit', form.
- b) Login to your account.
- c) Click on 'create new'.
- d) Complete the submission form step-by-step. The different sections which need to be completed are shown on the left. You can click on these sections and fill in the fields in any order. The system automatically saves the changes you made.
- e) Upload datasets – The last section helps you to select and upload files which include the datafiles.

While filling the form, please note the following issues:

- Try to fill in as many fields as possible. The more information and context you provide, the better the data can be used and the better the data can be interpreted in the way you intended.
- However, if you are not sure what to fill in some of the fields, we recommend to leave those blank rather than providing inaccurate information.
- In you encounter any problem, you can ask for assistance from SND and DAU.
- Try to have a backup of any information you provided in the submission form. It is recommended to download the all the information provided in zip file. Just click on '*Download as zip*'.

## 9. Components of the data submission form

The different sections or tabs help to provide information for the different aspects of the dataset. Additional information regarding these tabs is given as follows:

- a) Availability, responsibility and roles:
  - Access level: for EfD datasets the access level should be '*available through registration*'.
  - Principal – should be 'EfD initiative'.  
**! It is very important to note that researchers should choose EfD as principal organization, because that is the only way which allows the DAU get the right to curate the dataset submitted.**
  - PI – Details of the PI.
  - Contact person – Details of contact person responsible for responding submission related queries from DAU, SND or any user of the data.
- b) General Description:
  - You need to provide information regarding the project/study such as Title, Description, Language, Population, Sampling procedure, Methodology, etc.
- c) Topics and keywords.
- d) Geographic coverage.
- e) Data and access:

- Provide detail information concerning specific dataset such as Title, License, Description, PI, Kind of data, Time period, etc.
  - Multiple datasets can be described separately.
  - Datasets can be uploaded here. Click on ‘Select data file’ to upload datasets.
  - Data collection.
    - Provide some more details concerning the data collections such as mode of data collection, Data collecting institution, etc.
    - Multiple data collections information can be provided here depending on the nature of the data available for submission.
- f) Publication:
- Describe related publications which have used the datasets.
  - Title, Citation, Publication year, etc are required.
- g) Documentation files:
- Include all relevant documentation to ensure that the data files are understandable and reusable.
  - It includes questionnaires, variable lists, project documentation or publications.
  - You can upload multiple files and the maximum file size is 100 MB.
  - Data is not uploaded here. To upload data files, go to the ‘Data & access’ tab to upload datasets.
  - If you plan to upload large files or sensitive information, please contact [incoming@snd.gu.se](mailto:incoming@snd.gu.se).

## 10. List of submissions

You can always see the list of your submission by clicking on your name, but you can only edit before confirming the submission or if you are requested to make changes by the DAU or SND.

## 11. Dataset Title

The best practice is to describe “what” and “where” in the title. *E.g. “Households energy consumption behavior in Western Ethiopia”.*

## 12. Dataset Type

Most submissions will fall under the category “Dataset.” However, a submission could be Collection, Dataset, Image, Moving image, Text, Sound, Software or any kind of data resource.

## 13. Keywords

- Provide as many keywords as possible to be used for searches.
  - e.g. volatiles, CO2 fluxes, poverty level, social alienation, etc.
- Keywords can be selected from the existing control keyword lists.

If necessary, optional keywords can be entered in the free text field. However, for increased interoperability, keywords should be selected from any of the controlled lists.



## EfD Data Deposition Guidelines

### 14. Technical assistance

- EfD has established a Data Access Unit (DAU), which provides data management technical assistance to EfD researchers.
- Such queries should be directed to DAU using this email: [data@efd.gu.se](mailto:data@efd.gu.se)
- Data managers at DAU can also request information regarding data submissions made by researchers if required.