Forte (Swedish Research Council for Health, Working Life and Welfare): Forte Template

GENERAL INFORMATION

Project Title

Project Leader

Registration number/corresponding

Version

Date

DESCRIPTION OF DATA – REUSE OF EXISTING DATA AND/OR PRODUCTION OF NEW DATA

How will data be collected, created or reused?

Guidance:

a) Explain which methodologies or software you will use if new data are collected or produced.
b) State any constraints on re-use of existing data if there are any.
c) Explain how data provenance will be documented.
d) Briefly state whether you have considered re-using existing data sources, but have chosen not to do so, and if so, why?

What types of data will be created and/or collected, in terms of data format and amount/volume of data?

Guidance:

e) Give details on the kind of data: for example, numeric (databases, spreadsheets), textual (documents), image, audio, video, and/or mixed media.
f) Give details on the file format for storage, (often reflected by the filename extension, for example pdf, xls, doc, txt, or rdf).
g) Justify the use of chosen formats. For example, decisions may be based on staff expertise within the host organisation, a preference for open formats, standards accepted by data repositories, widespread usage within the research community, or on the software or equipment that will be used. Prioritise open and standard formats as they facilitate sharing and long-term re-use of data (several repositories provide lists of such ‘preferred formats’).
h) Give details on the volumes (they can be expressed in storage space required (bytes), and/or in numbers of objects, files, rows, and columns).

DOCUMENTATION AND DATA QUALITY

How will the material be documented and described, with associated metadata relating to structure, standards and format for descriptions of the content, collection method, etc.?

Guidance:

a) Consult with the relevant actors/functions and indicate which metadata you will provide to help others identify and discover the data.
b) Indicate which metadata standards (for example DDI, TEI, EML, MARC, CMDI) are used within the relevant discipline/subject area/domain. Use community metadata standards where these are in place.
c) Indicate how the data will be organised during the project, mentioning for example conventions, version control, and folder structures. Consistent, well-ordered research data will be easier to find, understand, and re-use.
d) Consider what other documentation is needed to enable re-use. This may include information on the methodology used to collect the data, analytical and procedural information, definitions of variables, units of measurement, and so on.
e) Consider how this information will be captured and where it will be recorded for example in a database with links to each item, a ‘readme’ text file, file headers, code books, or lab notebooks.

How will data quality be safeguarded and documented (for example repeated measurements, validation

of data input, etc.)?

Guidance:

f) Explain how the consistency and quality of data collection will be controlled and documented. This may include processes such as calibration, repeated samples or measurements, standardised data capture, data entry validation, peer review of data, or representation with controlled vocabularies.

STORAGE AND BACKUP

How is storage and backup of data and metadata safeguarded during the research process?

Guidance:

a) Have these aspects been ensured in consultation with the functions involved at the higher education institution, such as archive personnel, the data protection officer, or lawyers in your organisation?
b) Note that if you are conducting research at a Swedish governmental higher education institution, your work is covered by the research principal’s requirements for archiving and screening.

How is data security and controlled access to data safeguarded, in relation to the handling of sensitive data and personal data, for example?

Guidance:

a) Have these aspects been ensured in consultation with the functions involved at the higher education institution, such as archive personnel, the data protection officer, or lawyers in your organisation?
b) Note that if you are conducting research at a Swedish governmental higher education institution, your work is covered by the research principal’s requirements for archiving and screening.

LEGAL AND ETHICAL ASPECTS

How is data handling according to legal requirements safeguarded, e.g. in terms of handling of personal data, confidentiality and intellectual property rights?

Guidance:

a) Check with the relevant support functions at the research principal, such as lawyers, that management of personal data, if it occurs, is done in accordance with applicable laws and rules, such as the General Data Protection Regulation (GDPR). Some aspects are brought up in the items below:
b) Check with the relevant support functions if there is a need to obtain informed consent for managing personal data.
c) Check with the relevant support functions if there is a need for measures to anonymise, pseudonymise or encrypt personal data to be managed, and how these measures are most suitably taken.
d) Check with the relevant support functions whether there is a need to establish a procedure for regulated access for authorised users of personal data, and in what way.
e) Check with the relevant support functions what rules and procedures exist for supplying and access to data respectively.
f) Explain what access conditions will be applied for the data. Will the data be openly accessible, or will access be limited?
g) For projects with several parties and several data owners, ensure that access to and use of the data is regulated in the consortium agreement.
h) Check with the relevant functions at the research principal whether data is covered by intellectual property rights. Consider using licences or right markings to state terms for use and reuse.
i) If existing data has been used in research and become part of the research data, or forms a new data set, then check whether terms for reuse of the original data impacts on access and use.

How is correct data handling according to ethical aspects safeguarded?

Guidance:

j) Consider whether ethical issues can affect how data are stored and transferred, who can see or use them, and how long they are kept. Demonstrate awareness of these aspects and respective planning.
k) Follow the national and international codes of conducts and institutional ethical guidelines, and

check if ethical review (for example by an ethics committee) is required for data collection and other data handling in the research project.

ACCESSIBILITY AND LONG-TERM STORAGE

How, when and where will research data or information about data (metadata) be made accessible? Are there any conditions, embargoes and limitations on the access to and reuse of data to be considered?

Guidance:

a) Explain how the data will be discoverable and shared (for example by deposit in a trustworthy data repository, indexed in a catalogue, use of a secure data service, direct handling of data requests, or use of another mechanism), which should suitably be done in consultation with the functions involved at the higher education institution/research principal.
b) Have you ensured that the applicable procedures for archiving and storage are complied with, in consultation with the functions involved at the higher education institution?
c) State if and when metadata and data will be made available (see the Swedish Research Council's recommendation on open access to research data). State whether access to or use of data will be limited and if so, why and for how long, for example for publishing, protecting intellectual property, or applying for patents.
d) Indicate who will be able to use the data. If it is necessary to restrict access to certain communities or to apply a data sharing agreement, explain how and why. Explain what action will be taken to overcome or to minimise restrictions.

In what way is long-term storage safeguarded, and by whom? How will the selection of data for long-term storage be made?

Guidance:

e) Have these aspects been ensured in consultation with the functions involved at the higher education institution, such as archive personnel, the data protection officer, or lawyers in your organisation?
f) Note that if you are conducting research at a Swedish governmental higher education institution, your work is covered by the research principal's requirements for archiving and screening.
g) Explain the foreseeable research uses (and/ or users) for the data.

Will specific systems, software, source code or other types of services be necessary in order to understand, partake of or use/analyse data in the long term?

Guidance:

h) State whether potential users need specific tools to access and re-use the data. Remember to safeguard the sustainability of the software needed for accessing the data.
i) State whether data will be shared via a data repository, whether data requests are managed via the repository, or if another method will be used.

How will the use of unique and persistent identifiers, such as a Digital Object Identifier (DOI), be safeguarded?

Guidance:

j) Explain how the data might be re-used in other contexts. Persistent identifiers should be applied so that data can be reliably and efficiently located and referred to. Persistent identifiers also help to track citations and re-use.
k) Indicate whether a persistent identifier for the data will be pursued. Typically, a trustworthy, long-term repository will provide a persistent identifier.

RESPONSIBILITY AND RESOURCES

Who is responsible for data management and (possibly) supports the work with this while the research project is in progress? Who is responsible for data management, ongoing management and long-term storage after the research project has ended?

Guidance:

a) Outline the roles and responsibilities for data management/stewardship activities for example data capture, metadata
production, data quality, storage and backup, data archiving, and data sharing. Name responsible individual(s) where possible.

b) For collaborative projects, explain the co-ordination of data management responsibilities across partners.
c) Indicate who is responsible for implementing the DMP, and for ensuring it is reviewed and, if necessary, revised.
d) Consider regular updates of the DMP.

What resources (costs, labour input or other) will be required for data management (including storage, back-up, provision of access and processing for long-term storage)? What resources will be needed to ensure that data fulfil the FAIR principles?

Guidance:

e) Explain how the necessary resources (for example time) to prepare the data for sharing/preservation (data curation) have been costed in. Carefully consider and justify any resources needed to deliver the data. These may include storage costs, hardware, staff time, costs of preparing data for deposit, and repository charges.
f) Indicate whether additional resources will be needed to prepare data for deposit or to meet any charges from data repositories. If yes, explain how much is needed and how such costs will be covered.