NCCR: Research Data Management (RDM) Strategy –

Coversheet and Explanations

Coversheet

|  |  |
| --- | --- |
| **Title of the NCCR** |  |
| **NCCR Director**  Name, first name  Institution |  |
| **Funding Phase** |  |
| **Version** (Date of submission) |  |

**A. General section**

# A1. Data manager, data management organisation and budget

## A1.1. Data manager

## A1.2. Internal organisation, roles and responsibilities

## A1.3. Definition of the NCCR’s “scientific units”

## A1.4. Data management budget

# A2. Data storage and preservation

## A2.1. General strategy for data storage

## *A2.2. Data storage and back-up during the research \**

## *A2.3. Data preservation plan\**

## *\* To answer only if data storage and preservation is administered in a centralized manner (with or without exceptions) by the NCCR (see explanation A2.1.)*

# A3. Public data sharing

## A3.1. General strategy for public data sharing

## *A3.2. Public data sharing location\*\**

## *A3.3. Data sharing constraints\*\**

## *\*\* To answer only if public data sharing is administered in a unified manner (with or without exceptions) by the NCCR (see explanation A3.1.)*

# A4. Intellectual property rights and copyright

# Annex A. Internal data sharing policy

**B. Scientific units-specific sections**

# BX. Scientific unit X

# BX.1. General information

## BX.1.1. Person responsible

## BX.1.2. PIs concerned

# BX.2. Data collection and documentation

## BX.2.1. Description of the data collected, observed, generated or reused

## BX.2.2. Documentation and metadata provided

## BX.2.3. Data preservation plan

# BX.3. Ethics and security issues

## BX.3.1. Handling of ethical issues

## BX.3.2. Management of data access and security

# *BX.4. Data storage and preservation\*\*\**

## *BX.4.1. Data storage and back-up during the research*

## *BX.4.2. Data preservation plan*

# *BX.5. Public data sharing\*\*\**

## *BX.5.1. Public data sharing location*

## *BX.5.2. Data sharing constraints*

## *\*\*\* To answer only if not administered centrally by the NCCR or not following the NCCR’s general strategy*

[The following section should be deleted before submission of the document]

Coversheet Explanations

**General remarks**

The NCCR RDM Strategy must contain:

* One general section
* One scientific unit-specific section per scientific units

submitted to the SNSF as a single document.

Every heading (sub-section) listed in the coversheet must appear in the submitted RDM strategy. If a heading does not apply for your organisation / discipline / scientific unit, please include it and briefly explain why it cannot be filled.

A. General section

This section must be elaborated and filled by the NCCR Leadership.

A1. Data manager, data management organisation and budget

A1.1. Designate a “data manager”. The data manager is responsible for the coordination of data management within the network. Indicate the %FTE that the data manager will devote to the NCCR data management.

A1.2. Outline rights/duties, internal procedures incl. quality control/self-assessment. Describe how data management will be coordinated between the groups of different institutions.

Please assign responsibilities in terms of:

- Information and training of the NCCR members regarding SNSF/NCCR data management policy and requirements

- Maintenance of the data management infrastructures, data backup

- Preparation, curation, and documentation of datasets

- Timely submission of datasets on repositories

- Maintenance and update of the NCCR Dataset Index

The tasks can be distributed between the data manager, members of the network and external services. However, the data manager is finally responsible to supervise the execution and overall fulfilment of the SNSF ORD policy requirements. If more than one person is designated for a task, the individual responsibilities should be clearly delineated.

A1.3. Describe the scientific units of the NCCR used as basis for data management. The description can be provided as a scheme of the NCCR organisation or as a table (see Table 1).

Depending on the scientific organisation of the NCCR, “scientific units” can be (groups of) work packages, (sub-)projects, PIs or a combination thereof. Delineation of scientific units can be dictated by data management coherence (i.e. a set of (sub-)project having the same data management strategy / procedures) rather than scientific content or organisation. All research activity performed in the frame of the NCCR must be part of a scientific unit (even if it is not generating or reusing data). The scientific units must be numbered and a “scientific unit-specific section” of the RDM strategy must be provided for each of them. For each unit, a responsible person is designated for the elaboration of the document. This can be the data manager or other members of the NCCR.

Table 1: Description of the NCCR scientific units

|  |  |  |
| --- | --- | --- |
| **Scientific Unit No** | **(Sub-)project / work package / plateform,… name / number** | **Responsible\*** |
| 1 | e.g. project 1 |  |
| 2 | e.g. subproject 2.4, 2.5, 4.2 and 5.11 |  |
| 3 | e.g. screening platform A |  |

\* Person responsible for the submission of the corresponding “scientific unit-specific section”

A1.4. Provide the budget planned by the NCCR for data management for each year of the phase. Please categorize between salaries (data manager), data preparation and data reposition. Eligible costs are described in the NCCR Budget Guidelines.

A2. Data storage and preservation

A2.1. Define the global strategy of the NCCR regarding data storage and preservation (chose among the 3 possibilities):

- **Centralized** (all data generated in the frame of the NCCR is stored centrally (e.g. server dedicated to the NCCR accessible to all groups, institutional IT service dedicated to the NCCR,…))

- **Individual** (every scientific unit defines its own data storage and preservation strategy (e.g. storage at the research group level))

- **Centralized with exceptions** (generally centralized but 1-2 scientific units cannot adhere to the general NCCR’s strategy and have their own). List the exception(s).

Data storage and data preservation can be organised following different strategies (e.g. storage “centralized” and data preservation “individual” for each scientific unit).

A2.2. \* Describe how/where the data will be stored during research (e.g. dedicated server, institutional IT service, laptops,…). If available, give an estimate of your data storage capacity. If external services are asked for, it is important that this does not conflict with the policy of each entity involved in the project, especially concerning the issue of sensitive data. Describe the back-up procedures (frequency of updates, responsibilities, automatic/manual process, security measures, etc.)

A2.3. \* Specify which data will be retained, shared and archived after the completion of the project and the corresponding data selection criteria (e.g. long-term value, potential value for reuse, obligations to destroy some data, etc.). Please outline a long-term preservation plan for the datasets beyond the lifetime of the NCCR. Comment on the choice of file formats and the use of community standards).

*\* A2.2. (data storage) and A2.3. (data preservation) should be completed only if the corresponding answer in A2.1. is “centralized” or “centralized with exceptions”. The information provided in A2.2. and A2.3. has to be approved by all the PIs of the network.*

A3. Public data sharing

A3.1. Define the global strategy of the NCCR regarding data sharing (chose among the 3 possibilities):

- **Unified** (all data generated in the frame of the NCCR is shared according to the same strategy (use of same repository,…))

- **Autonomous** (every scientific unit defines its own data sharing strategy)

**- Unified with exceptions** (generally unified but 1-2 scientific units cannot adhere to the general NCCR’s strategy and have their own). List the exception(s).

A3.2. \*\* Define on which repository the data will be made available. The repository chosen must be conform to the FAIR Data Principles and must be maintained by a non-profit organisation. If these conditions cannot be fulfilled, please explain why. Note: the NCCRs are not expected to create their own repositories, but rather to use existing structures.

A3.3. \*\* Data have to be shared as soon as possible, but at the latest at the time of publication of the respective scientific output. If some data cannot fulfil this principle due to legal, ethical, copyright, confidentiality or other issues, please list them and explain why. Describe under which conditions these will be made available (timing of release,…)

*\*\* A3.2. and A3.3. should be completed only if answer to A3.1. is “unified” or “unified with exceptions”. The information provided in A3.2. and A3.3. has to be approved by all the PIs of the network.*

A4. Intellectual property rights and copyright

A4.1. Outline the owners of the copyright and Intellectual Property Right (IPR) of the data collected and generated in the frame of the NCCR, including the license(s). Indicate any IPR ownership agreement for the consortium.

Annex A. Internal data sharing policy

Provide the NCCR’s internal data sharing policy as a separate file. The internal data sharing policy should describe the access of the NCCR fellows to the data produced in the frame of the NCCR at any time (i.e. before the data is made public, between data collection and dataset submission). The policy should clearly define who has access to what data, at what time point and how. The treatment of sensitive data in this context should be addressed.

B. Scientific units-specific sections

Every scientific unit listed in A1.3. must provide a “scientific unit-specific section” (e.g. if the NCCR comprises 7 scientific units, the RDM Strategy must contain 7 scientific unit-specific sections). The scientific unit-specific sections are similar to the Data Management Plans (DMP) required with the submission of proposals for “Projects” to the SNSF. Examples of DMPs can be found [here](http://www.dcc.ac.uk/resources/data-management-plans/guidance-examples).

The data management strategy and information provided in these sections must be approved by all the PIs concerned.

Some scientific units may not produce or reuse any data. For these cases, please complete part BX.1.1 and BX.2.1. only.

BX.1.[[1]](#footnote-1) General information

BX.1.1. Name of the person responsible for the setup of this scientific unit-specific section (as listed in Table 1).

BX.1.2. List all the PIs concerned by this scientific unit-specific section (i.e. the PIs participating in work packages and/or (sub-)projects comprised in this scientific unit).

BX.2. Data collection and documentation

BX.2.1. Briefly describe the data you will collect, observe, generate or reuse. The descriptions should include the type, format and content. If no data generation, collection or reuse is expected in this scientific unit, please explain why.

BX.2.2. Describe the documentation that will be provided to enable secondary users to understand and reuse the data. Metadata include at least a name and a persistent identifier for each file, the name of the person who collected or contributed to the data, the date of collection and the conditions to access the data. If specific tools are needed to re-use the data, this needs to be documented and, if possible, the tools made available.

BX.3. Ethics and security issues

BX.3.1. Describe potential ethical issues related to the research performed or the data collected within the scientific unit. Describe how these will be addressed or handled. Methods to manage ethical concerns may include: anonymization of data; gain approval by ethics committees; formal consent agreements,…

BX.3.2. Describe potential personal or other sensitive data to be collected within the scientific unit and the corresponding level of risks. If such data will be collected, outline the security measures for data protection and how data access and security will be managed. Describe the main processes or facilities for storage and processing of personal or other sensitive data.

*BX.4. Data storage and preservation*

BX.4.1. This section should be completed only if answer to A2.1. for data storage (General section of the RDM Strategy) was “individual” or “centralized with exceptions” and scientific unit X is one of the exceptions.

Describe how/where the data will be stored during research (e.g. dedicated server, institutional IT service, laptops,…). If available, give an estimate of your data storage capacity. If external services are asked for, it is important that this does not conflict with the policy of each entity involved in the project, especially concerning the issue of sensitive data. Describe the back-up procedures (frequency of updates, responsibilities, automatic/manual process, security measures, etc.)

BX.4.2. This section should be completed only if answer to A2.1. for data preservation (General section of the RDM Strategy) was “individual” or “centralized with exceptions” and scientific unit X is one of the exceptions.

Specify which data will be retained, shared and archived after the completion of the NCCR and the corresponding data selection criteria (e.g. long-term value, potential value for reuse, obligations to destroy some data, etc.). Please outline a long-term preservation plan for the datasets beyond the lifetime of the NCCR. Comment on the choice of file formats and the use of community standards.

*BX.5. Public data sharing*

*This section should be completed only if answer to A3.1. (General section of the RDM Strategy) was “autonomous” or “unified with exceptions” and scientific unit X is one of the exceptions.*

BX.5.1. Define on which repository the data will be made available. The repository chosen **must be conform to the FAIR Data Principles** and must be maintained by a non-profit organisation. If these conditions cannot be fulfilled, please explain why. Note: the NCCRs are not expected to create their own repositories, but rather to use existing structures.

BX.5.2. Data have to be shared as soon as possible, but at the latest at the time of publication of the respective scientific output. If some data cannot fulfil this principle due to legal, ethical, copyright, confidentiality or other issues, please list them and explain why. Describe under which conditions these will be made available (timing of release,…).

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1. For subchapter numbering, please replace the « X » by the number of the corresponding scientific unit as described in Table 1 (e.g. for scientific unit No 2, « BX.1. » should be « B2.1.») [↑](#footnote-ref-1)