

## Data stewardship

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In 2017, all research institutes have to appoint a data steward. The data steward plays an important role in implementing RDM as a regular aspect of research and is responsible for carrying out the RDM policy at his or her institute. How the data steward shapes this responsibility depends on the RDM policy of an institute. The data steward plays at least a leading role in drafting the RDM policy. This policy should explain who does what, and more specific: what are the tasks of the researcher and the data steward and which tasks are executed by others in the institute or by the central RDM service desk (University Library).

Earlier, a framework has been drafted regarding the role and tasks of a data steward: [...] *Data management concerns all actual data-related activities in any phase of the data lifecycle (see also the institutional policy on research data management). Data stewardship refers to the assignment of responsibilities in data management. In the present context, data stewardship means putting into practice the university and institutional policies on good data management, as well as monitoring and ensuring compliance with legal requirements as well as requirements from granting institutions, publishers and so on [...].*

Generally, the following tasks of a data steward can be distinguished:

1. Guides drafting the research institute's RDM policy
2. Monitors progress in executing the research institute's RDM policy
3. Monitors compliance with the research institute's RDM policy
4. Monitors RDM skills in the research institute

The following matrix has been drafted to concretise possible tasks of a data steward. On the vertical axe, the [research cycle](#) is followed, divided into topics per phase (cf. the [checklist for research managers](#)). The horizontal axe presents the possible tasks of the researcher, the decentral data steward, the central RDM support (service desk) and others. As we expect diversity in the institute's RDM policy, the matrix should be read as a possible distribution of tasks, instead of something fixed. The aim of this document is to stimulate data stewards to divide tasks between him/herself, the service desk and others, based on the context of the research institute.

**Beneath the matrix, a summary of the possible tasks of the data steward is presented.**

## Phase 1. Creating data

	<b>Topic</b>	<b>Role researcher</b>	<b>Role data steward</b>	<b>Role service desk</b>	<b>Other roles</b>
1.	Data management paragraph (DM§) and plan (DMP)	- Writes a DM§ and/or DMP	- Monitors if a DMP is written	- Provides information/formats, helps drafting and gives feedback on a DM§ and/or DMP	- Grant officer: helps drafting a DM§ and/or DMP
2.	Informed consent form and information documents	- Writes informed consent forms (oral or written) and information documents (oral or written) (and checks them with the ethics committee)	- Monitors aspects of data in an informed consent form and information document	- Provides information and gives feedback on aspects of data in informed consent forms and information documents	- Ethics committee: provides examples/formats and checks/approves informed consent forms and information documents
3.	Project information	- Registers project information (at the research office)			- Research office: keeps an overview of project information
4.	Training on data management	- Takes part in training sessions	- Initiates training sessions	- Drafts the content of and lectures training sessions	- Graduate School: plans training sessions for PhD's
5.	Check for existing data	- Makes use of existing (disciplinary) data repositories	- Is aware of existing (disciplinary) data repositories	- Advises on re-use of existing data and data use agreements	
6.	Data storage during research	- Stores data in accordance with RU guidelines	- Monitors if data is stored in accordance with RU guidelines	- Advises on data storage, including tools, filing, versioning and backups	- Privacy/security officer: determines RU guidelines on data storage during research
7.	Data sharing during research	- Shares data in accordance with RU guidelines	- Monitors if data is shared in accordance with RU guidelines	- Advises on data sharing, including tools	- Privacy/security officer: determines RU guidelines on data sharing during research

## Phase 2. Processing data & phase 3. Analysing data

	Topic	Role researcher	Role data steward	Role service desk	Other roles
8.	Data minimally stored during research & documentation	- Stores (minimally) the data and documentation that is necessary for replication (scientific integrity)		- Advises on documentation of data	- IT department: provides storage space and tooling

## Phase 4. Archiving data

	Topic	Role researcher	Role data steward	Role service desk	Other roles
9.	Archiving data in RIS (DANS)	- Archives data for re-use in RIS (DANS) ( <a href="http://www.ris.ru.nl">www.ris.ru.nl</a> )	- Monitors if the institute's data is archived in RIS (DANS)	- Communicates with the researcher and the DANS archive regarding archived data in RIS	- Central/faculty Metis manager: makes the data steward familiar with Metis/RIS and informs him/her about changes
10.	Requirements of archiving	- Makes sure data is archived in accordance to the RIS guidelines		- Checks the data archived in RIS on completeness, privacy, metadata and documentation	
11.	The use of another repository	- Makes sure data is archived in accordance to the RU (= RIS) guidelines	- Monitors where data is archived	- Advises on good repositories and on request checks the data on completeness, privacy, metadata and documentation	
12.	Retention period	- Archives all data necessary for replication (scientific integrity), minimally ten years	- Is aware of minimum and maximum retention periods		

13.	Deletion of the dataset after retention period	- In case data is archived in another archive than RIS (DANS) or at the campus network, the researcher deletes data after the retention period (if applicable)	- Monitors the deletion of data (if applicable)	- In case of archiving in RIS (DANS), on request deletes data after the retention period	
14.	Registering data in RIS	- In case of the use of another repository, registers data in RIS	- Monitors if the institute's data is registered in RIS	- Checks registered dataset in RIS	
15.	Archiving non-digital data	- Archives non-digital data in accordance with the institute's guidelines	- Monitors if the institute's non-digital data is archived	- Advises on how and where to store non-digital data	- Research office: offers a facility for archiving and managing non-digital data
16.	Access control on restricted access datasets	- In case of a request of access to data with a restricted access license: grants or denies access	- Monitors if data is administered by an active staff member, including exit talks with leaving employees to transfer administration rights	- In case of RIS (DANS), technical support in transferring administration rights of data	
17.	'Dark'/'deep' archive (critical or sensitive data, raw data)	- Archives all data that is not suitable for re-use and is necessary for replication (scientific integrity) at the campus network, awaiting a suitable campus 'dark'/'deep' archive	- Monitors if the institute's data that is not suitable for re-use and is necessary for replication (scientific integrity) is stored at the campus network	In case of a campus 'dark'/'deep' archive solution: - Gives advice on what data should be archived - Keeps an overview of data - Grants access to data	- IT department: provides storage space and tooling
18.	Conditions for access to and reuse of data		- Monitors if the institute's conditions for access and reuse are being followed	- Advises on possible conditions of reuse of data	
19.	Data use agreements		- Monitors data to which access is restricted by a data use agreement, including	- Advises on data use agreements and, in case of RIS (DANS), manages access	- BJZ/privacy and security officer: assists in drafting data use agreements

			drafting that data use agreement	requests in accordance with these data use agreements	
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### Additional remarks

	Topic	Role researcher	Role data steward	Role service desk	Other roles
20.	Research data from bachelor and master's students	- Makes sure the planning and storage of (thesis/ReMa) data of BA/MA students is in line with the institute's guidelines	- Monitors the management of (thesis/ReMa) data of BA/MA students	- Supports BA/MA students and supervisors with managing (thesis/ReMa) data	

### Summary of the (possible) tasks of the data steward (based on the matrix)

For the data steward, the tasks are summarized as follows (numbers match to the topics in the matrix):

1. Guides drafting the research institute's RDM policy
2. Monitors progress in executing the research institute's RDM policy & 3. Monitors compliance with the research institute's RDM policy
  - Monitors if a DMP is written **(1)**
  - Monitors aspects of data in an informed consent form and information document **(2)**
  - Is aware of existing (disciplinary) data repositories **(5)**
  - Monitors if data is stored in accordance with RU guidelines **(6)**
  - Monitors if data is shared in accordance with RU guidelines **(7)**
  - Monitors if the institute's data is archived in RIS (DANS) **(9)**
  - Monitors where data is archived **(11)**
  - Is aware of minimum and maximum retention periods **(12)**
  - Monitors the deletion of data (if applicable) **(13)**
  - Monitors if the institute's data is registered in RIS **(14)**
  - Monitors if the institutes non-digital data is archived **(15)**

- Monitors if data is administered by an active staff member, including exit talks with leaving employees to transfer administration rights **(16)**
  - Monitors if the institute's data that is not suitable for re-use and is necessary for replication (scientific integrity) is stored at the campus network **(17)**
  - Monitors if the institute's conditions for access and re-use are being followed **(18)**
  - Monitors data to which access is restricted by a data use agreement, including drafting that data use agreement **(19)**
  - Monitors the management of (thesis/ReMa) data of BA/MA students **(20)**
3. Monitors RDM skills in the research institute
- Initiates training sessions **(4)**