

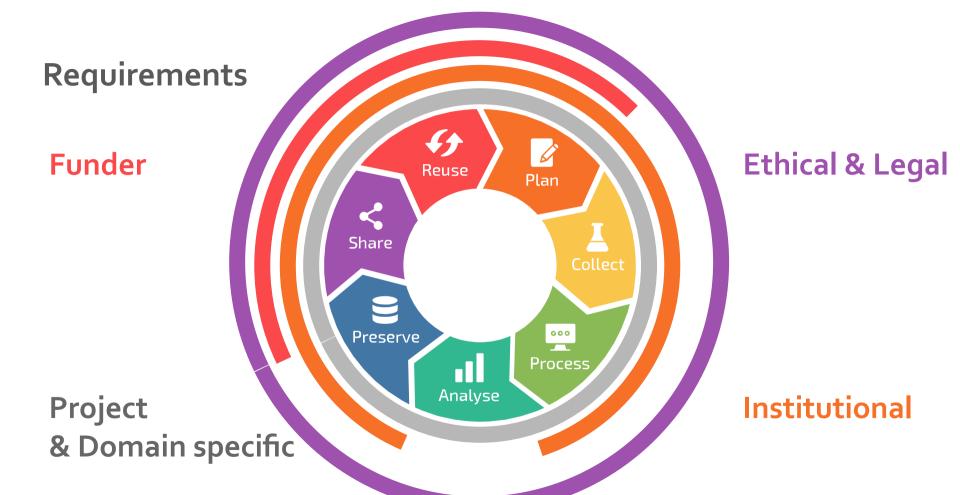
Open Data requirements for Life Science Projects



Korbinian Bösl Data management coordinator ELIXIR Norway/Digital Life

Life cycle





Requirements

Funder





"National Strategy on access to and sharing of research data"

2017



Publicly funded research data refers to:

- (i) data collected or generated for use for or as a result of publicly funded research, and
- (ii) data underpinning publications that are the result of publicly funded research, regardless of the source of the data.

Basic principles:

- 1. Research data must be as open as possible, as closed as necessary.
- Research data should be managed and curated to take full advantage of their potential.
- Decisions concerning archiving and management of research data must be taken within the research community.

https://www.regieringen.no/en/dokumenter/national-strategy-on-access-to-and-sharing-of-research-data/id2582412/



The Research Council of Norway's Policy for Open Access to Research Dat

Original 2014, updated 2017



"... requiring that R&D-performing institutions or companies should assess whether projects receiving funding from the Research Council must develop a **data management plan**."

"The **FAIR Guiding Principles** for scientific data management and stewardship are included as a main principle in the Research Council's policy"

https://www.forskningsradet.no/contentassets/e4cd6d2c23cf49d4989bb1oc5eeao87a/the-research-council-of-norways-policy-for-open-access-to-research-data.pdf



Research data...



... must be stored/archived in a safe and secure manner.



... must be made accessible for reuse.



... should be made accessible at an early stage [latest at publication]



... must be accompanied by standardised metadata.



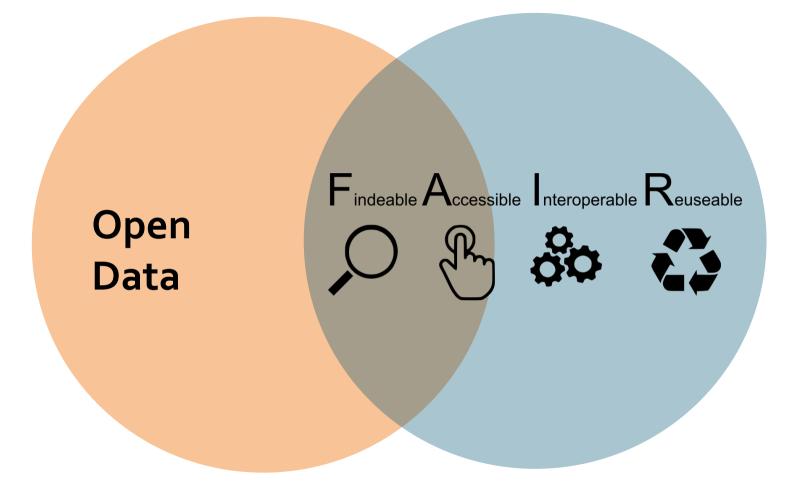
... must be provided with a license for access, reuse and redistribution.



... should preferably be made accessible at no charge.



... must be described in a data management plan



"As open as possible - as closed as necessary"

The Research Council of Norway





Potential impact of the proposed research

The extent to which the planned outputs are openly accessible to ensure reusability of the research outputs and enhance reproducibility

FAIR, available and reusable data [software, algorithms, protocols, models, workflows, electronic notebooks, and other tools]

Early sharing through pre-registration and preprints, open access to software, workflows, tools, etc

Communication and exploitation

The extent to which the appropriate open science practices are implemented as an integral part of the proposed project to ensure open sharing and wide distribution of research outputs.

Early and open sharing (preprints or pre-registration and/or registration reports)

Full and immediate open access publication





No full DMP required (- but helpful)

You should consider:



Storage and computing (budgeting?)

Budgeting for RDM-personnel & time effort





§§Ethical and Legal issues

REK approval necessary (for sharing of data?)

GDPR considerations

IPR aspects

Which Research Ethical Guidelines apply for this project?

RRI







Storage and Computing

Is access to computing/storage secured?

Will we have to pay for data storage (of sensitive data?)

How will data be accessed & transferred?







Budgeting for RDM-personnel & time effort

Will we need help from a Data Steward (and budget for this)?
Will we need with data analysis, data warehousing or deposition?



When awarded funding

Full DMP required

If you decide that a data management plan is not needed, you must provide an explanation.

I don't know of any - do you?

Even if you only reuse others data, you should describe where and how it is accessible & how your processed data can be accessed or reproduced?





When awarded funding

Full DMP required

Documentation, formats, volume

Quality assurance including Metadata standards

Backup during project

Sharing & Preservation

Ethical and Legal aspects - including IPR

Who is responsible in the project?

To which trustworthy repository will the data be submitted?

https://www.forskningsradet.no/en/research-policy-strategy/open-science/research-data/

 $\underline{https://www.scienceeurope.org/our-resources/practical-guide-to-the-international-alignment-of-research-data-management/dat$





When awarded funding

Full DMP required

The Research Council of Norway does not assess the content of submitted plans. It is the responsibility of the Project Owner to approve that the plan is in line with the institution's requirements and guidelines before it is submitted.





Full DMP required

Data management plans are to be made public and openly accessible.

Different possibilities:







DMP is constantly updated

Changes do not have to reported to RCN Early deposition & sharing





Final version of the data management plan in connection with the final report of the project.

Data is deposited to trustworthy repository

