Guidelines Research Data Management at NMBU

- The Norwegian University of Life Sciences (NMBU) is compliant to the principle "Open as standard" – for research data generated in projects financed through public money.

- This will contribute to:

  o The development of a global research community where the research data is widely shared
  o Improved quality of research through a better way to build upon earlier work and to consolidate research data in new ways
  o Transparency throughout the research process and improved opportunity to test scientific results
  o Increased cooperation and less duplicate research
  o Increased innovation in private and public sector
  o Efficiency and improved funding usage from public money

- NMBU students and employees seek to comply with international standards for research data management, ethical guidelines, and regulations from national and international sources of funding.
- NMBU students and employees seek to comply with the FAIR principles (acronym for findable, accessible, interoperable and reusable[1]). Research data and/ or metadata should be available, searchable and reusable. Furthermore, "interoperable" means that both data and metadata must be manageable for machines and that a consistent vocabulary is used.
- NMBU is the facilitator, in order for students and employees to effortlessly comply with the current regulation at any given time (web pages, training and support functions).

---

[1] More information:
http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf

The guidelines apply to research data building the basis for a scientific publication <u>and</u> the research data generated in ongoing projects.

1. Research data must be **<u>stored safely</u>**. The data must be stored centrally at the institution (here: NMBU), nationally or internationally.

    o The research data: registrations/records/reports of numbers, texts, pictures and sounds generated or created during research projects[2].

2. Research data **<u>should NOT be stored</u>** on hard drives on local PC or on Laptops, external hard drives, dropbox etc.

3. Storage of and sharing research data must be according to good scientific practice, current regulations, ethical guidelines and requirements from funding sources.

4. Research data must be stored so that they are of value for the researcher and a wider research environment, and must be stored for **<u>a minimum of 10 years</u>**.

5. All research data must have a Data Management Plan (DMP).

    o A DMP is a document describing how research data will be managed (storage and availability of data) both for the lifetime of a project and after completion of the project.

6. Research data must be stored in a way that they can be rediscovered, reconstructed and identified. The data must hence have **<u>metadata</u>**.
    o The purpose of metadata is to define or describe other data.
    o The metadata will enable others to search or make use of the data.

7. Research data must be an **<u>open and available (open access)</u>**, however, there are several challenges with making simple data set open and available. A reason to limit open access may be:

    o *Safety measures:* Where availability of data may harm individuals or national security, the data sets ***are not to*** be made open access.

    o *Personal data:* Where availability of data is in conflict with the current privacy regulations, the data sets ***are not to*** be made open access.

---

[2] Definitions from: [Open Access to Research Data, Policy for The Research Council of Norway](#)

- o *Other legal matters:* Where availability of data is in conflict with other legal provisions, the data sets ***are not to*** be made open access.

- o *Commercial provisions:* Data with commercial value generated in projects with a company may be exempt from the general principle of open access, as recommendations are for the data to be open access after a period of 3 to 5 years.

- o *Other conditions.* Where availability of the data has great economic or practical consequences for those who generated/ collected the data, the data sets may be exempt from the general principle of open access if the arguments satisfy the conditions. This may apply to for example **qualitative research data**.

8. Research projects notifiable for privacy regulations must be notified at [the Norwegian Centre for Research Data](#) (NSD). The Project Manager is responsible for:

   - o Reporting and expenses associated with reporting projects that involves person sensitive data.
   - o To follow up own projects at the end of the project to secure that the personal data is in line with the reported intentions and terms counselled/concession given.
   - o Research data must be stored safely so as not to leak person sensitive data.