



## Research Data Management Checklist

*Use this checklist to identify which data practices to work with in your research group. Your group can also set aside a few hours to go through the checklist together to support discussions of data practices.*

### 1. Data Organization & Documentation

#### ☐ File Naming

**Why:** Prevent confusion and make files easy to find.

**How:** Use descriptive names like **ProjectName\_YYYYMMDD\_Version**. Avoid spaces and special characters; use underscores or hyphens. Include version numbers or dates.

#### ☐ Folder Structure

**Why:** Logical structure supports collaboration and reproducibility.

**How: Organize by project → data type → version.**

☐ Separate raw data from processed data.

☐ Add a README.txt in each folder explaining contents.

☐ Is your version control updated or linked to forked or linked units??

**How:** for example, a lab's git account can be forked to department's or university's git account

#### ☐ Data Workflows

**Why:** If you standardise commonly used data workflows in your group, onboarding of new colleagues will be easier, it minimises knowledge loss and increases reproducibility

## 2. Data Quality & Cleaning

☐ Remove duplicates and redundant files.

**How:** Manually or use scripts or tools like **OpenRefine**. You can divide work among group members to clean up your own project folders.

☐ Are data in interoperable formats (dates, units, file types)?

**Why:** Interoperable formats ensure that data can be opened and reused without relying on proprietary software.

**How:** Avoid formats that lock you into specific tools. For example, .xlsx files depend on proprietary software and version compatibility. It is more FAIR to save tables as .csv or .tsv (plain text formats) because they are widely supported and machine-readable.

## 3. Compliance & Security

☐ Is data classified (sensitive vs. non-sensitive)?

☐ If yes, make sure you data is **GDPR Compliant**.

**Why:** Protect personal data and meet legal requirements.

**How:** Anonymize or pseudonymize personal data. Document lawful basis for processing (consent, research exemption).

Talk with your GDPR officer/responsible, if you need help.

## 4. Storage & Retention

☐ Document data deletion or archiving procedures.

**How:** Include in your Data Management Plan (DMP).

☐ Is data ownership agreed upon within the group?

☐ Discuss and finalise where data is stored at the end of a project and how can it be accessed?

## 5. Sharing & Publishing

- ☐ Do you have a chosen repository for data and code publication (Zenodo, Figshare, Dataverse, discipline-specific).

Choose repositories that support FAIR data and code

**Help:** Check [re3data.org](https://re3data.org) for options.

- ☐ Apply open licenses (Creative Commons, Open Data Commons).

**How:** Use CC-BY or similar for datasets unless restricted.

## 6. Tools & Practices

- ☐ If you use **Electronic Lab Notebooks (ELNs)** for structured record-keeping, review current practices for sustainability and clarity.

**How:** Identify gaps and update protocols.

- ☐ Identify and make a list of future needs for IT infrastructure and data management.

**How:** Plan for cloud storage, HPC, and secure access.