



Ready for BioData Management?

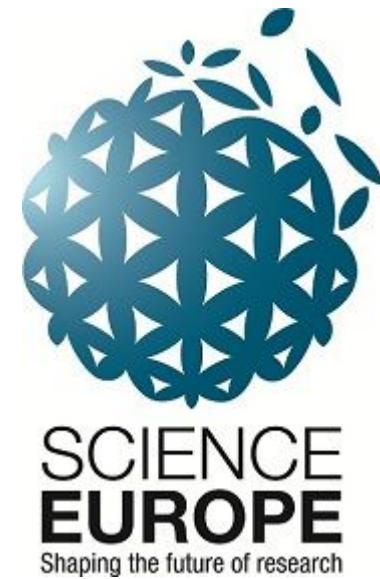


The Science Europe DMP Template

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Science Europe DMP Template

- Science Europe is the European association for the **representation** of both public research institutions and funding bodies.
- It comprises **37 member organisations** from **27 European countries**.
- **Open Access**, and **Research Data** are two of the main priorities of Science Europe.
- Science Europe is also involved in **topics that have an impact in research**.
 - **Copyright**
 - **Data-related Legislation**
 - ...





The Organisation of the Science Europe DMP Template

Learning Outcome 1:

Understand how the Science Europe DMP Template is organised, and how it interlinks with the RDM data lifecycle.

Science Europe DMP Template

- Science Europe has established a **DMP Template** in an attempt to establish the **core requirements for DMPs**.
- It is organised in **two parts**:

Science Europe DMP Template

Core Requirements
for a
Data Management Plan

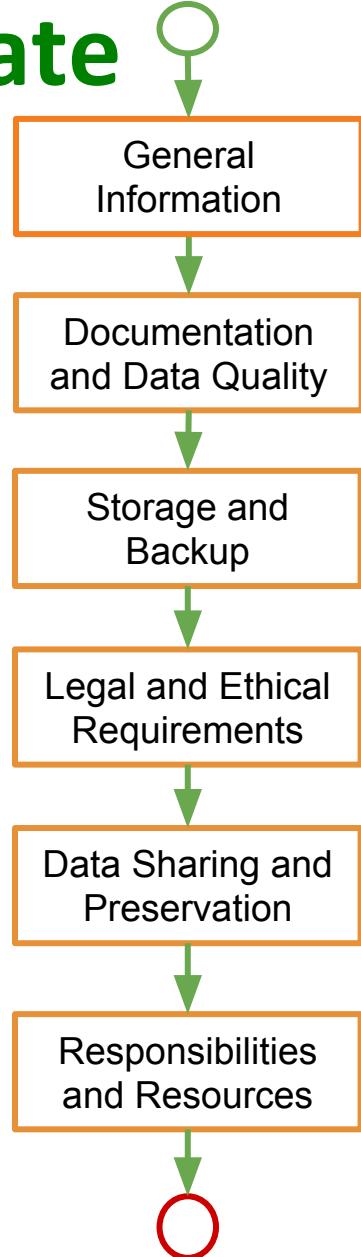
Criteria for Selection
of
Trustworthy Repositories

Science Europe DMP Template

- The Core Requirements for a DMP
 - Comprises of **16 questions**, organised into **6 categories**.
 - The **requirements** attempt to **cover all aspects** of the **RDM data lifecycle**.



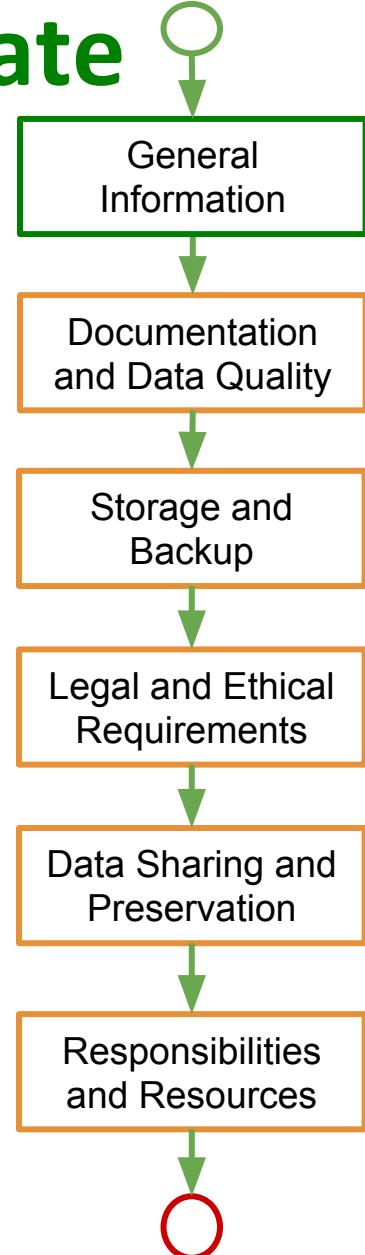
<https://rdm.elixir-europe.org>



Science Europe DMP Template

- General Information

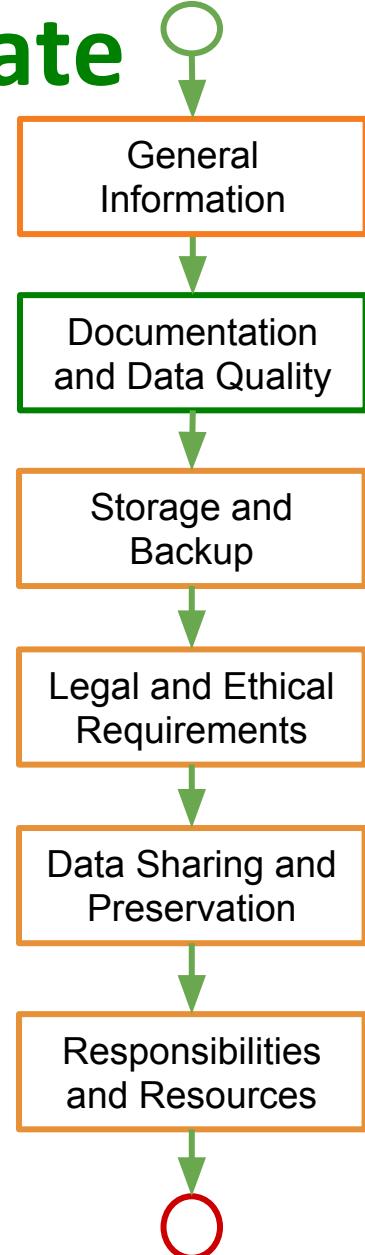
- Information on the **DMP document**
 - Title, Project, Version, Funding Agency, ...
- How will **new data** be **collected** or **produced** and/or how will existing data be **reused**?
 - Methodologies, constraints on reuse, documentation of data provenance, ...
- What data will be **collected** or **produced**?
 - Type of data, format, open or proprietary, volume,
...



Science Europe DMP Template

- Documentation and Data Quality

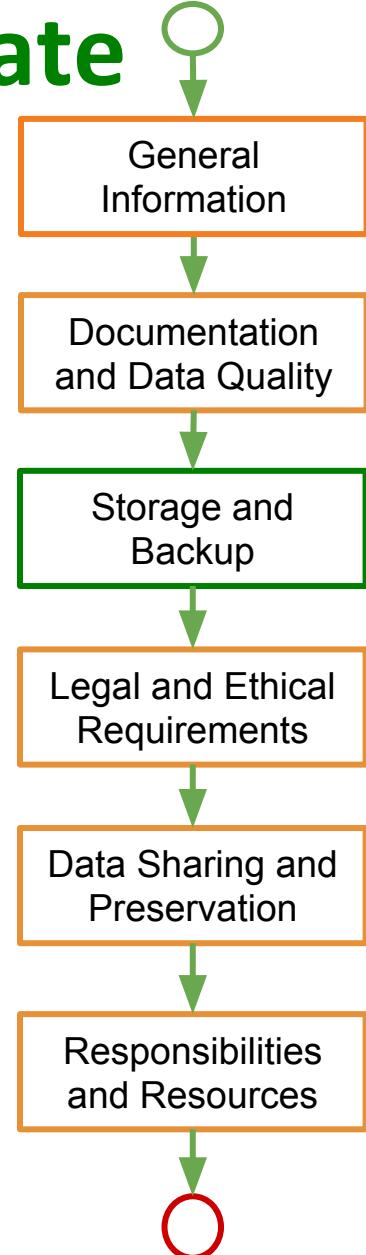
- What **metadata and documentation** will accompany the data?
 - Standards, description of practices, data organisation, how will metadata be captured and recorded, ...
- What **data quality control measures** will be used?
 - Calibration, standardised data capture, data entry validation, peer review, controlled vocabularies, ...



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- Storage and Backup during the Research Process

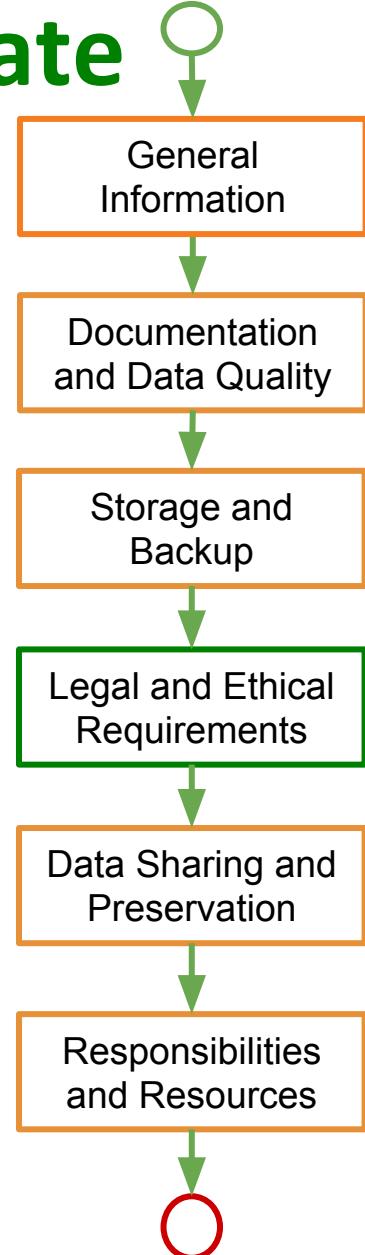
- How will **data and metadata be stored and backed up** during the research?
 - Backups, host, ...
- How will **data security and protection of sensitive data** be taken care of during the research?
 - Recovery of data , data access, sensitive data protection policies, ...



Science Europe DMP Template

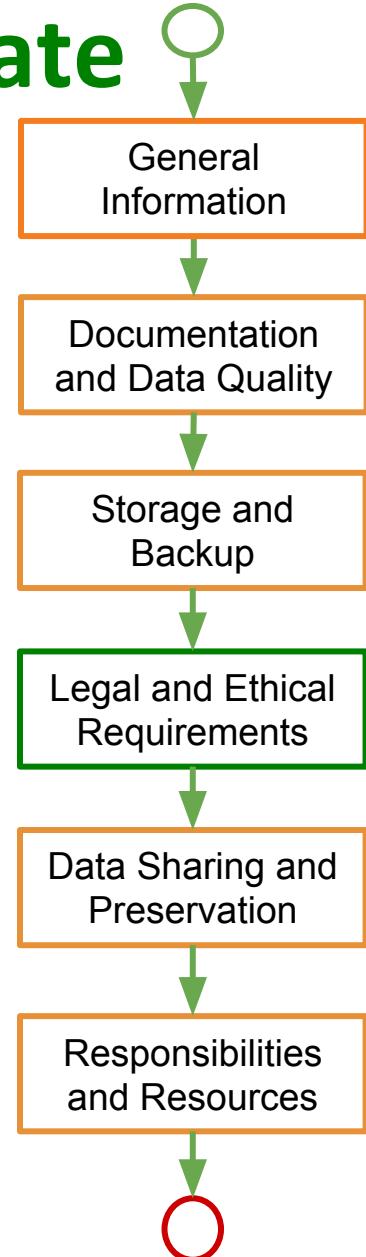
- Legal and Ethical Requirements, Codes of Conduct

- If personal data are processed, how will **compliance with legislation on personal data and on security** be ensured?
 - GDPR, anonymisation of personal data, encryption,
 - ...
- How will other **legal issues**, such as **intellectual property rights and ownership**, be managed? What legislation is applicable?
 - Who is the owner of the data, intellectual property rights, licenses that apply, ...



Science Europe DMP Template

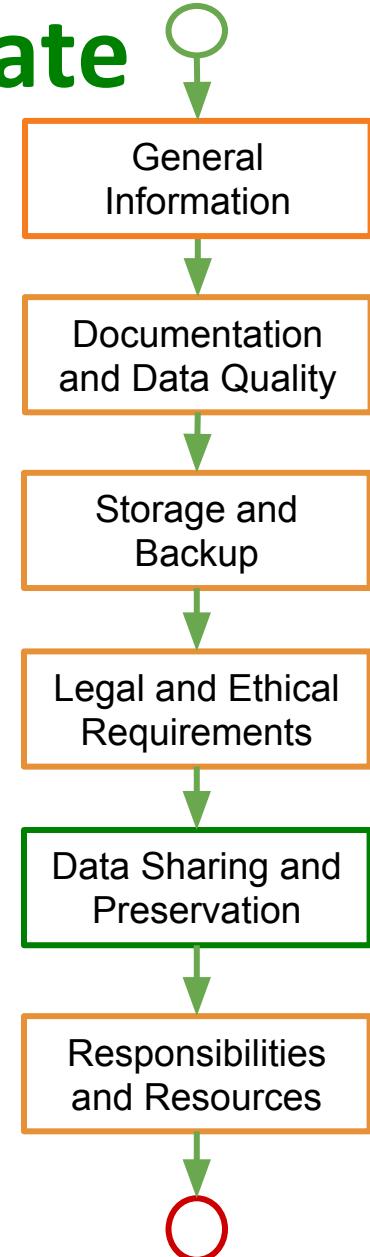
- Legal and Ethical Requirements, Codes of Conduct
 - What **ethical issues** and **codes of conduct** are there, and how will they be taken into account?
 - Ethical issues impact, national, international or institutional ethical guidelines that apply, ...



Science Europe DMP Template

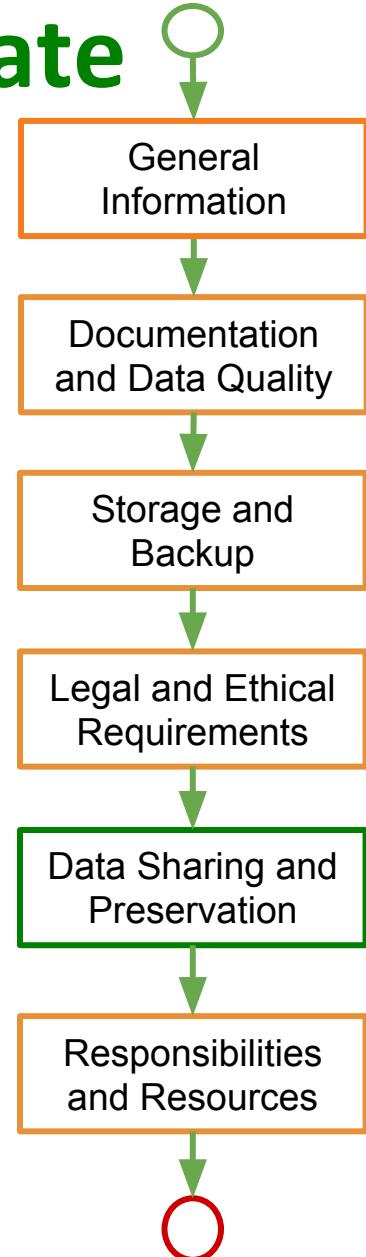
- **Data Sharing and Long-Term Preservation**

- How and when will **data** be **shared**? Are there possible **restrictions** to data sharing or **embargo** reasons?
 - Data preservation policy, availability of data, ...
- How will data for **preservation** be **selected**, and **where** **data will be preserved** long-term?
 - What to preserve and what to destroy, how to make that decision, ...



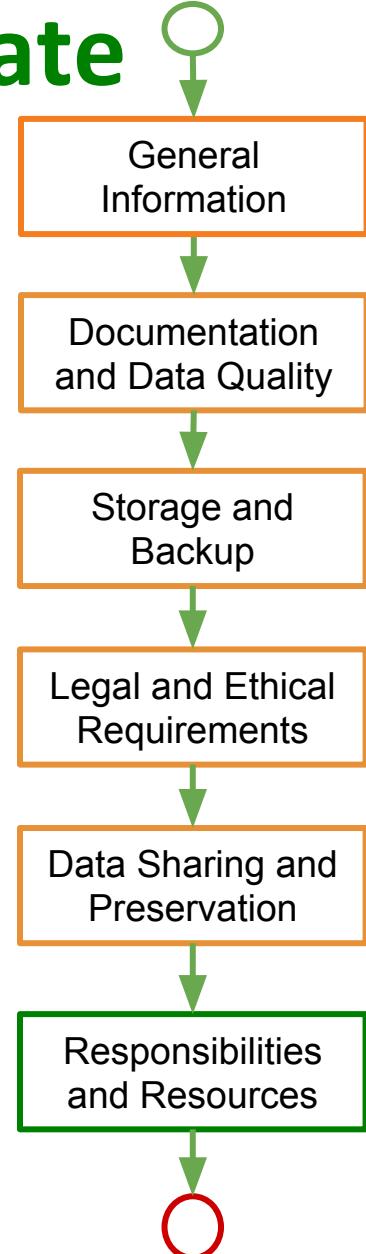
Science Europe DMP Template

- Data Sharing and Long-Term Preservation
 - What **methods or software tools** are needed to **access and use** data?
 - Specific tools, mechanisms for access, ...
 - How will the application of a **unique and persistent identifier** to each data set be ensured?
 - Type of persistent identifier, how it is applied, ...



Science Europe DMP Template

- Data Management Responsibilities and Resources
 - Who will be **responsible** for data management?
 - Roles and responsibilities, hierarchy, ...
 - What **resources** will be dedicated to data management and **ensuring that data will be FAIR?**
 - Costs associated with data management, other resources, ...





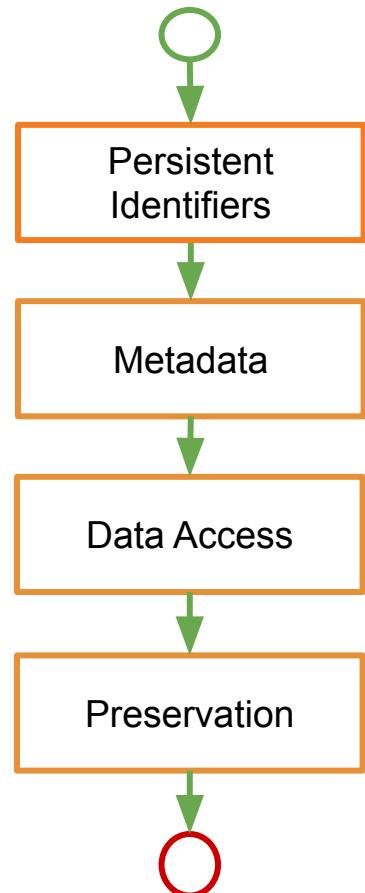
Selecting the “Right” Repository

Learning Outcome 2:

Recognise the criteria for selecting a trustworthy repository.

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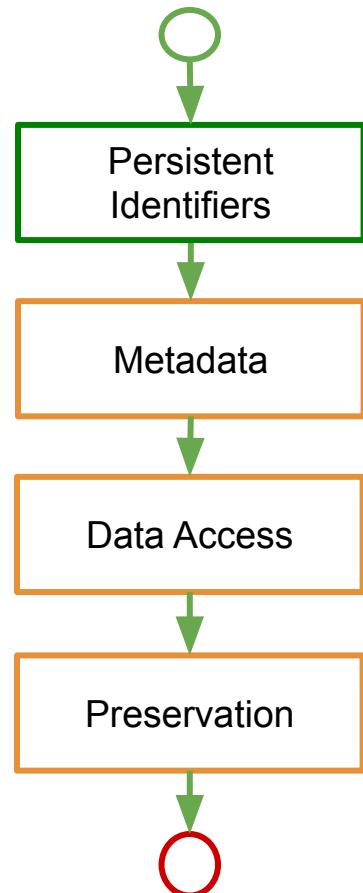
- Guiding the Selection of Trustworthy Repositories
 - Comprises of **15 criteria**, organised into **4 topics**.



Science Europe DMP Template

- **Provision of Persistent and Unique Identifiers (PIPs)**

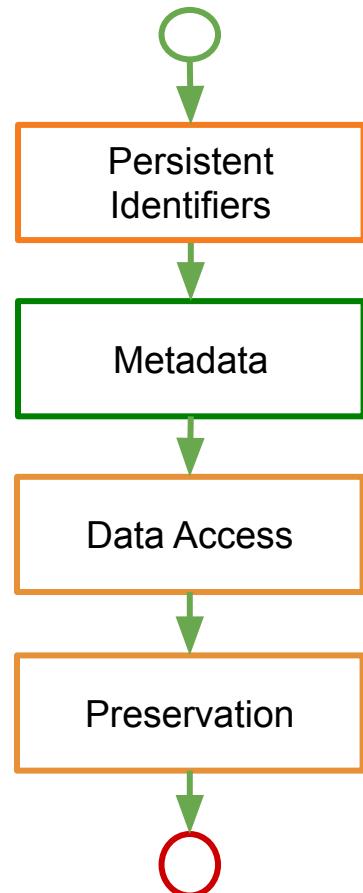
- Allow data discovery and identification
 - PIDs in metadata
- Enable searching, citing, and retrieval of data
 - PIDs linking data and metadata
- Provide support for data versioning
 - Permanent registry of versions, to allow provenance to be traced



Science Europe DMP Template

- **Metadata**

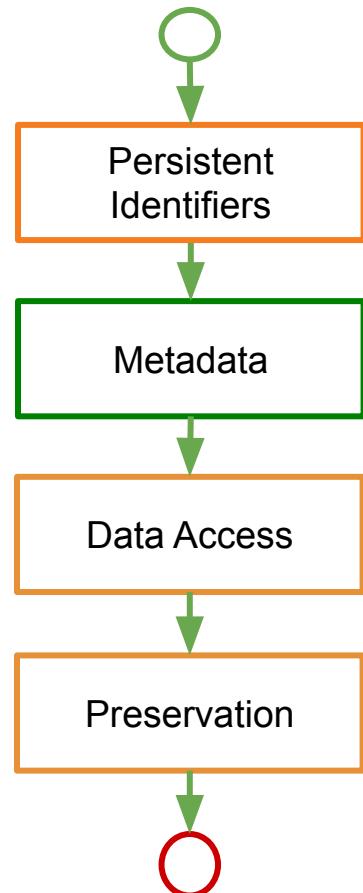
- Enable finding data
 - Aids with interoperability and reuse of data
- Enable referencing to related relevant information
- Provide information that is publicly available and maintained, even for non-published, protected, retracted, or deleted data
 - Metadata long-term preservation regardless of the status of the data



Science Europe DMP Template

- **Metadata**

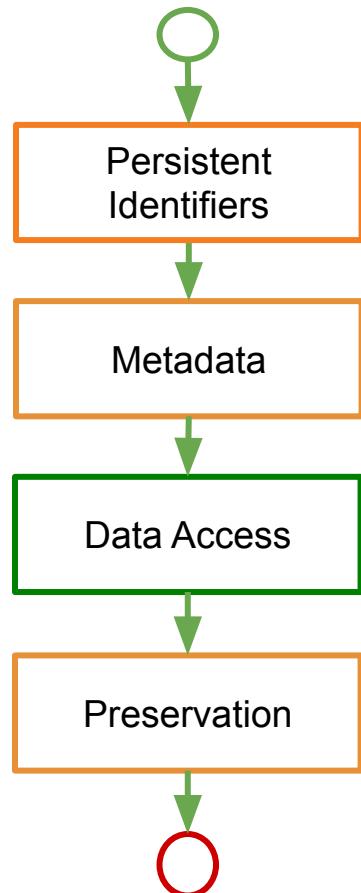
- Use metadata standards that are broadly accepted by the scientific community
- Ensure that metadata are machine-retrievable



Science Europe DMP Template

- **Data Access and Usage of Licences**

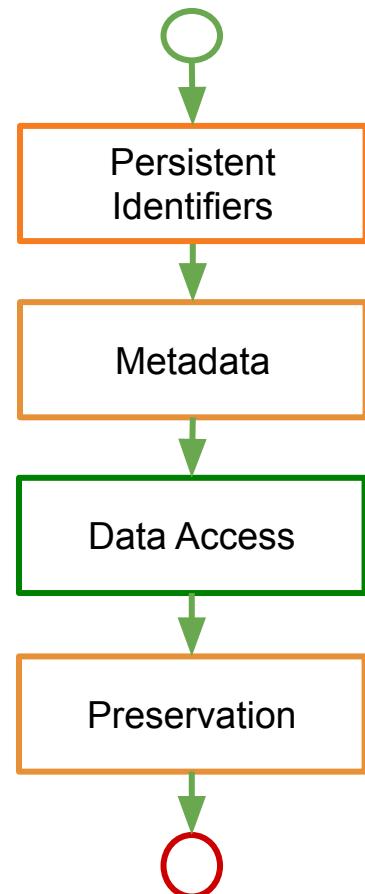
- Enable access to data under well-specified conditions
 - Clear terms of access
- Ensure data authenticity and integrity
 - Metadata should contain enough information on provenance
- Enable retrieval of data
 - Or at least metadata



Science Europe DMP Template

- **Data Access and Usage of Licences**

- Provide information about licensing and permissions
- Ensure confidentiality and rights of data subjects and creators
 - Provide a way for authentication and authorisation for humans and machines, and the specifications of group access rights



Science Europe DMP Template

- **Preservation**

- Ensure persistence of metadata and data
- Be transparent about mission, scope, preservation policies, and plans

