



Swedish Research Council and national coordination of open access to research data

Data management plans

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Outline of the presentation:

- 1. Swedish research council and the assignment on national coordination of open access to research data:**
 - background and goals
 - what open access means and the eco-system around it
 - open access, data management plans, and FAIR
- 2. Data management plans:**
 - What is a DMP and why is it important
 - Requirements from the Swedish Research Council
 - Working group
 - A DMP template



National coordination of open access to research data: background and goals:

RESEARCH BILL 2016

*"The Swedish Research Council should be given a **national responsibility** in coordinating a continued work regarding open access to research data, i.e. data produced with a scientific aim" ... "A readjustment **to open access to research data** including scientific publications, artistic work, and research data **should be fully completed within 10 years at the latest.**"*
(2026)

APPROPRIATION DIRECTIONS Spring 2017

*"The Swedish Research Council shall **coordinate the national work in establishing open access to research data.** When implementing the mission, the Swedish Research Council shall consult with the National Library, Swedish universities and the Swedish National Archives."*

NATIONAL COORDINATION:

- a **policy leader** on issues relating to open access to research data
- **contribute to and facilitate** open access
- FAIR data management
- focus on the entire **data management** cycle
- **collaboration** on national and international level
- in close collaboration with the research communities



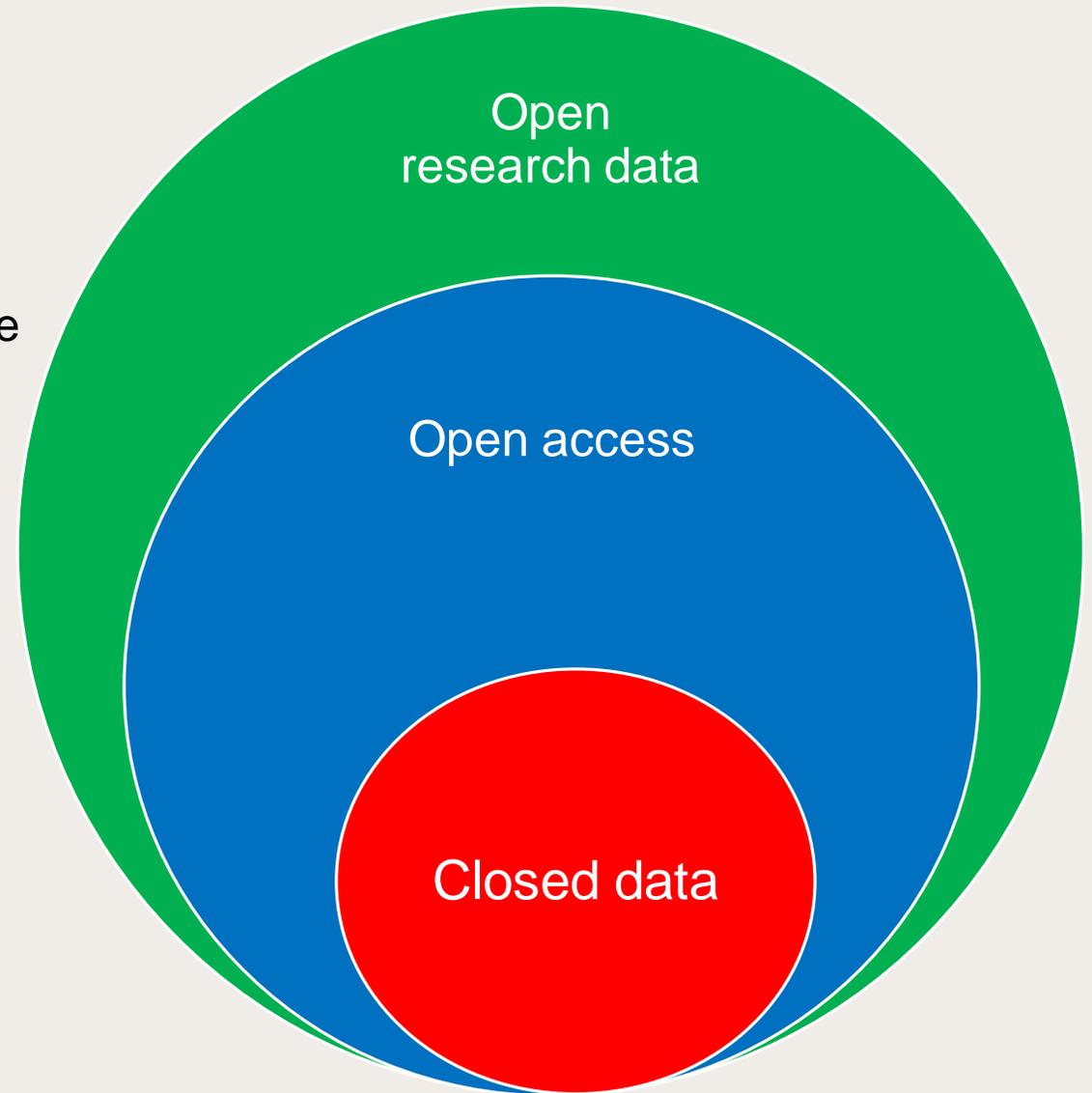
What is open access and open data in research?

Open data is data that is freely available, and can be used and re-used.

Open access to research data means that data collected and/or created during the course of research is published with free access via internet.

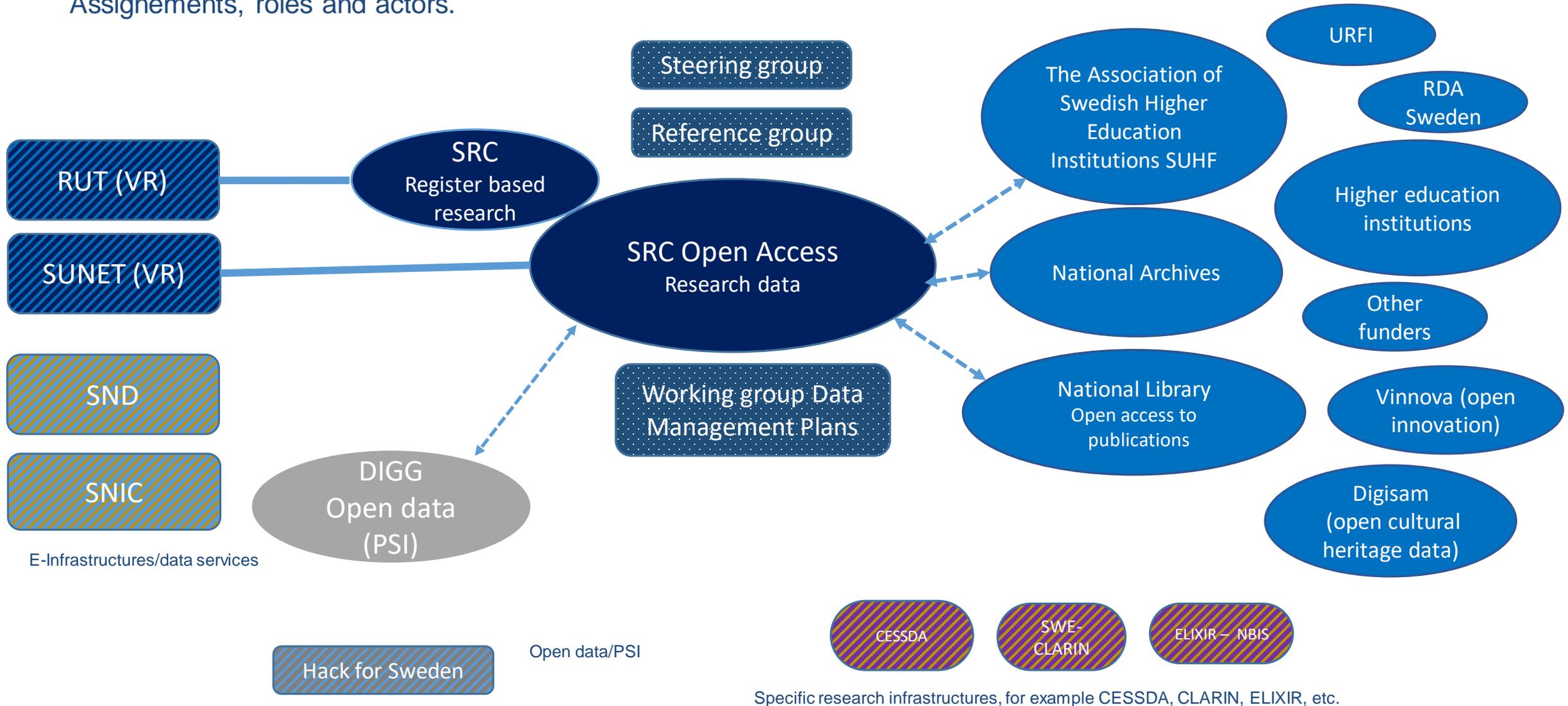
Research data that not only can be accessed but also used and re-used is **open research data**.

"As open as possible, as closed as necessary".



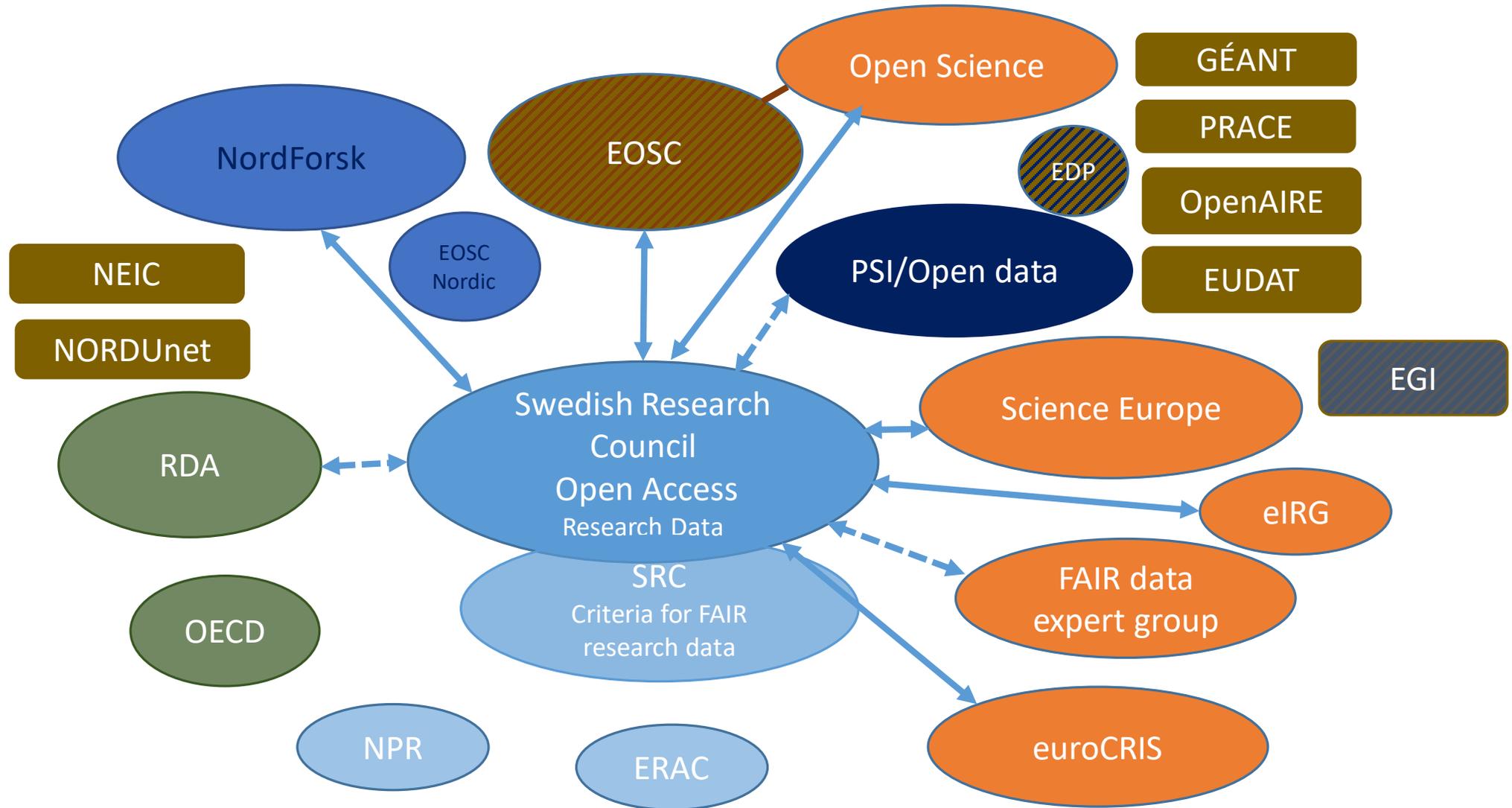
Eco-system around open access to research data

Assignments, roles and actors.



Specific research infrastructures, for example CESSDA, CLARIN, ELIXIR, etc.

Eco-system around open access to research data – nordic, European, international initiatives and activities





Open access, data management and FAIR

- In 2017, the Swedish Research Council received an assignment from the Government to produce criteria for assessing how research data that have wholly or partly been produced using public funds fulfil the **FAIR principles** (**F**indable, **A**ccessible, **I**nteroperable och **R**eusable). Resulted in a report in 2018 with **15 criteria and a guidance**.
- As from 2019, all who are awarded a grant from the Swedish Research Council must have a data management plan if the research generates research data.

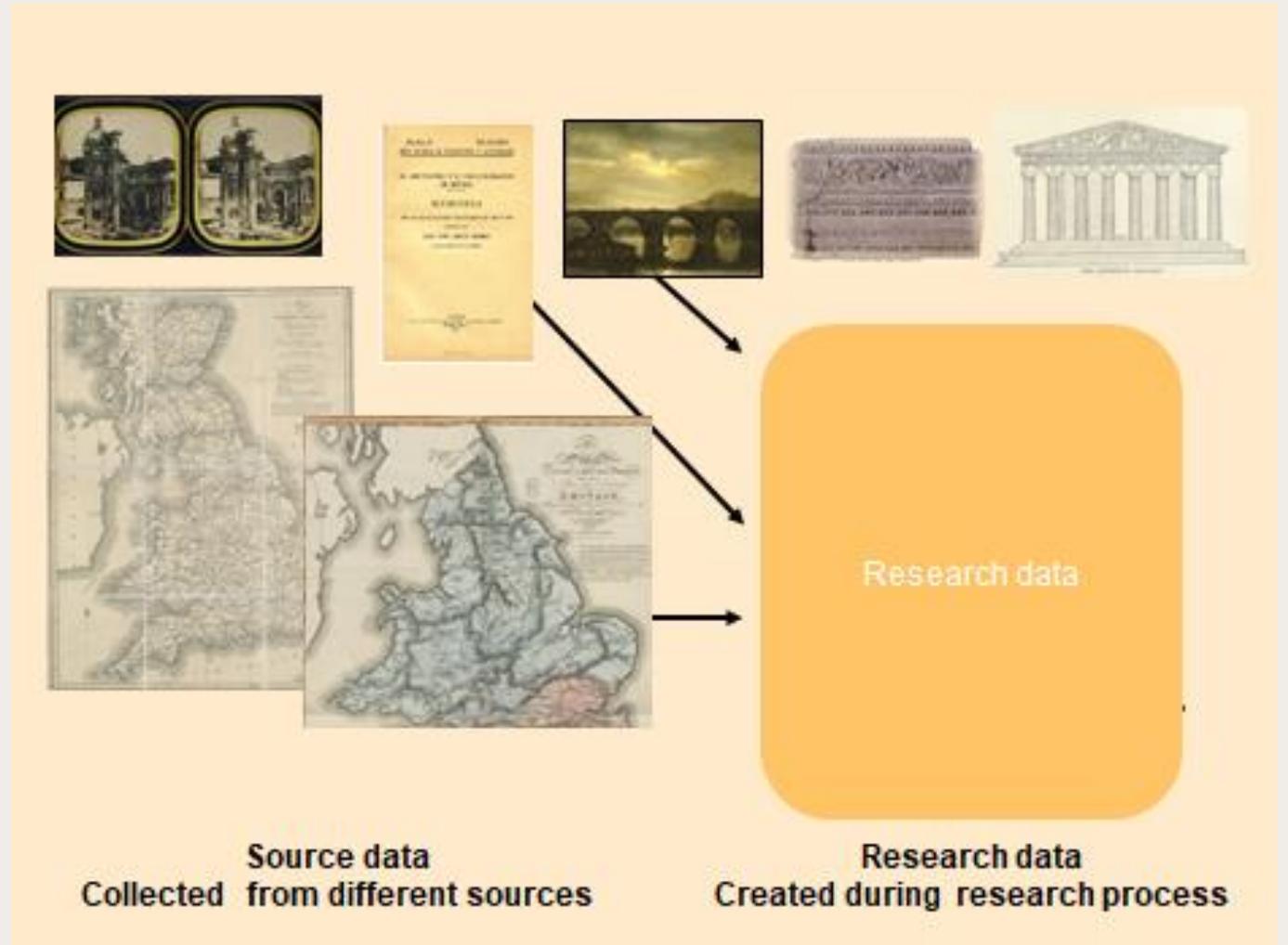
Kriterier för FAIR forskningsdata

Redovisning av regeringsuppdrag att ta fram bedömningskriterier för att följa vägen mot ett öppet vetenskapssystem



Data management plans

- **Description of data** – reuse of existing data and/or production of new data
- **Documentation** and data quality
- **Storage** and backup
- **Legal** and **ethical** aspects
- **Access** and **preservation**
- Responsibilities and resources





A data management plan: why is it important?

- A Data Management Plan is making it easier to plan for good data management, describing which data will be collected and/or created, how they will be handled during the course of the research, and how they will be taken care of afterwards.
- Good data management is a pre-requirement to make data understandable, usable and re-usable.
- Good data management is also a key component of open access to research data, and a cornerstone for FAIR.



Requirements from Swedish Research Council 2019

- As from 2019, all who are awarded a grant from the Swedish Research Council must have a data management plan if the research generates research data. The plan shall describe how data collected and/or created will be managed during the course of the research, and how they will be dealt with afterwards.
- According to the Swedish Research Councils general grant terms and conditions, administrating organisation must confirm that a data management plan will be in place when you start your project, and also that the plan will be maintained.



A working group on data management plans

In order to support increased open access to research data the Swedish Research Council is coordinating the national work on data management plans, and has appointed a working group.

A template for a DMP & needs for a digital tool.

Specific sub-groups in 2019: terminology, user-tests, stakeholders analysis, basic requirements on functionality for a common digital tool

The group has representatives from following organisations:

- Formas (Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning)
- Halmstad University
- Karolinska Institutet
- KTH Royal Institute of Technology
- National Archives
- Riksbankens Jubileumsfond (RJ)
- Scilifelab
- SND (Swedish National Data Service)
- University of Gothenburg
- SNIC (Swedish National Infrastructure for Computing)
- SUHF (The Association of Swedish Higher Education Institutions)
- Stockholm University
- SLU (Swedish University of Agricultural Sciences)
- Umeå University Library
- Young Academy of Sweden



Specific sub-groups:

1. Terminology
2. User-tests
3. Stakeholders analysis
4. Basic requirements on functionality for a common digital tool





A template and a tool for data management plans

The working group's main goal in 2019 was to develop a common template for data management plans and to investigate the needs of a digital tool. The aim of the working group was also to develop a basis for what functionality a common national tool should have.

Sunet (Swedish Research Council), is currently investigating various alternative solutions for a digital tool for data management plans. According to the preliminary schedule, a tool will be available in January / February 2020.

Decisions on which tools to use to develop and maintain data management plans are made by each authority.





Data management plans:

- The Swedish Research Council has as a part of the work conducted in the working group on coordination of DMP together with the Association of Swedish Higher Education Institutions, SUHF, translated and partially adapted Science Europe's "Core Requirements for Data Management Plans".
- This basic DMP template consists of six central parts describing a data management plan should include, with associated questions. It can provide support when you produce a data management plan.

FAQ: <https://www.vr.se/soka-finansiering/krav-och-villkor/ta-fram-en-datahanteringsplan.html>





1. Description of data – reuse of existing data and/or production of new data

- How will data be collected, created or reused?
- What types of data will be created and/or collected, in terms of data format and amount/volume of data?

2. Documentation and data quality

- How will the material be documented and described, with associated metadata relating to structure, standards and format for descriptions of the content, collection method, etc.?
- How will data quality be safeguarded and documented (for example repeated measurements, validation of data input, etc.)?

3. Storage and backup

- How is storage and backup of data and metadata safeguarded during the research process?
- How is data security and controlled access to data safeguarded, in relation to the handling of sensitive data and personal data, for example?

4. Legal and ethical aspects

- How is data handling according to legal requirements safeguarded, e.g. in terms of handling of personal data, confidentiality and intellectual property rights?
- How is correct data handling according to ethical aspects safeguarded?

5. Accessibility and long-term storage

- How, when and where will research data or information about data (metadata) be made accessible? Are there any conditions, embargoes and limitations on the access to and reuse of data to be considered?
- In what way is long-term storage safeguarded, and by whom? How will the selection of data for long-term storage be made?
- Will specific systems, software, source code or other types of services be necessary in order to understand, partake of or use/analyse data in the long term?
- How will the use of unique and persistent identifiers, such as a Digital Object Identifier (DOI), be safeguarded?

6. Responsibility and resources

- Who is responsible for data management and (possibly) supports the work with this while the research project is in progress? Who is responsible for data management, ongoing management and long-term storage after the research project has ended?
- What resources (costs, labour input or other) will be required for data management (including storage, back-up, provision of access and processing for long-term storage)? What resources will be needed to ensure that data fulfil the FAIR principles?

<https://www.vr.se/english/calls-and-decisions/grant-terms-and-conditions/data-management-plan.html>



Thank you for your attention!

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If it is not stated otherwise, photos in the presentation are from depositphotos.com.