

The experience of my university in addressing the introduction of an Open Science strategy and its implementation

Anna Lundhagen

Pro Vice-Chancellor Collaboration and Environmental Monitoring and Assessment Swedish University of Agricultural Sciences



In natural sciences, social sciences and the humanities

- Transdisciplinary approach
- Curiosity-driven basic research

Problem-solving studies

Sustainable cities and rural areas











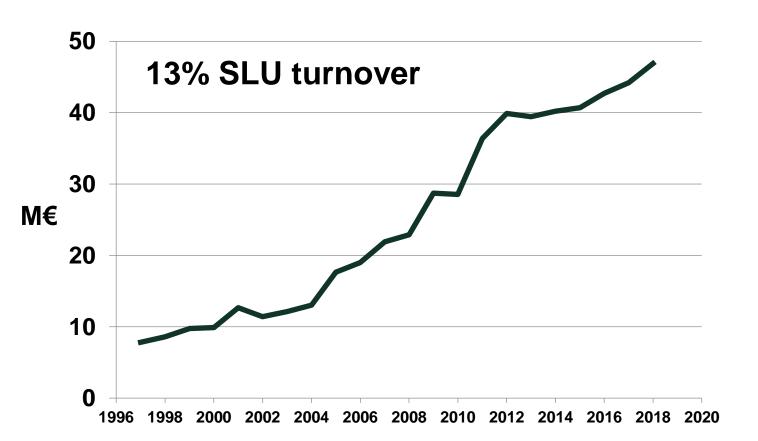
Animal and human welfare





Environmental monitoring and assessment (EMA)

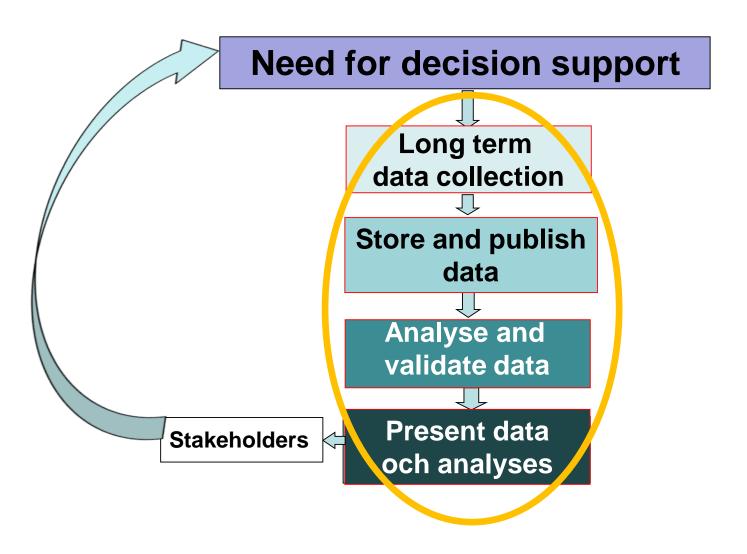
Delivers science-based decision support to reach environmental objectives







Environmental Monitoring and Assessment (EMA)



Open Science and Data Management Support





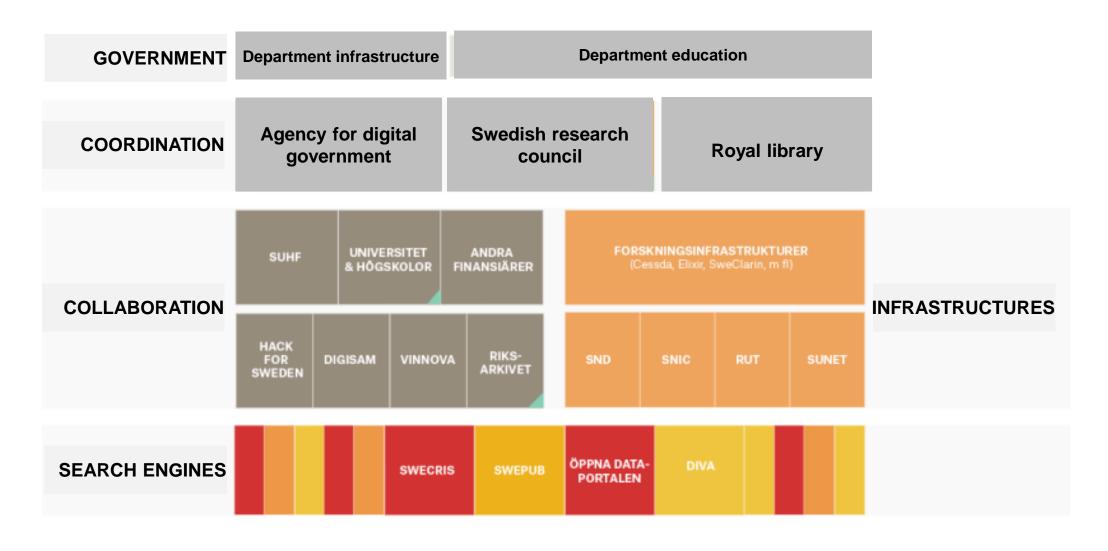
The Association of Swedish Higher Education Institutions A road map built on international policies

- Create supporting environments and guidelines
- Offer relevant, affordable and adequate support infrastructures complex
- Support FAIR principles Finadable, Accessible, Interoperable, Reusable complex
- Be active in international initiatives
- Develop reward and incentive practices global dimension

 Work for open access of publications (2021) and open structures for reuse of data (2026)



Complex digital ecosystem in Sweden





Open science is a cultural change

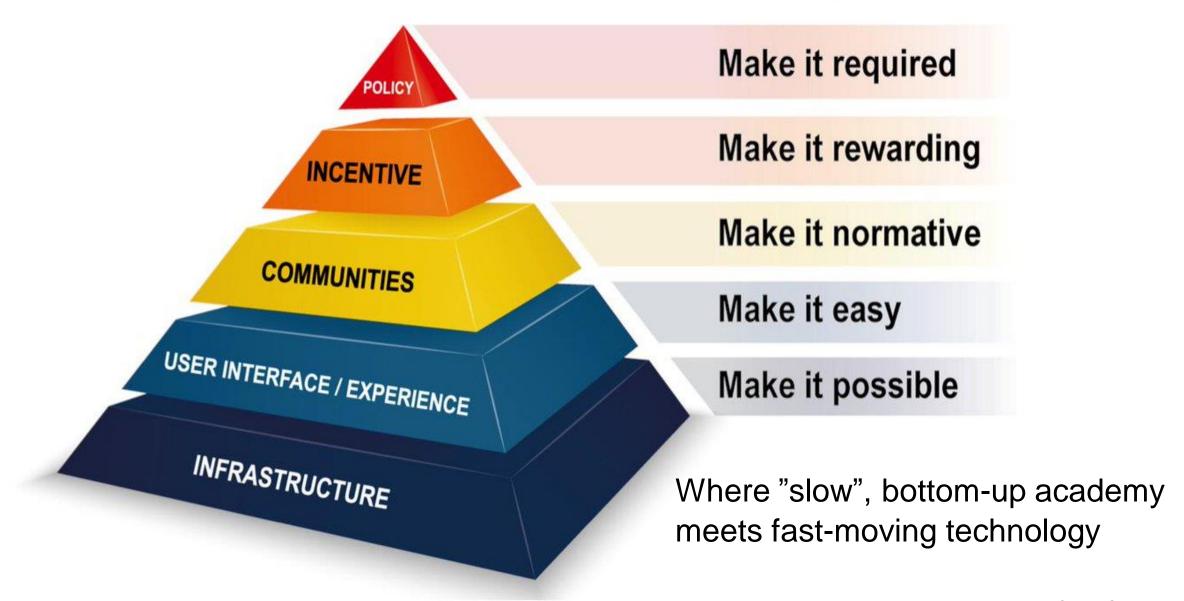


Illustration: EPFL Open Science



Data possession

Competition

Individual responsibility



Data sharing

Collaboration

Data sharing rewarded

Professional support





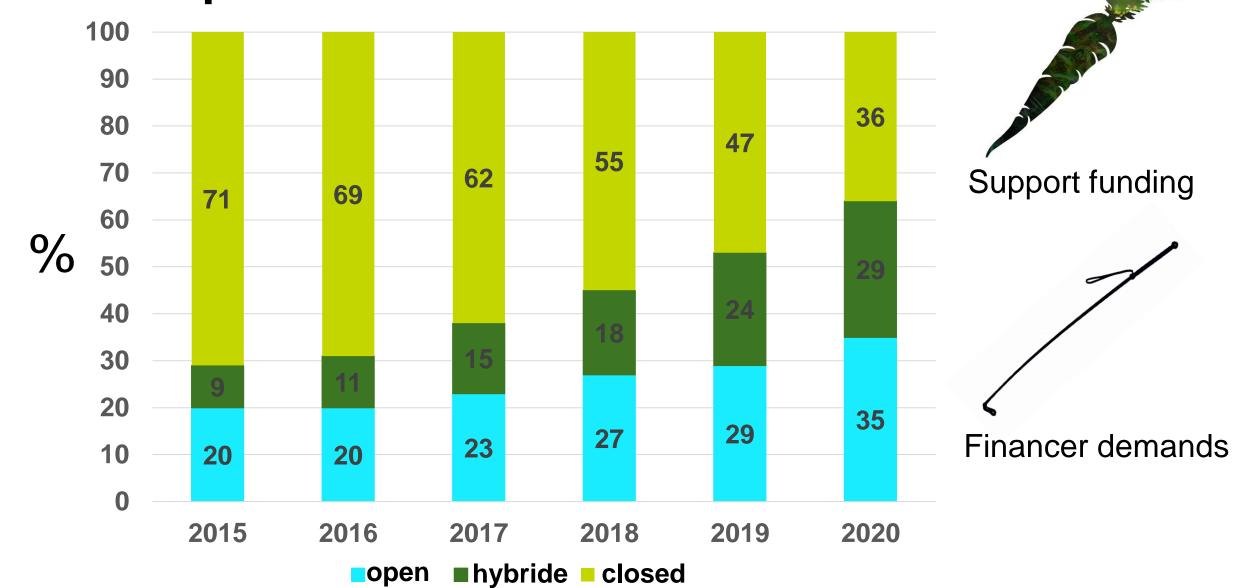


Open access





Open access articles at SLU





Open education

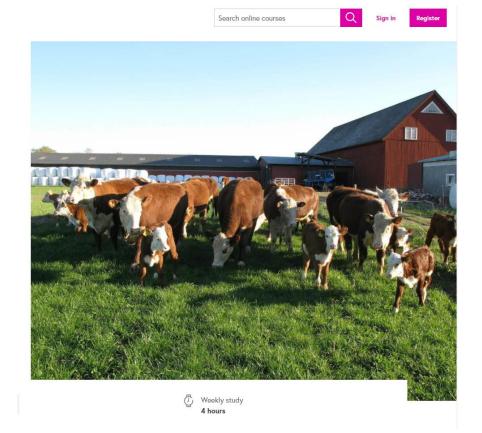




Open Education at SLU

MOOC https://www.futurelearn.com/courses/effective-livestock-production#section













Citizen Science





Citizen science at SLU

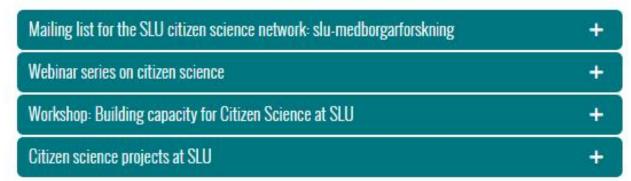
LAST CHANGED: 11 OCTOBER 2021

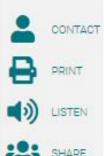
Are you interested in citizen science? Do you want to network with or learn from your colleagues? On this page you find information on current activities at SLU.

Current activities

Video. Get inspired by Tim
Hofmeester, researcher at the Department of
Wildlife, Fish and Environmental Studies in
the latest latest episode of Urban TakeAways that covers urban wildlife,
citizenscience and transdisciplinarity.









Part of the system Support development





Open data





Requirements for research data availability

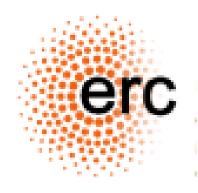


















Data Management Plans



FORMAS :

Keep a data management plan

You need to have a data management plan for the data produced in the project. If you receive funding, you need to develop a plan for data management. The plan should not be sent in to us but you should be able to present the plan upon request. We recommend that you follow the guidelines for data management plans developed by Science Europe. Read more about the guidelines in the report Practical Guide to the International Alignment of Research Data Management

ERC grantees of projects that take part in the Horizon 2020 ORD pilot are required to submit a Data Management Plan (DMP) within six months after the start of their grant. Grantees are required to deposit their research data in a repository and provide open access at least to those data, including associated metadata, needed to validate the results in their publications. Access to other data, including associated metadata, has to be provided as specified in the DMP.⁵

institution. RJ therefore decided to demand a DMP for projects that apply for RJ Infrastructure for research calls from 2020 and onwards. In the DMP, the focus is on digital data, although some sections relate to analog data.

RJ refers to the national template and the tool for DMP developed by the Swedish Research Council (or similar).

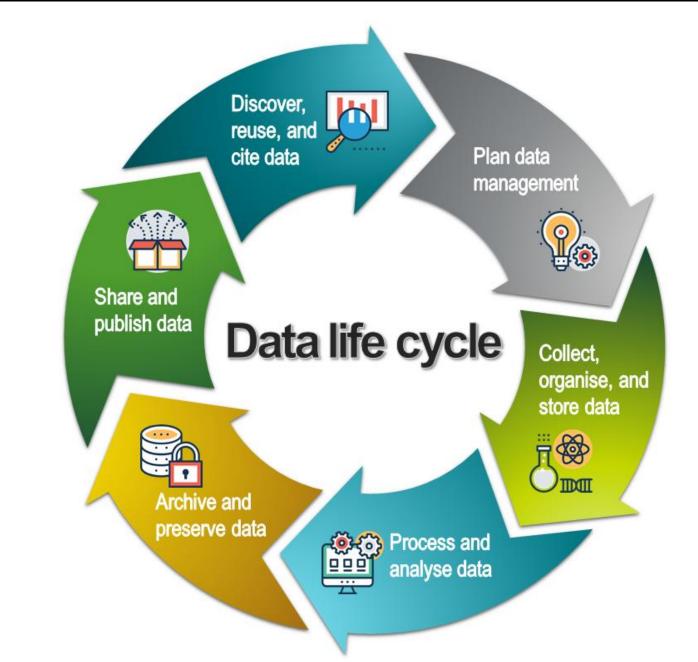
A completed DMP is considered when RJ assesses the feasibility of the project, where there should be a realistic, relevant and anchored DMP that extends beyond the end of the project period.



EU Grants: Data Management Template (HE):V1.0 - 05.05.2021

The Horizon Europe Model Grant Agreement requires that a data management plan ('DMP') is established and regularly updated. The use of this template is recommended for Horizon Europe beneficiaries. In completing the sections of the template the requirements for research data management of Horizon Europe as described in article 17 and analysed in the Annotated Grant Agreement, article 17, must be addressed.







Plan data management Collect, organise, and store data

Process and analyse data

Archive and preserve data

Share and publish data

Discover, reuse, and cite data



Statistics support Data protection and personal Bioinformatic Registration data Further use s support GIS data support of research Publication of output Storage of data publications during projects, Storage for Data capacity for archived management calculations, data plan (DMP) Software Search for Archiving of data Document and validate data Publication of data Personal - Persistent identifiers data and Add metadata - Advice on repositories contract and infrastructures management Revise DMP - Open data formats

Plan data management

Collect, organise, and store data

Process and analyse data

Archive and preserve data

Share and publish data

Discover, reuse, and cite data





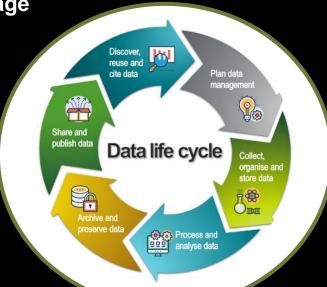


Rules and regulations

Storage



Validation, processing and publication





Archive...



Metadata and standards





Processing



Data management support

Curate data for long-term preservation and publishing Develop the systematic quality work Strengthen coordination



- Data management plans
- File formats
- Repositories
- Prepare for publishing
- Guidance on Open and FAIR data



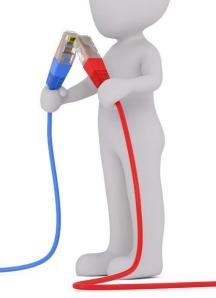
Data Management Support Library Archive Karl Coordinator Kerstin Pettersson Hanna elin Östholm Hanna Lindroos **EMA** Cissi Ylva Toljander Jansson SND lda Taberman Jürg Mikaela Logue **Asplund**







National network



Research data infrastructure

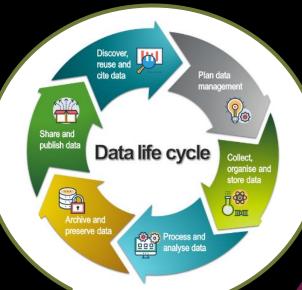


SND objectives

- To actively promote Open Science
- To coordinate the development of a trustworthy system of research data repositories
- To assist and benefit users with data publication and data management through education, support and technical prerequisites







Data management support organisation

Back office



IT department



Legal affairs



University library

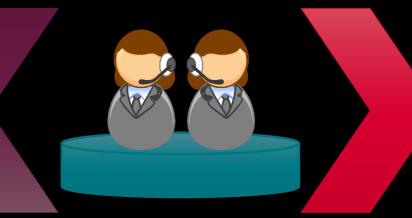


Archive



Information management





Front desk

Data Mangement Support @University library

Data Management Plan - obligatory



Development areas

- Connections with IT and legal affairs
 - Join very different expertis
- Creating an optimal organisation
 - Rectors' level
- Technical capacity
 - IT achitects
- Cultural transformation
 - Encurage and offer support
 - Lift the quality driving aspect
- Reward systems!
 - Global apporach





Incentives?

Data possession

Competition

Separate professions



Data sharing

Collaboration

Data sharing rewarded

Cross boundary professions

What is your institutions' biggest challenges? How implement open science in reward systems? **Game changers?**