



Data Management Plans

and a short introduction to ELIXIR & Digital Life Norway



CENTRE FOR
DIGITAL LIFE
NORWAY

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Data management coordinator
ELIXIR Norway/Digital Life Norway

Schedule

Today

0830 - 0900 Login support

0900 - 0915 Introduction

0915 - 0930 Requirements from the RCN

0930 - 1000 Parallel session: Local recommendations & storage infrastructures Institutional DMP guidelines

1000 - 1015 Short break

1015 - 1100 Introduction DSW

1100 - 1120 Information on national storage infrastructures

- NeLS/StoreBioInfo
- NIRD
- TSD

1120 - 1135 Short break

1135 - 1230 Persistent identifiers, Controlled Vocabularies & Ontologies



Schedule

Today

0900 - 1000 Key legal and ethical requirements for research in the GDPR and Health research act

- Personal Data Act
- Health Research Act

1000 - 1010 Short break

1010 - 1050 Relevant deposition repositories/ data archives

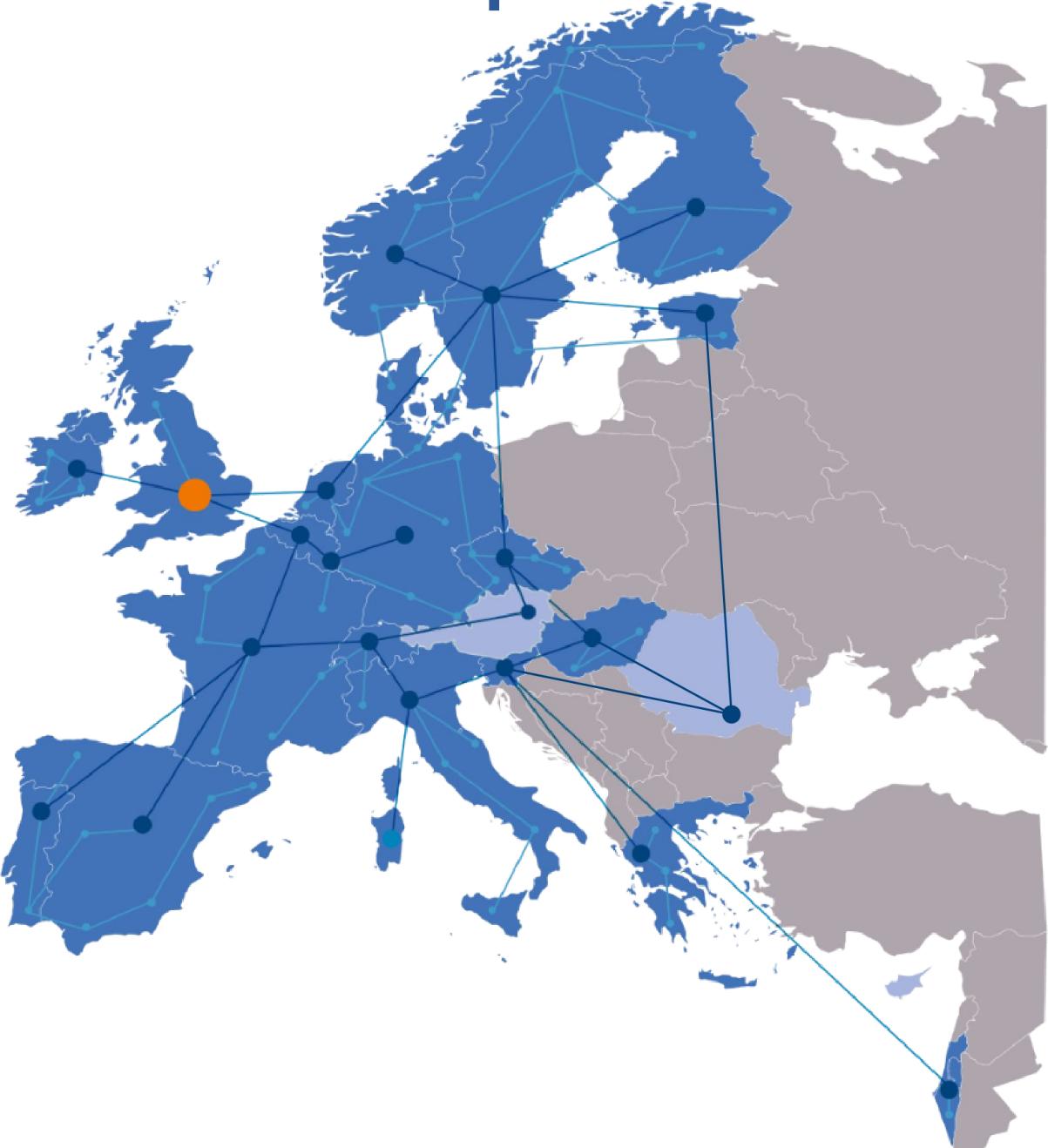
- domain specific archives (ELIXIR/EMBL-EBI, NCBI)
- Dataverse NO
- EGA
- NIRD archive
- NSD

1050 - 1100 Short break

1100 - 1115 Licensing of data, biological material and software

1115 - 1230 Hands on training and assistance to generate a data management plan

A unified European data infrastructure for life sciences



ELIXIR Europe

25 countries
250 institutions
850+ staff active
496 software and tools

Mission: to operate a sustainable European infrastructure for biological information, supporting life science research and its translation to society, the bio-industries, environment and medicine.

ELIXIR Services



Data deposition:
ENA, EGA, PDBe, EuropePMC, ...



Data management:
Genome annotation
Data management plans
RDMkit



Added value data:
UniProt, Ensembl, OrphaNet, ...



Data Interoperability:
FAIRSharing, identifiers.org, OLS,
Bioschemas, ...



Compute:
Secure data transfer, cloud computing, AAI



Bioinformatics tools:
Bio.tools, Benchmarking: OpenEBench



Industry:
Innovation and SME programme
Bespoke collaborations



Training:
TeSS, Data Carpentry, eLearning





The Norwegian Node of ELIXIR



UiT node
Erik Hjerde
Node Leader

UiB node



Ingeborg Winge
Node coordinator



Kjell Petersen
Technical coordinator



Sushma Grellscheid
Head of Norwegian Node



Korbinian
Bösl
Data
Management
coordinator



David
Dolan
Lead National
Helpdesk



NTNU node
Pål Sætrom
Node leader



Espen Åberg
Service
Coordinator



Erin Calhun
Training Coordinator



UiO node
Eivind Hovig
Rein Aasland
Node leaders



NMBU node
Simen Rød Sandve
Node leader



* ELIXIR4

ELIXIR Norway – Helpdesk

support@elixir.no

Issues that can be solved within one working day or less are covered by NFR funding

Services:

- General advice
- Experimental design consultancy
- Programming and scripting assistance
- Data analysis
- Data management
- Storage

We have experience in:

- Sequence data (DNA / RNA)
- Proteomics data
- Chip-seq data
- Structural data

We have expertise in a wide range fields:

- Genome and transcriptome assembly
- Variant calling
- Gene expression, coding and noncoding
- Methylation and epigenetics
- Statistical genomics
- Network analysis
- Metagenomics
- Microbial genomics
- Cancer
- Health
- Marine





Espen
Åberg



Nazeefa
Fatima



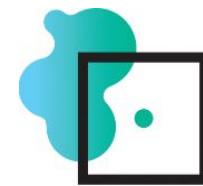
Federico
Bianchini



Arturo
Vera-Ponce
de Leon



Korbinian
Bösl



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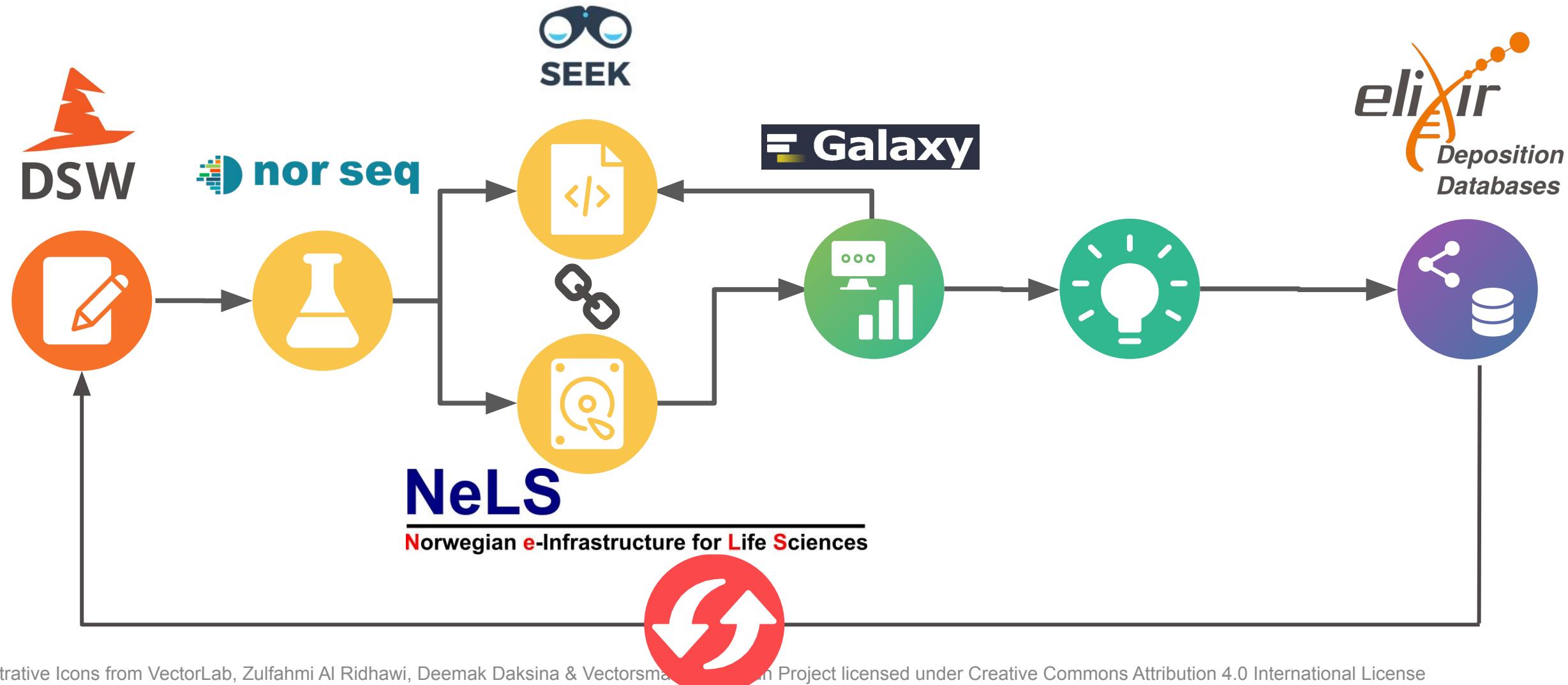
Data Management

Make research data and related metadata
discoverable, accessible and understandable ...

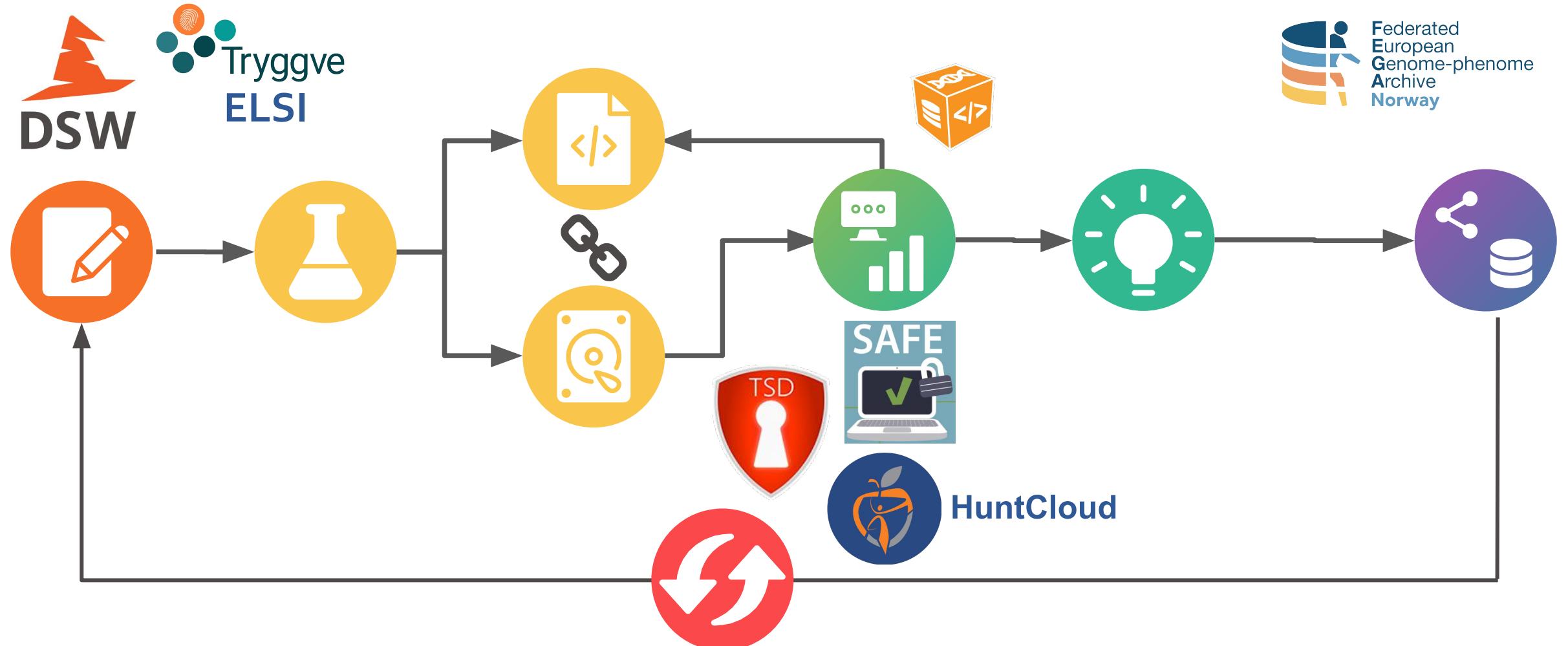


... today, tomorrow, and well into the future.
... across geographical distances.
... enabling efficient collaboration; even across disciplines.

Norwegian RDM tool assembly



For sensitive data





A user-oriented guide to the FAIR RDM practices in life sciences



increase
self-sufficiency



support researchers
to know and utilise
RDM services



build capacity and
skills in every
research institute



pool the expertise of
the community for
the community

To support the data needs of Europe's estimated **500,000** life scientists

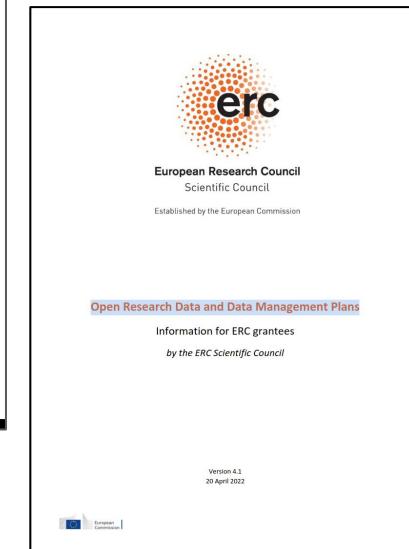
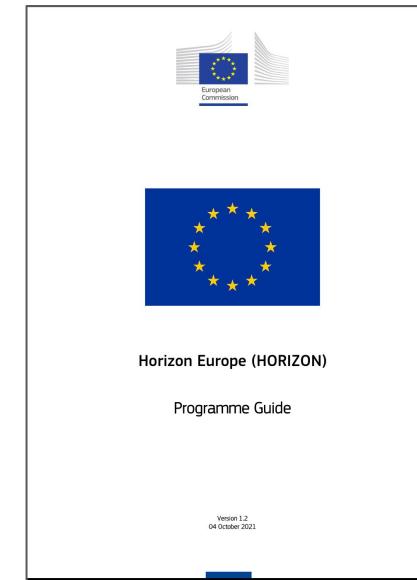
<https://rdmkit.elixir-europe.org>

Recommended by:

EC: Horizon Europe Program Guide

ERC: Research Data and Data Management Plans

Research Council of Norway





plan.research-data.no is a knowledge resource to support Data Management planning at Norwegian research institutions.

What can we help you find?



Search using a keyword

About data management planning



Purpose of a Data Management Plan

Why should you write a Data Management Plan (DMP)?



Guiding questions pre-start/ pre-award

Start here to identify data management needs and challenges in ahead of a project start, particularly beneficial when applying for funding.



Glossary

Terms used in the context of data management plans and research data management explained.

For researchers writing a DMP



Find local and discipline-specific experts

Get support from local experts and get inspired by discipline-rooted resources.



DMP questionnaire

Discipline-agnostic knowledge model in the DMP-tool Data Stewardship Wizard/ FAIR Wizard.



Accompanying information resources

Information pages for researchers filling out a DMP.

Cheat Sheets

Cheat Sheets



We provide here a set of information (cheat sheets) for various domains in the life sciences showcasing different data management approaches. In this section, you will find:

- Links to data formats
- Links to metadata standards
- Links to data reuse resources
- Links to data deposition databases
- Links to exemplar Data Management Plans (DMPs), relevant to your research domain, in the [ELIXIR-NO Data Stewardship Wizard](#)

Each cheat sheet is maintained by one of the life science research infrastructures within [BioMedData in Norway](#).

To figure out the relevant archive/repository to submit your life sciences data, check out the [Data Submission Wizard](#) provided by the European Bioinformatics Institute.

The screenshot shows a grid of nine cheat sheet cards. Each card has a title, a brief description, and links to related pages and affiliations.

- High-Throughput Screening**: Data from automated testing of chemical and/or biological compounds against targets. Affiliations: NOR-openSCREEN.
- High-Throughput Sequencing**: Sequencing data. Affiliations: nor seq.
- Light microscopy**: Data from different light microscopy technologies. Affiliations: LMI.
- Marine Metagenomics**: Data from marine (meta-) genomics. Affiliations: Related pages.
- Preclinical Imaging**: Data produced on research animals using imaging techniques like MR, PET/CT. Affiliations: NORopenMRI and NMR.
- Proteomics**: Mass spectrometry based Proteomics. Affiliations: NAPi.
- Species occurrence data**: Biodiversity data about species recorded in space and time. Affiliations: GBIF.no.
- X-ray crystallography of biological macromolecules**: Data from X-ray diffraction of biological macromolecules crystals. Affiliations: NORCRYST.

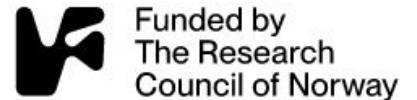
https://elixir.no/rdm-lookup/cheat_sheets



Joint effort across 5 institutions

More than 50 people involved:

- Software developers
- Bioinformaticians
- Coordinators
- Researchers



Co-funded by
the European Union



UNIVERSITY OF BERGEN



UiO : University of Oslo



UiT The Arctic University of Norway

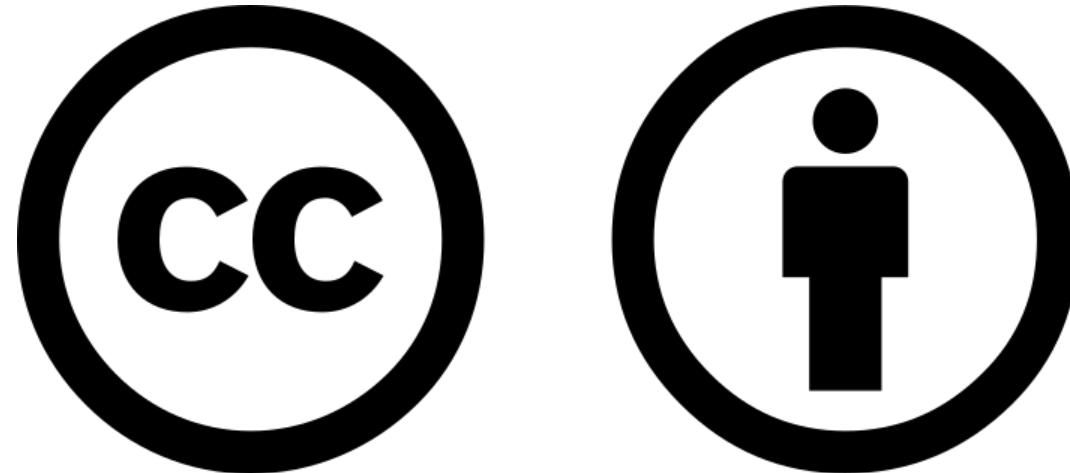


NTNU

Norwegian University of
Science and Technology



Norwegian University
of Life Sciences



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