

# Competency framework for data management in Norway

RESEARCH DATA ALLIANCE



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### Participants





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The project: <a href="https://osf.io/52zub/">https://osf.io/52zub/</a>



















### Competency framework

Define a sett of skills and competencies.

Applied in development of education for a profession.

Used by organisations for recruiting and further education.

The competency framework for data management define a sett of expertise needed to deliver research data services.

Different levels of expertise in the described areas are needed to deliver hight quality services.





Requirements
FAIR data
Open Research

Needs
Reproducibility
Cultural change
Transparency
Digitalisation
Trust

#### Resources

Research advisors Legal competence Data stewards Research ethics IT



#### Libraries

Skills for data management



#### Infrastructure

Domain specific Institutionally Nationally Generic



International collaborations
Library collaboration



FAIR data









### Administration

Policy development

Strategy development

Stakeholder support

Project management

Highlight needs

Apply for funding

Implementation of policy







### Mediation

Pedagogy

Instruction

Presentation

Communication

Culture change

Instruction in guidelines

Disclosure of policy

Create space for learning







## Data management support

Data stewardship experience

Metadata

**Ontologies** 

Curation

Long-term perspective

**Documentation** 

Persistent Identifiers

Cultural heritage perspective







#### **Ethics & Law**

Copyright

Licensing

Intellectual property rights

Privacy and GDPR

Research ethics

The Health Research Act

Contract law







#### **Technical skills**

Programming skills

Software knowledge

IT security

Data visualization

System understanding

Operation and maintenance of infrastructure







## Domain knowledge

Research experience

Research methods

Experience in curation

**Training and Guidance** 

**Terminology** 

Translate between different subjects





### Level of expertise

Specialist Tacit Knowledge
Contributory expertise
Interactional expertise
Ubiquitous Tacit knowledge
Primary source knowledge

Internal Metaexpertise
Referred expertise

(Rethinking Expertise, Collins & Evans, 2007, p. 14)





# Personal skills

**Exploratory** 

Network builder

Independent

Collaborative

Organized

**Patient** 

Ability to listen & learn

Detail oriented

Professional updates





# Recommendations for the education of data stewards

Establish study subjects based on the competence areas in the framework in regular education programmes.

Establish offers for further and advanced training based on the six competence areas described in the framework.

Coordinate education programmes with courses and certification work from other actors nationally and internationally





# Recommendations to the libraries' management

Regard research data management as focus area in the work with open research and research quality.

Map the competence internally in the organizations based on the six competence areas described in the framework.

Invest in continuing education, recruitment, and collaboration to build expertise in the areas that are not currently covered.





# Recommendations to the libraries' management

Invest in subject area knowledge and research experience to build up dual expertise in the subject area and data handling, respectively.

Further develop existing knowledge within subject areas, collection management and metadata in the work with data management.

Act as contact point for data managers who work in the professional environment.

Pilot models for data steward positions, coordinated by the library. Based on models from pioneering institutions in the field.





# Recommendations to the libraries' management

Bring in external funding for development of projects that will increase knowledge about data management.

Stakeholder support for responsibility for data management locally at the research libraries and collaborate nationally.

Participate in international networks and contribute to developments in the field.





## Challenges

Role and expectations
Accreditation
Career path(s)
Acknowledgement and recognition
Keeping up to speed on multiple domains





### Read our report:

Kvale, L., Bochynska, A., Goncharenko, I., Sarre, A., Stangeland, Sarre, A., Stangeland E., Ostrop J., Enerstvedt, K., Bertheussen, L., Pharo, N., Sundstøl, S. A., Strandskogen, S. (2022). Kompetanserammeverk for forskningsdatastøtte i UH-bibliotek. OSF. https://osf.io/52zub/

