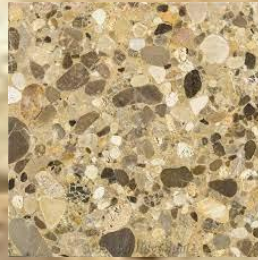


Making Nordic FAIR competency resources FAIR

International Liaison, **Lene Krøl Andersen**, Computerome, Denmark
Data Management Consultant, **Hannah Mihai**, DeiC, Denmark
Data Steward, **Nazeefa Fatima**, UiO, Norway
Executive Advisor, **Abdulrahman Azab**, NeIC, Nordic



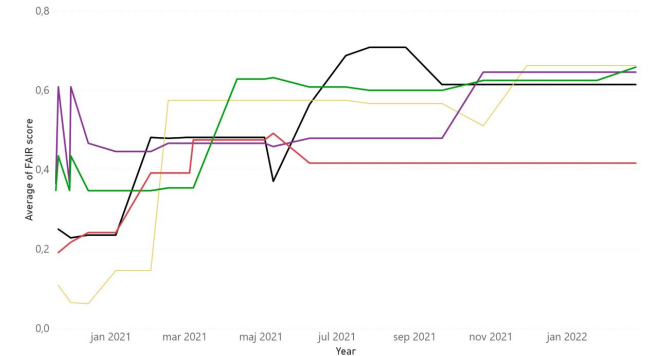
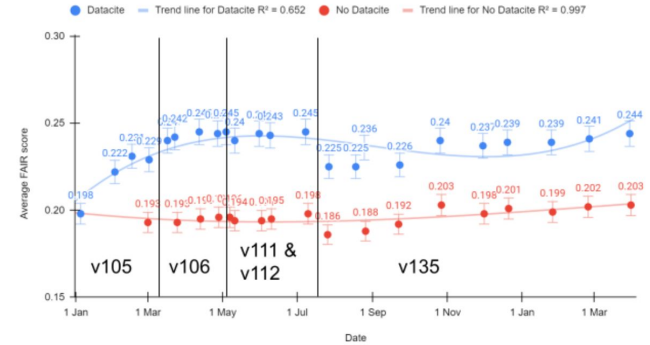
Outline

1. Introduction: How do we improve FAIR competencies in the Nordics?
International Liaison, Lene Krøl Andersen, Computerome
2. FAIR skills that matter! A nordic example Hannah Mihai, DeiC
3. The way to ECTS accreditation and why is this important? Data steward
Nazeefa Fatima, UiO
4. Integrating FAIR skills at Nordic level. Executive Manager, Abdulrahman
Azab, NeIC
5. Audience Advising Session

FAIR skills that matter! A nordic example (Hannah)

- report: [Report on Nordic and Baltic repositories and their uptake of FAIR](#)
- monitored ca 100 Nordic repositories and calculated the average FAIR score
- overall FAIR score increased slightly, but not significantly
- Few repositories have drastically improved

Development of average FAIR score over time



FAIR skills that matter! A Nordic example (Hannah)



Step webinars: [Step 5 webinar](#) April 2020 – [First assessment hackathon – Initial exercise](#)

- November 2020 – [Webinar Step 1 – Focus on PID](#)
- February 2021 – [Webinar Step 2 – Focus on the split between Data and Metadata](#)
- April 2021 – [Webinar Step 3 – Focus on Generic Metadata](#)
- October 2021 – [Webinar Step 4 – Focus on Domain-Specific Metadata](#)
- February 2022 – Webinar Step 5 – Value and Limitations of FAIR evaluators

(all the material can be found on the EOSC-Nordic Knowledge Hub)

FAIR skills that matter! A nordic example (Hannah)



- Key findings
 - From FAIR assessment to FAIR assistance
 - Repositories improve their FAIR score, when they are actively reaching out for help and are willing to put work into it
 - FAIR assessment tools have an immense value, but also limitations
 - different tools are testing and evaluating differently, which causes confusion and mistrust
 - The EOSC FAIR metrics and Data Quality Task Force has written a report on this: [FAIR Assessment Tools: Towards an “Apples to Apples” Comparisons](#)
 - Metadata standards and templates are a key factor!

Data Stewardship Curriculum for Higher Education

Nazeefa Fatima

(Pronouns: They/Them)

Data Steward

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8 November 2023



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ELIXIR Europe

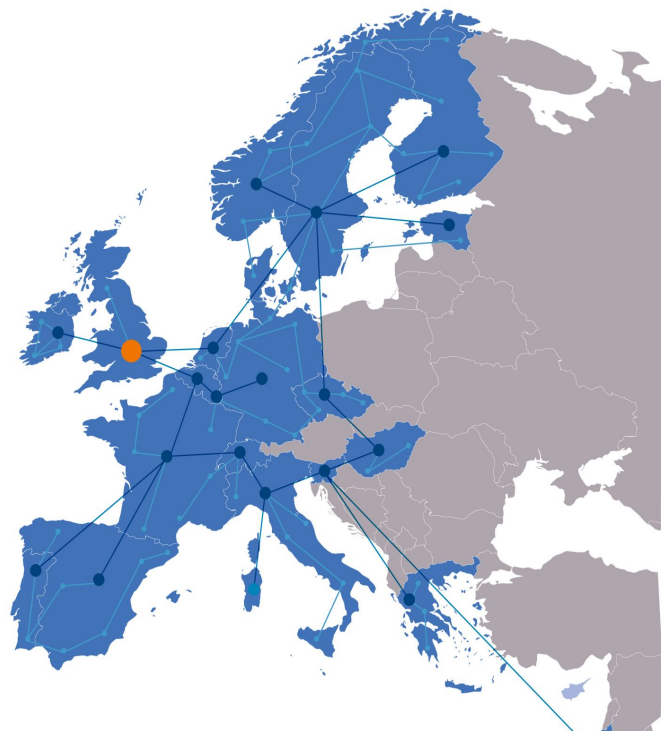


'Data for Life'

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

<https://elixir-europe.org/about-us/who-we-are>



The Norwegian node of ELIXIR Europe

Currently funded by:

The Research Council of Norway

Involved institutions; UiB, UiO, NMBU, NTNU and UiT

Users

Services to national users

Infrastructure;

Helpdesk and Training;

bioinformatics, data management

Deliverables to ELIXIR Europe

Tools and databases



support@elixir.no





Data Stewardship

Post-graduate Curriculum

Name (ECTS)	Module Content
1. Introduction to RDM (2.5)	FAIR principles, data life cycle, Data Steward roles, National landscape/resources, legal and ethical requirements, guidelines and policies
2. Fundamental programming skills (2.5)	Software Carpentry: POSIX, git, high-level language: R Python, databases & SQL, Machine Learning in R Python, reproducible computing
3. Data Stewardship of (quantitative) natural science data (2.5)	DMPs, Metadata management system(s), technical compliance with ELSI requirements, data reproducibility, data reuse
4. Role(s) of data steward in practice (2.5)	Service provision, Communication strategies, Stakeholder involvement, project management from a DS perspective, change management
5. Project work (5)	1) Analysis of support needs for a research project 2) Conceptualization and development of data management policies

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DIGITAL LIFE
NORWAY



NTNU

Norwegian University of
Science and Technology



Norwegian University
of Life Sciences

Thank you!



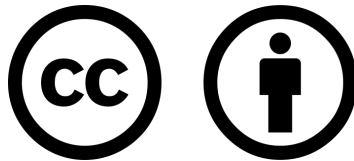
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e-Infrastructure

- Consists of:
 - High performance computing, storage, network.
 - People who maintain it (system administrators).
 - People who help researchers use it (“DBAs”, application experts).
- National e-infrastructures for academic research:
 - NAISS in SE, CSC in FI, Sigma2 in NO, DeIC in DK, RHnet in IS, ETAIS in EE.
 - This is where you should go to crunch lots of data.
 - About 500 technical personnel.

NeIC does not own or operate hardware.

NeIC helps improve all this by co-financing those who are willing to collaborate across borders.



FAIR Data Stewardship Training

- **FAIR data stewardship; an introduction:** provides an introduction to the main topics required to become a FAIR data steward, including a thorough introduction to FAIR data management and the importance of preparing data and metadata for reuse.
- **FAIR ontologies engineering:** Ontologies play a key role in data interoperability but, for that, they must themselves be designed for interoperability. The main objective of this course is to introduce practitioners to the theory and practice of Ontology Engineering in general, and the engineering of FAIR ontologies, in particular.



Nordic-Baltic FAIR Data Forum

The Forum brings together researchers, data stewards, service providers, repository owners, and activity funders in one community to learn from each other, plan for training, competence-building (e.g. training events and workshops), and collaboration activities (including Nordic/EU-funded projects).

Activities:

- Workshops/webinars/training events. NeIC funds 1-2 F2F events/year
- Join the Community: <https://neic.no/mailman/listinfo/fair>

Audience Advising Session



A special THANKS to:

NeIC Result Transfer Program

EOSC-Nordic Consortium

DeiC

University of Oslo

ELIXIR

Tampere University, Finland

NBIS, Sweden

Computerome (KU & DTU)