



# Data Stewardship Competence Centers IN

National chapters' meeting - 1st day

October 4th 2021 - 2-4 PM CEST

# Ground rules for the meeting

- Please switch off your mic and camera if not talking
- Use the chat to ask questions to speakers, highlighting “QUESTION” in capital letters
- Links to common notes can be found in the chat
- Slides of the presentations will be shared with participants and DSCC-IN members at the end of the meeting
- The meeting will not be recorded
- During the discussion time, please participate in the Menti polls!

# First day outline

- 2:00 - 2:10: Opening remarks (Barend Mons)
- 2:10 - 3.30: Chapters' presentation by national representatives (20 min. each):
  - **Germany** (Monika Linne, Patrick Helling)
  - **Netherlands** (Laurents Sesink)
  - **Austria** (Sarah Stryeck, Ilire Hasani-Mavriqi)
  - **US** (Melissa Cragin)
- 3:30 - 4:00: Q&A and discussion

Link to common notes Google doc:

<https://docs.google.com/document/d/1wroqeEKYEgLIRifBWYyW8okzXtZnW0z4cUKb28T37p4/edit?usp=sharing>

# Second day outline

- 2:00 - 2:05: Welcome (Valentina Pasquale)
- 2:05 - 3.25: Chapters' presentation (20 min. each):
  - Brazil (Debora Pignatari Drucker)
  - Italy (Elena Giglia)
  - Poland (Anna Walek)
  - Denmark (Hannah Mihai, Mareike Buss)
- 3:25 - 3:55: Discussion & questions
- 3:55 - 4:00: Final wrap-up

Link to common notes Google doc:

<https://docs.google.com/document/d/1mGq6aTrxqjqW-MOlP1bCxSPZnbwPYYweJrc7bNQUsKg/edit?usp=sharing>





# Opening remarks

B. Mons



# GO UNITE!

German Chapter of the Data Stewardship Competence Centers  
Implementation Network (DSCC-IN)

October 4th - 5th 2021 - 2-4 PM CEST

**Kontakt:**

Monika Linne, KonsortSWD, GESIS Cologne, [monika.linne@gesis.org](mailto:monika.linne@gesis.org)

Patrick Helling, Data Center for the Humanities (DCH), University of Cologne, [patrick.helling@uni-koeln.de](mailto:patrick.helling@uni-koeln.de)



# GERMAN RESEARCH DATA MANAGEMENT LANDSCAPE

October 4th - 5th 2021 - 2-4 PM CEST

# GERMAN RESEARCH DATA MANAGEMENT LANDSCAPE\*

- Individual (generic/domain-specific) **RDM competence centres** and **contact points at universities and research institutions**

- 66 listings for universities

- 1
- 8

- **Research**

- 3

- **Regional**

- 6

- **National**

- 3 listings (at least)

- **International networks and initiatives**

- 3 listings (at least)



\*<https://www.forschungsdaten.org/index.php/FDM-Kontakte>

National Research Data Infrastructure (NFDI)



„The aim of the national research data infrastructure (NFDI) is to systematically manage scientific and research data, provide long-term data storage, backup and accessibility, and network the data both nationally and internationally. The NFDI will bring multiple stakeholders together in a coordinated network of consortia tasked with providing science-driven data services to research communities.“

*[https://www.dfg.de/en/research\\_funding/programmes/nfdi/index.html](https://www.dfg.de/en/research_funding/programmes/nfdi/index.html)*

# GERMAN RESEARCH DATA MANAGEMENT LANDSCAPE



## National Research Data Infrastructure (NFDI)

### ■ **Vision:**

- Research data sets should be FAIR

### ■ **Aims:**

- Systematically managing research data
- Providing long-term data storage, backup and accessibility
- Linking data both nationally and internationally

### ■ **Approach:**

- Coordinated network of consortia tasked with providing science-driven data services to research Communities focused on specific scientific fields or methods (bottom-up process)
- Consortia → users and providers of research data run by state-funded and state-recognized higher education institutions, non-university research institutions, departmental research institutions, academies and other publicly financed information infrastructures
- Consortia assembly – crosscutting topics
- Building upon and federating existing infrastructures

→ Funding period of five years

→ Start of funding: Oct. 2020, Oct. 2021, Oct. 2022 (*expected*)

## National Research Data Infrastructure (NFDI)

- DataPLANT  
Data in plant research
- GHGA  
German Human Genome Phenome Archive
- KonsortSWD  
Consortium for the social, educational, behavioral and economic sciences
- NFDI4Biodiversity  
Biodiversity, Ecology and Environmental Data
- NFDI4Cat  
NFDI for sciences related to catalysis
- NFDI4Chem  
Chemistry consortium for NFDI
- NFDI4Culture  
Consortium for research data on tangible and intangible cultural heritage
- NFDI4Health  
NFDI for personal health data
- NFDI4Ing  
NFDI for the engineering sciences

# GERMAN RESEARCH DATA MANAGEMENT LANDSCAPE



## National Research Data Infrastructure (NFDI)

- BERD@NFDI  
NFDI for business administration, economics and related data
- DAPHNE4NFDI  
Data from photon and neutron experiments
- FAIRmat  
FAIR data infrastructure for condensed matter physics and the chemical physics of solids
- MaRDI  
Mathematical Research Data Initiative
- NFDI4DataScience  
NFDI for data science and artificial intelligence
- NFDI4Earth  
NFDI consortium for earth system research
- NFDI4Microbiota  
NFDI for microbiota research
- NFDI-MatWerk  
National Research Data Infrastructure for Materials Science and Materials Engineering
- PUNCH4NFDI  
Particles, Universe, Nuclei and Hadrons for NFDI
- Text+  
Language and text-based research data infrastructure





**GO UNITE!**

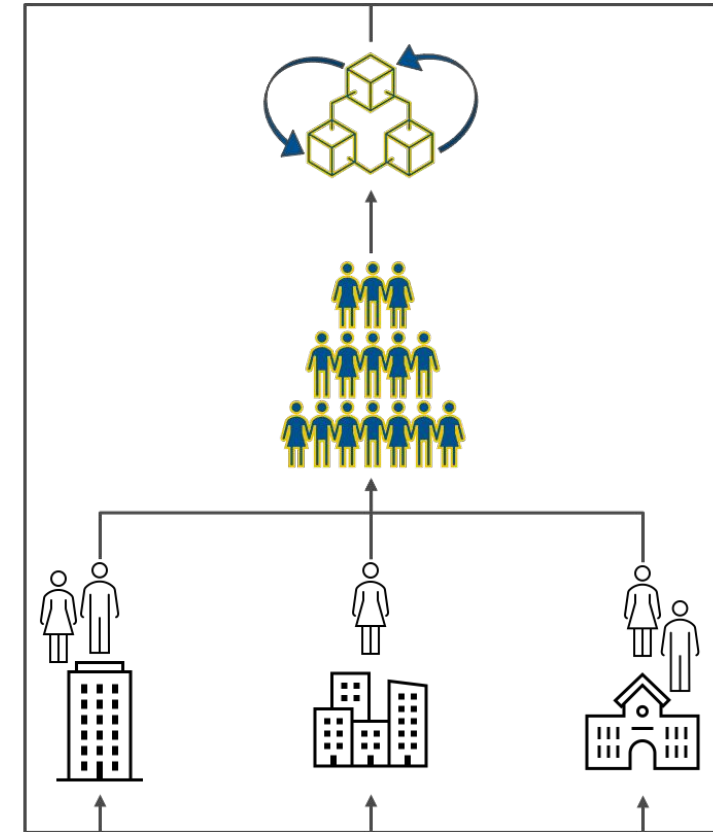
**October 4th - 5th 2021 - 2-4 PM CEST**

## **GO UNITE!** – main goals

- Translating the main goals/taks of the DSCC-IN into a national/institutional level
- Supporting the establishment of institutional (and pragmatic) RDM services
- Providing a network of competencies and cooperation

## GO UNITE! – our approach

- Coordination-Group → 2 coordinators + dedicated participants
- Community-driven initiative that brings together participants from different research domains, institutions/infrastructures and projects (e.g. data centres, infrastructural institutions, data stewards, rdm managers/curators, (data-driven) researchers)
- Working together on requirements of the GO UNITE! community and transferring solutions back to the common RDM community both nationally and internationally



# GO UNITE! - GERMAN CHAPTER OF THE DSCC-IN

- **Kickoff-Meeting (Oct. 2020)**
  - ca. 40+ participants
  - Discussion about central requirements and goals of the participants related to RDM  
→ Community-driven definition of three requirements/working groups
- **Regular General Meetings (twice per year)**
  - Reports on working groups and collaboratively enhancement of common requirements
  - Evaluation of new requirements/working groups by the community
  - Internationalization
- **Regular Meetings of the coordination group (twice per year at least)**
  - Short reports on working groups
  - Preliminary discussion on regular general meetings of GO UNITE!
- **Exceptional Meetings/Workshops on special topics**
  - e.g. requirements by the community/working groups



# GO UNITE! WORKING GROUPS

October 4th - 5th 2021 - 2-4 PM CEST

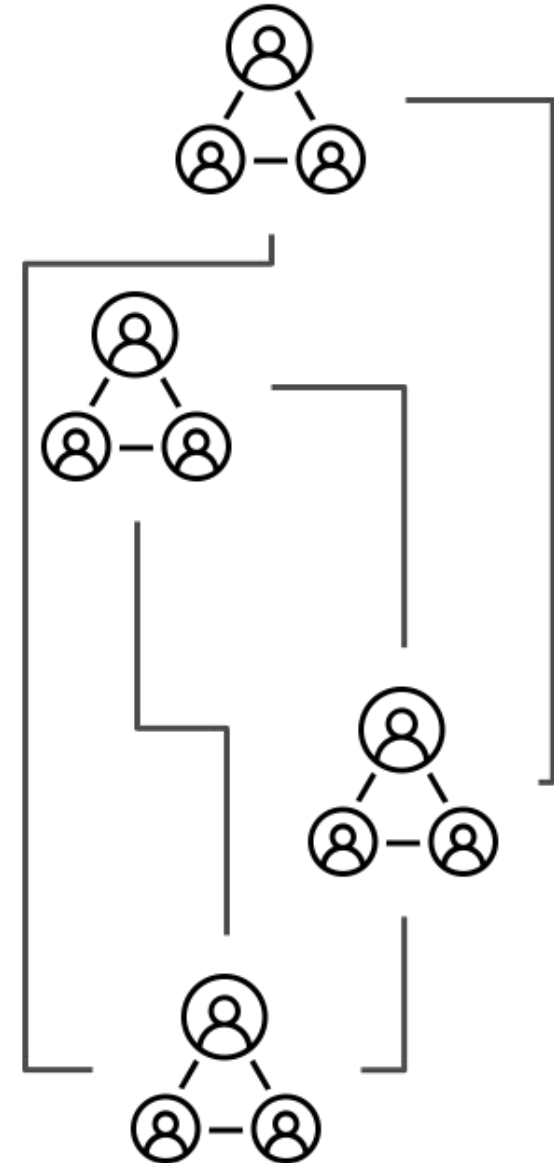
# CONNECTING THE NETWORK

## *Identified requirement*

- **Too many regional/national initiatives and networks** on the same topics, e.g. collecting and connecting materials for RDM training or building up a network of experts and services

## *Goals*

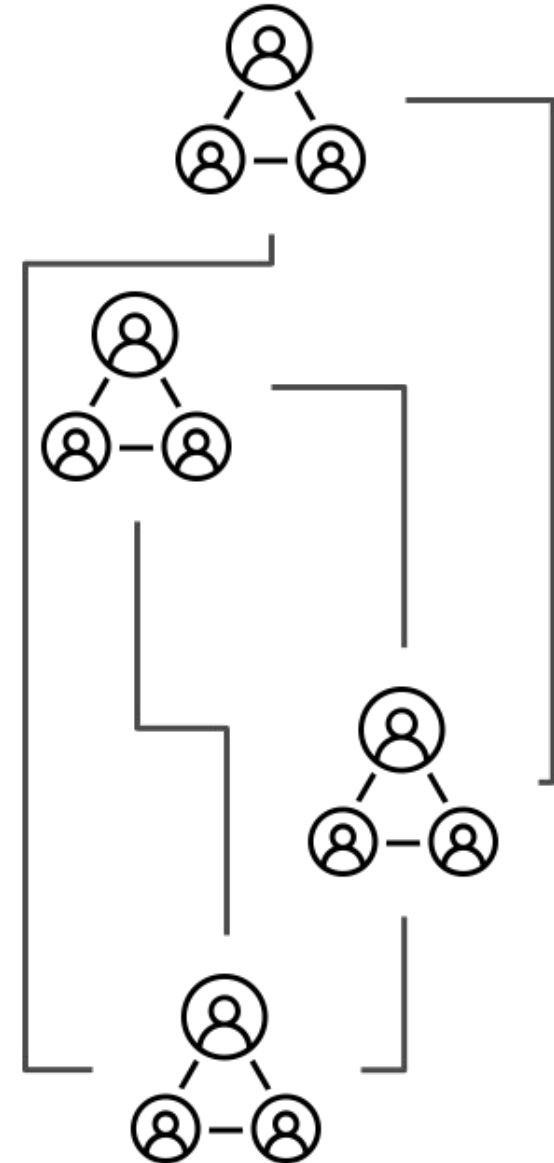
- **Avoiding the reinvention of the wheel** and parallel work on identical topics
- **Bringing together initiatives** like the NFDI consortia, universities, working groups etc. to work on a central document with a common metadata scheme in order to obtain a complete overview of all existing material and programs



# CONNECTING THE NETWORK

## Current steps

- **Collection of training services** within the GO UNITE! community
- **Cooperation** with the DINI / UAG training courses
  - Describing data with a common metadata scheme  
→ <https://zenodo.org/record/3784238#.YU2zuW5CRHg>
  - Integrating data into the online database of the DINI / UAG training courses  
→ [https://rs.cms.hu-berlin.de/uag\\_fdm/pages/home.php?login=true](https://rs.cms.hu-berlin.de/uag_fdm/pages/home.php?login=true)  
→ <https://zenodo.org/communities/uag-fdm-schulung/?page=1&size=20>
- **Participation** in DINI / nestor working group for collaboration between RDM initiatives and the NFDI consortia



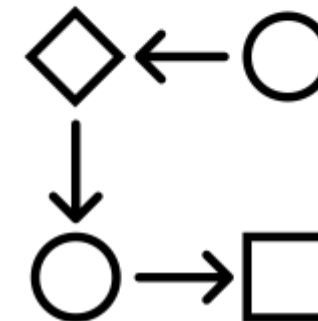
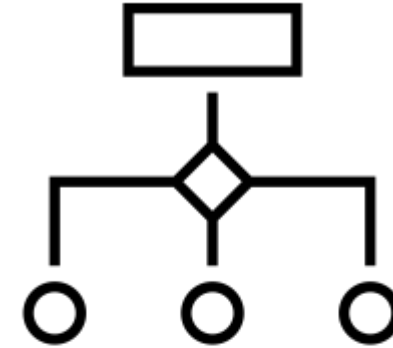
# RESEARCH DATA MANAGEMENT DESCRIPTION MODEL

## *Identified requirement*

- Need for a **comprehensive description model of requirements and workflows** within the German RDM landscape

## *Goal*

- Establishing a cooperative forum for **presenting/discussing existing RDM structures, workflows and requirements** with regard to their individual conditions. **Developing a comprehensive and practice-oriented, abstract description model to measure RDM concepts and the landscape of RDM requirements**



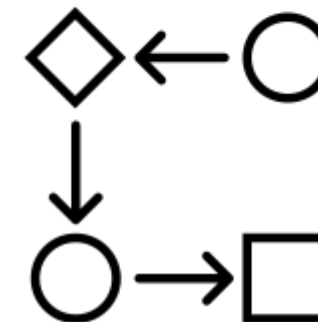
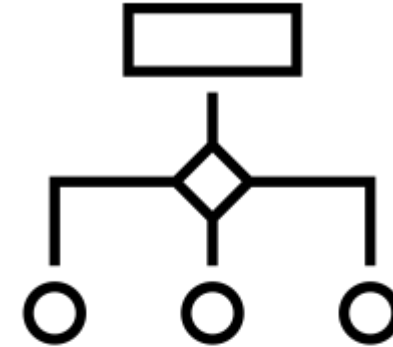


# RESEARCH DATA MANAGEMENT DESCRIPTION MODEL

## Current steps

- **Evaluation and mapping** of **existing models and approaches** by the organizers (ongoing)
- **Community-driven workshop** (July 2021) for **collecting and modelling** service descriptions and perspectives as well as RDM requirements
  - **Our idea:**  
**Development of a** (partially) generic, abstract and, above all, practical **description and categorization model** for RDM service structures and requirements landscapes together with the RDM community
  - **What we did:**  
**Collaborative analysis of self-descriptions of RDM service structures** to evaluate the possibilities and necessity of a comprehensive description model for RDM service structures and requirements
  - **What we found out:**  
There seems to be **a need for the development of a description model for RDM service structures and requirements**, but it cannot be developed within one workshop

→ [Follow-Up Workshop in spring 2022](#)



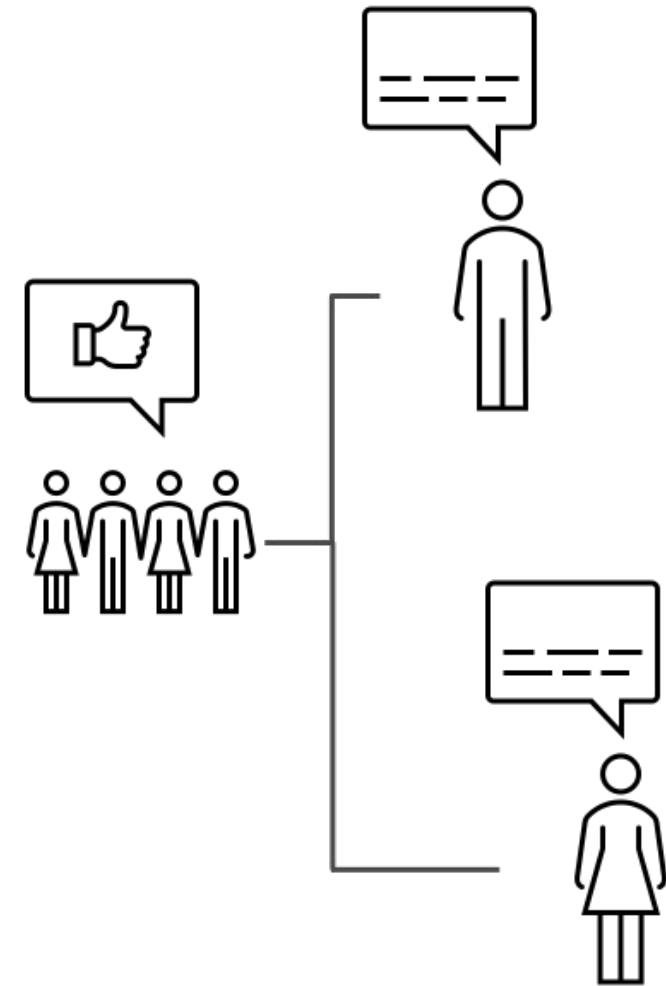
# INTERNATIONALIZATION

## *Identified requirement*

- **More internationalization** regarding RDM topics

## *Goal*

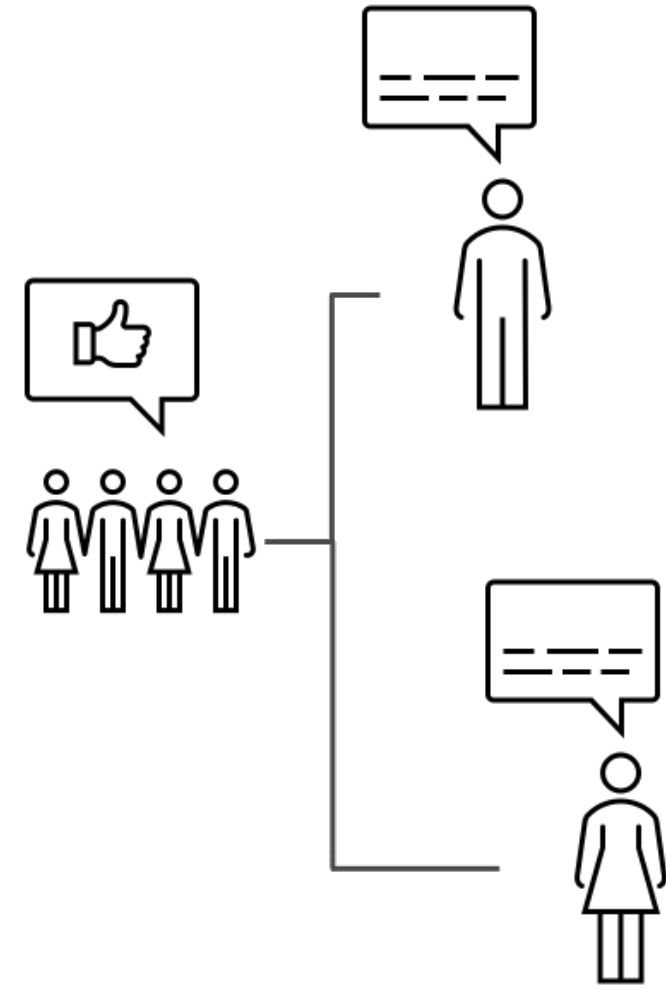
- **Continuous exchange** with RDM experts, Data Stewards etc. and **stronger Connection** to the GO FAIR DSCC IN



# INTERNATIONALIZATION

## Current steps

- **Participating in the DSCC IN Workshop** on 4th/5th of October 2021
- **Inviting coordinators from other DSCC IN national chapters** to upcoming GO UNITE! meetings to report on current developments and explore networking opportunities
  - 4. GO UNITE! General Meeting 2021 (21th of October): Anna Wałek, Gdańsk University of Technology Library (GUT Library)



## 4. GO UNITE! General Meeting (21st of October 2021)

- **Reports** and breakout-discussions on the **current working groups**
- **Guest lecture** Anna Wałek, Gdańsk University of Technology Library (GUT Library)
- **Pitches of new requirements** (*sneak preview*)
  - Establishing RDM in curricula at German universities
  - Consolidation of RDM counseling services
  - Ethics
  - Online portal for RDM experts
  - ...

Thank you for your attention!

Patrick Helling | Data Center for the Humanities (DCH), University of Cologne, Germany | email: [patrick.helling@uni-koeln.de](mailto:patrick.helling@uni-koeln.de) | fon: +49(0) 221 – 470 1307 |twitter: @helling\_patrick



# Netherlands - Data landscape landscape

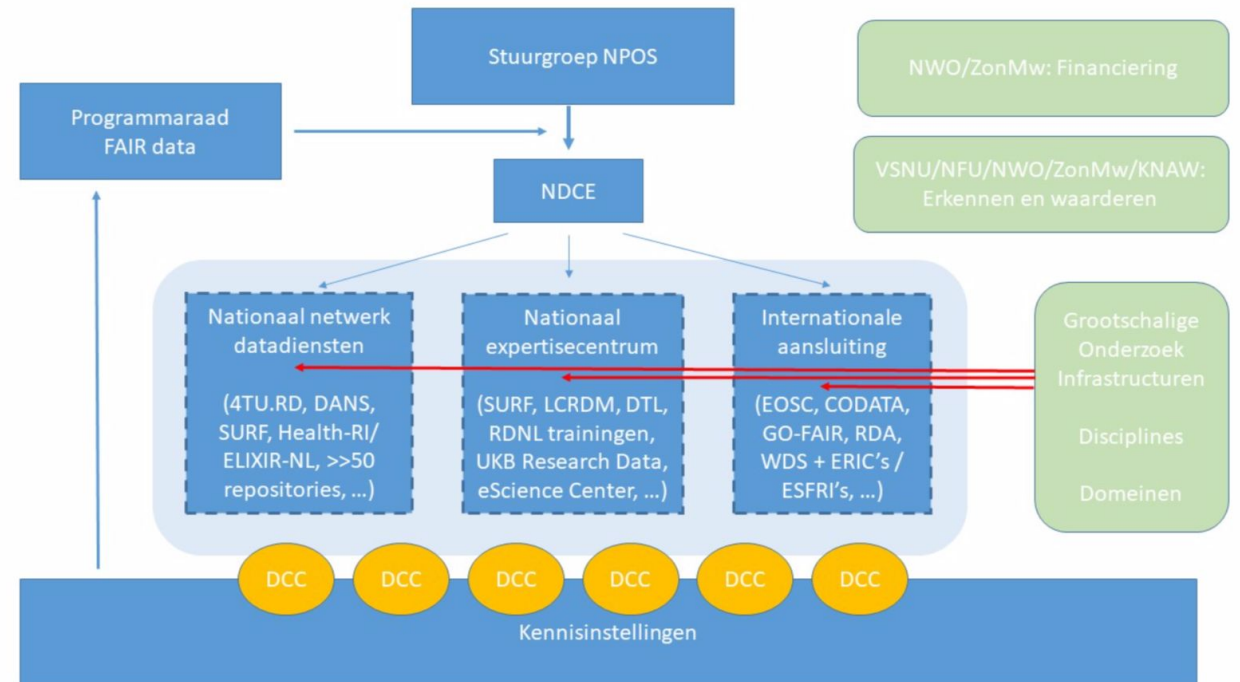
Study: Exploration and optimization national data landscape (2019)

Outcome:

→ A fragmented and federated data landscape → More coordination and collaboration necessary.

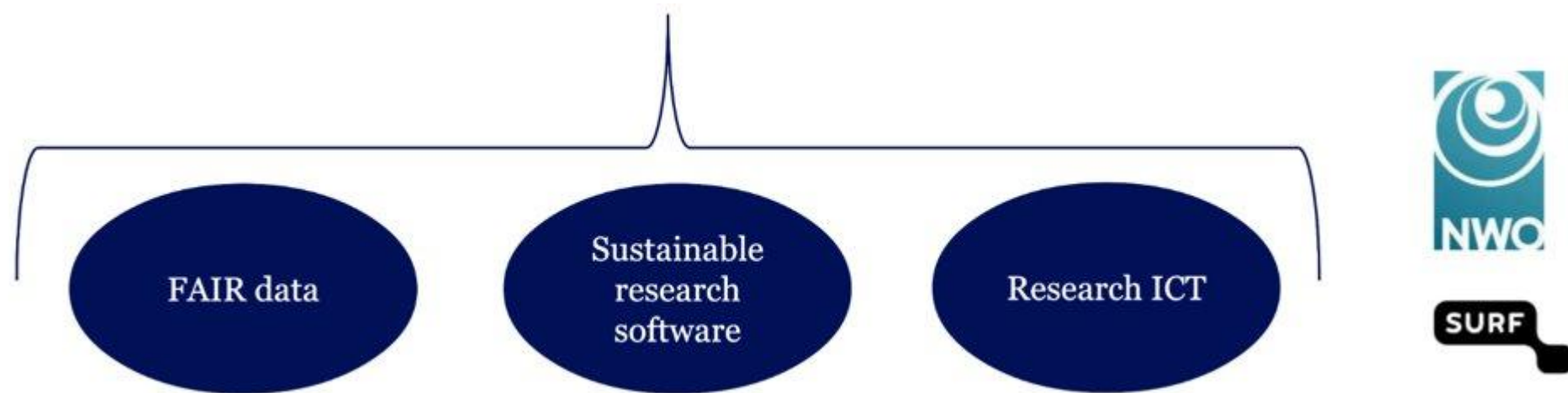
Thematic DCCs →

Local DCCs →



# Netherlands - Local DCCs

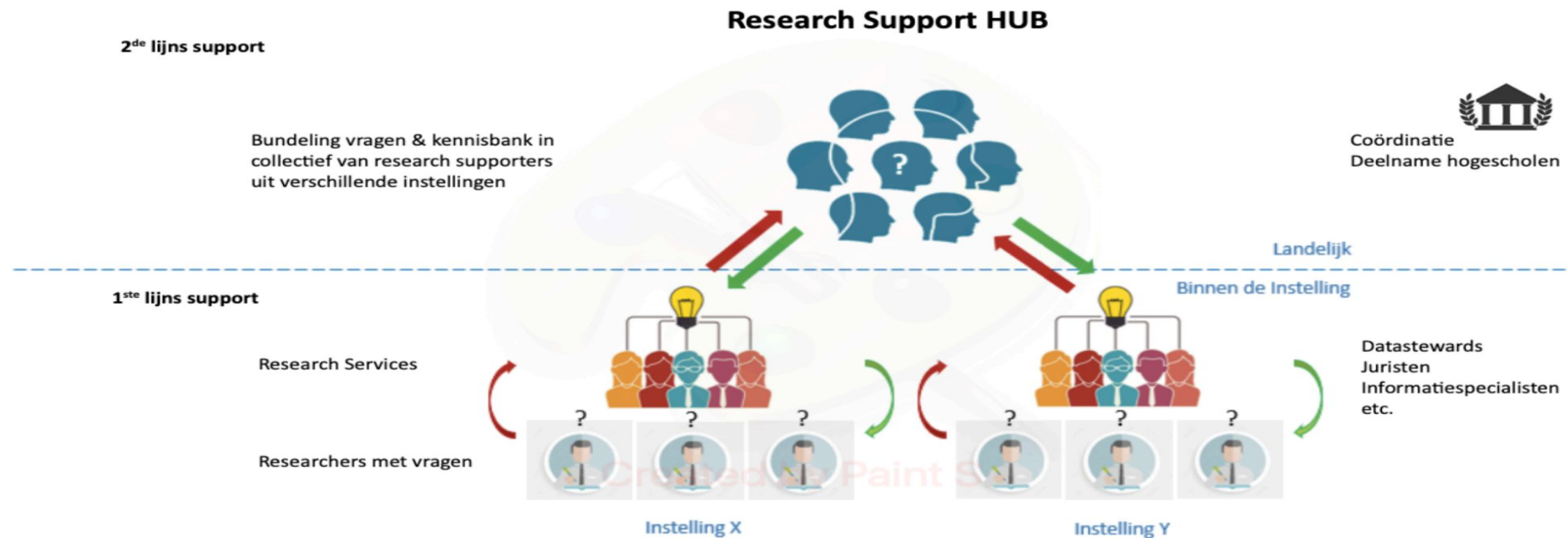
Researchers should be able to use and rely on state-of-the-art infrastructure, such as calculating storage facilities and data/software repositories. However, the knowledge required for this is not always sufficiently available to all researchers at all universities. To fill this gap, universities, academic medical centres and the NWO and KNAW institute organisation are invited by NWO to create or advance so-called Local Digital Competence Centers (DCCs).



DCCs are expected to bundle expertise in the field of FAIR Data Stewardship, software and computing.

# Netherlands - Local DCCs - Universities of applied sciences

Universities of applied sciences work together in a Digital Competence Center (DCC) for Practice-oriented research to further facilitate research data management, FAIR data and data-intensive research at universities of applied sciences in order to realize their open science ambitions.

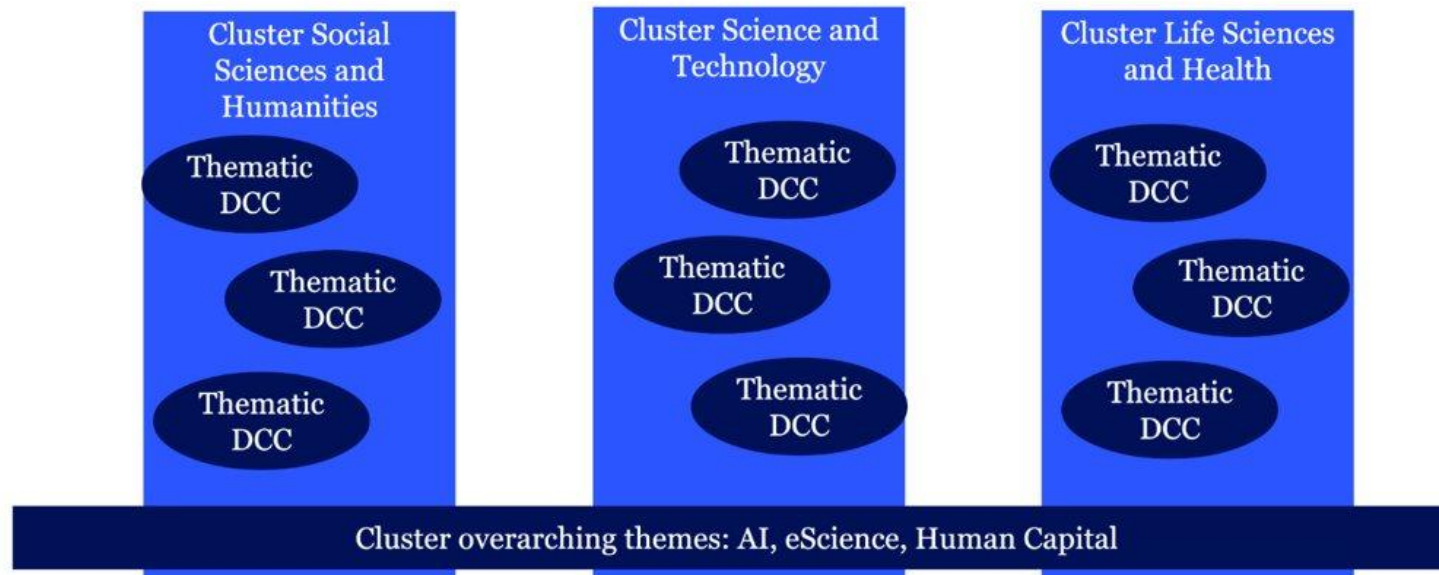




# Netherlands: Thematic DCCs

- Avoid fragmentation of resources and initiatives.
- Steer towards cooperation and self-organization between existing organizations within the various domains.
- Ensure a good link to existing thematic DCCs and local DCCs.

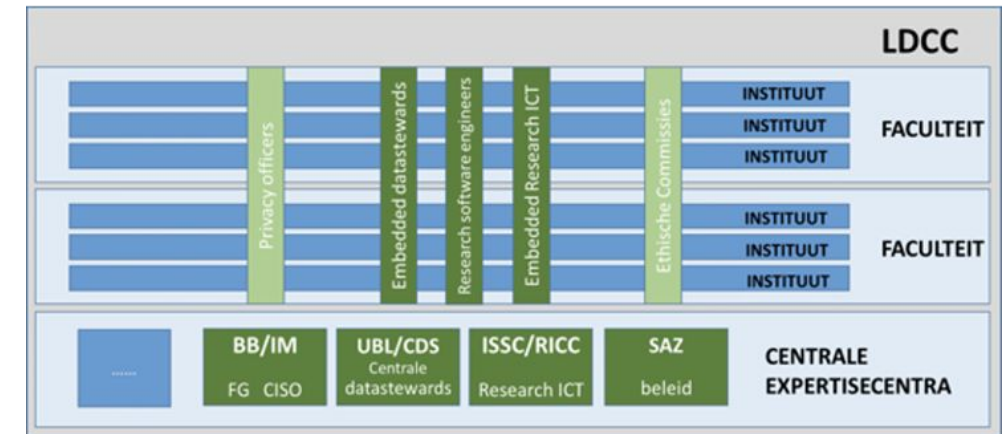
## Thematic Digital Competence Centers



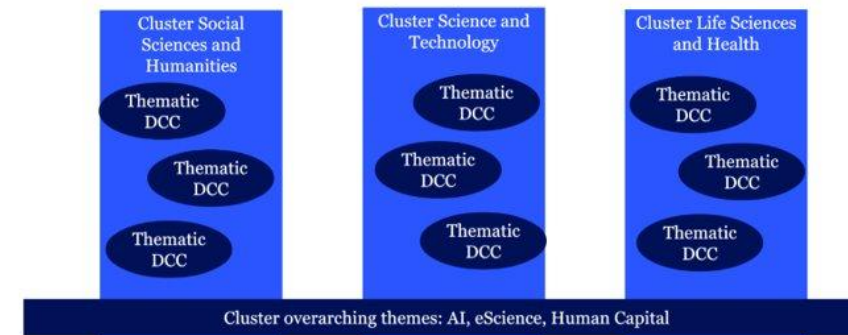
# An example: Leiden DCC

- Integrated support for training, tooling and policy for the complete research data cycle
- Cooperation between data management, Research ICT, information security & privacy and ethics
- 3 networks: embedded data stewards, research software engineers and Research-ICT
- In cooperation with:  
Other local DCCs  
Thematic DCCs

**I want to analyze my big data, make my data FAIR and share my research software**



## Thematic Digital Competence Centers



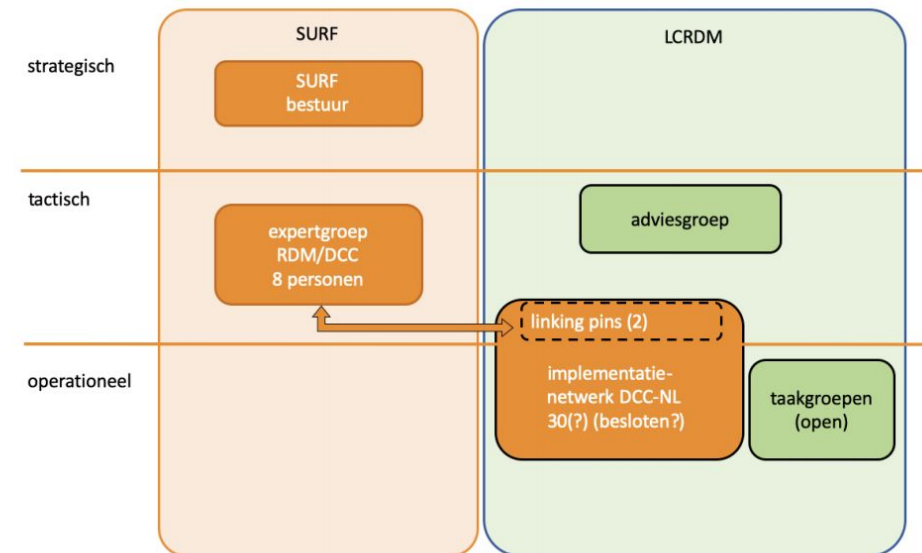
# Netherlands - LRCDM: DCC Implementation Network

- National Coordination Point Research Data Management
- 2 coordinators (linking pins).
- Regular meetings around thematic topics (Funding, training, research software management, ....)
- Involved in further development of National Programme Open Science. FAIR data table.



## Implementatie Netwerk DCC NL

Mei 30, 2020



- NWO funding
- Surf: coordination, implementation and development
- Universities: Coordination group RDM services (CIO)
- Universities of applied Sciences

Round 1. *Stimulate new initiatives (2020)*

Round 2. *Stimulate collaboration, implementation and innovation (2021)*

*Supply and demand for training (trainers and researchers) 2021*

Recommandation: Marketplace.



## Data storage and management

### Research & ICT

We offer a wide range of services for different phases in the life cycle of your research data. Everything for the secure storage, management, sharing and reuse of data.

- Fontys Hogescholen - Platform digitale faunaschade taxatie
- Saxion Hogeschool - Research Drive / iRODS integratie pilot
- HZ University of Applied Sciences - Open science made simple: Ecosysteem en werkwijze voor hele onderzoekscyclus
- Hogeschool Utrecht - Verbinden van systemen voor gezondere peutermonden

# Netherlands - Experience: Collaboration is essential

- Within Research performing organisations
  - Library, IT, Information Management, policy, faculty.
    - Align services, policy, information, one stop shop for researchers.
- Between Local DCCs
  - Share knowledge, collaborate in the development of infrastructure, influence on national developments, share best practices about funding a DCC.
- Between local DCCs and Thematic DCCs
  - Generic services (F and A) versus domain specific services (I and R)
- Between the local DCCs/thematic and national DCCs

# Netherlands - Strength/Weakness

- **Strength:** Awareness about capacity and competencies building.  
Sense of urgency to collaborate.  
Concept of DCC is accepted and is seen as an important building block.
- **Weakness:** Low involvement of researchers.  
Alignment with international stakeholders is still problematic.  
Structural funding at the level of research performing organisations
- Possible activities for DCC IN: Share information about the national data landscape. (Organization, funding, ....) and how we can involve more researchers, align local/thematic/national DCCs with international stakeholders, secure structural funding.



## Data Stewardship at Austrian Universities

National initiative as part of the FAIR Data Austria project

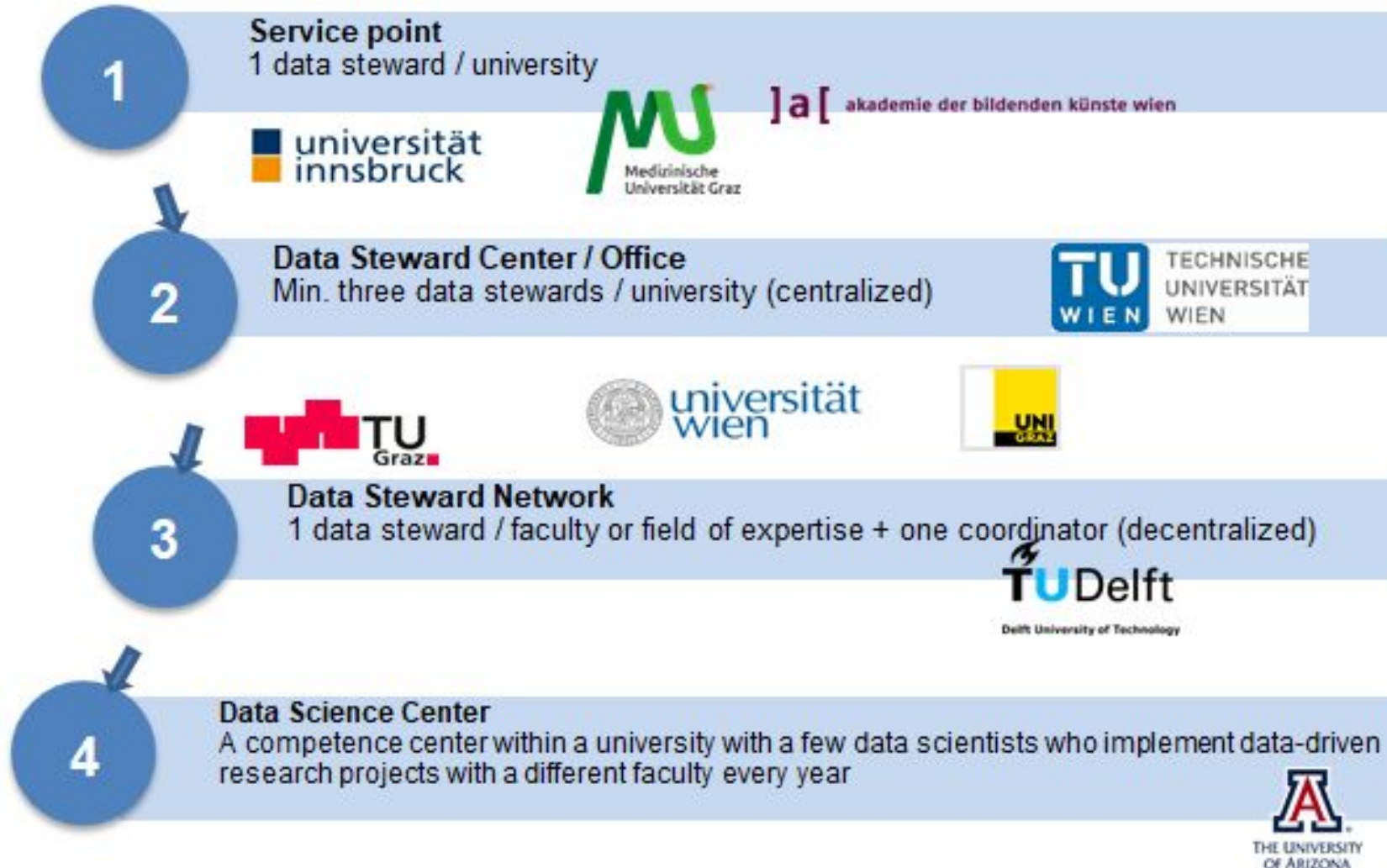
- Funded by the Federal Ministry of Education, Science and Research
- 6 partner institutions and 23 associated partners

### Goals:

- Align data stewardship efforts and activities on a national and international level
- Define data steward models, profiles, competences and training for the Austrian context
- Establish a self-assessment tool to identify a suitable model
  - Match the **requirements** (e.g., university size, available resources, fields of expertise, number of DMPs/year) and **existing solutions** (number of data stewards, centralized / decentralized models, profiles, training)



## Data Stewardship at Austrian Universities





## Data Stewardship at Austrian Universities

### Challenges:

- Status at partner universities/differences in:
  - models in the process of being implemented
  - stages in the process
  - priorities for data stewards (profile) and expectations
- Communicating the need for data stewardship
- Lack of clearly defined roles and responsibilities
- High demand - data science and programming skills
- Repurposing existing positions
- Funding new positions

## Data Stewardship at TU Graz

### *Facts and Figures*

- 3,850 staff total\*
  - of which are academic staff 1,877\*
  - of which are mandated instructors/student assistants 912\*
  - of which are non-academic staff 1,063\*
- 13,673 regular students (WS)\*
- **7 faculties**
- **97 institutes**
- 3 campus locations in Graz
- 176.5 mio € federal budget 2020
- **67.4 mio € income from third-party funds 2020**

(\*as of 31/12/2020)



## Data Stewardship at TU Graz

3 Data Stewards with discipline-specific background in mechanical engineering, physics and life sciences

### Skills

**Communication** (researcher engagement, management of data stakeholders, facilitation of meetings, trainings and working sessions and communication of policies)

**Organizational** (understand, define and document processes, ability to develop & apply policies, team work)

**Technical** (data processing, data science, data management)

**Flexibility** for change management to improve data quality

**Problem solving**





## Data Stewards at TU Graz



<b>Name:</b>	<b>Alexander Gruber</b>	<b>Hermann Schranzhofer</b>	<b>Sarah Stryeck</b>
<b>Data Steward since:</b>	01.03.2021	01.10.2020	02.05.2019
<b>Background:</b>	Dipl.-Ing. in Technical Physics (NAWI)	Dipl.-Ing. in Techn. Physics; PhD in Material Sciences, MU Leoben; Project assistant Thermal Engineering	MSc in Biochemistry and Molekular Medicine (NAWI) PhD in Molecular Medicine (MedUni)
<b>Responsible for:</b>	Data Champions, Development of RDM guidelines	RDM in Engineering	CyVerse Austria, Data quality

## How do we help?

### Infrastructure

InvenioRDM, CyVerse AT,  
maDMPs, elabFTW

### Consulting

Standardization, Archival,  
Container technologies

### International connections

EOSC, GAIA-X, GOFAIR,...

### Proposals

Data management strategies,  
Project tasks in data  
management

### Support

Data management plans,  
Analytics workflows,  
Metadata

## Use Case 1: Faculty-specific implementation strategy of the RDM policy (MBWW – mechanical engineering)

- Ratified by the dean on 12th of May
- Measures are valid for all PhD projects starting from 1. Juli 2021
- Trainings with / from RDM team

### TU Graz insider

« Zurück zu: TU Graz insider

#### Forschungsdaten: TU Graz Repository und erste RDM Policy



Neuerungen im Forschungsdatenmanagement: Im TU Graz Repository können Publikationen und Daten digital aufbewahrt werden. Und an der Fakultät für Maschinenbau und Wirtschaftswissenschaften wurde die erste fakultätsspezifische Research Data Management (RDM) Policy österreichweit verabschiedet.

© RDM-Team

<https://www.tugraz.at/sites/rdm/policies/faculty-policies/>

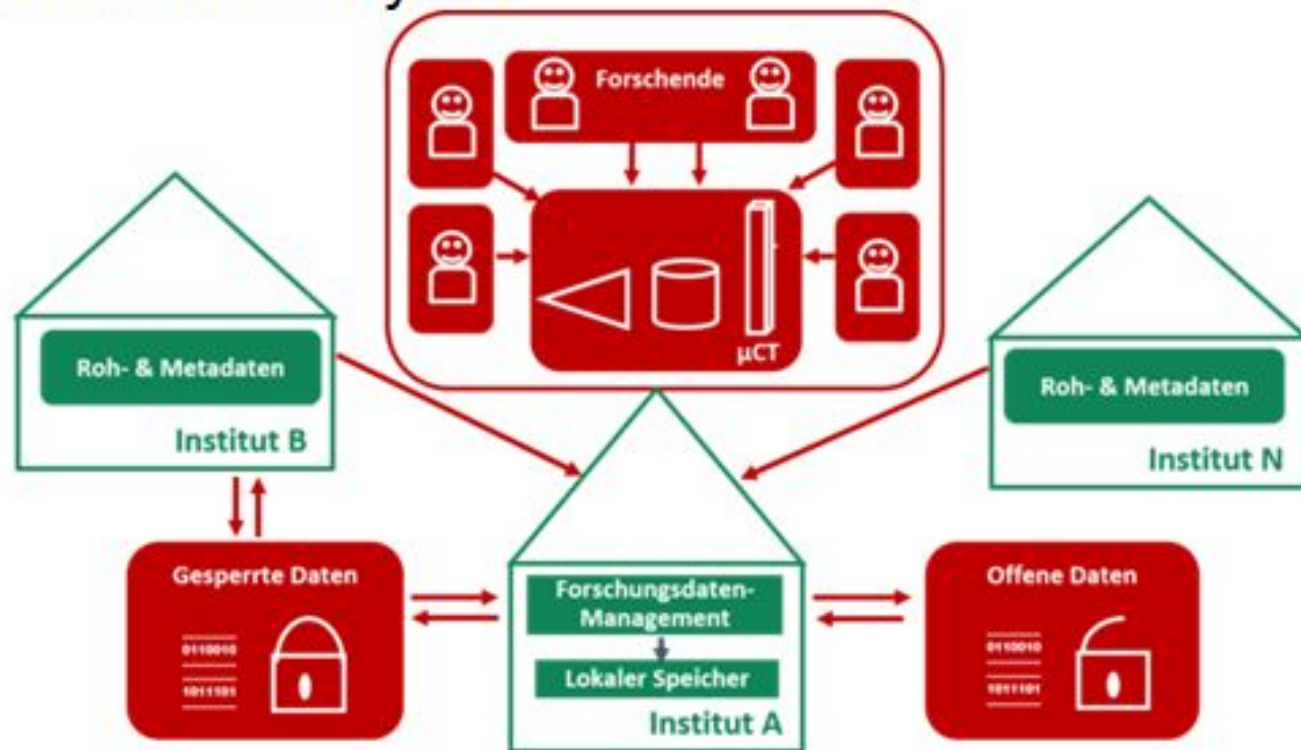
[https://tu4u.tugraz.at/no\\_cache/bedienstete/insider/article/forschungsdaten-tu-graz-repository-und-erste-rdm-policy/](https://tu4u.tugraz.at/no_cache/bedienstete/insider/article/forschungsdaten-tu-graz-repository-und-erste-rdm-policy/)

TU Graz insider vom 9. Juni 2021



## Use Case 2 – Data Sharing for Core Infrastructures

Institute for Solid State Physics



**µCT at TU Graz.** Cooperative project with 13 institutes of the three universities in Graz for sharing a computer tomograph. Data transfer will be enabled using our infrastructure CyVerse Austria.

## Use Case 3 - Biochemistry

Dr. Thallinger (Institut für Biomedical Informatics), Dr. Feichtinger (MedUni Graz), Dr. Hahn (Uni Graz)

Course in biostatistics with 15 students did not take place f2f due to the COVID19 pandemic. Students used CyVerse Austria to get access to R-Studio, without need of any local installations.

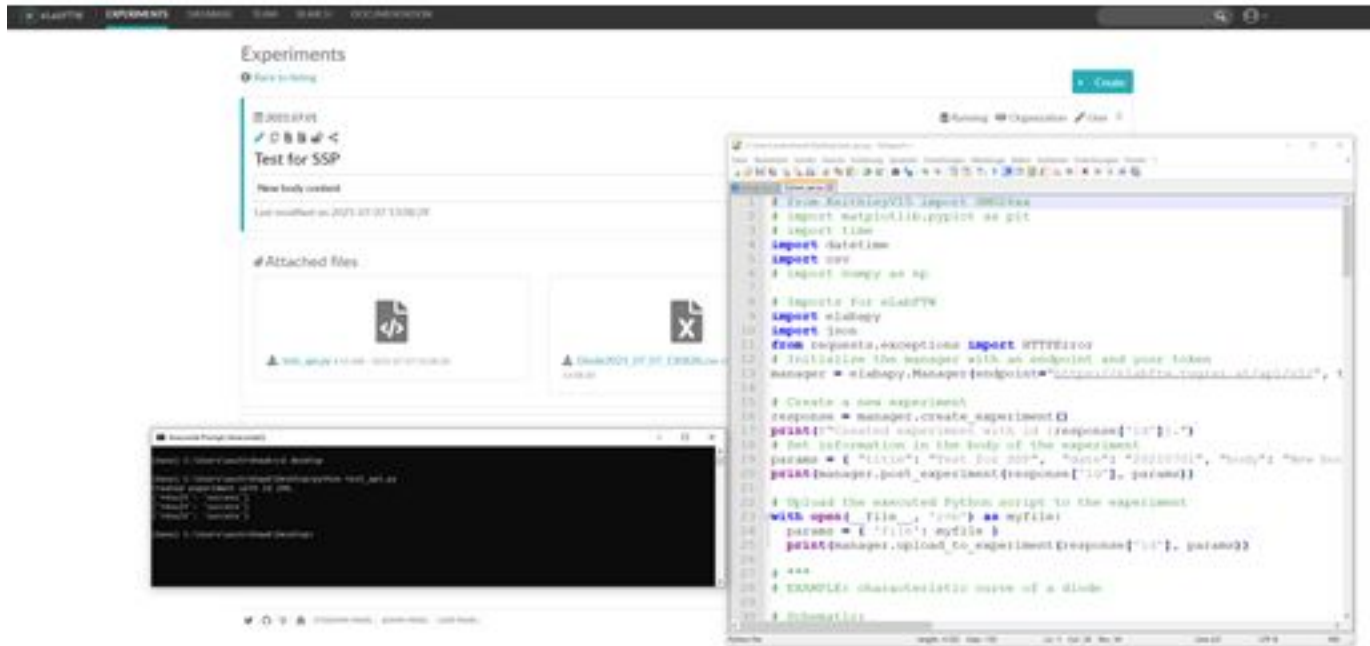


In future:

Computational Social Systems courses in CyVerse Austria (Prof. Garcia, Dr. Lasser)



## Use Case 4 – Institute for solid state physics



### eLabFTW

- Introduction of an electronic labnotebook
- Generation of a script for automated data transfer to elabFTW

### DMPs

- Support for data management plan
- DMP accepted from funder

Export data from experiment and automatically integrate via **APIs** into elab FTW



# DSCC IN: National Chapters Meeting

October 4, 2021

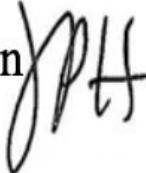
<https://gofair.us/>

# US Context: Data Policy, Public Access, Open Science

EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF SCIENCE AND TECHNOLOGY POLICY  
WASHINGTON, D.C. 20502

February 22, 2013

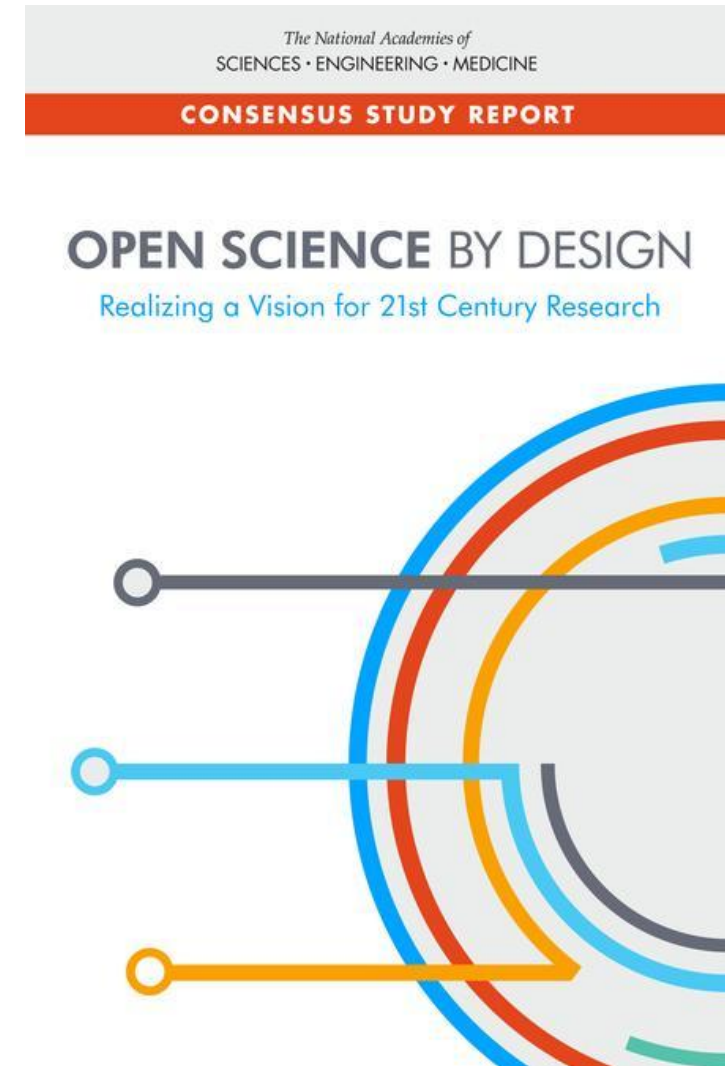
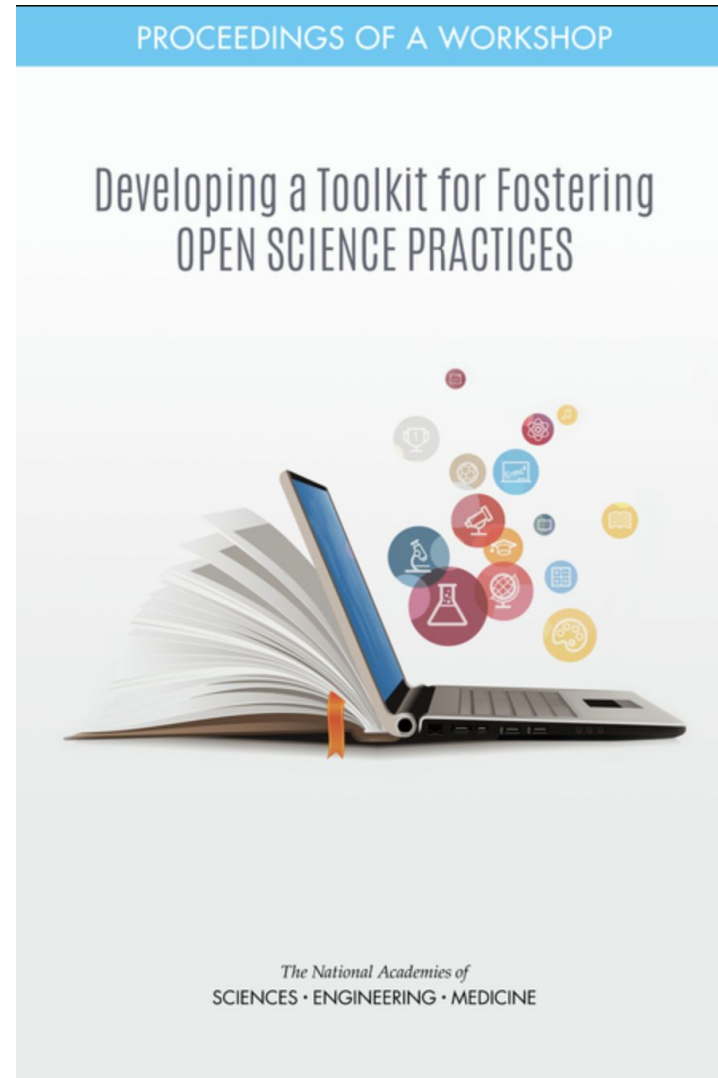
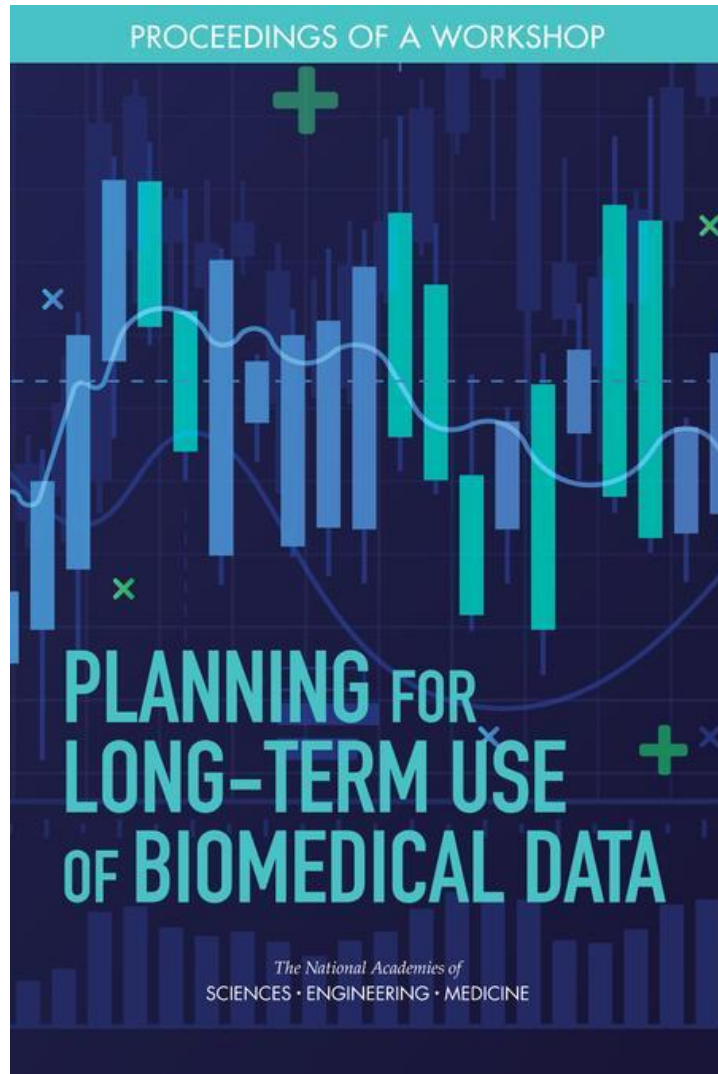
MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: John P. Holdren   
Director

SUBJECT: Increasing Access to the Results of Federally Funded Scientific Research

## 1. Policy Principles

# US Context: Data Policy, Public Access, Open Science





## Advancing FAIR

- Foster a community of practice
- Expand data stewardship
- Improve understanding of FAIR technologies



**Christine Kirkpatrick**

GO FAIR US Office Head,  
SDSC/UC San Diego



**Melissa Cragin**

GO CHANGE Chair,  
SDSC/UC San Diego



**Juliane Schneider**

GO FAIR US Office, Sage  
Bionetworks



**Chris Erdmann**

GO BUILD Chair, American  
Geophysical Union



**Natalie Meyers**

GO FAIR US Office, Notre  
Dame



**Katie Knight**

GO TRAIN Chair, Oak Ridge  
National Laboratory



**Alexandra Andreiu**

GO FAIR US Office Project  
Manager, SDSC/UCSD



**Nancy  
Hoebelheinrich**

Ambassadors Chair,  
Knowledge Motifs LLC

# Advance FAIR Capacity in the US:

- National leadership and cross-community engagement
- Train FAIR Data stakeholders
- Extend Implementation Networks (IN) into US
- Technical services - building and support

## Goals:

- Build connections among FAIR stakeholders
- Foster community discussions on the topic of FAIR
- Update communities on developments in FAIR tech
- Offer training and a space to share expert knowledge
- Liaise with GO FAIR International Support and Coordination Office (GFISCO).
- Increase awareness of GO FAIR Implementation Network (IN) activities in the US and worldwide.
- DSCCs

# Office Activities



- Capacity-building and Events
  - “FAIR on the Ground” webinar series
  - Data Stewardship Interest Group
  - GO Build, Train, Change – active Pillars for national activities
- Extend Implementation Networks (IN) into US
  - VODANA
  - Metabolomics
  - Chemistry
  - Data Stewardship Competency Centers
- Technical services - building and support
  - Facilitate network of FAIR Data Points (Test site, starting catalogue work)

## Improving data value across its lifecycle

- Linking Research Data Management with Planning for long-term use
- Application of standards and semantics technologies
- Adding value to support new kinds of use
- Training for new roles and adding new skills
- Facilitating Policy
- In coordination with RDA's *Professionalizing Data Stewardship Interest Group*





## Fostering Institutional Planning and Service Development

- Comparative overviews of FAIR initiatives, organizations, and projects around the globe.
- Navigating funding agency calls for FAIR data.
- Managing conflicting assumptions and expectations about FAIR across other stakeholders
- FAIR actions / implementation for individual researchers, repositories and other community resources
- What does it mean to be “FAIR” at the institutional level?

## FAIR Data Stewardship Plan Template for Organizations and Institutions

FSCI 2020 Course: T16- Advancing FAIR Data Stewardship: Fostering Institutional Planning and Service Development

### Table of Contents

<b>Organization/Institution Details:</b>	<b>2</b>
<b>Stakeholders:</b>	<b>2</b>
<b>Data Stewardship Goal</b>	<b>2</b>
<b>Institutional FAIR Assessment</b>	<b>2</b>
<b>Opportunities (who are your data/FAIR champions?)</b>	<b>3</b>
<b>Training Plan</b>	<b>3</b>
<b>Priorities and Resource Wishlist</b>	<b>4</b>
Priorities Wish List Worksheet	4
<b>“Extra credit”</b>	<b>5</b>

### 7. Priorities and Resource Wishlist

Review the goal, assessment, opportunity, and training plan.

1. List the actions these suggest and record a timeframe using the worksheet.
2. For each time frame, collapse into 10 items. This can be done by categorizing like things into one item.
3. Order based on priority.

#### Priorities Wish List Worksheet

Action to Take	Short-term (0-12 mos)	Medium Term (1-2 Years)	Longer Term (3+ years)

#### Short-Term Priorities

Item	Resources available	Resources needed
1.		
2.		
3.		
...		

#### Medium-Term Priorities

Item	Resources available	Resources needed
1.		



Biological and Environmental Systems Science Directorate

## Biosciences Division

[About](#) [Sections](#) [Capabilities](#) [News](#) [Projects](#) [Publications](#) [Awards](#) [Staff](#)

Project

### National Microbiome Data Collaborative

Topic: Clean Energy



# nmdc

## National Microbiome Data Collaborative

More information at <https://microbiomedata.org> and <https://twitter.com/MicrobiomeData>

The **National Microbiome Data Collaborative (NMDc)**, is a new Department of Energy initiative led by Lawrence Berkeley National Laboratory (LBNL), in partnership with Oak Ridge (ORNL), Los Alamos (LANL), and Pacific Northwest (PNNL) national laboratories. The NMDc will leverage DOE's existing data-science resources and high-performance computing systems to develop a framework that facilitates more efficient use of microbiome data for applications in energy, environment, health, and agriculture.

Nearly every ecosystem and organism on Earth hosts a diverse community of microorganisms – its microbiome. Yet we know little about the functions of individual microbes, let alone how they interact with each other, their hosts, or their environments, and

### Researchers

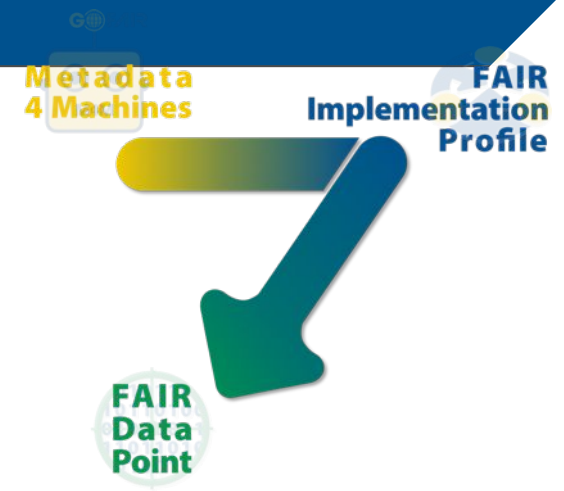


Stanton Martin

### Related Organizations

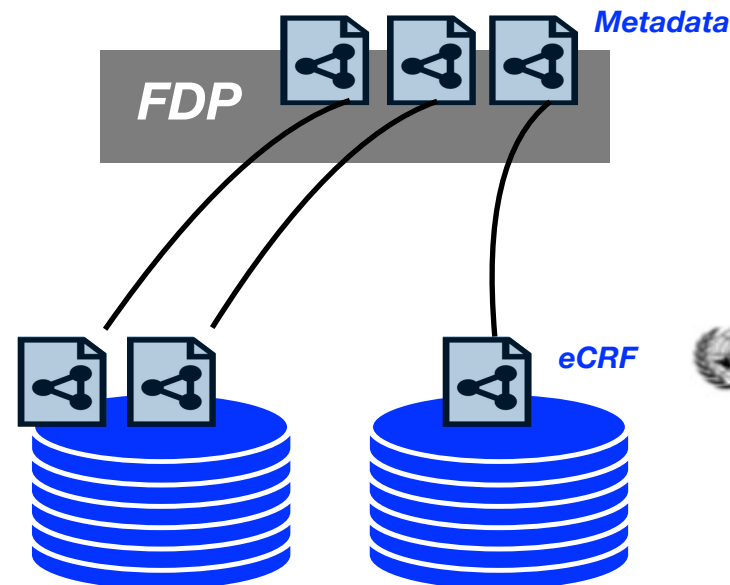
[Biological and Environmental Systems  
Science Directorate  
Biosciences Division](#)

# 3-Point FAIRification

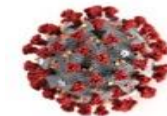


1. Metadata for Machines (M4M):  
1-2 day workshop series
2. FAIR Implementation Profile
3. FAIR Data Point: Data visiting

FAIR principle	Question	FAIR enabling resource types	Your answers
F1	What globally unique, persistent, resolvable identifiers do you use for metadata records?	Identifier type	e.g. PURL, DOI
F1	What globally unique, persistent, resolvable identifiers do you use for datasets?	Identifier type	
F2	Which metadata schemas do you use for findability?	Metadata schema	
F3	What is the technology that links the persistent identifiers of your data to the metadata description?	Metadata-Data linking mechanism	
F4	In which search engines are your metadata records indexed?	Search engines	
F4	In which search engines are your datasets indexed?	Search engines	
A1.1	Which standardized communication protocol do you use for metadata records?	Communication protocol	
A1.1	Which standardized communication protocol do you use for datasets?	Communication protocol	
A1.2	Which authentication & authorisation technique do you use for metadata records?	Authentication & authorisation technique	
A1.2	Which authentication & authorisation technique do you use for datasets?	Authentication & authorisation technique	
A2	Which metadata longevity plan do you use?	Metadata longevity	
I1	Which knowledge representation languages (allowing machine interoperation) do you use for metadata records?	Knowledge representation language	
I1	Which knowledge representation languages (allowing machine interoperation) do you use for datasets?	Knowledge representation language	
I2	Which structured vocabularies do you use to annotate your metadata records?	Structured vocabularies	
I2	Which structured vocabularies do you use to encode your datasets?	Structured vocabularies	
I3	Which models, schema(s) do you use for your metadata records?	Metadata schema	
I3	Which models, schema(s) do you use for your datasets?	Data schema	
R1.1	Which usage license do you use for your metadata records?	Data usage license	
R1.1	Which usage license do you use for your datasets?	Data usage license	
R1.2	Which metadata schemas do you use for describing the provenance of your metadata records?	Provenance model	
R1.2	Which metadata schemas do you use for describing the provenance of your datasets?	Provenance model	



Virus Outbreak Data Network (VODAN)





# FAIR in Action: Virus Outbreak Data Network Africa & Asia (VODANA)



*“Until every country is safe, no one is safe.” – Dr. Reginald Nalugala*

# How & Who / Beyond Data

Research Type	Trailblazers	Addition to FAIR Ecosystem
Data Repositories	EarthCube's Council of Data Facilities, DataONE, Re3Data, EOSC Nordic, NIH Common Fund Data Ecosystem	Responsibilities for searching across data, data validation, FAIR Metrics
Workflows	CAW opening keynote!, Carol Goble & Frederik Coppens – RO-Crate	Separate and specify specification (WorkflowHub), execution (sw), objects (data)
Software	FAIR4RS (Michelle Barker, Dan Katz)	New principles for software
Virtual Research Environment (VRE) aka Gateway	Science Gateways Community Institute (SGCI) + GO FAIR US/forming RDA WG	Making data produced FAIR, focus on digital objects
AI	OpenML, MLCommons Science	Models, training sets

## Earth Sciences:

1. EarthCube FAIR Initiative
  - Creating resources
  - New - Metadata for Machines

## FAIR for US Workshop:

1. Assemble diverse group of stakeholders
2. Gather input
  - Seek consensus - 3-5 years aims for FAIR uptake in US?
3. Identify additional communities and voices for discussions on the future.

## Mobilizing without competing

- Engaging existing professional communities
  - Active Data Curation, Data Librarians, Computing & Cyberinfrastructure
- Opportunities without duplication

## Funding

- Hard to find regularized support for coordination and capacity-building

Working toward common understanding of concepts and aims - especially with leaders across the science community



## Get Involved

- [Mail List](#). GO FAIR US's main communication channel. Sign up to receive periodic updates.
- [Slack Channel](#). Sign up to the GO FAIR US Slack to chat with community members.
- [Twitter](#). Follow GO FAIR US on Twitter, learn about what community members are doing, and get updates.
- Go FAIR US [News & Events](#). Stay up-to-date on news and events of interest to the Go FAIR US community.
- [YouTube](#). Watch GO FAIR US outreach and webinar videos.
- [GitHub Organization](#). Submit issues/pull requests to Go FAIR US resources on GitHub.
- [Contact](#). Send GO FAIR US general inquiries.

## Events

### Mapping GO FAIR Pillars to the new USGS Roadmap for enabling FAIR Data

On **October 28th**, 2021 at 9 am PST/12 pm EST/ **5 pm UTC**, GO FAIR US will be hosting a webinar on how USGS has utilized the GO FAIR Pillars in their roadmap for enabling FAIR Data. **Fran Lightsom** and **Viv Hutchinson** will be giving a talk titled: "Mapping GO FAIR Pillars to the new USGS Roadmap for enabling FAIR Data." **Registration available at [this link](#).**



Questions?



**Discussion**

# Data Stewardship definition

Data Stewardship can be defined as the ‘responsible planning and executing of all actions on (digital) data before, during and after a research project, with the aim of optimising usability, reusability, and reproducibility of the resulting data.’

Essentially, data stewardship encompasses all of the various tasks and responsibilities that relate to research data management (RDM) throughout the entire research lifecycle.

## Sources:

- [Data \(Stewardship\) Makes the Difference: Towards a community-endorsed data stewardship profession.](#)
- Salome Scholtens, Mijke Jetten, Jasmin Böhmer, Christine Staiger, Inge Slouwerhof, Marije van der Geest, & Celia W.G. van Gelder. (2019). Final report: Towards FAIR data steward as profession for the lifesciences. Report of a ZonMw funded collaborative approach built on existing expertise. Zenodo. <https://doi.org/10.5281/zenodo.3474789>

## Correlated initiatives:

DTL Data Stewards Interest Group: <https://www.dtls.nl/about/community/interest-groups/data-stewards-interest-group/>

RDA Professionalizing Data Stewardship Interest Group: <https://www.rd-alliance.org/groups/professionalising-data-stewardship-ig>

★ Please participate in our poll  
<https://www.menti.com/zx9ix53g4c>

★ Voting code: **3879 4156**



# Data Stewardship Competence Centers IN

National chapters' meeting - 2nd day

October 5th 2021 - 2-4 PM CEST

# Ground rules for the meeting

- Please switch off your mic and camera if not talking
- Use the chat to ask questions to speakers, highlighting “QUESTION” in capital letters
- Links to common notes can be found in the chat
- Slides of the presentations will be shared with participants and DSCC-IN members at the end of the meeting
- The meeting will not be recorded
- During the discussion time, please participate in the Menti polls!

# Second day outline

- 2:00 - 2:05: Welcome (Valentina Pasquale)
- 2:05 - 3.25: Chapters' presentation (20 min. each):
  - **Brazil** (Debora Pignatari Drucker)
  - **Italy** (Elena Giglia)
  - **Poland** (Anna Walek)
  - **Denmark** (Hannah Mihai, Mareike Buss)
- 3:25 - 3:55: Discussion & questions
- 3:55 - 4:00: Final wrap-up



# Take-home messages from the 1st day

## Need for national coordination strategies

Every chapter underlined the need for better coordination of fragmented initiatives on a national scale: universities, RPOs, infrastructures, organisations need guidance on common DS service models and DS/RDM requirements.

## International collaboration is key

International collaboration among national chapters is key to drive convergence, share best practices, strategies, models, especially regarding staffing and funding issues.

## Stakeholders' engagement (researchers, governance, etc.) is still an issue

Strategies are debated (open science evaluation? rewards and incentives? funders' requirements?)

## Long-term sustainability of DSCCs and data stewards' positions is a problem to be solved

Some countries benefit from well funded national plans for starting up institutional DSCCs and/or developing data infrastructures and DS consortia, but sustainability in the long term is not guaranteed.

**Open questions:** how to progress from funding data stewards out of fixed-term external grants to establishing more permanent roles funded through research income? Can (research) data stewards be considered as components of a research team (actually performing research) more than support people?

# Menti outcomes from the 1st day

## For you, what distinguishes Data Stewardship from RDM?



# Menti outcomes from the 1st day

What have you heard today that could benefit your DSCC in your own national context?

good examples  
collaboration on i pillar  
peer-network  
facilitation  
national strategies  
professional set-up  
shared challenges  
n ds service models  
standardization  
the case studies austria

# Menti outcomes from the 1st day

## How to set-up a DSCC with poor or no funding? Share your ideas!

Start with a virtual DSCC

Networking and community engagement

organize an annual DSCC one-day event

Which DSCC outcome might be of benefit for all? Is it possible or illusive to identify an overarching theme with relevance for most IN member, look for synergies + spend resources

Start with just one or two disciplines, engage researchers in projects that are interesting for them but require data stewardship competences to succeed, use them as ambassadors to engage others and governance

online meetings, instead of physical strong connection to other projects running within the home-organizations

**N O F U N D I N G** - see DSCC as a regular forum for sharing activities/concepts/efforts and learning from others, keep the contact; **P O O R F U N D I N G** - join forces, maybe on one or two concrete issues?

Build support - find a few researchers with good examples to share as case studies, and run awareness sessions about implementing FAIR, reusing existing materials from e.g. GO-FAIR and EOSC projects (FAIRsFAIR etc.)

Stay in contact nevertheless

adjust the expectations + but make use of the network



# DSCC IN - National Chapters' Meeting Brazil

Debora Pignatari Drucker  
[debora.drucker@embrapa.br](mailto:debora.drucker@embrapa.br)



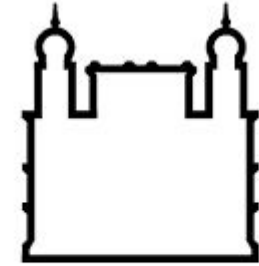


**ibict**

Instituto Brasileiro de Informação  
em Ciência e Tecnologia



UNIVERSIDADE FEDERAL  
DO RIO DE JANEIRO



**FIOCRUZ**  
Fundação Oswaldo Cruz

**Embrapa**



**UNIRIO**

Universidade Federal do  
Estado do Rio de Janeiro



**RNP**

REDE NACIONAL DE  
ENSINO E PESQUISA

**unesp**

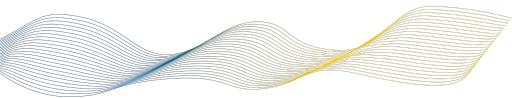
UNIVERSIDADE ESTADUAL PAULISTA  
"JÚLIO DE MESQUITA FILHO"



**UNIVERSITY  
OF TWENTE.**



- ★ Self-organized and bottom-up network
- ★ Complexity - 27 Federation Units, National and State Relevant Actors (Universities, Research Institutions and Funding Agencies)
- ★ Governance Model with operating rules

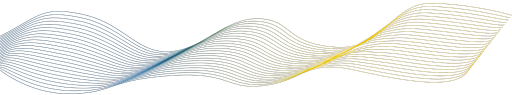






source: <https://www.go-fair.org/>

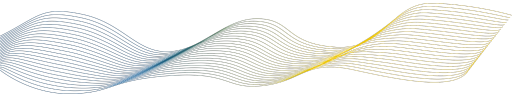
1. GO FAIR Brasil Health - Fiocruz
2. GO FAIR Brasil Nursing - Unirio
3. GO FAIR Brasil Humanities - Ibict
4. GO FAIR Brasil ECTI (Teaching, Science, Technology and Innovation) - Capes
5. GO FAIR Brasil Nuclear Sciences- National Commission for Nuclear Energy - CNEN
6. GO FAIR Brasil Agriculture - Embrapa
7. GO FAIR Brasil Biodiversity - Rio de Janeiro Botanical Garden



Open  
Government  
Partnership

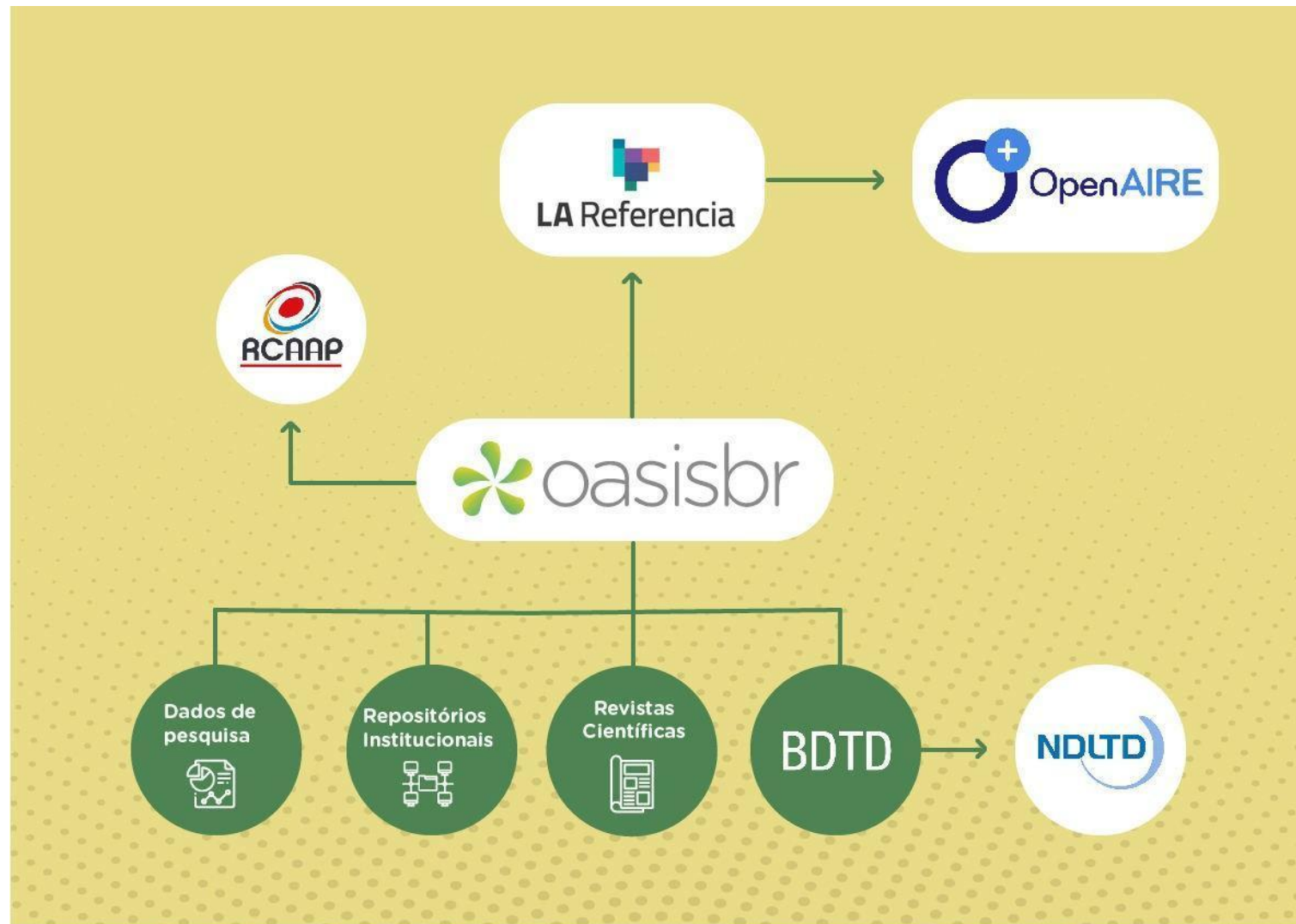


- ★ Connection with initiatives with national scope as RDA in Brazil and Open Government Partnership
- ★ Participation in RDA Groups and GO-FAIR IN with global scope
- ★ Engagement with data relevant Communities such as DataOne and GDCC
- ★ Participation in discipline-specific initiatives such as TDWG and Godan





# Architecture - Brazilian Portal of Scientific Data & Publications



slide:  
Washington  
Segundo -  
Go-Build  
Brasil



Consortium lead



Organization 1  
(Also Consortium Lead role)



Organization 2



Organization 3



Repository



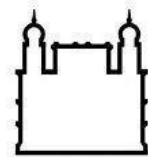
Repository



Repository



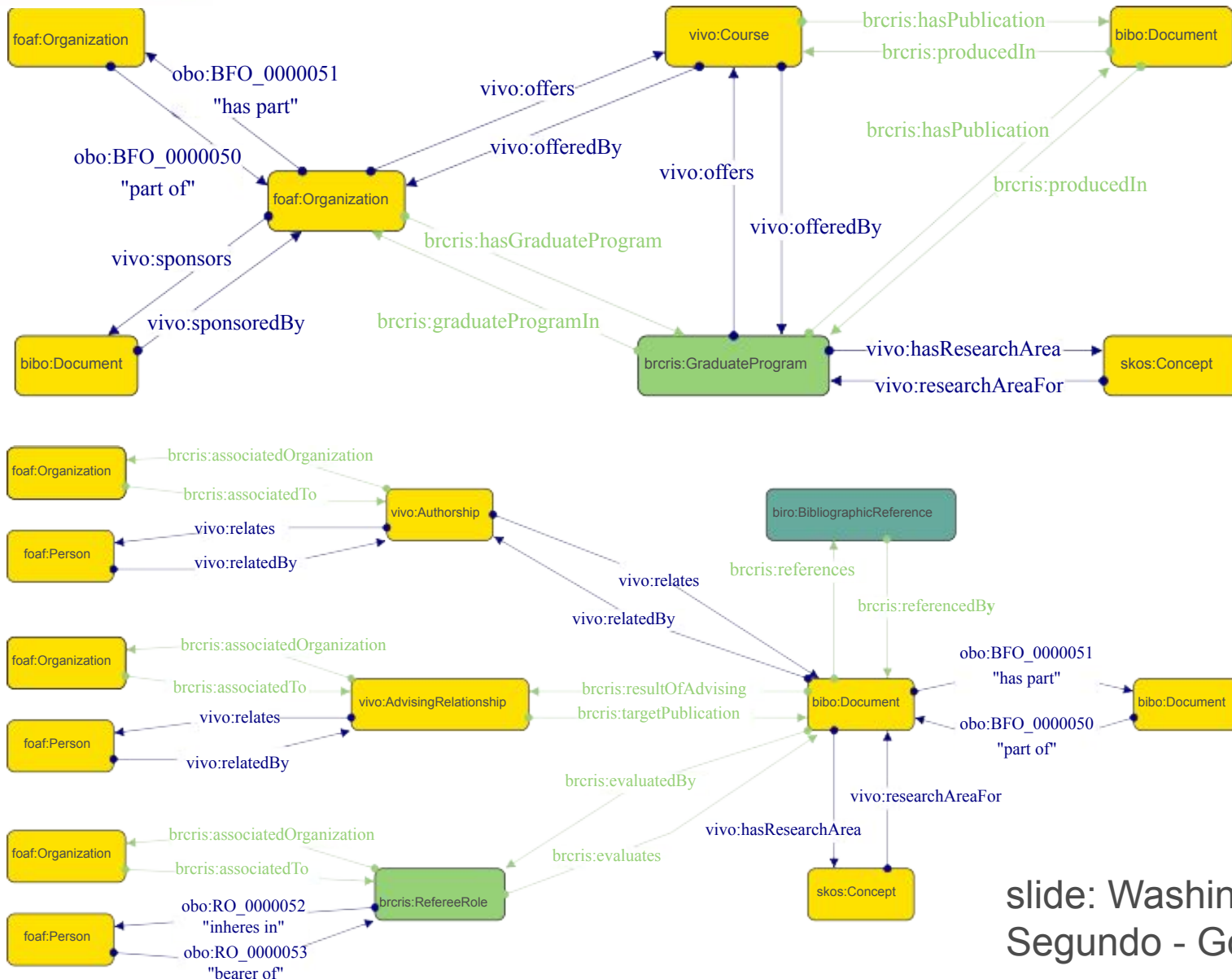
Repository



FIOCRUZ



slide:  
Washington  
Segundo -  
Go-Build  
Brasil



Giancarlo Guizzardi;  
 Ontology, Ontologies and  
 the "I" of FAIR. *Data  
 Intelligence* 2020; 2 (1-2):  
 181–191.  
[https://doi.org/10.1162/dint\\_a\\_00040](https://doi.org/10.1162/dint_a_00040)

slide: Washington  
 Segundo - Go-Build Brasil





**CONFAP**

Conselho Nacional das Fundações  
Estaduais de Amparo à Pesquisa



1. National Council of State Research  
Support Foundations & Reward  
systems



2. CAPES & CNPq National Level  
Support FAIR Data and Go-Fair  
activities



## Research data metasearch

🔍

This repository gathers research data from academic institutions in the State of São Paulo. The responsibility for the data provided is exclusive of who made them available.

This website, software and associated repositories were created to comply with the [FAPESP Data Management Policy](#)



### Institutions

Choose a institution to browse its collections.

USP - Universidade de São Paulo	76
EMBRAPA - Empresa Brasileira de Pesquisa Agropecuária	270

### Discover

Author

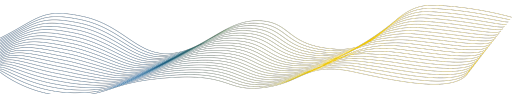
Barbedo; Jayme Garcia Arnal	93
Halfeld-Vieira; Bernardo de Almeida	56

Subject

Computer and Information Science	17
COVID-19	12
desenho amostral	12

Date issued

2020 - 2029	97
2010 - 2019	291
2008 - 2009	1



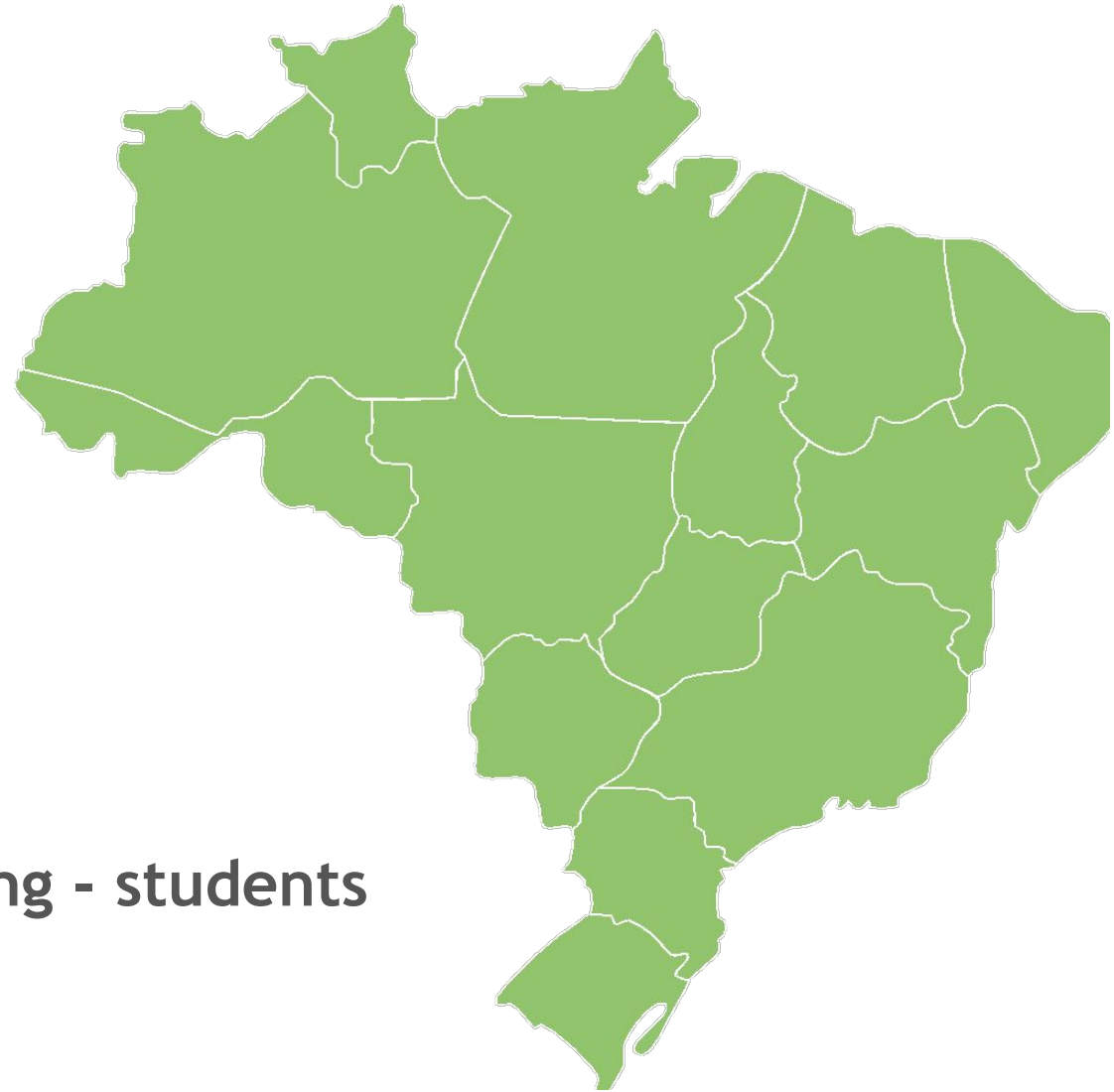


Brazilian stricto sensu  
postgraduate degree grew



going from 3,128  
programs in 2011 to  
4,650 in 2020

Opportunity for capacity building - students  
and early career researchers



slide: modified from  
<https://www.arca.fiocruz.br/handle/icict/47839>

# Expanding boundaries?





# Mind the gap for non-English material - learning is always a two way road

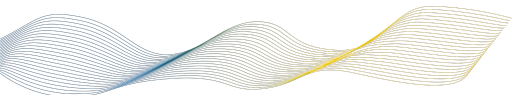


FÓRUM  
GESTÃO DE DADOS  
DE INVESTIGAÇÃO

## Grupo | Formação e competências para Gestão e Dados FAIR

### Objetivos gerais

- Contribuir para a capacitação dos diferentes agentes de formação em gestão e dados FAIR nas Instituições de investigação em Portugal.
- Apoiar a definição de estratégias de formação nas instituições, infraestruturas e comunidades de investigação.
- Identificar as necessidades de competências para a aplicação na prática dos Dados FAIR.





- National initiatives and achievements  
*Community engagement, governance model, convergence with allied initiatives, network of research data repositories, consortium*
- Experiences and/or points of strength that you would like to share with other members of the network  
*Training materials and training programs for FAIR data stewardship  
Ontology engineering strategies - "I" pillar from FAIR*
- Challenges and/or experiences you would like to gain from participation to the network  
*Collaboration towards a common view on data stewardship  
FAIR adoption experiences, convergence towards FAIR data*

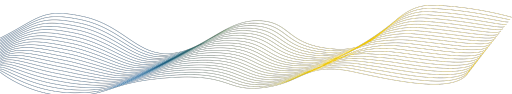
# Professionalizing Data Stewardship IG - RDA

**Data stewardship:** the responsible planning and executing of all actions on (digital) data before, during and after a research project, with the aim of optimising the usability, reusability and reproducibility of the resulting data

Salome Scholtens, Mijke Jetten, Jasmin Böhmer, Christine Staiger, Inge Slouwerhof, Marije van der Geest, & Celia W.G. van Gelder. (2019, October 3). Final report: Towards FAIR data steward as profession for the lifesciences. Report of a ZonMw funded collaborative approach built on existing expertise. Zenodo.

<http://doi.org/10.5281/zenodo.3474789>

<https://www.rd-alliance.org/groups/professionalising-data-stewardship-ig>



# Why Professionalizing Data Stewardship is needed?

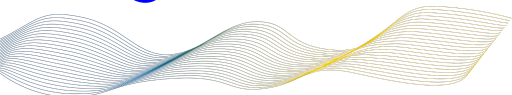
Lack of **consensus** on responsibilities, knowledge and value of data stewards leads to confusion about the role and hampers **building adequate data steward capacity**.

A **coherent approach** and dedicated training for data stewardship on the international level is needed

Scarce resources for data stewardship at many institutions limits vital developments such as defining recruitment procedures and **career paths** for current and future data stewards

<https://www.rd-alliance.org/groups/professionalising-data-stewardship-i>

10

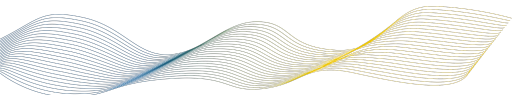


# Professionalizing Data Stewardship IG - RDA

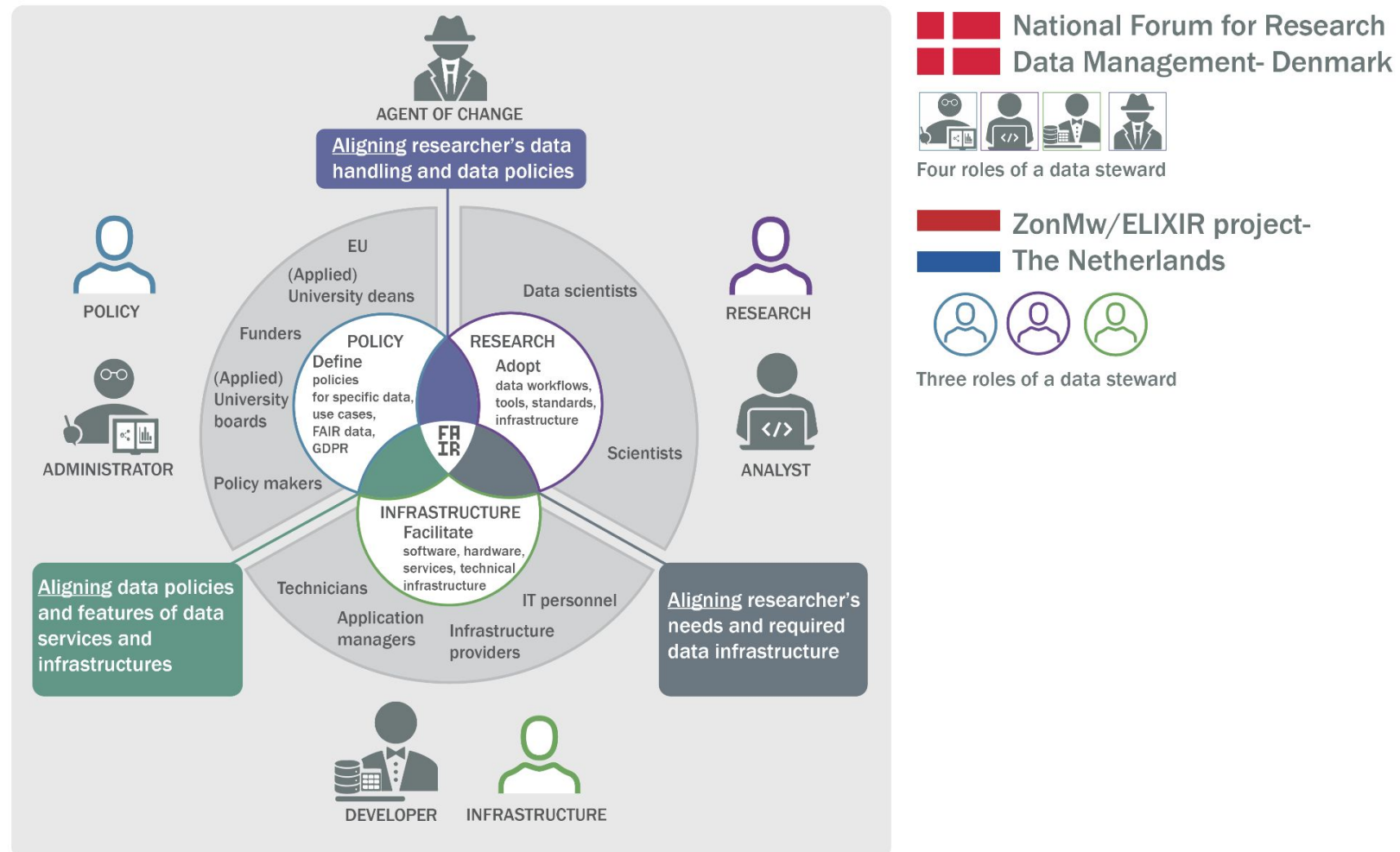
8 active task groups, tackling the following challenges:

1. A business case for data stewardship
2. Data stewardship terminology
3. The integration of data stewardship across an organisation
4. Job profiles for data stewards
5. Training for data stewards
6. Career tracks for data stewards
7. Networking and knowledge exchange
8. Certification

[Slack Channel](#) - 227 members at slack, 204 members RDA IG



# Professionalizing Data Stewardship IG - RDA

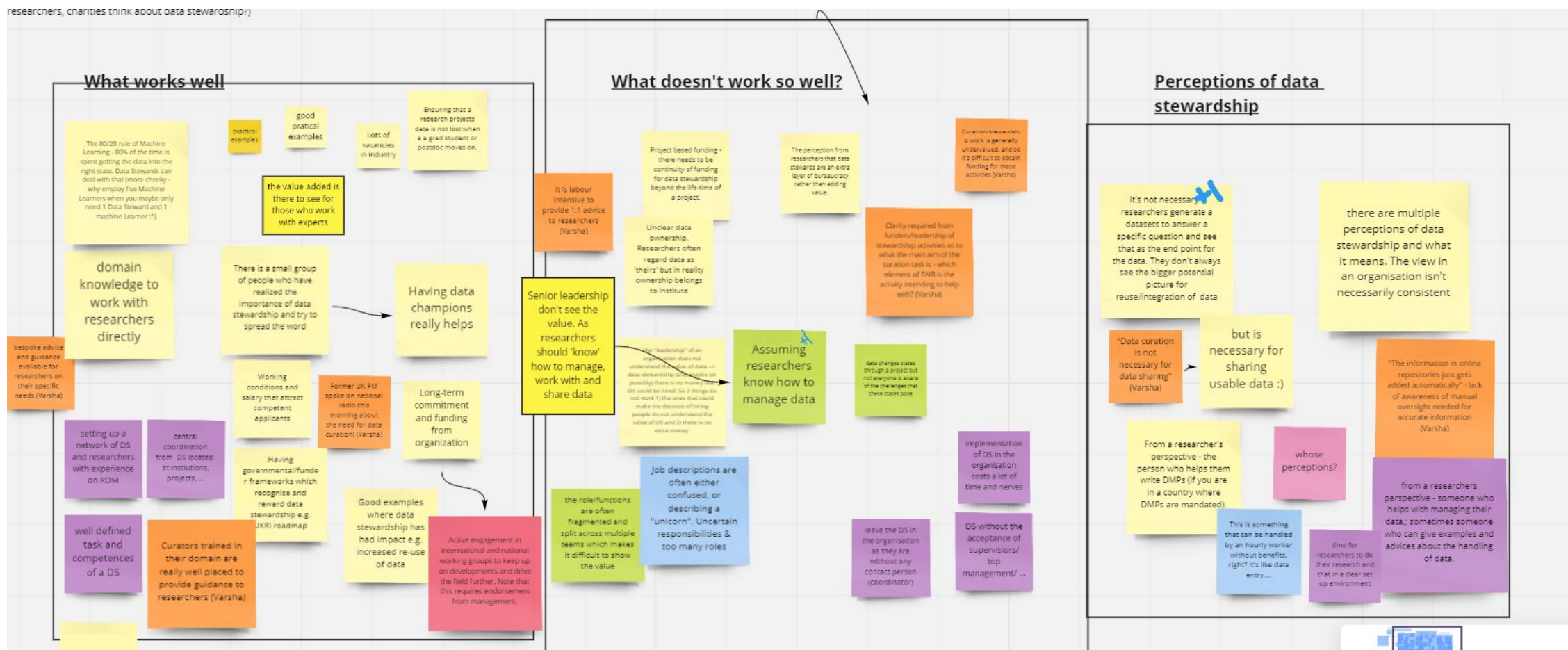


The roles of data stewards in the data stewardship landscape identified in Denmark and the Netherlands [10.5281/zenodo.4321265](https://doi.org/10.5281/zenodo.4321265)



# Why Professionalizing Data Stewardship is needed?

researchers, charities think about data stewardship?)



<https://www.rd-alliance.org/groups/professionalising-data-stewardship-ig>





<https://www.rd-alliance.org/plenaries/rda-18th-plenary-meeting-virtual/moving-towards-professionalising-data-stewardship>

## The need to converge!

### GO FAIR US Data Stewardship Interest Group Meeting and Next Steps

MAY 8, 2021 - CHRIS ERDMANN

On 30 April 2021, GO FAIR US hosted a Data Stewardship Interest Group Meeting with roughly 70 registered attendees from the following organizations:

*NIH, NHLBI, NIEH, ORNL, SDSC, Figshare, 16F, GSA, Notre Dame, Lyraasis, U of Rio de Janeiro, U of Cincinnati, KIU, U of Illinois, Musée de la Civilisation, AGU, U of New Mexico, OME, Anveco, BLM, BNL, NCRJ, NASA, LBL, Research Space, CDC, CINA, REINCI, Embrapa, CNB, OSTI, African Union, U of Iowa, KM, RSU, U of Ljubljana, HESC, Maastricht U, FSU, Smartlogic, RTI, DOE, Sage Bionetworks, U of Manchester, Brac University, UK Polar Data Centre, NRCC, UCLA, UBC, JPL, Grenoble U, Cornell, Children's Hospital of Philadelphia*

The meeting was not US centric and was open to all. We began with Katie Knight (ORNL) providing background on the challenges that data stewards face, from her perspective at ORNL. Slides from the background session are available [here](#). Katie then guided us through a Menti session where we polled the attendees on the following points:

- What are core competencies for Data Stewards? (CSV)
- How many Data Stewards does your workplace employ? (JPG, CSV)
- What kind of Data Stewardship training is needed? (JPG, CSV)
- I would like a FAIR Data Stewardship community to... (JPG, CSV)

<https://gofair.us/news/2021-05-8-data-stewardship-ig-mtg.html>

Thank you for your attention!



[debora.drucker@embrapa.br](mailto:debora.drucker@embrapa.br)

You can find the slides (PPT and PDF) at <https://doi.org/10.5281/zenodo.5550099>





## Polish Chapter of the GO-FAIR DSCC-IN

**Dr Anna Wałek**  
**GdańskTech Library**

DSCC-IN meeting 05.10.2021

## Polish academic landscape

According to the national science register POL-on, **373 universities** operated in Poland in the 2019/20 academic year.

It was:

18 universities; 70 economic universities; 25 technical universities; 19 art academies; 15 theological colleges; 15 pedagogical universities; 9 medical universities; 7 agricultural universities; 7 universities of the Ministry of National Defense and the Ministry of Internal Affairs; 6 academies of physical education; 2 maritime universities; 236 other types of universities.

**93.1 thousand academic teachers**, including 43.7 thousand women, were employed at the universities.

There were nearly 13 students per 1 teacher. The Polish Statistical Office sums up that 1.2 million students studied at universities in the 2019/20 academic year,

## GdańskTech in numbers

Established in 1904 (since 1945 Polish technical university)

The university employs about 2,600 people, including about 1,200 academic teachers (about 900 researchers)

Gdańsk University of Technology in 2019 took second place in the country and was ranked highest among technical universities in the competition 'Excellence Initiative - Research University' (IDUB). The aim of the competition organized by the Ministry of Science and Higher Education was to select and support 10 best universities that will become research centers and will be able to successfully compete with the best universities in Europe and in the world





## Polish perspective

The development of data stewardship services in Poland is still in its initial phase.

Various types of teams and initiatives are formed to educate future data stewards.

Polish librarians and researchers are involving in different initiatives

Data Steward School – Visnea (2nd edition this year)

Trainings provided by Gdańsk Tech, ICM Warsaw and projects like for example OPERAS-PL

## Bridge of Data - Multidisciplinary Open System Transferring Knowledge stage II Open Research Data

| The goal was to create **Competence Center** which provides expertise and support including trainings among scholars about different aspects of Open Science and face to face consultations

and to design and build a **platform dedicated to research data** generated at the **three most important universities of Pomerania**, which will increase accessibility, coherence and reuse of science, knowledge and  
| technology resources

co-financed by the European Regional Development

Project value: almost **6,3 M EURO**

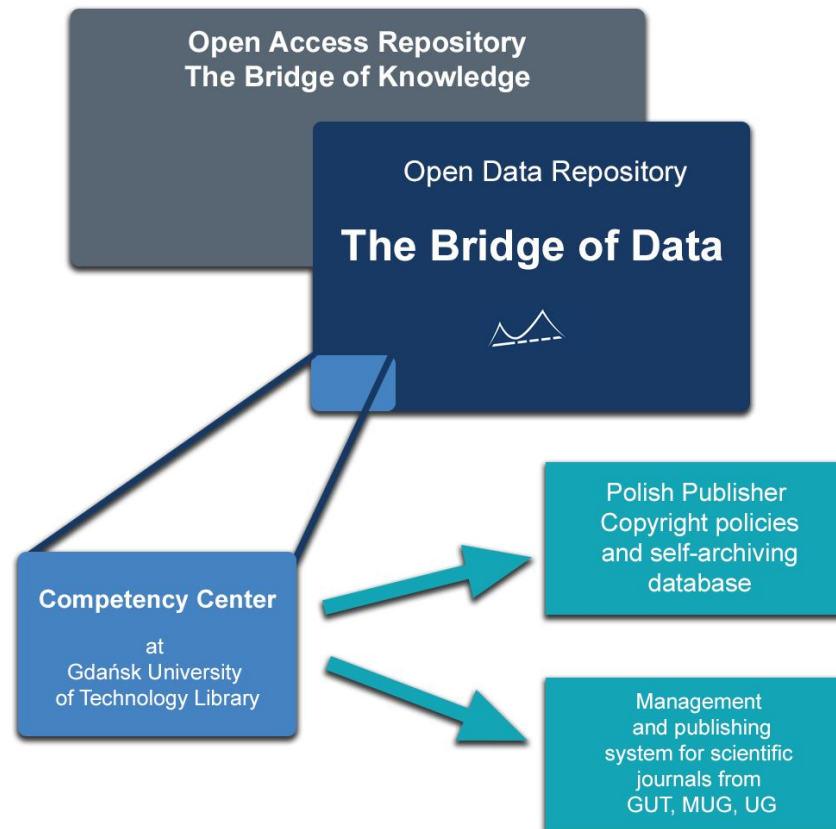
Period of implementation: 01.10.2018 - 29.12.2021

Operational Program Polska Cyfrowa (Digital Poland)



## Gdańsk University of Technology (GdańskTech) Open Science Competence Center

## Open Science Competence Center



Open Science Competence Center at the Gdańsk University of Technology Library was established upon the Bridge of Data project at the end of 2018.

## Open Science Competence Center

- Assistance and on-site tailoring training among researchers from all scientific disciplines that include Data Management Plan, open licensing or metadata standards
- Workshops regarding different aspects of Open Science as well as scholarly communication
- InfoKit regarding Open Research Data
- Metadata support
- Journals & Conference Proceedings indexing and publishing support
- Evaluation & Bibliometric support



## Open Science Competence Center

OSCC in numbers so far (since October 2018):

Workshops - 51

Online trainings – 22

Verified datasets – 8326

Verified Data Management Plans – 289

Face to face consultation – about 157

Since January 2020 to September 2021 – we trained about 480 users

## Open Data repository

- Collect and store datasets from Gdańsk Tech, GUMed and UG
- Indexing datasets in Google Data, Web of Science Data Citation Index and other services
- Technological innovations such as hosting the project on the private computing cloud and storing the data on the Ceph Object Storage.
- NoSQL database – ElasticSearch.
- Repository allows researchers to perform Big Data Analysis by the Apache Zeppelin GUI on the supercomputer Tryton (40.000 cores, 1,5 PFLOPS).

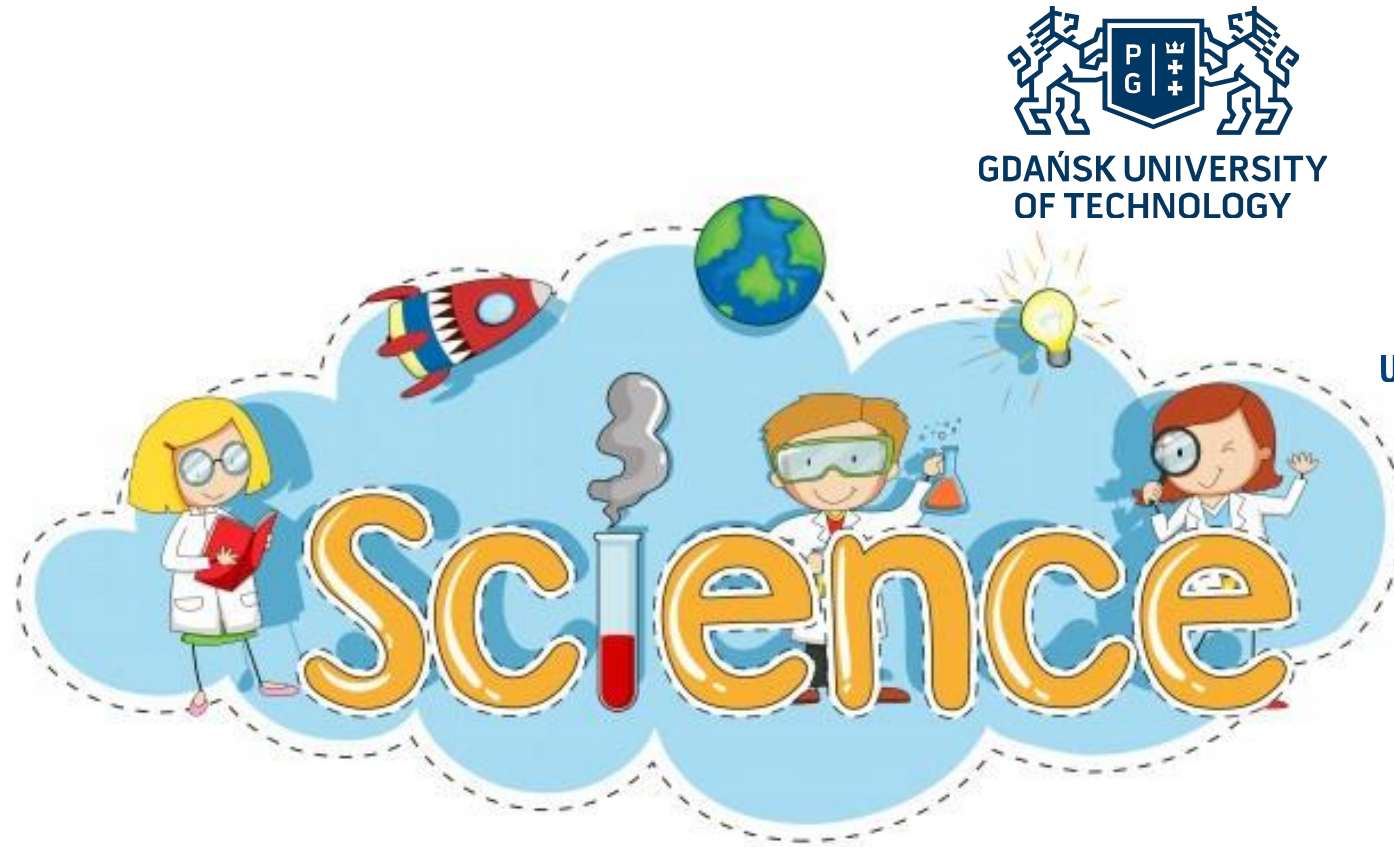
## Data Management Plan?

What researchers at Gdańsk Tech really think about DMPs (2019)?

- „Strange thing”
- „Babble something data”
- „Unnecessary input”
- „Business plan”
- I do not produce any data so I do not have to provide DMP
- „Bureaucracy”



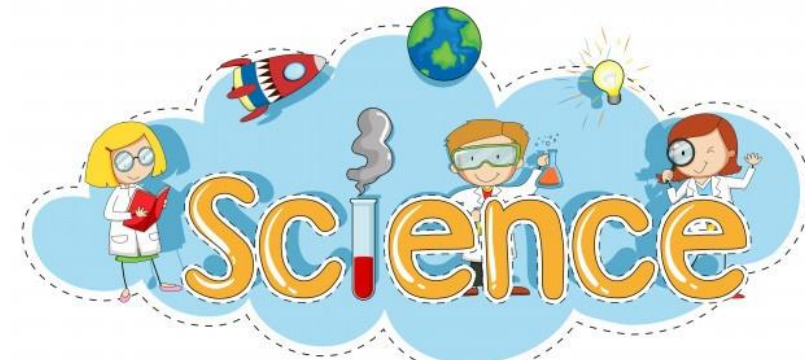
## Research teams



## Research Teams

The researchers involved in the Bridge of Data project emphasize that the following motivating and facilitating factors are the most important for them:

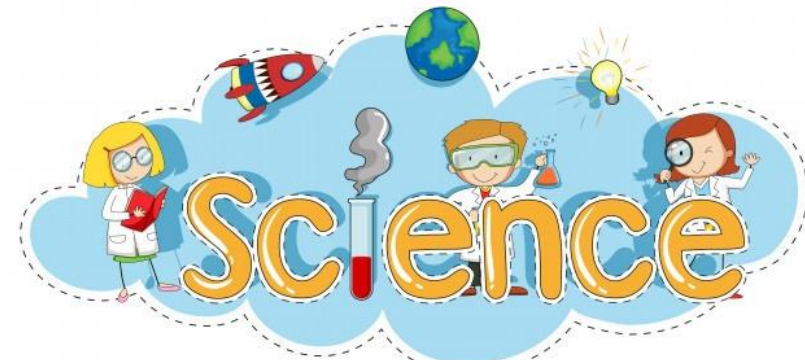
- the policy of the National Science Center and Horizon 2020 regarding the provision of data (top-down obligation)
- support for the Competence Center and verification of data and metadata correctness
- ease of use of the repository tool
- indexing datasets in the Web of Science Data Citation Index
- potential future profits, such as additional points for the evaluation of grant applications



## Research teams

The most significant difficulties are:

- no time
- time-consuming preparation of data for sharing
- lack of motivators (additional points for the evaluation of scientific achievements, awards, promotions)
- legal problems





## Legal issues in different disciplines

### PROBLEMS OCCURED DURING PREPARING DMPs IN DIFFERENT DISCIPLINES

#### Biology

- Ethical issues  
e.g. animal testing
- Replication of research
- Fear of misuse
- Not enough capacity in repositories to share data

#### Civil Engineering

- Fear of being scoped
- Not knowing where to share research and technical data
- Large amount of data is collected by instrumentation – authorships' concerns
- Construction data is rather complex and multiple engineering parties are often involved

#### Computer Science

- Eligibility to hold rights to a database
- Different practices of sharing code – e.g. via GITHUB
- Data versioning
- Hard to share ever-greater quantities of data

#### Chemistry

- Ethical issues with collecting research data e.g. clinical trials, patient privacy
- Concerns about data mining
- Secondary analysis of data
- Desire to protect confidential commercial information

#### Economics and Management

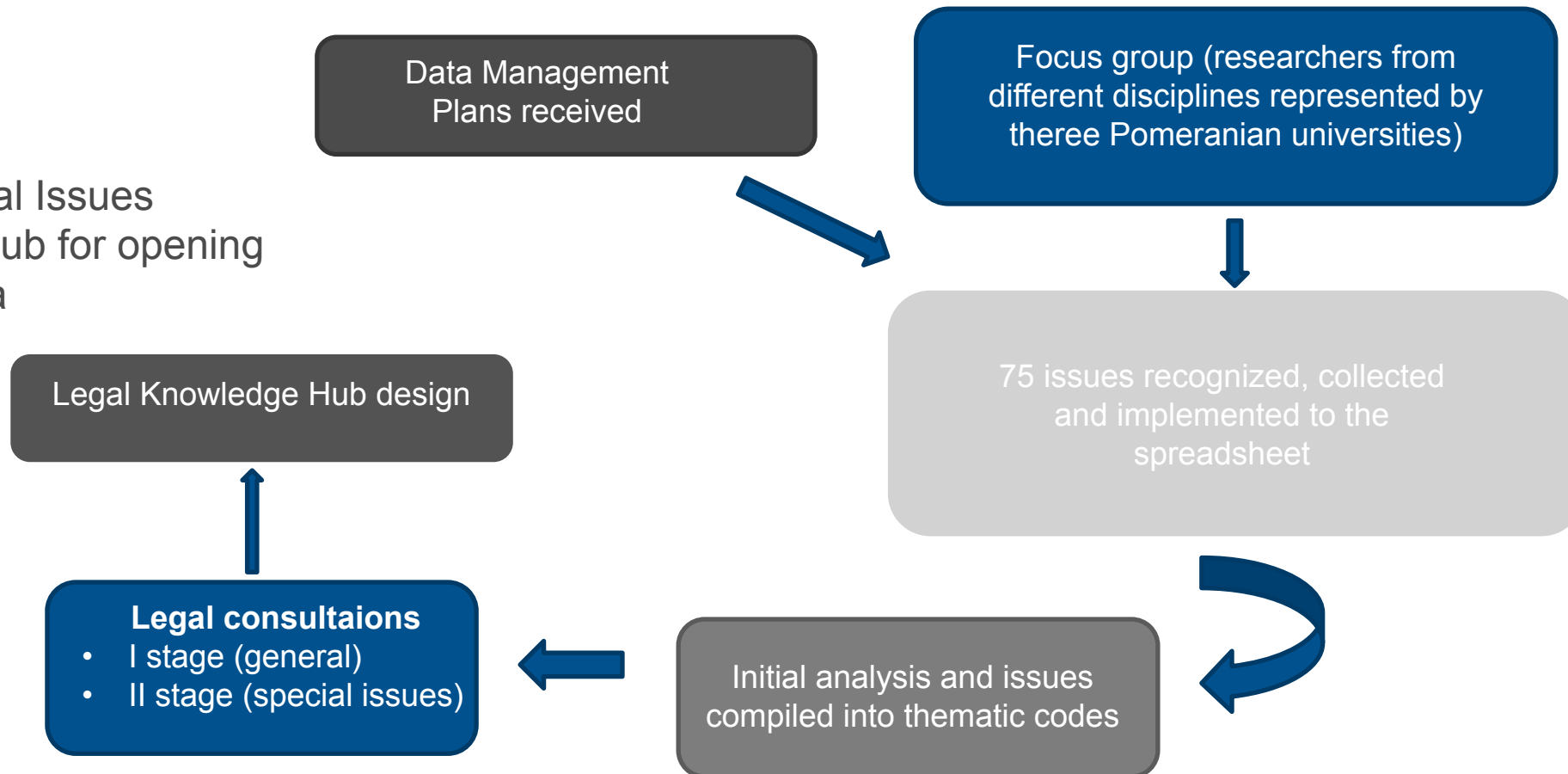
- Contractual obligations
- GDPR
- Data value cycle is very complex and might involve numerous stakeholders and different business agreements
- Complications with quality data anonymization e.g. interviews

## Legal barriers to data sharing

- Legal issues arising in data release (e.g. intellectual property rights, copyright in data)
- Uncertainty around data ownership
- Data licencing
- Data reuse
- Privacy of research subjects
- Ethical issues
- Controlling access to data

## Methods for data collecting (legal issues)

Creating Legal Issues  
Knowledge Hub for opening  
research data



## II stage – legal consultation

The study provided recommendations to improve the current legal situation concerning research data and gave practical solutions and interpretation of legal acts that might influence sharing data openly.

Creating Legal Issues Knowledge Hub  
for opening research data

1 z 167    - +    Skala automatyczna ▾

Jaworzno, dnia 23 marca, 2021 r.

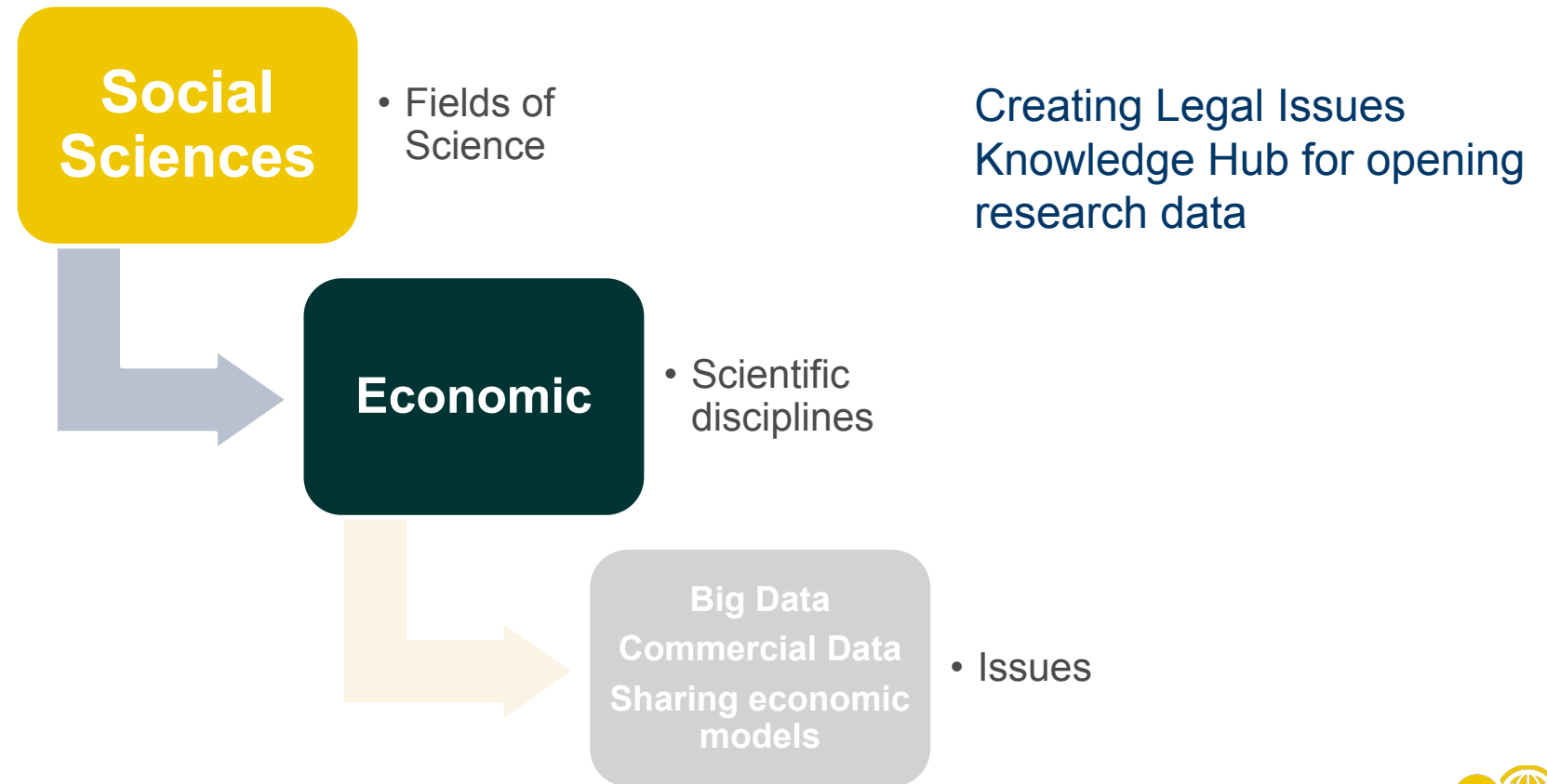
**EKSPERTYZA PRAWNA**  
przygotowana na zlecenie Politechniki Gdańskiej  
w ramach projektu „MOST DANYCH. Multidyscyplinarny Otwarty System Transferu Wiedzy –  
etap II: Open Research Data”. Projekt jest finansowany z UE w ramach Programu  
Operacyjnego Polska Cyfrowa na lata 2014-2020

1. Stan faktyczny

1.1. Zakres ekspertyzy

W ramach podjętej analizy tematyki Zamawiający przedstawił 20 pytań, które stanowią główny przedmiot rozważań w ekspertyzie:

## Database structure (example)



## Why is it important?

- There is no such a database in Poland/Europe
- There is insufficient knowledge on the legal issues related to the data sharing among researchers
- Complexity of legal issues
- Differences between scientific disciplines
- Element of DMPs

Creating Legal Issues Knowledge Hub for opening research data



## Data Steward School – 1st edition

- First initiative of this kind in Poland (Sept 2020 – March 2021)
- Collaboration with international partners
  - A total of over 25 lecturers from 4 continents
- Foundation week + 3 specializations (IP, technology, information management)
- Mentoring
- Participants – mostly University librarians now taking on new challenges



## Data Steward School – 2nd edition

- First initiative of this kind in Poland (Sept 2021 – Dec 2021)
- Collaborations
  - with local partner – ICM UW
  - with international partners (GO FAIR)
- A total of over 20 lecturers
- Foundation week + 2 specializations (project management, information management)
- Participants – mix - University librarians + project managers and one researcher



## National Chapter Working Group

Our goal as Open Science Competence Center:

Establishing and maintain a Working Group for Polish community in terms of Research Data Management (RDM), FAIR research data and support activities.

Kick-off meeting in December 2021



## National Chapter Working Group

Target/Audience:

Library staff  
Researchers  
IT specialists  
Administrative staff

Language – at the beginning only for Polish community.



## National Chapter Working Group

- Group Webpage — Website within the Gdańsk University of Technology Library - website for group leaders from Gdańsk Tech to manage the information and activities of the group such as interesting links, publications, presentations, trainings.
- Application form.
- Group Private Email List — Only for members based on Google Groups.
- Group Google Drive Folder — for members to work on documents together or store documents such as conferences proposals.
- Discussion Area in Slack - Area for posting topics and comments divided into different issues such as Data Management Plans, infrastructures or metadata.
- Rolling notes from our meetings (we plan one meeting per month) – Google documents.
- Online meetings – via Microsoft Teams.



## International cooperation – OSCC as a part of several working groups

CESAER

The strong and united voice of universities  
of science and technology in Europe



FAIR Principles **Implementation Networks** News Events Resources About GO FAIR 



### Current Implementation Networks



Home | Implementation Networks | Current Implementation Networks

- > What is an Implementation Network?
- > Current Implementation Networks
- > GO FAIR Today
- > How to join
- > Application form

See all of our current Implementation Networks, and the pillars in which they are active, in the overview below. But before you head over there, find out what made people join our GO FAIR initiative:



**Anna Walek**

Data Stewardship Competence Centers IN

*For issues as important as open research data, open science and FAIR data it is essential that you don't act by yourself! Within GO FAIR you are cooperating with each other and speaking with one common voice.*







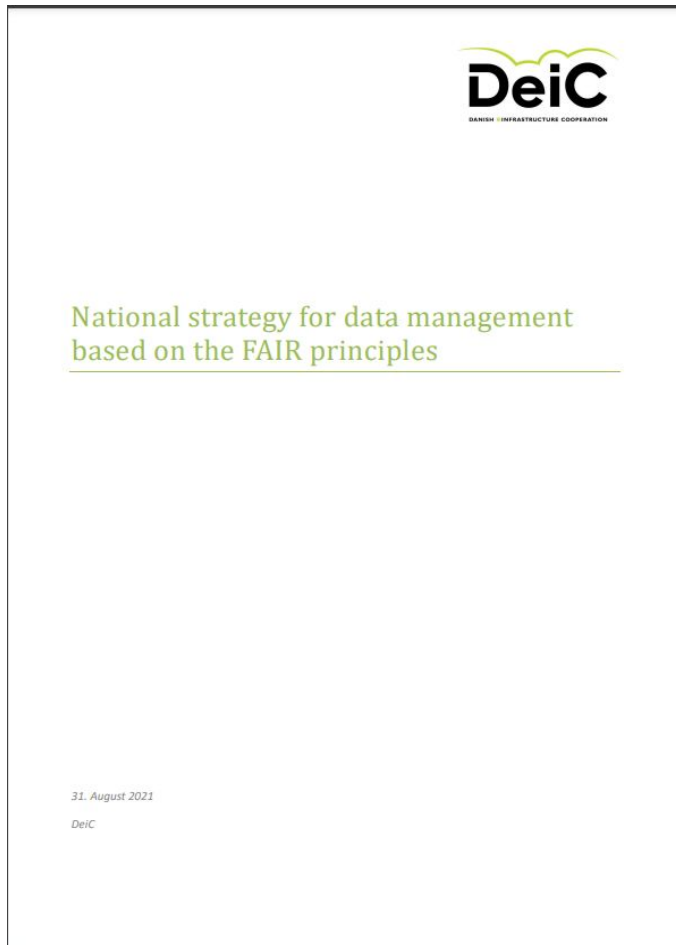
Thank you

## > Denmark - A National Strategy for FAIR Data Management

05.10.2021

Hannah Mihai (DeiC) & Mareike Buss (CBS)

## National strategy for data management based on the FAIR principles



DeiC has been appointed by the **Danish Agency for Education and Research** to lead the work on the strategy

The strategy is part of the implementation of the

- > EU directive on open data
- > The Danish implementation of this (PSI Act)

Includes a number of principles and focus areas to strengthen dissemination and financing of good data management practices

- > Results in **more FAIR research data**

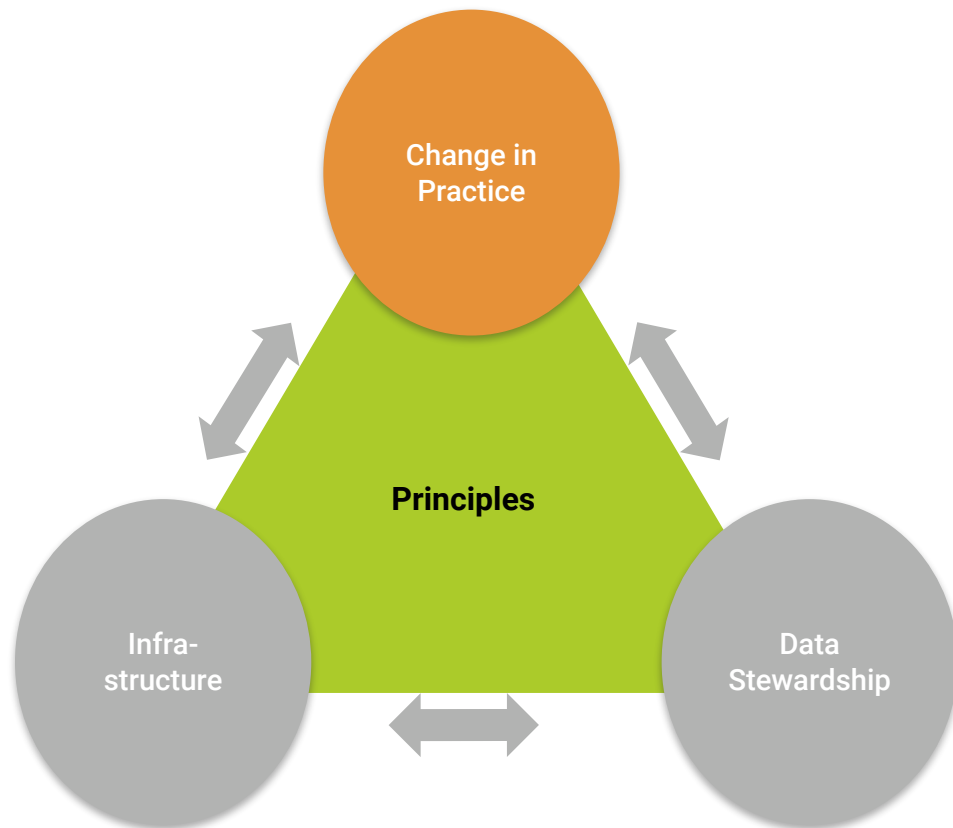
## Content of the strategy

- > **Principles**
  - For a research practice that to increasing degree includes data management and FAIR and (if possible) open data
- > **Actions**
  - Changes that are needed to make the change in practice possible
- > **Financing**
  - Principles for distribution of costs for projects financed by research foundations

## Target groups

- > **Strategy**
  - Research performing organisations and research funders
  
- > **Principles**
  - Researchers
  - Research support staff
  - Data Stewards
  
- > **Actions**
  - Decision-makers
    - in research institutions
    - DeIC
    - Research funders
    - Archives

## Principles for DM in relation to a change in practice



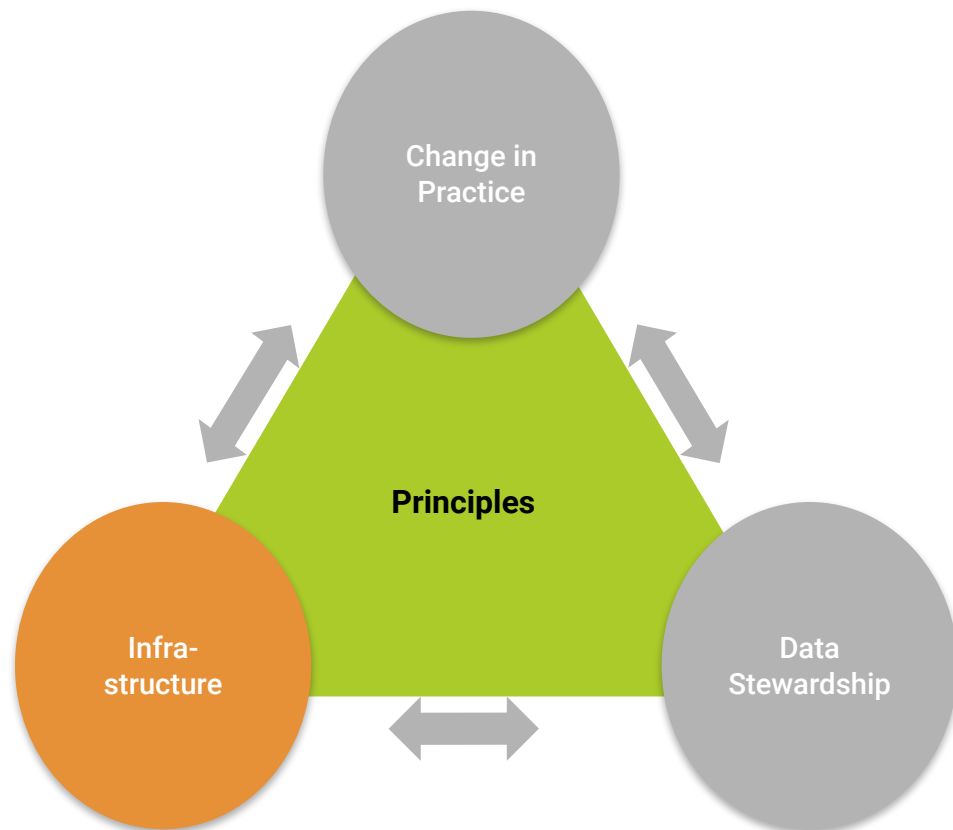
- > Data management should support the FAIR principles
- > It should be considered that relevance and importance of the different principles is varying in between different research areas
  - There is not one solution for everyone and this is okay!
- > Data management is a continuous process under the whole data lifecycle
  - It might not be possible to start out with a 100% FAIR dataset in the beginning of a project, but should increase in FAIRness until publication!



## Actions to achieve a change in practice

- > Accessibility and FAIR data are a change in practice for many research fields
- > Research groups need support to define their own implementation of the FAIR principles
- > It should be supported to document data at all stages in a project and throughout the data lifecycle

## Principles for DM in relation to infrastructure



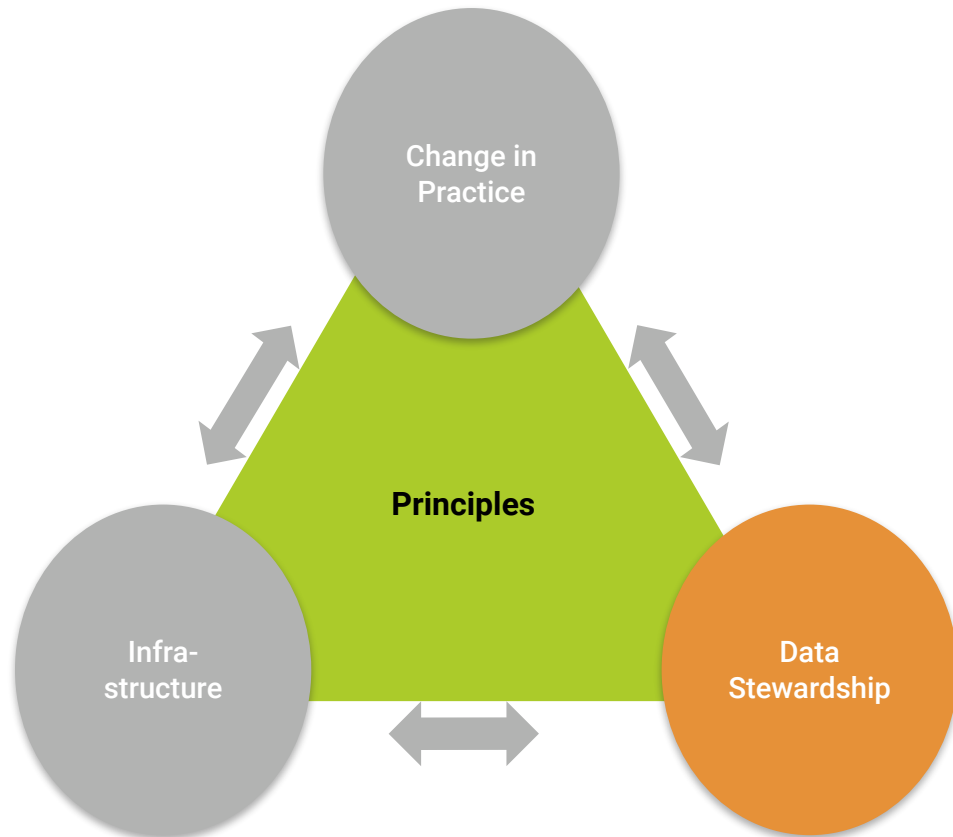
- > The relevant technical infrastructure and tools should be available to all researchers in Denmark.
  - It should not matter which institution or department the researcher is from!
- > It should be possible to store all types of research objects and file formats.
  - Research is not only represented by articles published in a journal!

## Actions to build the needed infrastructure

- > Establish a technical e-infrastructure that supports good data management practices and accessibility of FAIR data
- > The e-infrastructure should support storing and archiving of research data in the short and long term

## Principles for DM in relation to Data Stewardship

- > The needed help and knowledge resources should be available to all researchers regardless of research subject or institutional affiliation



## Actions to achieve Data Stewardship competences

- > Establish a knowledge infrastructure that delivers the needed help and knowledge resources for good data management and the production of FAIR data

## Financing

- > Universities are expected to finance the basic e-infrastructure
- > National research foundations are open to additionally finance extra needs
  - Extra large features for basic e-infrastructure
  - Special, project specific e-infrastructure needs
    - The term ‘basic e-infrastructure’ still needs to be defined
- > It is proposed to assemble a list over expenses for FAIR DM to help estimate project budgets
- > National research foundations DON'T want to set specific requirements for handling of research data
  - The responsibility is lying with researchers and universities



# Denmark: The example of Copenhagen Business School (CBS)

## *Facts and Figures (2020)*

- 2,504 staff total
  - academic staff 764
  - PhD students 282
  - part-time academic staff 772
  - administrative staff 686
- 20,541 students
  - international students 3844
- 11 departments
- 3-year bachelor programmes, 2-year master programmes, 3-year PhD programmes
- Executive master programmes, full-time MBA, diploma programmes and short courses



# RDM Support at CBS: RDM policy

Basic principles of the **institutional RDM policy** (July 2017)

1) FAIR data

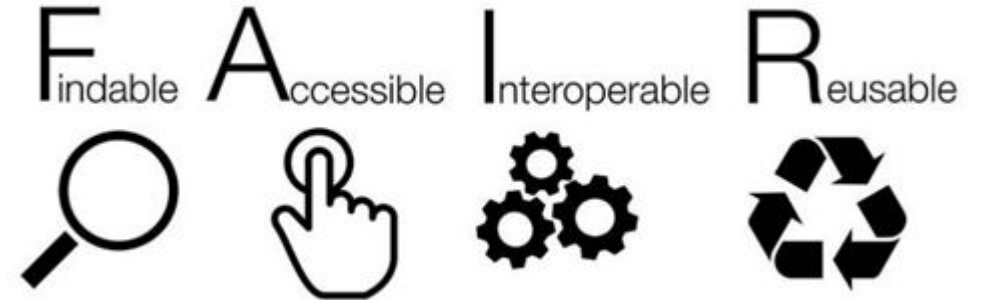


Image: [CC-BY-SA 4.0](#) by [Sangya Pundir](#)

2) As open as possible, as closed as necessary

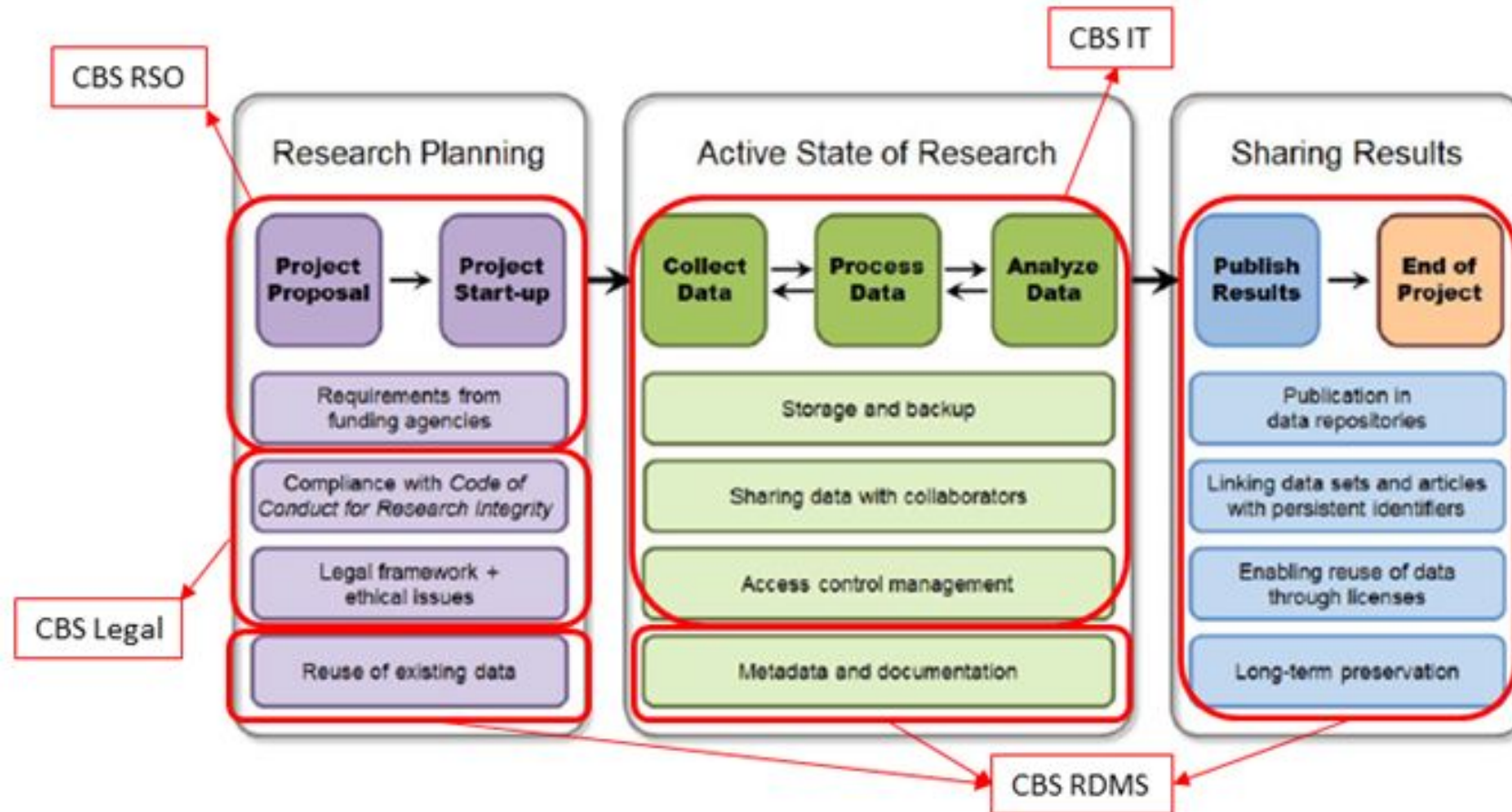


3) Compliance without extra burdening

# RDM Support at CBS: RDM Steering Committee

- The committee's key objective is “to promote and ensure the quality of research data management at CBS”
- Representatives from all 11 departments and relevant administrative units (Library, IT, Legal, RSO)
- Chairman: Carsten Sørensen, FI
- Biannual meetings

# RDM Support at CBS



[Research Data Lifecycle](#) (by DTU AIS Bibliometrics and Data Management - licensed under [CCO 1.0](#))

## RDM Support Office

- 2 ½ FTE
- RDM, Open Science, HPC, Data Science
- Individual support & courses for researchers
- National projects on RDM courses and training materials
- National RDM network, RDA-DK, DeIC DM Advisory Forum, CoP Training Coordinators, SSHOC community

# RDM concerns at CBS

- 1) Inability to **access research data due to obsolescence**, expired software licence, etc. **(37%)**
- 2) Delays in getting **access to research data (36%)**
- 3) Disputes over **ownership** of research data **(30%)**
- 4) Insufficient information security measures for **sensitive or confidential research data (29%)**
- 5) Inability to **interpret research data** (e.g. due to poor or lost documentation or inadequate descriptions) **(26%)**
- 6) Inability to **maintain control of my research data** and understand how it is used **(26%)**
- 7) Insufficient **storage space** for research data **(25%)**
- 8) Insufficient **availability of computing power**, e.g. HPC **(24%)**
- 9) **Lack of file-naming/metadata conventions** making it difficult to retrieve research data **(18%)**

(CBS Research Data Practices Survey, 2019)

# Denmark: National coordination of the strategy implementation

The Danish Agency for Education and Research (part of the Ministry of Higher Education and Science) will appoint an **advisory group** to coordinate the implementation of the strategy:

- 3 university representatives
- 2 DeIC representatives
- 5 funder representatives
- 1 ministry representative

## **Timeline** for the advisory group

- 1) Action plan for the national implementation: 1/3-2022
- 2) Follow-up on action plan: 1/12-2022



# Denmark: National coordination of the strategy implementation

Advisory group can appoint **working groups** to actually plan the implementation.

Proposal:

- 1) WG for **discipline-specific implementation** of the strategy (*STEM/SSH? Datatypes? Or?*)
- 2) WG **infrastructure**
- 3) WG **data stewardship** and competence development
- 4) WG **DM costing & budgeting**
- 5) WG **information security & GDPR**
- 6) WG **merits & incentives**

# Denmark: Discussions with researchers about the FAIR strategy

FAIR research data management as a set of practices rooted in diverse research disciplines and traditions - it is important to acknowledge diversity

Important shift from “open data” to “FAIR data”

Highlight benefits of FAIR data with concrete use cases as well as calculations

No FAIR data without FAIR (supporting) infrastructures

Strategy implementation process: Avoid a strict top-down implementation process and consider how the strategy will obtain legitimacy among all stakeholders

Strategy implementation process: Avoid micromanagement and bureaucratisation

Strategy implementation process: Hit the right “degree of granularity” for the implementation activities



Questions?

★ Please participate in our poll  
<https://www.menti.com/bc135z6ncx>

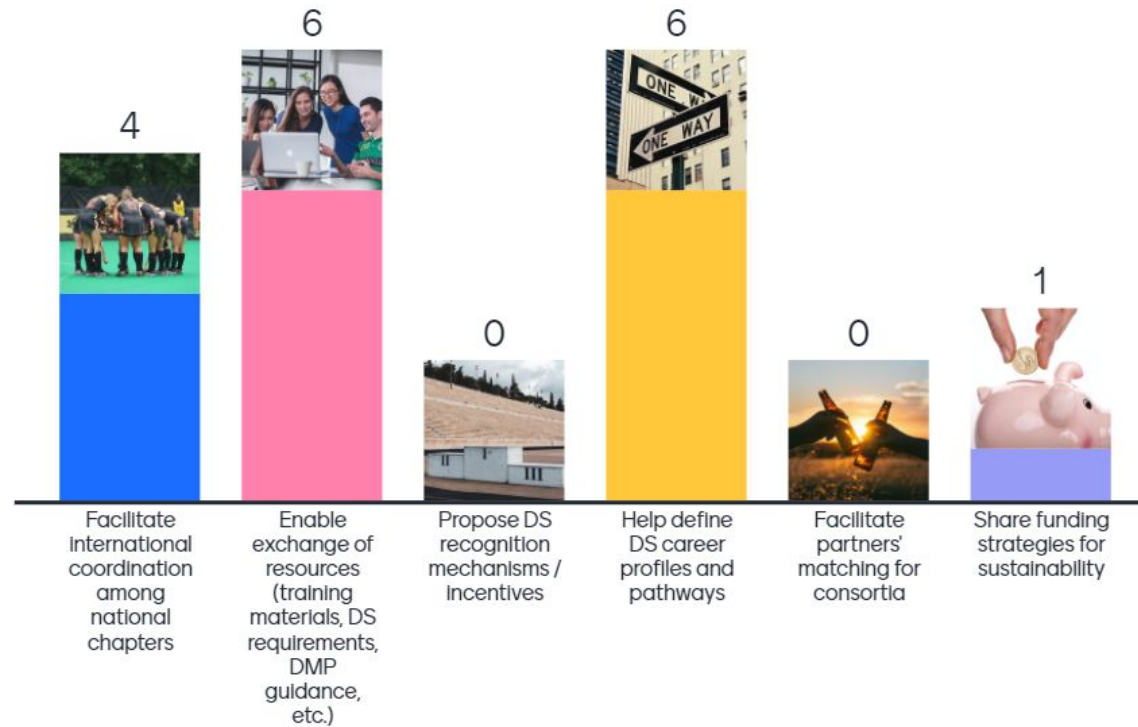
★ Voting code: 2967 7619

# Menti outcomes from the 2nd day

Go to [www.menti.com](http://www.menti.com) and use the code 2967 7619

Mentimeter

## What would you expect from DSCC-IN?



# Menti outcomes from the 2nd day

Go to [www.menti.com](http://www.menti.com) and use the code 2967 7619

Mentimeter

## What would you like to share with DSCC-IN members?

