Research Data Management in the Open Access Policy of the National Science Centre Poland

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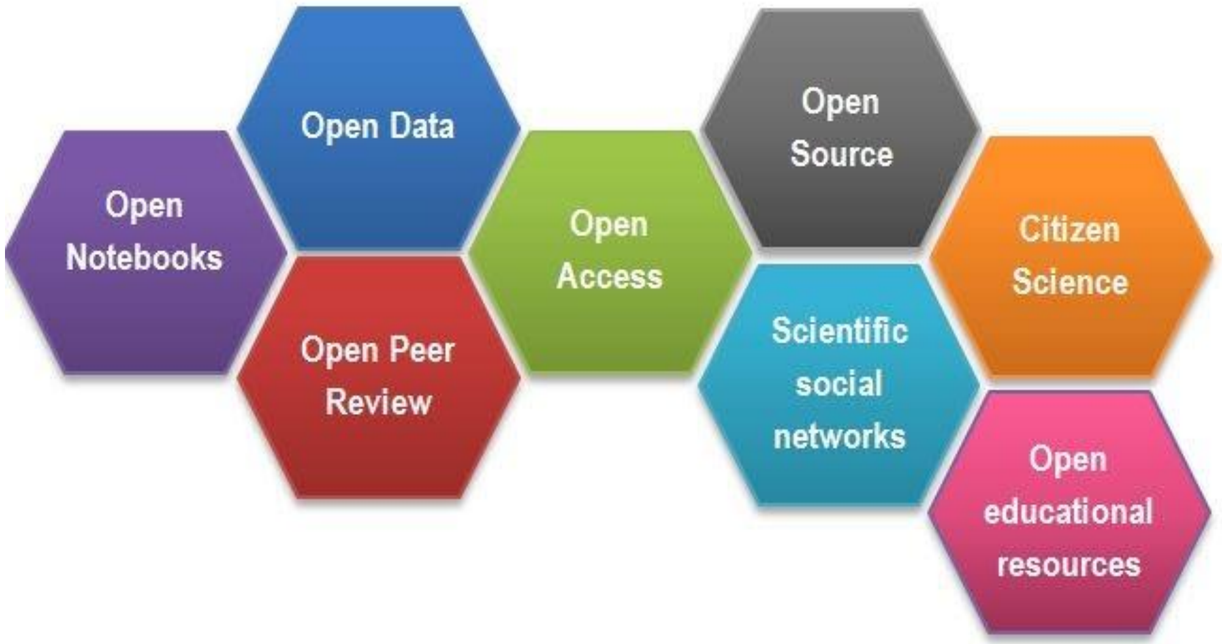
Narodowe Centrum Nauki

Open Science: definitione

Open Science is frequently defined as an umbrella term that involves various movements aiming to remove the barriers for sharing any kind of output, resources, methods or tools, at any stage of the research process (FOSTER/Facilitate Open Science Training for European Research, 2014-2019).



Open Science: definition

Open Science is a set of **principles and practices** that aim to make scientific research from all fields accessible to everyone for the benefit of scientists and society as a whole. The Recommendation aims to ensure **not only that scientific knowledge is accessible** but also that the production of that knowledge itself is **inclusive, equitable and sustainable**. By promoting science that is more accessible, inclusive and **transparent,** open science furthers the right of everyone to share in scientific advancement and its benefits, as stated in Article 27.1 of the **Universal Declaration of Human Rights**.

UNESCO Recommendation on Open Science (2021)

Open Science: global perspective

2001: Budapest Open Access Initiative (BOAI)

2004: OECD Declaration on Access to Research Data From Public Funding

2010: Singapore Statement on Research Integrity, 2nd Conference on Research Integrity

2013: San Francisco Declaration on Research Assessment (DORA)

2016: Council Conclusions on the Transition towards Open Science System

2018: Plan S by cOAlistion S

2021: UNESCO Recommendations on Open Science

Open Science: Polish perspective

2004: Poland signed the OECD Declaration on Access to Research Data From Public Funding

2013: Recommendations on Open Access of the Presidium of the Conference of Rectors of Academic Schools in Poland (KRASP) and Polish Academy of Sciences (PAN).

2015: Directions of the development of open access to research publications and research results in Poland, Ministry of Science and Higher Education

2020: National Science Centre Policy on Open Access.

2021: National Act on open data and re-use of public sector information

2022: National Science Policy (Point 4.4)

2024: [est.] Open Research Data Policy

Open Research Data: European Framework

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Data-driven Europe

Projected figures 2025

European Commission: 2019 - 2024

„We will be moving out of an economy based on fossil fuels, towards a sustainable and a data economy. Data is a renewable resource as much as sun and wind. Every 18 months we double the amount of data we produce. Industrial and commercial data, 85% of which is never used.
(Ursula von der Leyen at World Economic Forum 2020)

Regulations:

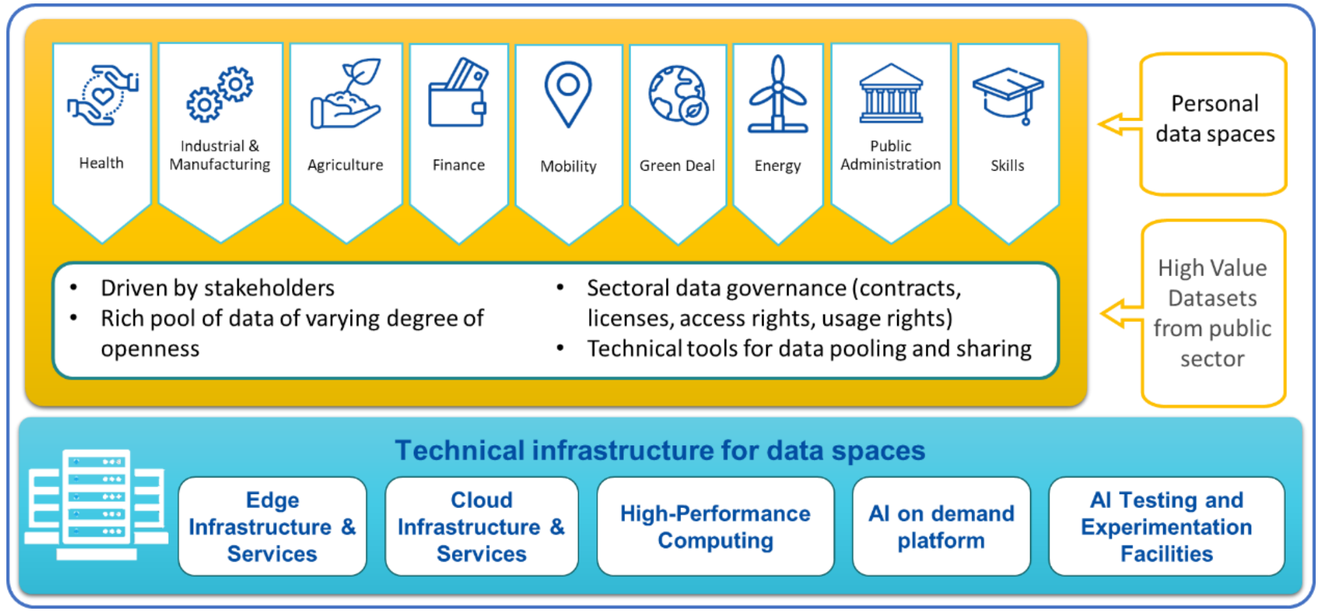
- 2019: Directive no 2019/1024 of the EP and of the Council (EU) of 20 June 2019 on open data and the re-use of public sector information;
- 2021: Strategic Research and Innovation Agenda (SRIA) of the European Open Science Cloud (EOSC)
- 2022: European Strategy for Data, Data Act, Data Governance Act, Digital Services Act, Digital Markets Act…

European Commission 2024 - 2029

European Data Union Strategy will draw on existing data rules to ensure a simplified, clear and coherent legal framework to share data seamlessly and at scale, while respecting high privacy and security standards.

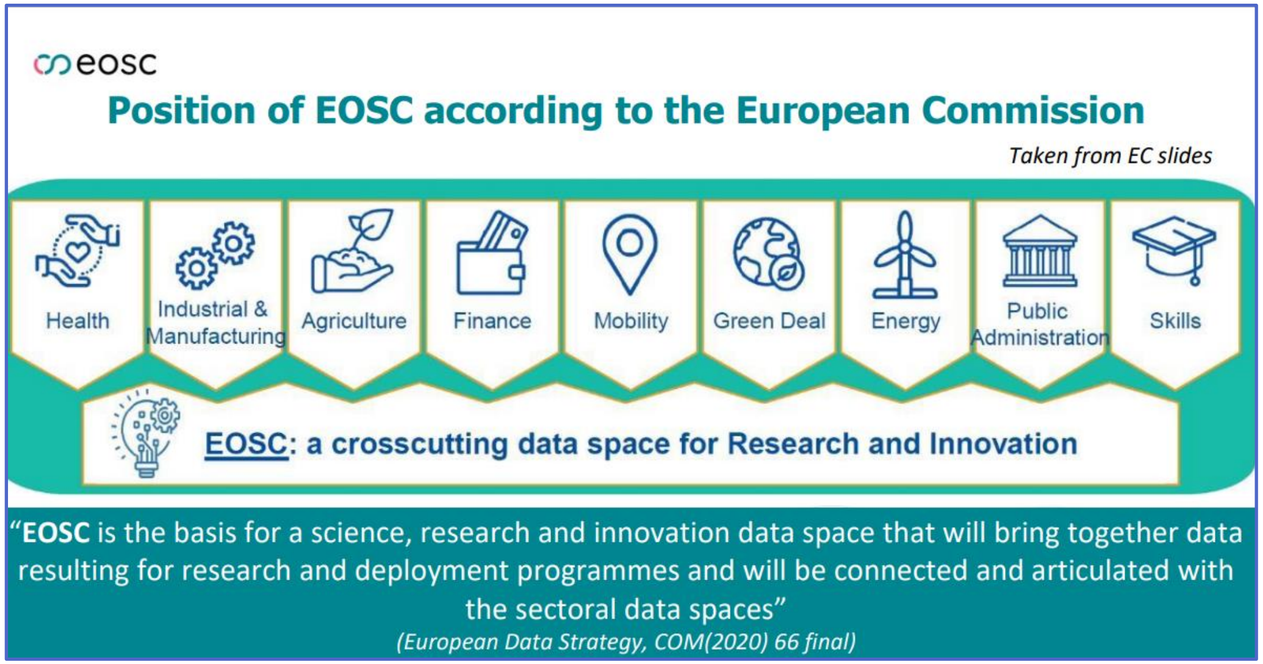
Europe’s Choice. Political Guidelines For The Next European Commission 2024−2029 Ursula von der Leyen Candidate for the European Commission President.

European Strategy for Data 2022



„We are creating a European Open Science Cloud now. It is a trusted space for researchers to store their data and to access data from researchers from all other disciplines. We will create a pool of interlinked information, a ‘web of research data'.

This is what we call the European Open Science Cloud and we are the first in the world to do that. It is being developed in Europe for Europe and for European researchers”
(Ursula von der Leyen at World Economic Forum 2020)



Open Research Data at the NCN Poland

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Open Science at NCN Poland: Open Access Policy

OPEN ACCESS

2018: NCN signed Plan S and became a member of cOAlition S

2018: NCN signed San Francisco Declaration on Research Assessment (DORA)

2020: NCN Open Access Policy adopted by order of the Director of the National Science Centre No. 38/2020 of 27 May 2020, as amended by order no. 40/2020 of 31 May 2020. Came into effect: 1 January 2021

2023: Liberalisation of the policy

2024: Extended liberalisation of the policy

OPEN DATA

2019: Data Management Plan: obligatory section of each grant application from the 33rd Grant Call

DMP and accompanying guidelines were prepared in line with the recomendations of Science Europe

In all grant agreements signed from 1 January 2021: underlying data (data sets) related to the published articles have to be shared through data repositories.

Open Data in the policy of NCN Poland

POLICY

Underlying data (dataset) to published articles should be made available in an open access repository where possible, subject to the terms of the license Creative Commons Public Domain (CC0 license) (…). All published metadata must meet the guidelines provided by OpenAIRE and contain a note on financing from the project funds (National Science Centre, Poland project number).

AGREEMENT: § 5. Project results

Data underlying scientific publications resulting from the project as referred to in sections 2 and 4 shall be reliably documented in a manner that satisfies the principles of findability (machine-readable or manual search), accessibility, interoperability and reuse (FAIR Data). They shall be available in a repository, where possible, under the terms of the Creative Commons Public Domain license (CC0 license)

LIBERALISATION

Subject to the terms of the license Creative Commons Public Domain (CC0) and Creative Commons Attribution (CC BY)

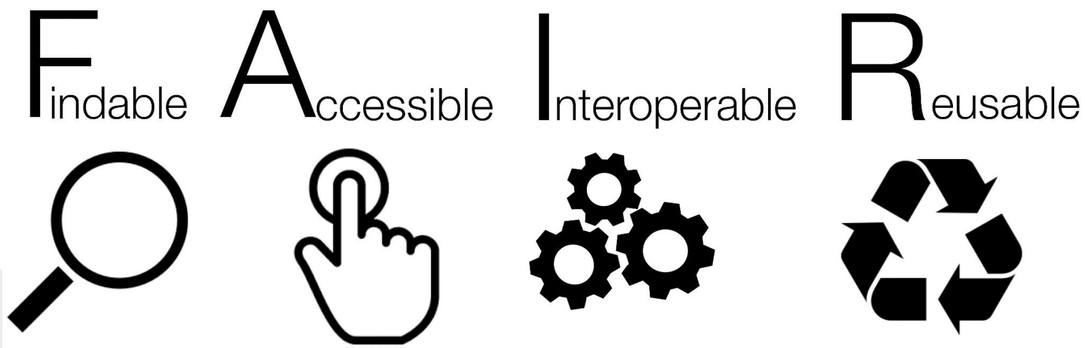
Scope of the NCN OA Policy:

RESEARCH DATA

UNDERLYING DATA of RESEARCH PAPERS AND REVIEWED CONFERENCE MATERIALS

FAIR DATA

AS OPEN AS POSSIBLE, AS CLOSED AS NECESSARY



What is research data?

What is research data?

National Act on open data and re-use of public sector information 2021

Research data: public sector information stored in electronic form, other than scientific publications, which has been produced or collected as part of scientific activities (….) and are used as evidence in the research process or serve to verify the validity of research findings and results.

In practice, it is any kind of data produced, collected, processed, analysed as part of a research project, covering all possible forms both digital and non-digital.

- textual documents
- numerical data
- results of surveys or questionnaires
- audio and video recordings
- drawings,
- photos and images
- database content
- mathematical models,
- algorithms
- software (scripts, input files)
- artefacts,
- other

How FAIR are your data?

To be Findable:

F1. (meta)data are assigned a globally unique and eternally persistent identifier.
F2. data are described with rich metadata.
F3. (meta)data are registered or indexed in a searchable resource.
F4. metadata specify the data identifier.

To be Accessible:

A1 (meta)data are retrievable by their identifier using a standardized communications protocol.
A1.1 the protocol is open, free, and universally implementable.
A1.2 the protocol allows for an authentication and authorization procedure, where necessary.
A2 metadata are accessible, even when the data are no longer available.

To be Interoperable:

I1. (meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.
I2. (meta)data use vocabularies that follow FAIR principles.
I3. (meta)data include qualified references to other (meta)data.

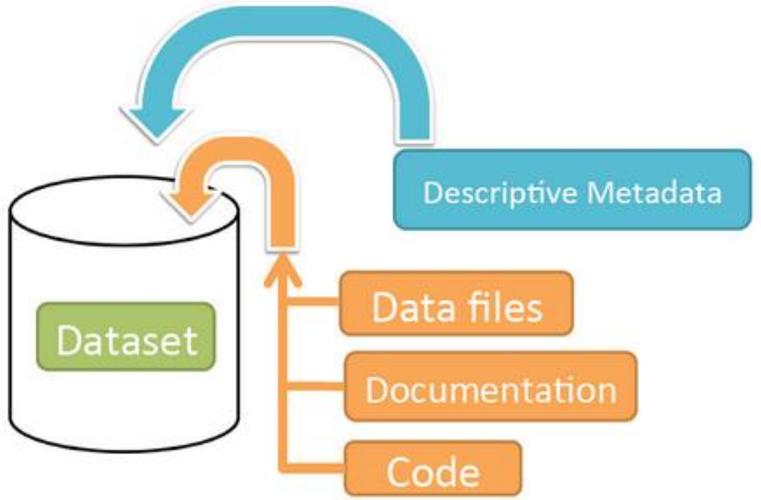
To be Re-usable:

R1. (meta)data have a plurality of accurate and relevant attributes.
R1.1. (meta)data are released with a clear and accessible data usage license.
R1.2. (meta)data are associated with their provenance.
R1.3. (meta)data meet domain-relevant community standards.

Find: FAIR Assessment Tools

1. **Underlying data**: research data provided in the form of datasets, i.e. collections of data that form a distinct whole and are related to a publication (a scientific article or peer-reviewed conference proceedings).
3. Data documentation
4. Metadata
5. Permanent unique digital identifier/PID(e.g. DOI)
6. License
7. Other, if relevant.

Schematic Diagram of a **Dataset** in Dataverse 4.0



Container for your data, documentation, and code.

https://repod.icm.edu.pl/

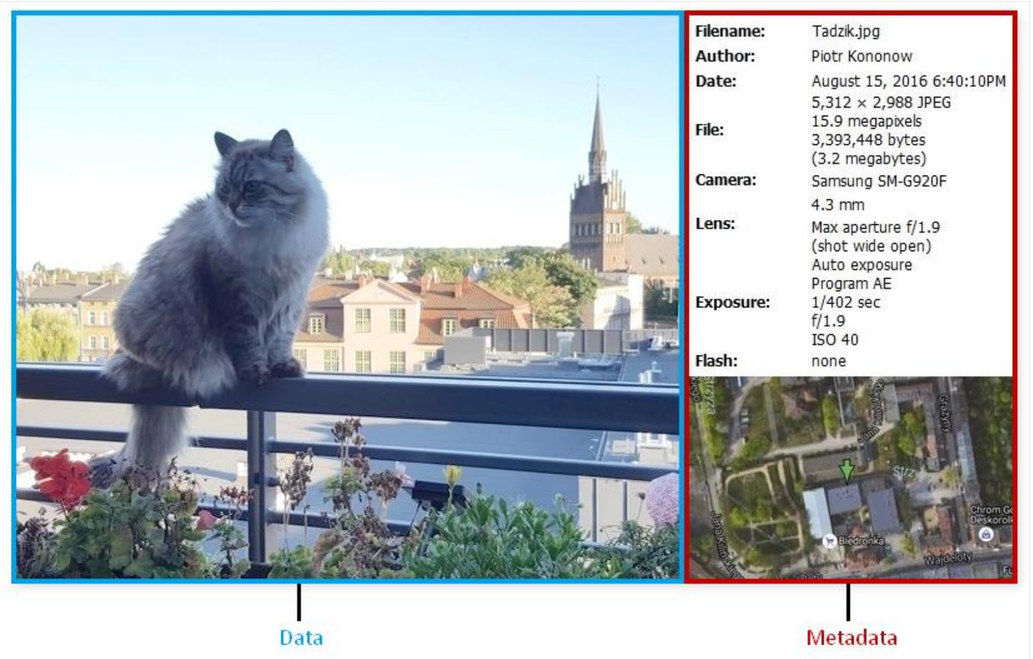
Metadata: data about data

OpenAIRE Guidelines 2013

Metadata (discipline-specific) characterise the research data collection (a dataset), including the following information:

- a title of the project and of dataset (Mandatory),
- a year of creation (Mandatory),
- name of the researcher/ORCID numer (Mandatory)
- keywords
- format (Optional)
- PID (Mandatory)
- related datasets, publications (MA/Mandatory when Applicable)
- licenses (Mandatory)
- funding institution (Mandatory in NCN OA Policy)
- …

Examples of metadata standards: Dublin Core, DDI…



Source: www.dataedu.com, Autor: Piotr Kononow

Documentation

- Description of the research context.
- Description of the methodology: data acquisition methods, data analysis methods, software and hardware used
- Structure and relationships between folders: chronologically and thematically
- Method of data quality control
- Information on data openness
- Glossary

Why is it important?

- **replicability**
- **reproducibility**

As open as possible as closed as necessary

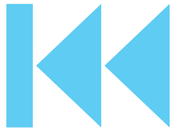
Data should be open by default.

If access is restricted, it must be well justified, for example in cases of sensitive data protection, trade secrets, competitive interests, confidentiality or intellectual property rights, including patents, public safety.

Data storage and back-up

3+2+1 archiving standards

No private share-point allowed



Back-up schedule/regularity; action in case of data damage or loss

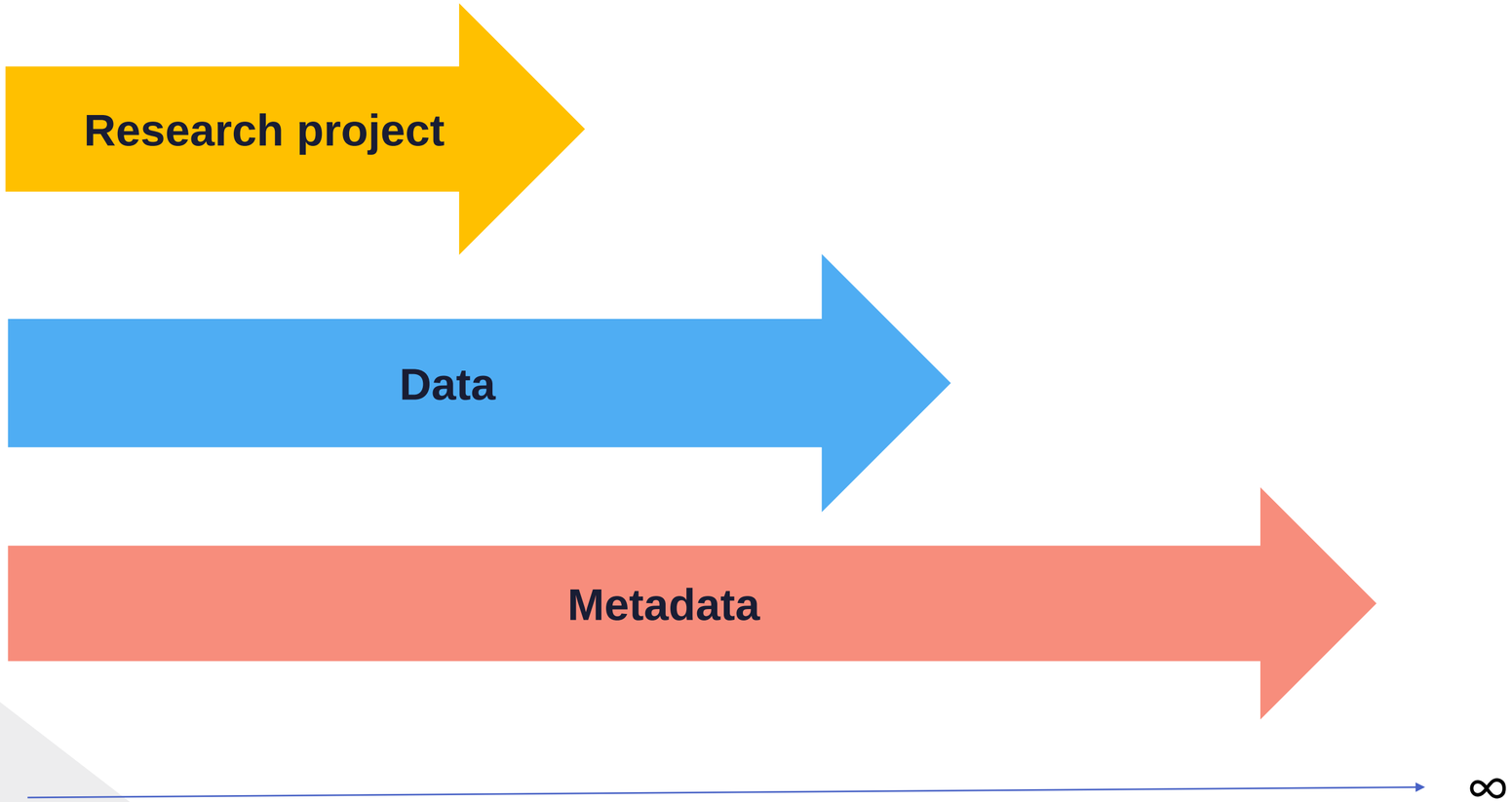
An authorised person(s): PI, members of research team or/and data steward, other?

Providing open access to data

Underlying data should be transfer to the open data repository, if possible, as soon as the article is published.

Envisaged period of data preservation: minimum 10 years.

(Meta)data timelines

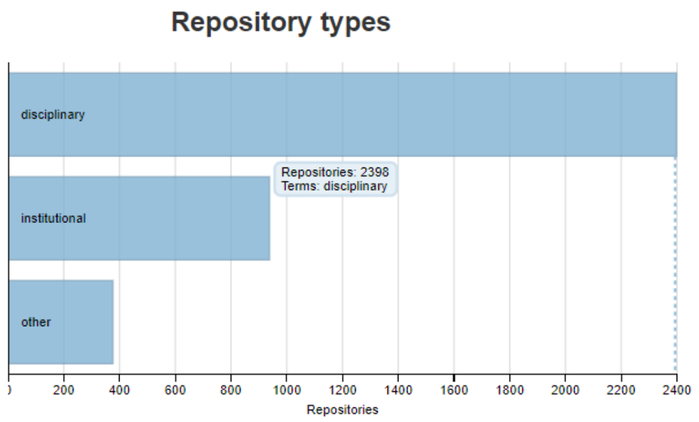


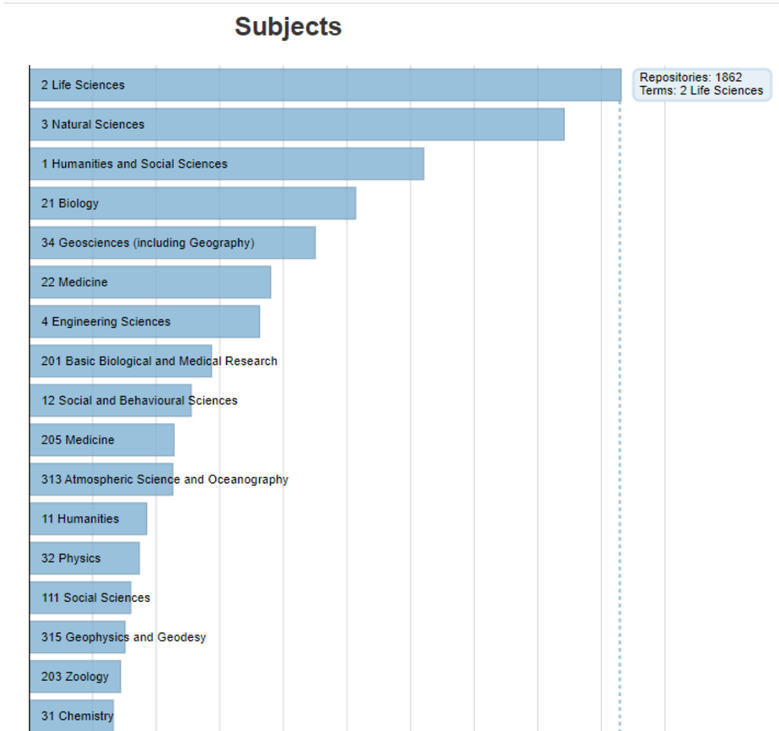
Data Repositories

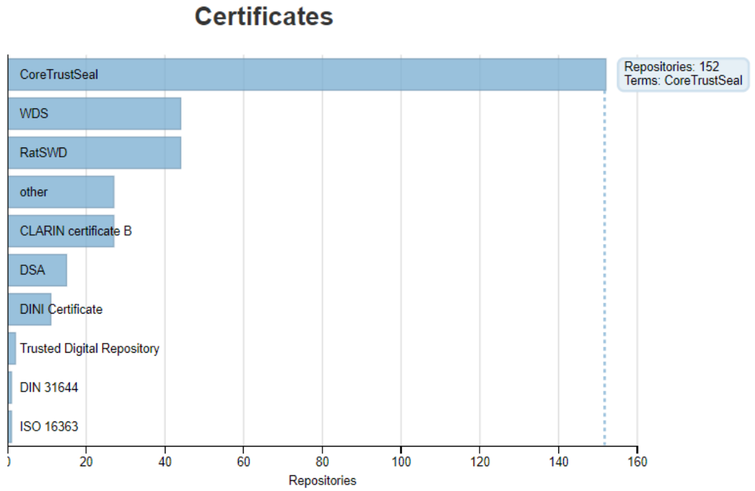
Trusted repositories certified by CoreTrust Seal:
CoreTrustSeal – Core Trustworthy Data Repositories

Registry of Research Data Repositories: www.re3data.org

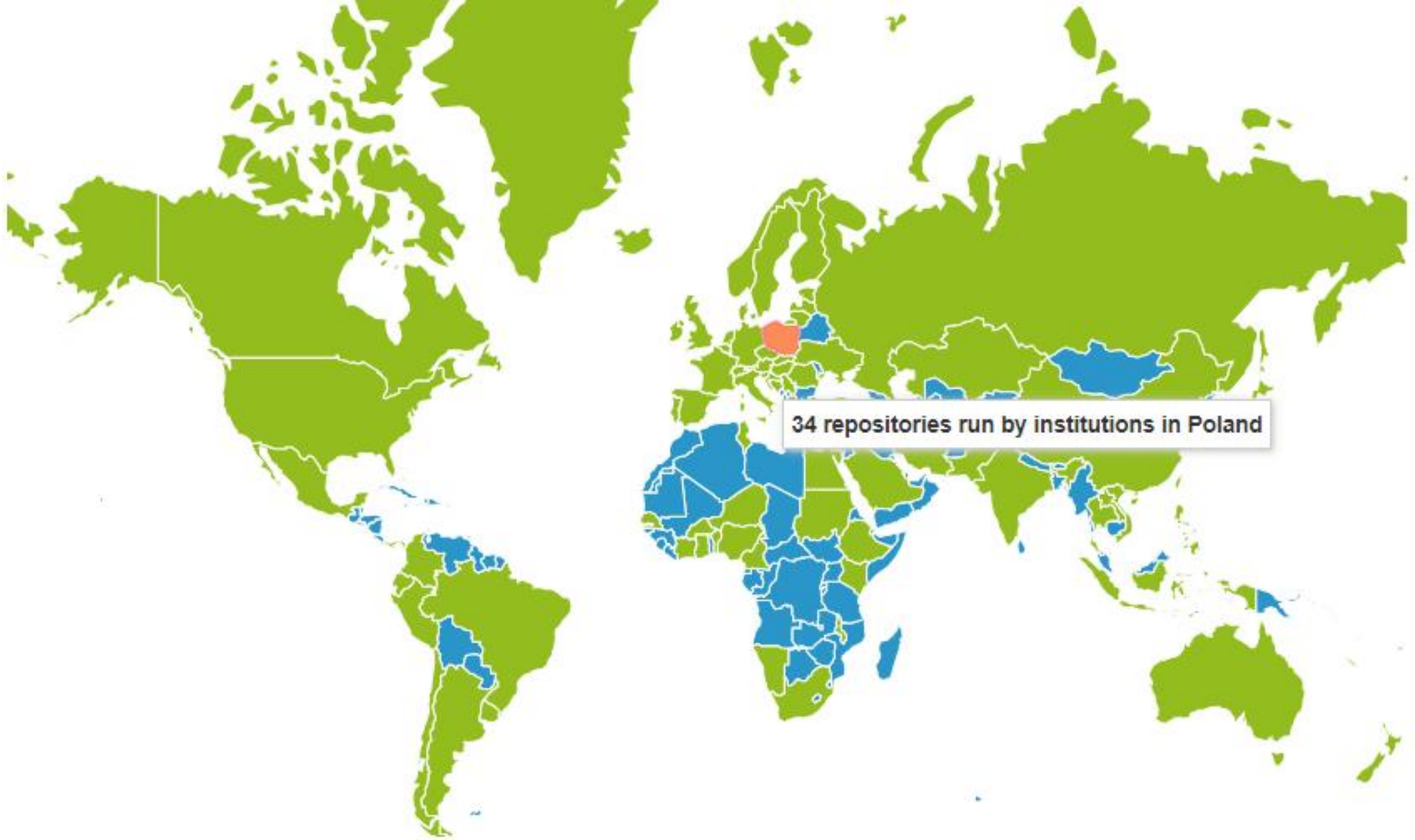
Types of repositories: institutional and dispciplinary



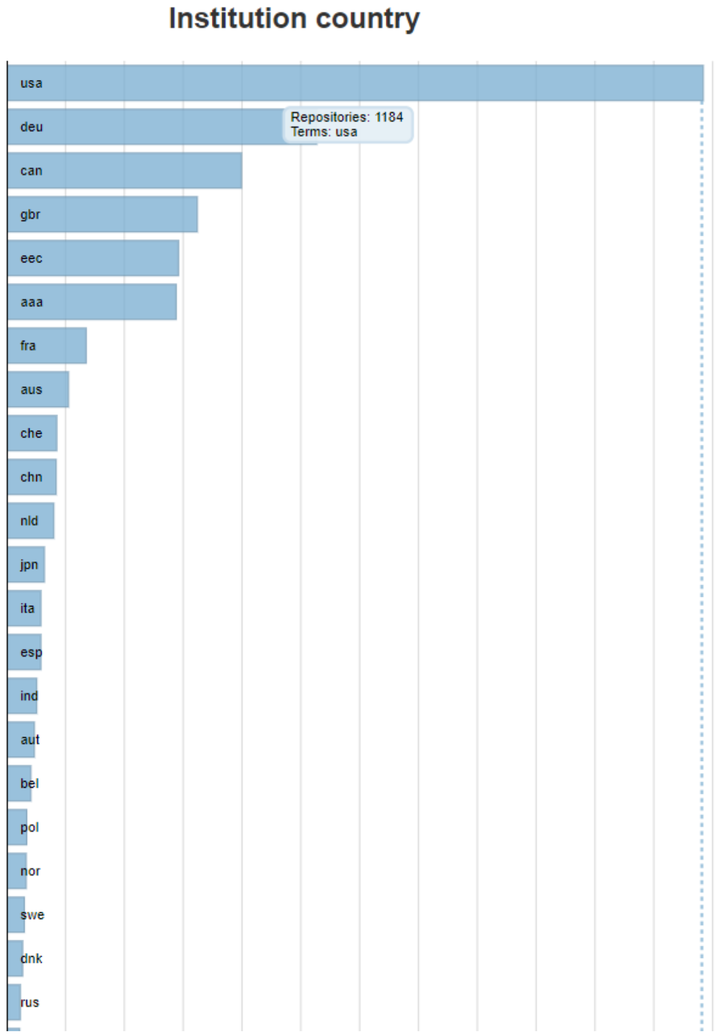




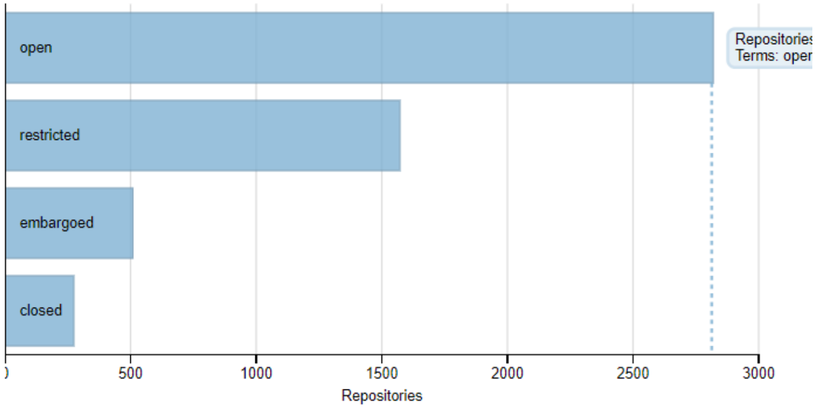
Statistics | re3data.org



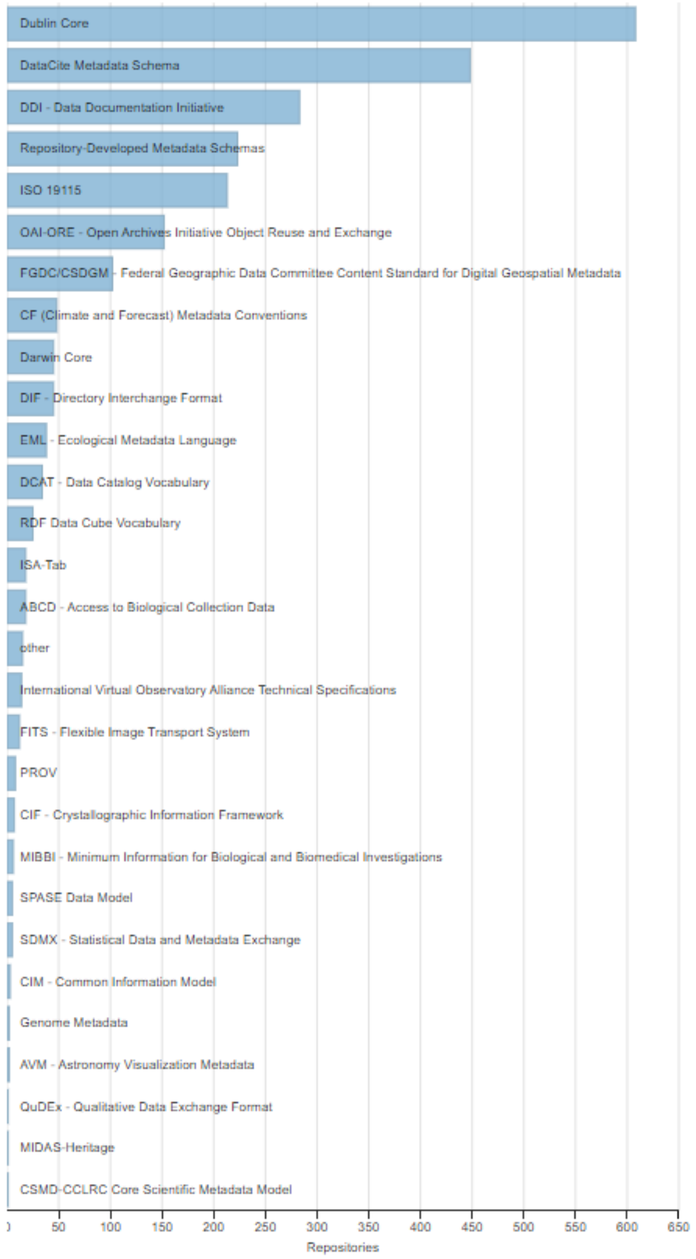
re3data.org
REGISTRY OF RESEARCH DATA REPOSITORIES



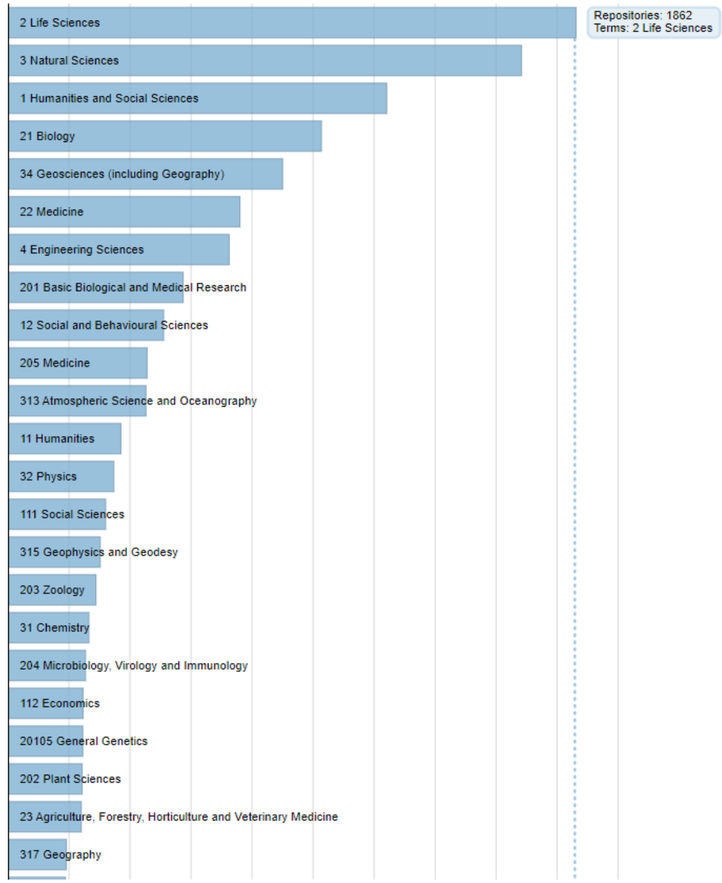
Data access



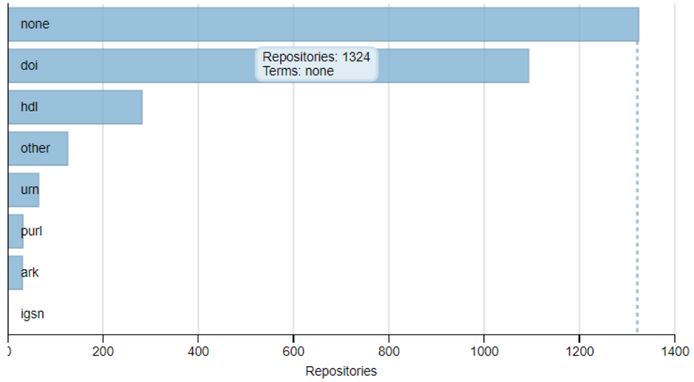
Metadata standards



Subjects



PID systems



How to choose a repository?

Repository details

CLARIN-PL

Repository details

Most Wiedzy Open Research Data Catalog

General | Institutions | Terms | Standards

Name of repository	**Most Wiedzy Open Research Data Catalog**
Additional name(s)	Most Wiedzy Katalog Danych Badawczych Bridge of Knowledge
Repository URL	https://mostwiedzy.pl/en/open-research-data/
Subject(s)	Humanities and Social Sciences · Life Sciences · Natural Sciences · Engineering Sciences
Description	The nature of the 'Bridge of Data' project is to design and build a platform that allows collecting, searching, analyzing and sharing open research data and to provide it with unique data collected from the three most important Pomeranian universities: Gdańsk University of Technology, Medical University of Gdańsk and the University of Gdańsk. These data will be made available free of charge to the scientific community, entrepreneurs and the public. A bridge will be built to allow reuse of Open Research Data. The available research data will be described by standards developed by dedicated, experienced scientific teams. The metadata will allow other external computer systems to interpret the collected data. ORD descriptions will also include data reuse or reduction scenarios to facilitate further processing.
Contact	most@pg.edu.pl https://pg.edu.pl/en/most/data/contact
Content type(s)	Databases · Images · Audiovisual data · Scientific and statistical data formats · Raw data · Plain text · other
Certificates and Standards	CoreTrustSeal
Keyword(s)	multidisciplinary
Persistent identifier(s) of the repository	FAIRsharing_doi:10.25504/FAIRsharing.ac4e2b
Repository type(s)	institutional

Data Management Plan (DMP)

How to prepare, monitor and report DMP?

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Introduction to the DMP

A DMP is a document that describes how research data will be collected, stored, protected, shared and re-used.

It is a "dynamic" document that should be updated during the course of the research project (i.e.: if the methodology changes).

The DMP should be completed in English (except for Miniatura, where the DMP can be completed in English or Polish).

NCN recognises that some projects will not generate, reuse or analyse research data and related materials. In these cases, a short explanation is required in response to question 1.1. How will new data be collected or produced and/or how will existing data be reused?

Introduction to the DMP

Before filling in the DMP form, please read „Guidelines for completing the Data Management Plan for a research project”, which can be found in the call announcement.

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Guidelines for applicants to complete the Data Management Plan form in the proposal

In this section, the NCN understands ‘data’ to be both collected, unprocessed data as well as analyzed, generated data. Under this all forms are conceivable; digital and non-digital (for example samples, completed questionnaires, sound recordings, etc.).

Consider your DMP as a part of your research plan. DMP complements your research plan with a description of the tecl your data. The NCN recognises that some projects will not generate, re-use or analyse research data and similar mater short explanation is required.

For the completion of the section please contact the library/intended repository/ICT Department of your institute or univers with the completion of the data section.

	Questions	Help text
1.	**Data description and collection or re-use of existing data**	
	1.1 How will new data be collected or produced and/or how will existing data be re-used? Questions you might want to consider: – What standards, methodologies or software will be used if new data are collected or produced? – What quality assurance processes will you use? – Which existing data (yours or third party) will you re-use? – How data provenance will be documented? – How will you organize your files and handle versioning?	Explain how the data produced. Also, ment data that will be (re-)us what types of data yc producing. Also expla already existing data example, the types photographs, measur physical samples or cc you plan to control consistency and quali data: calibration pr samples or measureme and capture standards, vocabularies, data en peer review, etc.
	1.2 What data (for example the kinds, formats, and volumes) will be collected or produced?	The descriptions shoul format and content Furthermore, provide a

5.	**Data sharing and long-term preservation**	
	5.1 How and when will data be shared? Are there possible restrictions to data sharing or embargo reasons? Questions you might want to consider: – How will potential users find out about your data? – For how long will the data be stored? – Are there any barriers and constraints to making the research data fully or partially accessible? – Will journal publishers require deposit of data supporting article findings?	Data have to be shared as soon as possible, but at the latest at the time of publication of the respective scientific output. Please, also consider how the reuse of your data v valued and acknowledged by researchers. Explain when the data w made available. Justify the retention peri

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	– Do you need to ask participants for their consent for data to be shared?	data storage[2]. Indicate the expected release. Indicate whether data sharing v postponed or restricted for example to pu protect intellectual property, or seek pa Consider whether a non-disclosure agree would give sufficient protection for confic data.
	5.2 How will data for preservation be selected, and where will data be preserved long-term (for example a data repository or archive)? Questions you might want to consider: – What data must be retained or destroyed for contractual, legal, or regulatory purposes? – How it will be decided what data to keep? – What procedure would be used to select data to be preserved? – What repository will you be using? Is this repository conform to the FAIR Data Principles[3]?	Consider how and on which repositor data will be made available. Outline the for data preservation and give informati how long the data will be retained. Cor the cost of data deposit and storage spa long-term storage. Estimate how much storage space is needed for the entire du of the project. Please, explain whethe

[2] Raw and processed data must be stored for a period appropriate for the discipline and methodology at issue. NCN considers a minimal period o years reasonable.

[3] The FAIR Data Principles define a range of qualities a published dataset should have in order to be Findable, Accessible, Interoperable and Reusable (see Wilkinson et al. (2016), The FAIR Guiding Principles for scientific data management and stewardship, *Scientific Data* 3, doi:10.1038/sdata.2016.18).

[4] There are a number of international certification schemes, which determine the trustworthiness of data repositories. Of these the international Data Seal of Ap the most basic set of criteria. Trusted Digital Repositories with a quality mark include repositories with a Data Seal of Approval, DIN-31644-, ISO-16363- or WD certification. An overview of existing repositories with Data Seal of Approval can be found in this list of repositories. Other useful listings of repositories include: of Research Data Repositories https://www.re3data.org/, some of them like Zenodo, an OpenAIRE and CERN allow researchers to deposit both publications a while providing tools to link them. It is always recommended to refer to broadly recognised discipline-specific or certified repositories in the first place. In cases w such a repository can be identified for selection of trustworthy repository please use criteria listed in *Practical Guide to the international alignment of resea management*, https://www.scienceeurope.org/wp-content/uploads/2018/12/SE_RDM_Practical_Guide_Final.pdf.

6.	**Data management responsibilities and resources**	
	6.1 Who will be responsible for data management (i.e. data steward)? Questions you might want to consider: – What is the role of data steward in your institution? – What is his/her position in the institution?	It has to be distinguished between Data owner and Data steward. Data steward is a data quality (DQ) expert who is responsible for data assessment (corrective measures) but he/she is not in charge of correcting data themselves. Outline the roles and responsibilities for data management/stewardship activities. Indicate who is responsible for implementing the DMP, and ensuring it is reviewed and revised. For collaboration project, explain the co-ordination

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		of data management responsibilities across partners.
	6.2 What resources will be dedicated to data management and ensuring that data will be FAIR[5]? Questions you might want to consider: – What are the costs for making data FAIR in your project? – How will these be covered?	Explain how the necessary resources (for example time) to prepare data for sharing/curation have been costed in. Indicate if the additional resources will be needed to prepare data for deposit. If yes, please explain how much is needed and how such costs will be covered.

Additional information:

If you submit an application in an international competition organized by the NCN based on the procedure of a leading agency, in which the leading agency is a foreign partner, regardless of whether this agency requires submission of a data management plan or not, you are still obliged to supplement it in the NCN application form submitted in the ZSUN/OSF system. The content of the plan applies only to research data that will be created or will be reused during the implementation of the project by the Polish research team.

If you submit an application in an international competition organized by the NCN in multilateral cooperation, regardless of whether you need to submit a data management plan at international level, you still have to complete it in the NCN application form submitted in the ZSUN/OSF system. The content of the plan applies only to research data that will be created or will be reused during the implementation of the project by the Polish research team.

DMPs are very individual. They can be of various types and their composition can differ. The examples provided by the Digital Curation

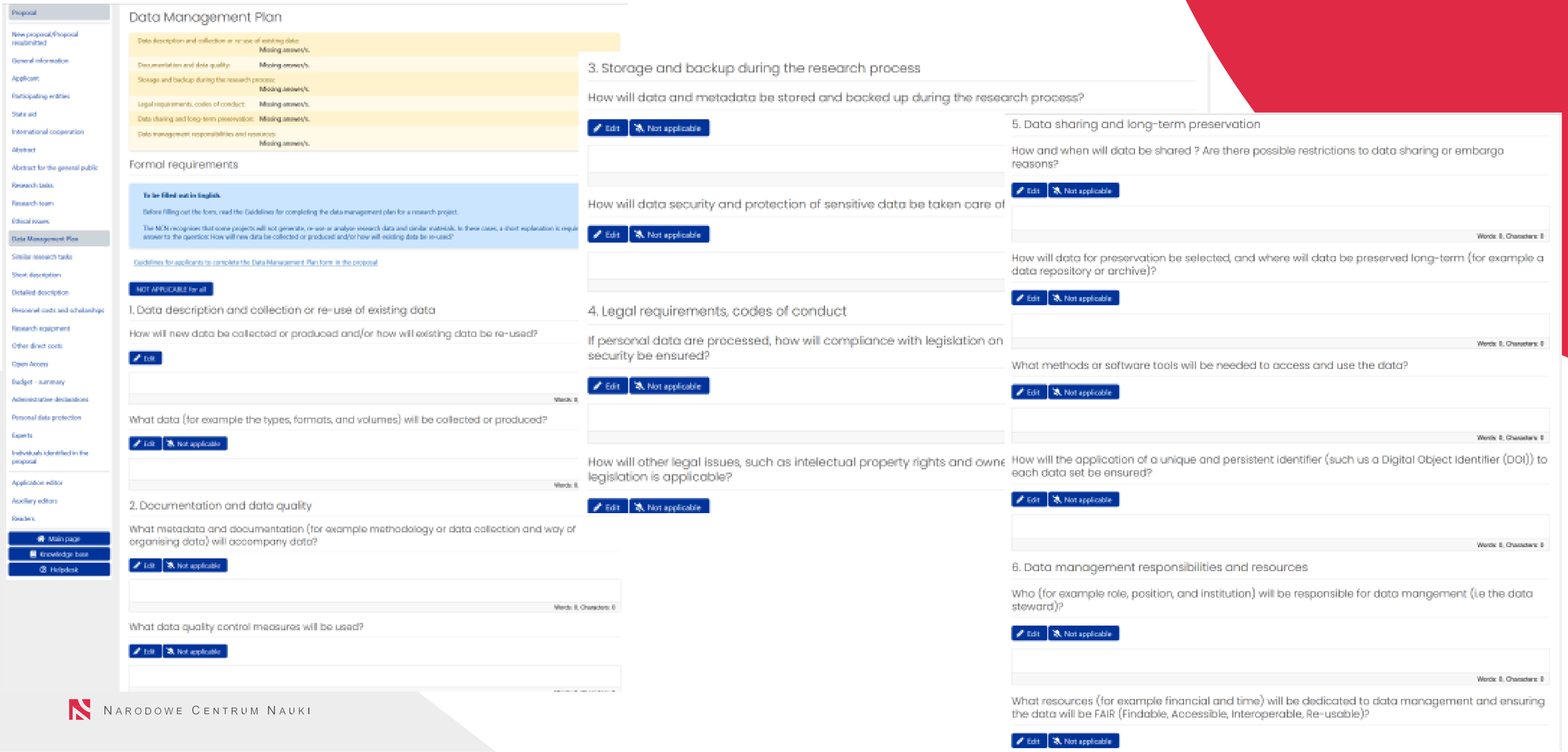
Introduction to the DMP

Each NCN call will use the same template of the DMP, which consists of 6 sections:

1. Data description and collection or re-use of existing data
2. Documentation and data quality
3. Storage and backup during the research process
4. Legal requirements, codes of conduct
5. Data sharing and long-term preservation
6. Data management responsibilities and resources.

There is a text box below each question for a description of up to 1000 characters.

DMP in the NCN application system



1. Data description and collection or re-use of existing data

1.1 How will new data be collected or produced and/or how will existing data be re-used?

Primary (new): data acquisition and analysis methods and software that will be used to acquire or produce new data

Secondary (pre-existing) data: own or held by a third party: how the origin and qualoty of the data is documented; how their different versions are managed; whether it will be necessary to digitise analogue or hard copy data (e.g. maps, photographs, texts)…

1.2. What data (for example the types, formats, and volumes) will be collected or produced?

Format/s and estimated volume of data produced, retrieved, reused.

2. Documentation and data quality

2.1 What metadata and documentation will accompany data?

Specify the metadata standards of your choice:

- international standards or schemas for the organisation of metadata (OpenAIRE, Dublin Core, DDI, DataCite…)
- The Digital Curation Centre (DCC) maintains a list of widely used metadata standards: http://www.dcc.ac.uk/resources/metadata-standards

What documentation will be made available so that potential new users will be able to read and interpret the collected data in the future, reuse it or replicate the study?

2.2 What data quality control measures will be used?

The project should demonstrate high quality data by assessing:

- impact of methods of data collection, processing and analysis;
- impact of tools, services, instruments and other research infrastructures on data quality;
- methods of verifing data quality
- risks to data validity, such as measurement error or bias
- methods of data protection from unauthorised modification.

3. Storage and backup during the research process

3.1 How will data and metadata be stored and backed up during the research process?

- data storage and security
- method and procedures for making backups
- frequency of backups
- data recovery in case of loss/damage
- security of data flow between team members: authorised access
- transferring data from mobile devices, field workstations or home equipment to the main server at the workplace

3.2 How will data security and protection of sensitive data be taken care of during the research?

- specify where and how to store sensitive data
- data access control and authorisation during and after the project

4. Legal requirements, codes of conduct

4.1 If personal data are processed, how will compliance with legislation on personal data and on data security be ensured?

- GDPR, Polish RODO, other regulations …
- anonymisation proces, if required
- In line with the research code of conduct and ethics, a consent form shoud contain information on the long-term storage and archiving of data, including personal data (securely stored and eventually destroyed), and research data (publicly shared and retained for a period of time specified in the RFO guidelines)

4.2 How will other legal issues, such as intellectual property rights and ownership, be managed? What legislation is applicable?

- ownership of data (primary: research entity, secondary: research entity, private or public entity, individuals, NGO...)
- licenses used (including Creative Commons)
- restrictions on re-use of data from third parties

Other regulatory frameworks: Copyright, Intellectual Property Rights, Code of Research Ethics, Databases Protection Law, Act on Combating Unfair Competition Bilateral Agreements, Grant Agreement, Licences, Terms of use of the repository, other

5. Data sharing and long-term preservation

5.1 How and when will data be shared ? Are there possible restrictions to data sharing or embargo reasons?

5.2 How will data for preservation be selected, and where will data be preserved long-term (for example a data repository or archive)?

5.3 What methods or software tools will be needed to access and use the data?

5.4 How will the application of a unique and persistent identifier to each data set be ensured?

6. Data management responsibilities and resources

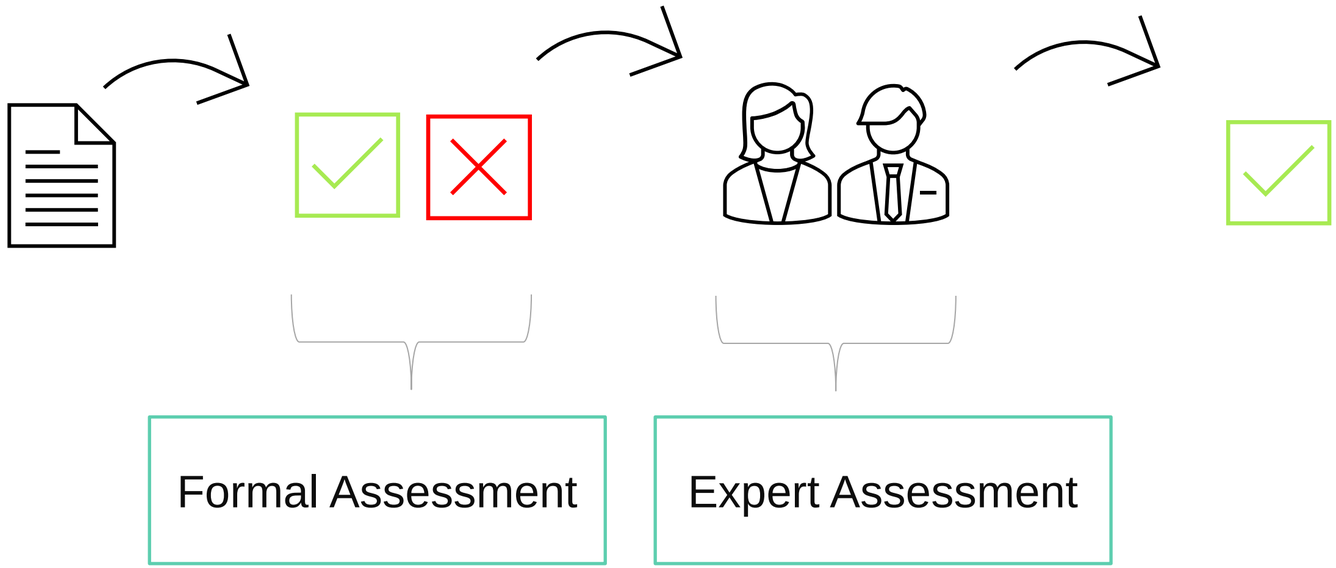
6.1 Who (for example role, position, and institution) will be responsible for data mangement (i.e the data steward)?

6.2 What resources (for example financial and time) will be dedicated to data management and ensuring the data will be FAIR (Findable, Accessible, Interoperable, Re-usable)?

DMP assessment process at NCN

Narodowe Centrum Nauki

DMP assessment in the NCN application process



DMP Annual Reporting

NARODOWE CENTRUM NAUKI

DMP Annual Report

OTWARTE DANE lub METADANE

Należy przedstawić dane powiązane z opublikowanymi artykułami oraz inne zestawy danych (data set) lub metadane udostępnione w otwartym dostępie.

Lp.	Rodzaj (dane lub metadane)[1]	Tytuł w języku oryginalnym [oraz tłumaczenie tytułu na język angielski]	Twórca/y[2]	Data złożenia do repozytorium otwartego dostępu[3]	Język[4]	Licencja[5]	Trwały identyfikator (np. DOI)[6]	Link do danych
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

[1]Rodzaj (należy wpisać dane lub metadane)/ Type: dane są to dane zebrane i dotąd
danych/ data: both collected, unprocessed data as well as analyzed, generated dat
Tytuł w języku oryginalnym [oraz tłumaczenie tytułu na język angielski]/ Original tit
[2]Twórca/y/ Creator(s): Podmiot odpowiedzialny za tworzenie zasobu. Przykłady: os
[3]Data złożenia do repozytorium otwartego dostępu/ Submission date to OA reposit
[4]Język/ Language: Język zasobu./ A language of the resource.
[5]Licencja/ Licence: Dokument prawny lub umowa, określająca warunki korzystania
resource, Creative Commons open licences are recommended, e.g. CC-BY 4.0.
[6]Trwały identyfikator (np. DOI)/ Persistent identifier (e.g. DOI): Jednoznaczne odnie
context. In the original form e.g. "10.1234/ab"

No	Type (data, metadata)	Title in original language (and translation of the title into English)	Data creator(s)	Date of submission to the open access repository	Language	License	Persistent identifier	Link to data
1								
2								
3								

DMP Final Reporting

Narodowe Centrum Nauki

DMP Final Report Form

Plan zarządzania danymi opisany we wniosku należy stosować w trakcie realizacji projektu.		
PLAN ZARZĄDZANIA DANYMI[4]		
1. OPIS DANYCH ORAZ POZYSKIWANIE LUB PONOWNE WYKORZYSTANIE DOSTĘPNYCH DANYCH		
	PLAN	WYKONANE
Sposób pozyskiwania i opracowywania nowych danych i/lub ponownego wykorzystania dostępnych danych		
Pozyskiwane lub opracowywane dane (np. rodzaj, format, ilość)		
2. DOKUMENTACJA I JAKOŚĆ DANYCH		
	PLAN	WYKONANE
Metadane i dokumenty (np. metodologia lub pozyskiwanie danych oraz sposób porządkowania danych) towarzyszące danym		
Stosowane środki kontroli jakości danych		
3. PRZECHOWYWANIE I TWORZENIE KOPII ZAPASOWYCH PODCZAS BADAŃ		
	PLAN	
Przechowywanie i tworzenie kopii zapasowych danych i metadanych podczas badań		
Sposób zapewnienia bezpieczeństwa danych oraz ochrony danych wrażliwych podczas badań		
4. WYMOGI PRAWNE, KODEKS POSTĘPOWANIA		
	PLAN	
Sposób zapewnienia zgodności z przepisami dotyczącymi danych osobowych i bezpieczeństwa danych w przypadku przetwarzania danych osobowych		
Sposób zarządzania innymi kwestiami prawnymi, np. prawami własności intelektualnej lub własnością. Obowiązujące przepisy		
5. UDOSTĘPNIANIE I DŁUGOTRWAŁE PRZECHOWYWANIE DANYCH		
	PLAN	
Sposób i termin udostępnienia danych. Ewentualne ograniczenia w udostępnianiu danych lub przyczyny embarga		
Sposób wyboru danych przeznaczonych do przechowania oraz miejsce długotrwałego przechowywania danych (np. repozytorium lub archiwum danych)		
Metody lub narzędzia programowe umożliwiające dostęp do danych i korzystanie z danych		
Sposób zapewniający stosowanie unikalnego i trwałego identyfikatora (np. cyfrowego identyfikatora obiektu (DOI)) da każdego zestawu danych		
6. ZADANIA ZWIĄZANE Z ZARZĄDZANIEM DANYMI ORAZ ZASOBY		
	PLAN	
Osoba (np. funkcja, stanowisko i instytucja) odpowiedzialna za zarządzanie danymi (np. data stewarc)		
Środki (np. finansowe i czasowe) przeznaczone do zarządzania danymi i zapewnienia możliwości odnalezienia, dostępu, interoperacyjności i ponownego wykorzystania danych		

RAPORT SPORZĄDZONO DNIA

1. DATA DESCRIPTION AND COLLECTION OR RE-USE OF EXISTING DATA		
	Plan	Completion
1.1 How will new data be collected or produced and/or how will existing data be re-used?		
1.2 What data (for example the types, formats, and volumes) will be collected or produced?		
2. DOCUMENTATION AND DATA QUALITY		
	Plan	Completion
2.1 What metadata and documentation will accompany data?		
2.2 What data quality control measures will be used?		

DMP Final Report assessment

Costs of opening data

Open Access Indirect Costs

- **OA indirect costs: 2% of direct costs**
- **Indirect costs: 20% of direct costs**

Indirect costs settled as a lump sum.

Agreement: "The entity is obliged to agree with the Project Manager the use of at least 25% of the value of other indirect costs."

It is up to the entity in which year the OA costs will be spent; they may be carried over to the following year(s) of project implementation or even when the project is finished.

Who supports research data managment?

- Open Science Coordinator
- Data Stewards: preparation, monitoring and reporting of DMPs, final reporting.

Where to find them?

- IT Infrastructure team: infrastructure, data storage, software/hardware, back-up, IT safety, data damage/data loss, archiving.
- Office of the Patent Attorneys: Copyright law and Intellectual Property Rights,
- Data Protection Officer: sensitive data and personal data management
- Ethics Commission
- Mentor and co-researchers
- Project and/or Science Office at your institution
- Finance and/or Accountancy Office at your institution
- National Science Centre Poland (information, training, assistance)

Conclusions: why do we need open research data?

Researcher perspective and scientific issues:

- Data citation,
- National/international visibility
- National/international collaboration,
- Reproducibility: (re-)use of data,
- Effectiveness: avoidance of previous research topics and mistakes
- Requirements of research funders and publishers,
- Reproducibility of the research process leading to increased scientific integrity, credibility and trust in scientists and science,
- Transparency of the research process
- Accountability of scientists to the scientific community

Public perspective, institutional issues and national policies:

- Efficiency in the use of public funds for research (avoidance of funding the same research projects and the same research mistakes);
- Efficient use of existing data
- Recognition of open data in science policy (institutional, national and EU level),
- Scientific evaluation/scientific assessment,
- Promotion of market and social innovation
- Trust in science and scientists,
- Finding effective solutions to global and local challenges
- Data-driven governanve/public policy/decision-making proces/socjety…

Useful links

- NCN’s OPEN ACCESS POLICY
- Instructions – NCN’s Open Access Policy
- NCN Guidelines for completing DMP
- Open Access - Frequently Asked Questions

Contact us

NCN Open Science Team

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