

Web Tutorial 2: Preparation & implementation of Data Management Plans for EMPIR projects

TC IM 1449: Research Data Management and the
European Open Science Cloud

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Content

- RDM obligations in EMPIR
- Preparation of data management plans
 - EMPIR DMP template
 - Support for DMPs
 - DMP tools: RDMO
- Implementation of data management plans
 - Tasks & tools in RDM
 - Personal support
- Vision



METAS



NPL



The TC-IM 1449

COORDINATING INSTITUTE

PTB (Germany)

PARTICIPATING PARTNERS

BEV (Austria)

CMI (Czech Republic)

DTI (Denmark)

IMBiH (Bosnia and Herzegovina)

INRIM (Italy)

IPQ (Portugal)

METAS (Switzerland)

MIKES (Finland)

NPL (United Kingdom)

RISE (Sweden)

VSL (Netherlands)

... welcome to join!

Research
Data
Management

Metrology

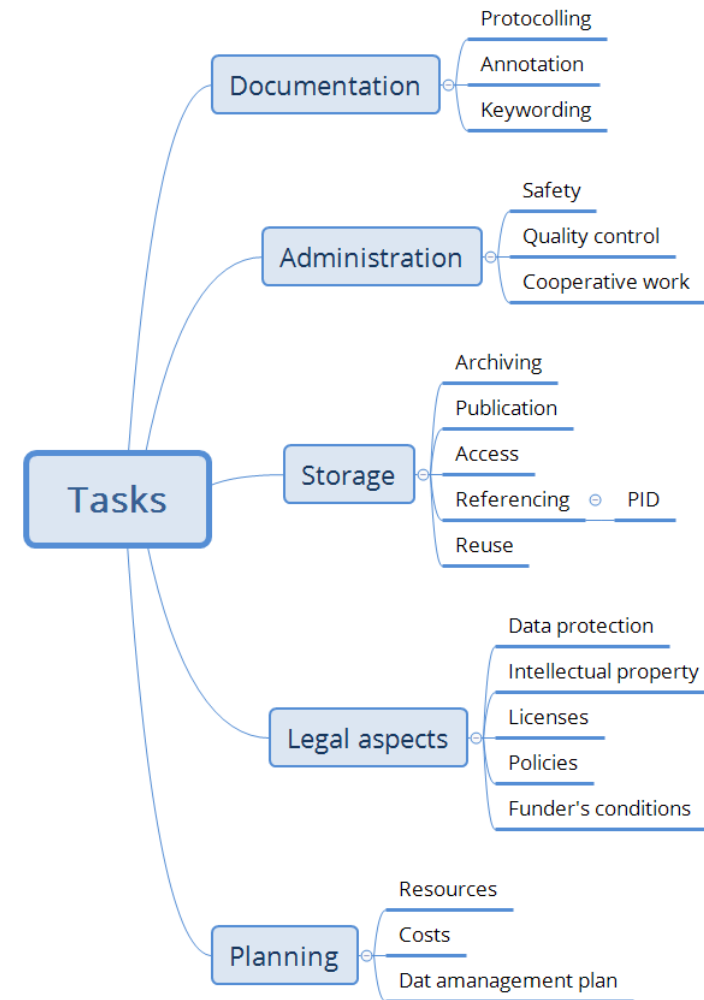
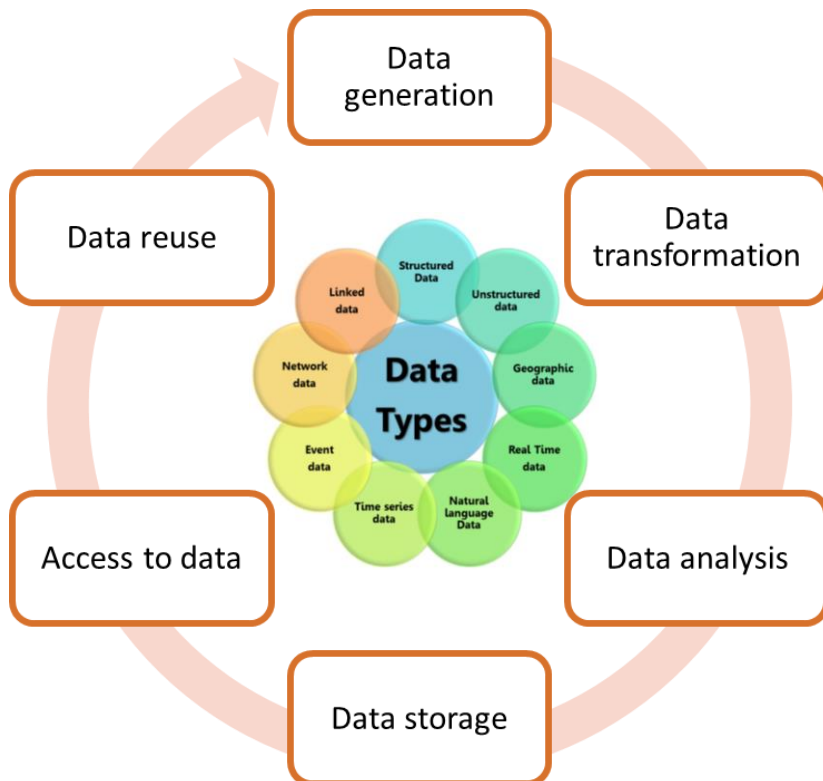


**EUROPEAN OPEN
SCIENCE CLOUD**

Work packages
Increase impact of metrology on EOSC
EU RDM requirements
Motivation of the users
Case studies + appl. design guidelines
Development of RDM structures
Stakeholders / scientific community
Vision for metrology in RDM

Research data management

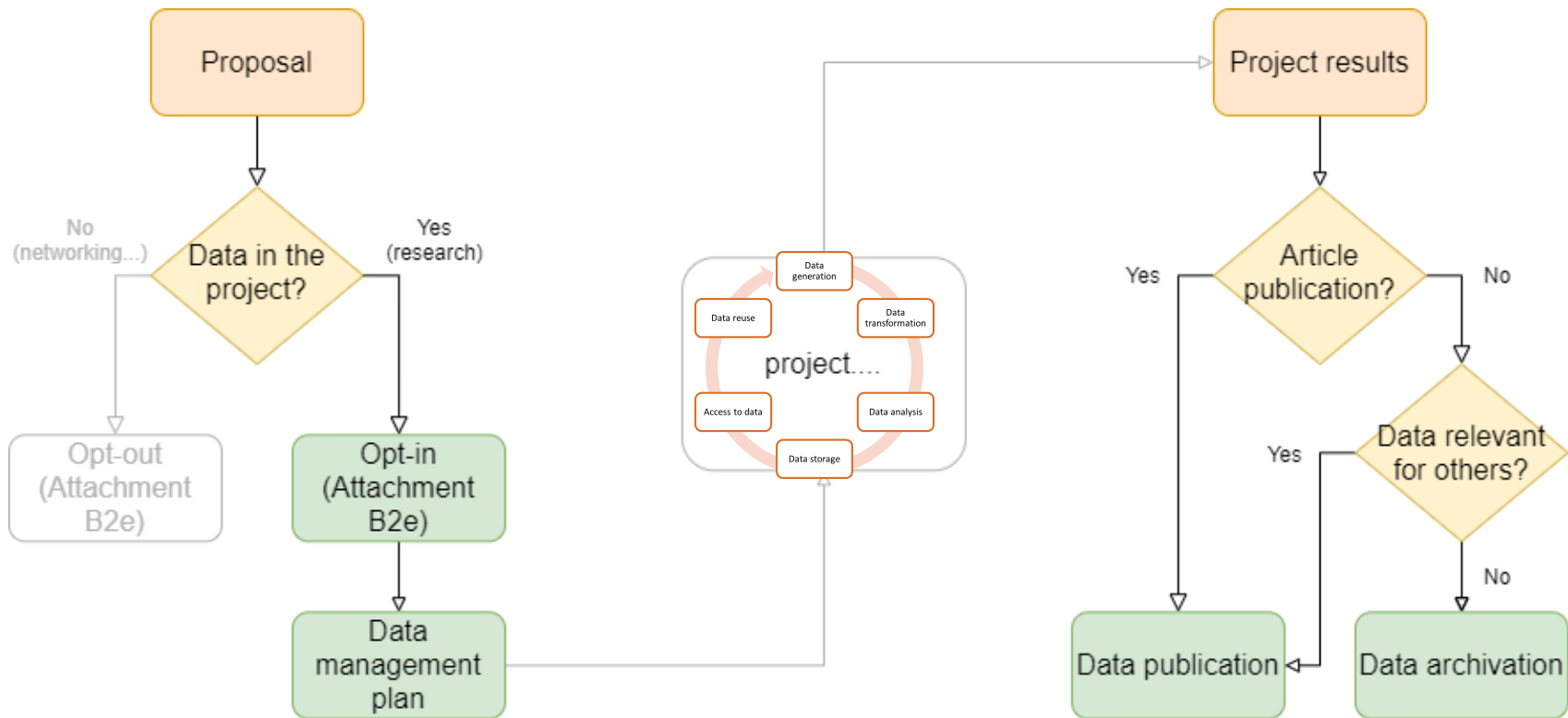
- Data life cycle and connected tasks



Harmonisation necessary

- Simplify exchange
- Improve efficiency
- Avoid losses

RDM in EMPIR: obligations



XXYYYYZZ-(eg-17IND01,-17SIP01)-- Short-Names

¶
¶
¶
¶



DATA-MANAGEMENT-PLAN¶

Data Management Example and Key Points for Opt-in¶

The project chooses to 'Opt-in' to the open access data requirement.¶

The consortium has chosen to opt-in as the deliverables and/or publications in peer-reviewed journals. Thus, for these to be disseminated by as many stakeholders as possible, the data should be freely available. The consortium intends the outputs of the project to be adopted and up-taken by as many stakeholders as possible. Therefore, as the consortium includes NMs/DIs who will be considered traceable to the SI, these data sets should be available to other researchers for reuse and validation.¶

RDM in EMPIR: publication, referencing

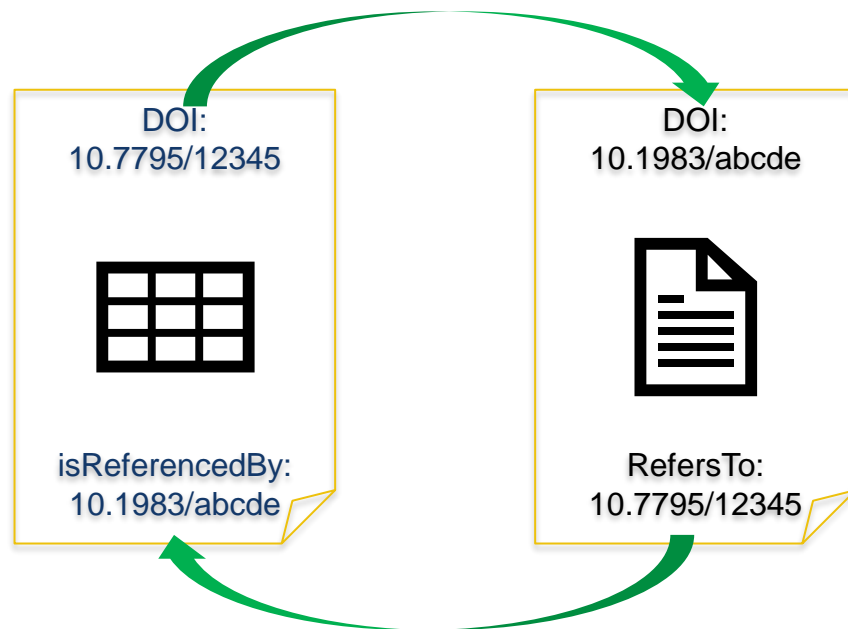
EMPIR Model Grant Agreement: Multi-beneficiary MGA v5.0 – 12.03.2018

- (c) ensure open access — via the repository — to the bibliographic metadata that identify the deposited publication.

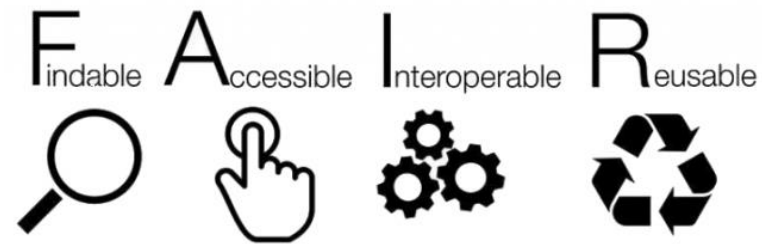
The bibliographic metadata must be in a standard format and must include all of the following:

- the terms "EMPIR" "European Union (EU)" and "Horizon 2020"
- the name of the action, acronym and grant number;
- the publication date, and length of embargo period if applicable, and
- a persistent identifier.

***Open?
FAIR!!!***



Requirements

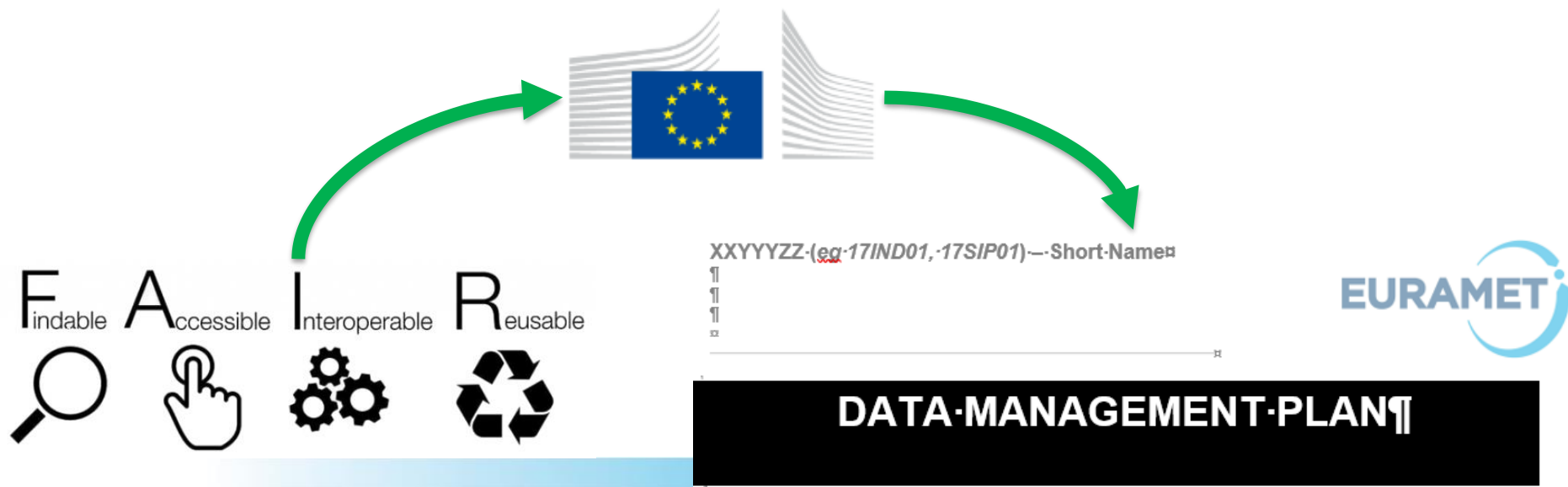


- **File formats:** long-lived, open
- **Identifiers:** globally unique, persistent
- **Metadata:** rich, indexed, accurate, relevant, persistent; standard language (controlled vocabularies)
- **Protocol:** open, free, universally implementable
- **License:** clear, accessible

**DMP preparation:
content, support, tools**

RDM in EMPIR: Data management plan

- Describes all aspects of the interaction with data
 - Thematic classification; security; resources; rights and ethics...
- Creation of order and structure
- Accompanies the project –changing over time
 - 1st version 1 month after contract signing, then every 9 months



DMP structure

TABLE OF CONTENTS¶

1 → Data management plan.....→	2¶
1.1 → Data summary.....→	2¶
1.2 → Findable, Accessible, Interoperable and Reusable (FAIR) Data.....→	2¶
1.2.1 → Making data findable, including provisions for metadata.....→	2¶
1.2.2 → Making data openly accessible.....→	2¶
1.2.3 → Making data interoperable.....→	3¶
1.2.4 → Increase data re-use (through clarifying licenses).....→	4¶
1.3 → Allocation of resources.....→	4¶
1.4 → Data security.....→	5¶
1.5 → Ethical aspects.....→	5¶
1.6 → Other.....→	5¶

- Initial version ≠ follow-up version
- Project-internal decisions
 - What repository? What license...?
 - Security aspects...
 - Ethical aspects...

Support for DMPs

- MSU template + guide
- 1449 guide in preparation
- Personal advice @ RDM office
- DMP tools

https://msu.euramet.org/downloads/#reporting

- [Part 7 - Writing a final publishable report](#)
- [Part 8 - Writing a final RMG report](#)
- [Part 9 - Preparing data management plans](#)

[View the presentation on Data Management in EMPIR \(MP4 file\)](#)

- [Guide to Publications - Information for Authors](#)

https://msu.euramet.org/downloads/documents/EMPIR_Reporting_Guidelines_Part9.pdf

— + Automatischer Zoom ▾

Questions	Answers
34 What are the estimated costs for making data Findable, Accessible, Interoperable and Reusable (FAIR) in your project?	The estimated costs for making the data Findable, Interoperable and Reusable (FAIR) are 1 000 € (costs). These costs have been kept to a minimum by using a public repository (Zenodo) and by making only relevant data available.
35 How will these costs be covered? <i>Note that costs related to open access to research data are eligible in EMPIR (if compliant with the Grant Agreement conditions).</i>	The costs for making the data FAIR are included in the project budget and will be claimed if compliant with the Grant Agreement's conditions.
36 Who will be responsible for data management in your project?	The consortium's data access committee will also be responsible for data management. The coordinating institution will be responsible for coordinating the data management plan. The committee will be responsible for organising data backup and storage, data archiving and depositing the data within the repositories (Zenodo, Open Access Repository).

Tools for DMPs

institution-specific:

- TUB-DMP

funder-specific:

- ARGOS (H2020/OpenAIRE)
- DSW (Elixir)
- DMPonline
(UK research councils)
- DMPTool (US)
- DMPRoadmap (UK+US)

subject-specific:

- GFBio DMP Tool
- DataWiz (psych)

community-driven:

- RDMO

https://www.forschungsdaten.org/index.php/Data_Management_PI%C3%A4ne

RDMO

A tool to support the planning, implementation, and organisation of research data management.

- Organiser = “to-do-agenda” (proj documentation; reminders; maDMP...)
- Structured information (XML, JSON) → reusable
- DFG project, now community-based
- Local instance (e.g. <https://rdmo.ptb.de/>)
- Personalisation (multilanguage, drop-down)

Questionnaire

Kurztitel / Akronym:

Bitte geben Sie einige Schlagworte zur Forschungsfrage an.

Schlagwörter können aus den von der PTB empfohlenen Klassifi

Bitte nutzen Sie für die Schlagwörter jeweils eine eigene Zeile. Si dem grünen Knopf hinzufügen und mit dem roten Kreuz (x) ent

Output

Data management plan

Grant agreement number: BF259SR, BS206TK

Project short name / acronym: BiriBiri

Project full title: Beobachtungen des Interstellaren Raums mittels Ipothormaler Beleuchtung Infolge Röhren-Installationen - Bulbi Incandescenti Radianti per l'Illuminamento del Buio Interstellare mediante Radiazione Ipotermica

Version ...

Date: 11/04/2018

Project partners: Physikalisch-Technische Bundesanstalt, TU Braunschweig, Bauhaus Dessau

→ Export in .docx, .tex, .pdf

DMP implementation: Tools and support

Task and tools

Administration

Safety

Quality control

Cooperative work

Database systems



Cooperative work platforms



Versioning tools / CI



GitLab

Container systems



Caosdb
an open scientific database



Pachyderm

Electronic lab notebooks



Chemotion



labfolder

Documentation

Protocolling

Annotation

Keywording

Lab information management systems

Annotation tools

RightField



Metadata generators



DataCite Metadata Generator

Task and tools

WORM-archives



Data journals / repositories / online databases

• subject-specific



• institutional



• generic



Storage

Archiving

Publication

Access

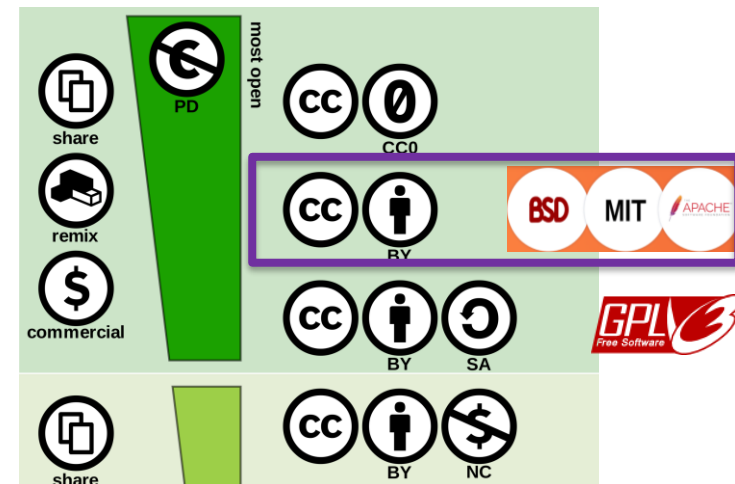
Referencing

Reuse

Important:

• PID (DOI)

• License

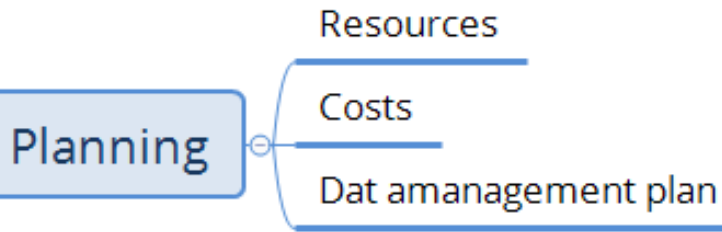


Data search engines



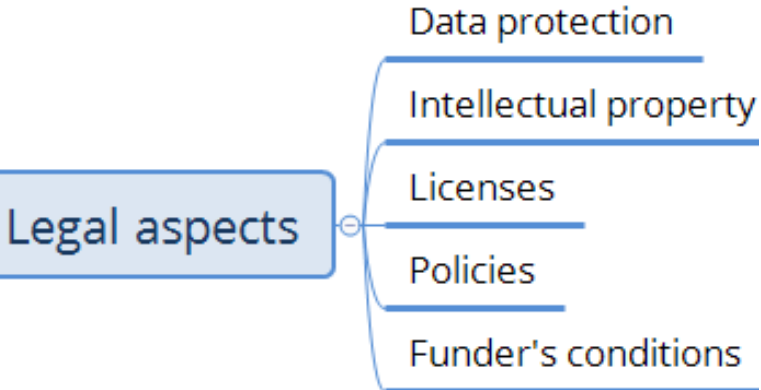
Repository search engines re3data.org OpenDOAR

Tasks and tools




PM-tools  

DMP-tools 



Legal office!

	Bestehen Vorgaben im hochschuleigenen Recht?	Zwang zum Open Access-Publizieren? Der rechtl. Präzedenzfall ...! (Aufsatz)	Vgl. Juristische Agenda für digitale Inhalte v.a. Kap.10 Globale Datenräume (Aufsatz)	Vgl. EU-Kommission, COM/2017/09 final	Erstellt von Thomas Hartmann, 2018
	Wissenschaftsrecht	Welcher verfassungsrechtlichen Grenzen sind zu beachten?	Welche Rechtsbestimmungen gelten außerhalb Deutschlands?	Was bringt z. Bsp. Für FD die „European Data Economy“?	
Welche rechtliche Bindung können Policies erfüllen? (Compilience-Anforderungen für das F- und Publikationsmanagement (Vortrag))	Policies	Grundrechte	Internationales Recht	EU-Recht	Patentrecht
Welche Bedingungen geben Förderer (DFG, Industrie) vor? (DFG, Leitlinien zum Umgang mit FD)	Förderbedingungen	<p>terra incognita - digitale Forschungsdaten auf der Suche nach einer rechtlichen Heimat</p> 			Patentrecht
	Verträge	Urheberrecht	Datenschutz	Arbeits-/Dienstrecht	Wettbewerbsrecht
	Bestehen Absprachen zum „(geistigen) Eigentum“ an FD?	Unterfallen FD überhaupt Urheberrechtsgesetz?	Unterfallen FD überhaupt Datenschutzrecht?	Wem „gehören“ die an Universitäten erhobenen FD?	Werdend Daten in unternehmerischen Geschäftsverkehr unfair genutzt?
		Urheberrechtliche Schutzfähigkeit von Forschungsdaten (Vortrag und Aufsatz)	Vgl. RfII-Empfehlungen: Datenschutz und Forschungsdaten	Vgl. Urheberrecht in der Bildungspraxis, S. 40 ff.	

Support



Giacomo Lanza (Bibliothek), Sascha Eichstädt (Digitalisierung, Met4FoF)



Dario Pileri (Sistemi informatici)



Thilo Muth (S.3: E-science), Michelle Unger (Dept 4)



Sébastien Marmin (Data Science and Uncertainty)



Martin Koval (Software validation)



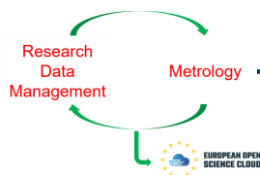
Per Olof Hedekvist (Safety and Transport)



Federico Grasso Toro



Jean-Laurent Hippolyte (Data science)



TC-IM 1449 “RDM & EOSC”

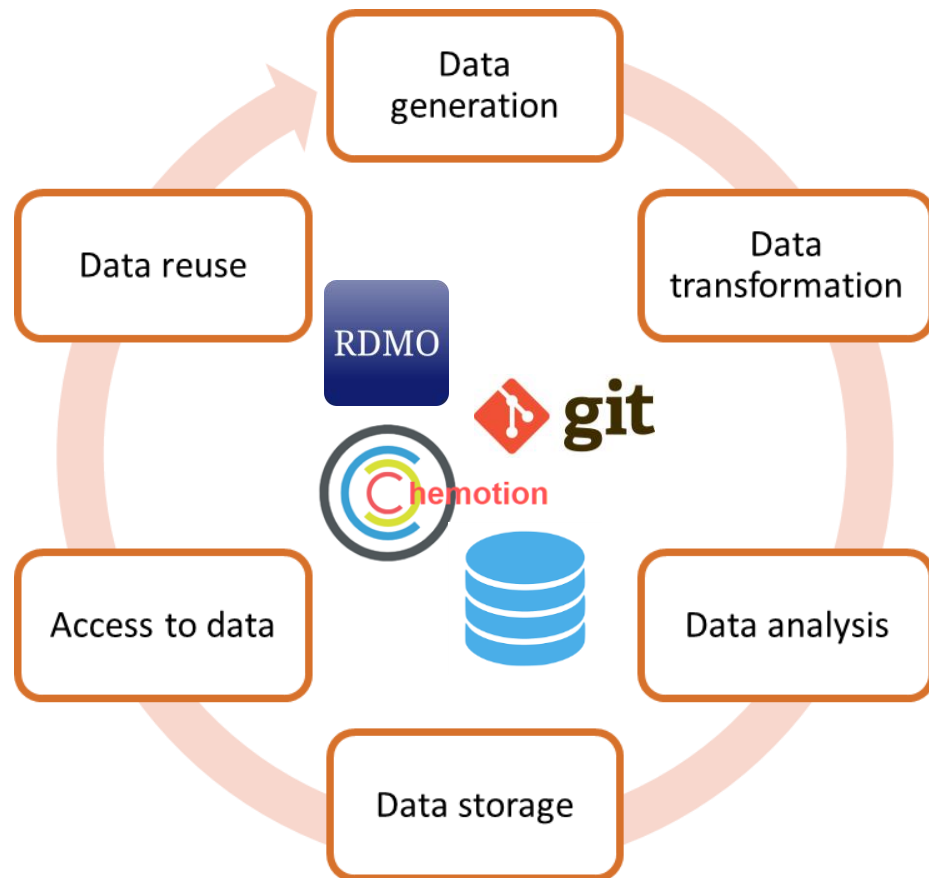
Vision: not like that...

- Dispersion
 - noncompatible standards
 - uncorrelated tasks

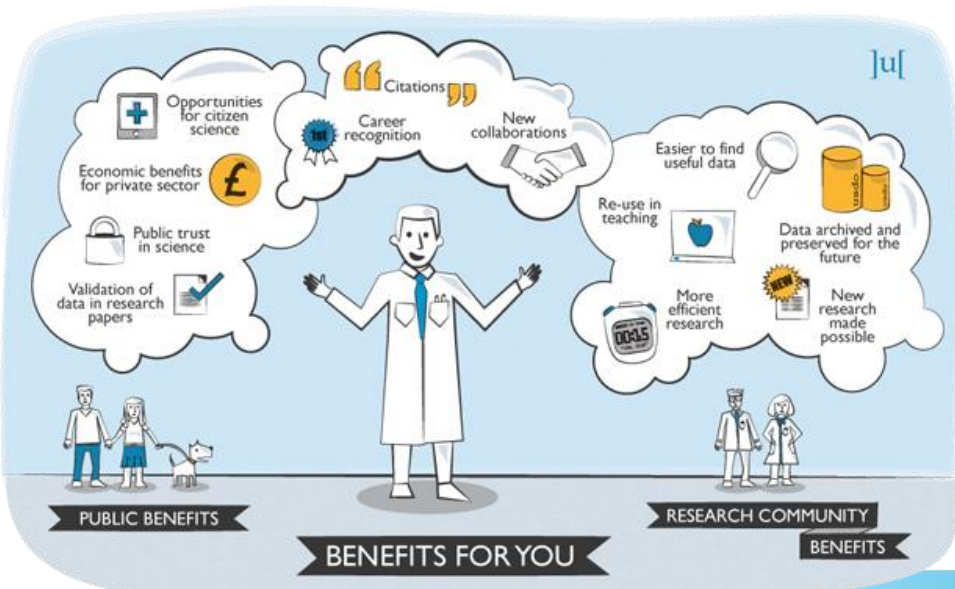


Vision: rather...

- Automated procedures
 - Integrated tools
 - Seamless transmission
- Acknowledgement
 - Score
 - Resources



→ *Scientists' vision??*



Perspective: German NFDI initiative

- Federated infrastructure:
 - Central association + 30 disciplinary consortia
- Bottom-up approach → pilots



NFDi4ing



Thank you for your attention!

**NEXT TUTORIAL:
Metadata for RDM and publications
submission for EMPIR projects**

2021-03-11, 10 AM CET

Speaker: Jean-Laurent Hippolyte (NPL)

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