

THÜRINGER FDM-TAGE

2020



**Data Management Plans:
FAIRify your Data!**



Data Management Plans: FAIRify your Data!

Moderator: Kevin Lang
Wednesday, 01.07.2020

Agenda

- 1) Introduction
- 2) The Guideline for Handling Research Data
- 3) Help and Guidance for Handling Research Data
- 4) Guest Lecture by Kerstin Helbig
- 5) Open Discussion

Introduction

About myself...

Kevin Lang, Master of Science

- 2011 – 2016: Bachelor Degree, Medieninformatik
- 2016 – 2018: Master Degree, Computer Science and Media
- since 2015 at Webis
 - Key activities: Natural Language Processing, Machine Learning, Artificial Intelligence und Big Data
- since 2018:
 - Contact person for Research Data Management at the Bauhaus-Universität Weimar
 - Member of the Thuringian Competence Network for Research Data Management (TKFDM)

Strategie zur Digitalisierung (12/2017)

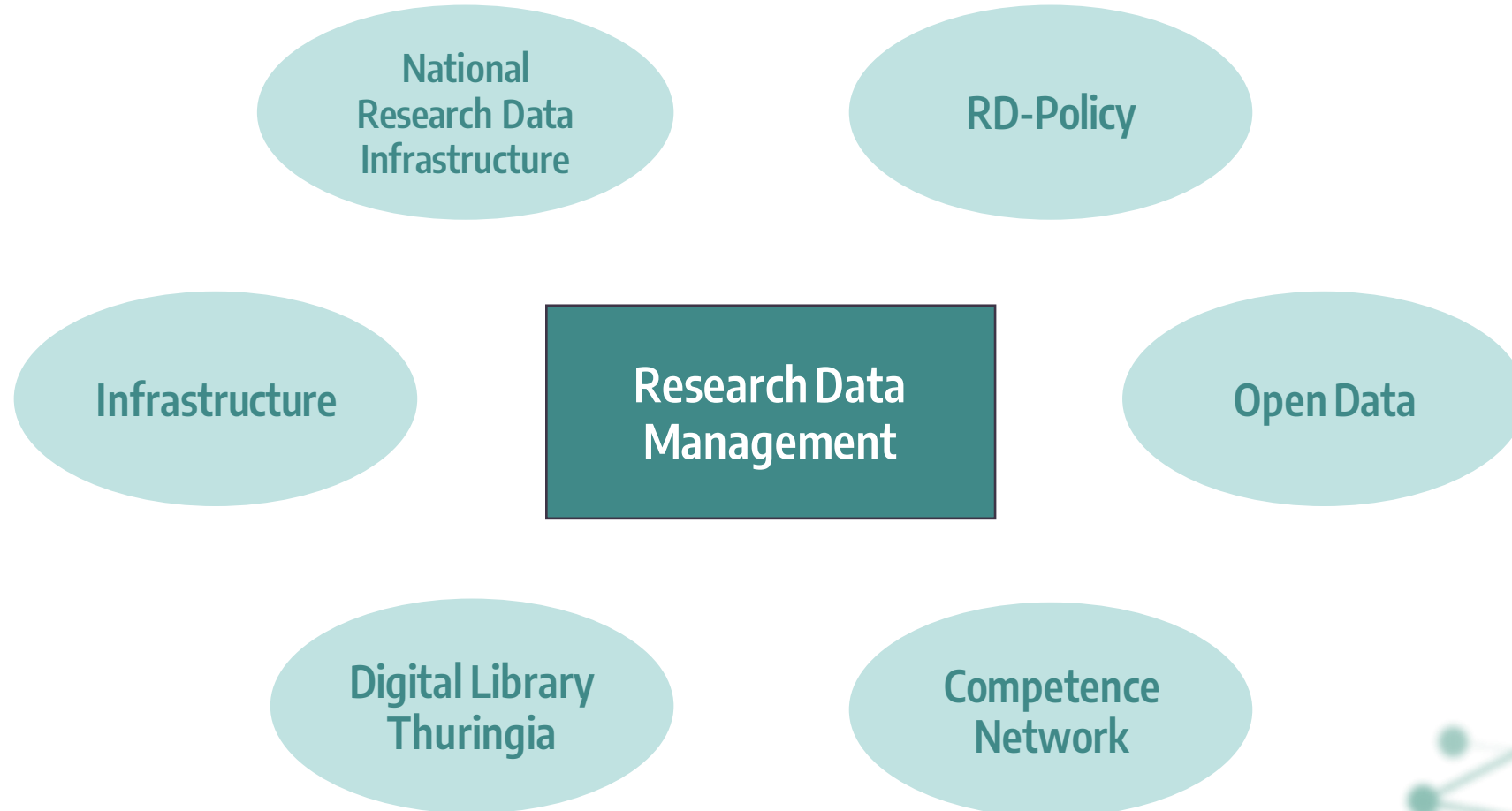
Fields of action:

- Digital University Teaching
- Digital Research Processes
- Open Access and Licencing of electronic Information Resources
- Current Research Information System and Knowledge Transfer
- Digital Infrastructure at Universities



(aus [Thüringer Strategie zur Digitalisierung im Hochschulbereich](#), 2017, zuletzt aufgerufen am 17.06.2019)

Digital Research Processes



Thuringian Competence Network for Research Data Management

- Build a network between all Thuringian universities
- Advice Center and training offers for all Thuringian universities
- Networking and coordination between the universities as well as between other actors (e.g. ThULB or HS-ITZ) and activities of the digitization strategy (e.g. CRIS or teaching)



Open Data

- **Reasons and Goals:**



Encourage and facilitate Research



Transparency



Reduce Data Loss



Publicly funded Research

- **Other topics of Open Science:**

- Open Access, Open Educational Resources, Open Source, Open Research, Open Knowledge, Open Innovations, Open Peer-Review, Citizen Science...

**OPEN SCIENCE:
JUST
SCIENCE
DONE RIGHT**

The Guideline for Handling Research Data

What is an Research Data Policy?

- **Definition**
 - Describes how members of an institution should handle research data.
- **Reasons**
 - Create awareness about research data management (top down)
 - Favouring early planning
 - Make data findable, understandable and reusable
 - Work with funders (DFG, BMBF, EU Horizon 2020 Program, ...)

Policies by Organizations

- 2010 [Grundsätze zum Umgang mit Forschungsdaten](#)
- 2014 [Management von Forschungsdaten - eine zentrale strategische Herausforderung für Hochschulleitungen](#)
- 2015 [Leitlinien zum Umgang mit Forschungsdaten](#)
- 2019 [Leitlinien zur Sicherung guter wissenschaftlicher Praxis](#)

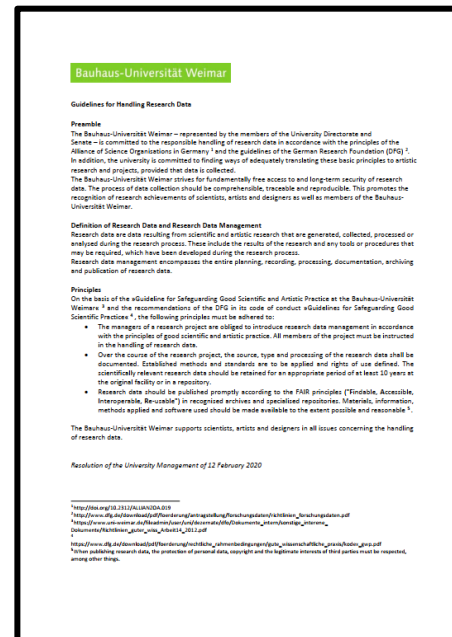
Policies by Organizations

- 2012 [Guidelines for ensuring good scientific and artistic practice](#)
- 2014 [Strategie zur Sicherung und Verwertung von geistigem Eigentum](#)
- 2015 [Leitlinienpapier zur Forschungsförderung](#)
- 2016 [Open-Access-Policy](#)
- ...
- 2020 [Leitlinie zum Umgang mit Forschungsdaten](#)
[Guideline for handling research data](#)

Development of the RD-Policy

- Based kits and existing Policies from other Institutions
 - Policies by [FSU Jena](#), [TU Ilmenau](#), [HU Berlin](#), [LU Hannover](#), ...
 - [Erstellung und Realisierung einer institutionellen Forschungsdaten-Policy](#)
 - [Empfehlungen zur Erstellung institutioneller Forschungsdaten-Policies](#)

- Development:
 - first Draft early 2019
 - Discussions in different committees (IT-Council, Advisory Board University Library, Senate, ...)
 - Released on the 12th February 2020!



20 DIN/nestor - Bausteine Forschungsdatenmanagement

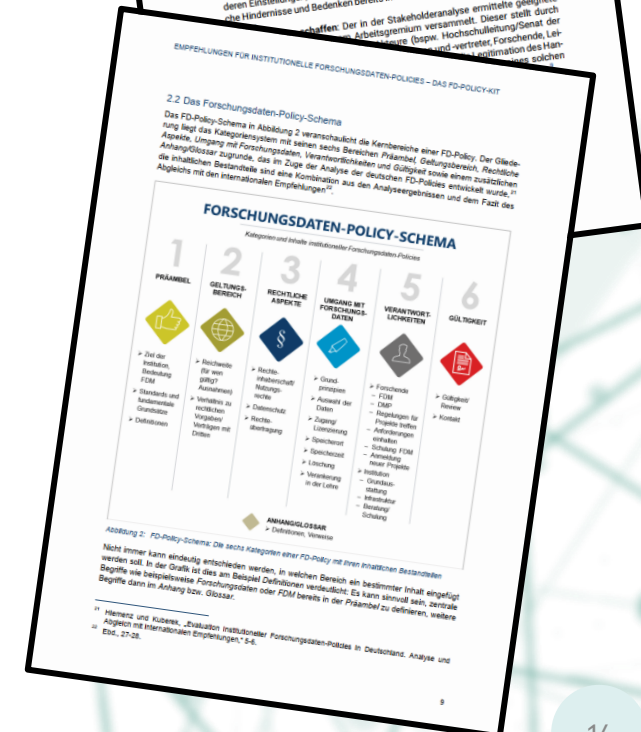
Tabelle 1: Kernelemente in den Forschungsdatenpolicies an deutschen Hochschulen und Forschungseinrichtungen auf Basis von 21 untersuchten Policies

Kernelement	Häufigkeit
Definition des Begriffs Forschungsdaten	20
Hinweis auf die Verantwortlichkeiten von Forschenden	19
Hinweis auf verfügbare Infrastruktur und (Beratungs-)Dienstleistungen	15
Hinweis auf Datenschutz und/oder Beachtung des Urheberrechts	14
Hinweis auf verlässliche Daten offen zugänglich zu machen	14
Aufforderung zur Einhaltung etablierter/erschlagter Standards	12
Definition Forschungsdatenmanagement	12
Aufforderung zur Einhaltung etablierter/erschlagter Standards	11
Aufforderung Datenmanagementpläne zu verwenden	4
Aufforderung zur freien Abgabe	4
Empfehlung für einen Abgabeort	4
Wahl einer freien Lizenz/Sicherstellen der Verfügbarkeit bei	3
Übertragung von Rechten	3
Kriterien für zu veröffentlichende Daten	3
Charakter als Living Document (Versionierung/Review)	3

3 Handlungsfelder

1. Stakeholderanalyse durchführen: Um Klarheit darüber zu schaffen, welche Person(engruppen) an der Implementierung einer Forschungsdaten-Policy beteiligt sein sollten, ist es sinnvoll, eine Stakeholderanalyse durchzuführen. Ziel der Stakeholderanalyse ist es, relevante Person(engruppen) zu identifizieren und sich über deren Einstellungen, Interessen und Ziele bewusst zu werden. So können mögliche Widersprüche und Bedenken bereits im Vorfeld erkannt und ggfs. ausgeräumt werden.

2. Verantwortlichkeiten definieren: Der in der Stakeholderanalyse ermittelte geeignete Person(engruppen) sollte in einem Arbeitsgremium versammelt. Dieses stellt durch die Einbindung von Vertretern der beteiligten Person(engruppen) die Legitimation des Verfahrens sicher.



Content: Introduction

Preamble

The Bauhaus-Universität Weimar – represented by the members of the University Directorate and Senate – is committed to the responsible handling of research data in accordance with the principles of the Alliance of Science Organisations in Germany and the guidelines of the German Research Foundation (DFG). In addition, the university is committed to finding ways of adequately translating these basic principles to artistic research and projects, provided that data is collected.

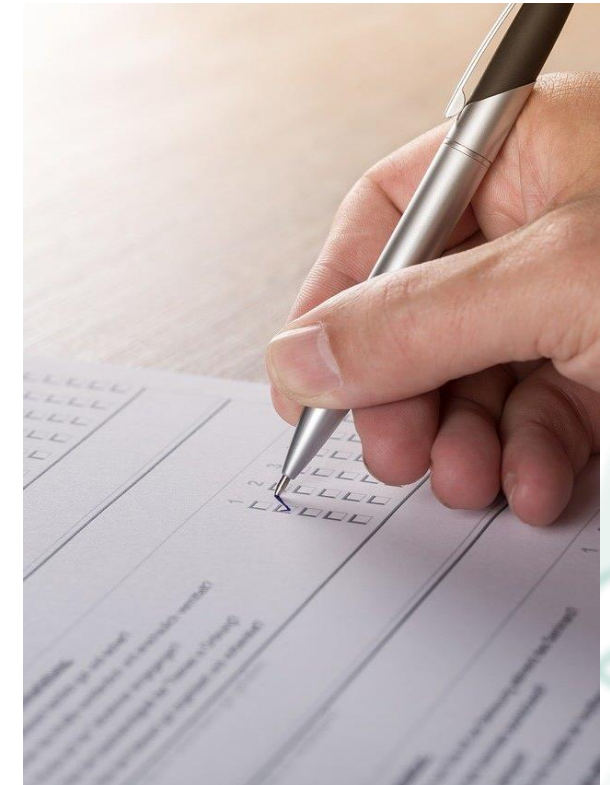
The Bauhaus-Universität Weimar strives for fundamentally free access to and long-term security of research data. The process of data collection should be comprehensible, traceable and reproducible. This promotes the recognition of research achievements of scientists, artists and designers as well as members of the Bauhaus-Universität Weimar.

Content: Definitions

Definition of Research Data and Research Data Management

Research data are data resulting from scientific and artistic research that are generated, collected, processed or analysed during the research process. These include the results of the research and any tools or procedures that may be required, which have been developed during the research process.

Research data management encompasses the entire planning, recording, processing, documentation, archiving and publication of research data.



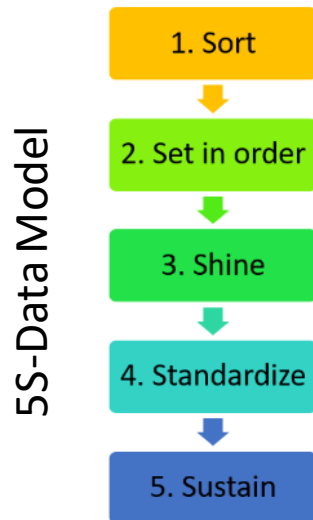
Content: Responsibility

The managers of a research project are obliged to introduce research data management in accordance with the principles of good scientific and artistic practice. **All members of the project must be instructed** in the handling of research data.



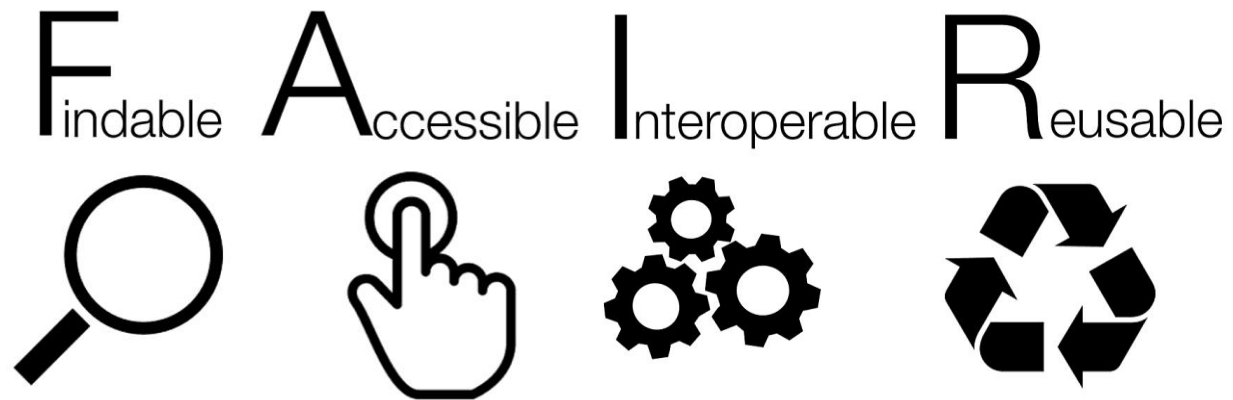
Content: Documentation & Preservation

Over the course of the research project, the **source, type and processing** of the research data shall be documented. Established **methods and standards** are to be applied and rights of use defined. The scientifically relevant research data should be retained for an appropriate period of **at least 10 years** at the original facility or in a repository.



Content: Publishing

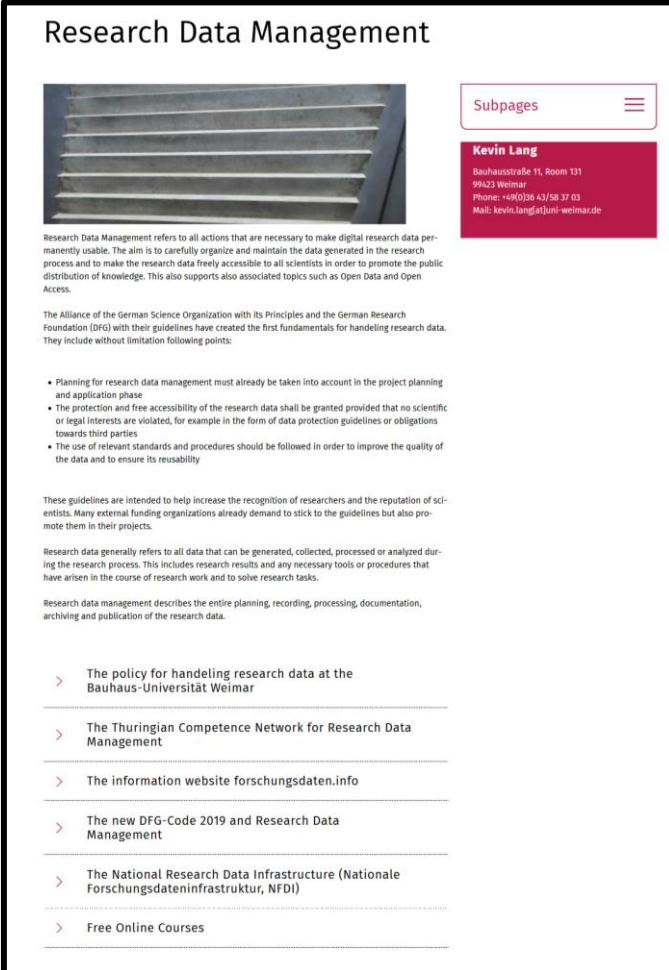
Research data should be published promptly according to the FAIR principles in recognised archives and specialised repositories. Materials, information, methods applied and software used should be made available to the extent possible and reasonable. When publishing research data, the protection of personal data, copyright and the legitimate interests of third parties must be respected, among other things.



Help and Guidance for Handling Research Data

Service Point Research Data Management

- Service Point for any question about handling research data
- established at the University Library
- Website (short link): www.uni-weimar.de/rdm
 - Policy
 - DFG Kodex
 - Partners: TKFDM, forschungsdaten.info
 - National Research Data Infrastructure (NFDI)
 - Free Online Courses
- Creating a Recommendation for RDM
 - Based on [publication](#) in FSU Jena and survey from last year



Research Data Management

Subpages

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Research Data Management refers to all actions that are necessary to make digital research data permanently usable. The aim is to carefully organize and maintain the data generated in the research process and to make the research data freely accessible to all scientists in order to promote the public distribution of knowledge. This also supports also associated topics such as Open Data and Open Access.

The Alliance of the German Science Organization with its Principles and the German Research Foundation (DFG) with their guidelines have created the first fundamentals for handling research data. They include without limitation following points:

- Planning for research data management must already be taken into account in the project planning and application phase
- The protection and free accessibility of the research data shall be granted provided that no scientific or legal interests are violated, for example in the form of data protection guidelines or obligations towards third parties
- The use of relevant standards and procedures should be followed in order to improve the quality of the data and to ensure its reusability

These guidelines are intended to help increase the recognition of researchers and the reputation of scientists. Many external funding organizations already demand to stick to the guidelines but also promote them in their projects.

Research data generally refers to all data that can be generated, collected, processed or analyzed during the research process. This includes research results and any necessary tools or procedures that have arisen in the course of research work and to solve research tasks.

Research data management describes the entire planning, recording, processing, documentation, archiving and publication of the research data.

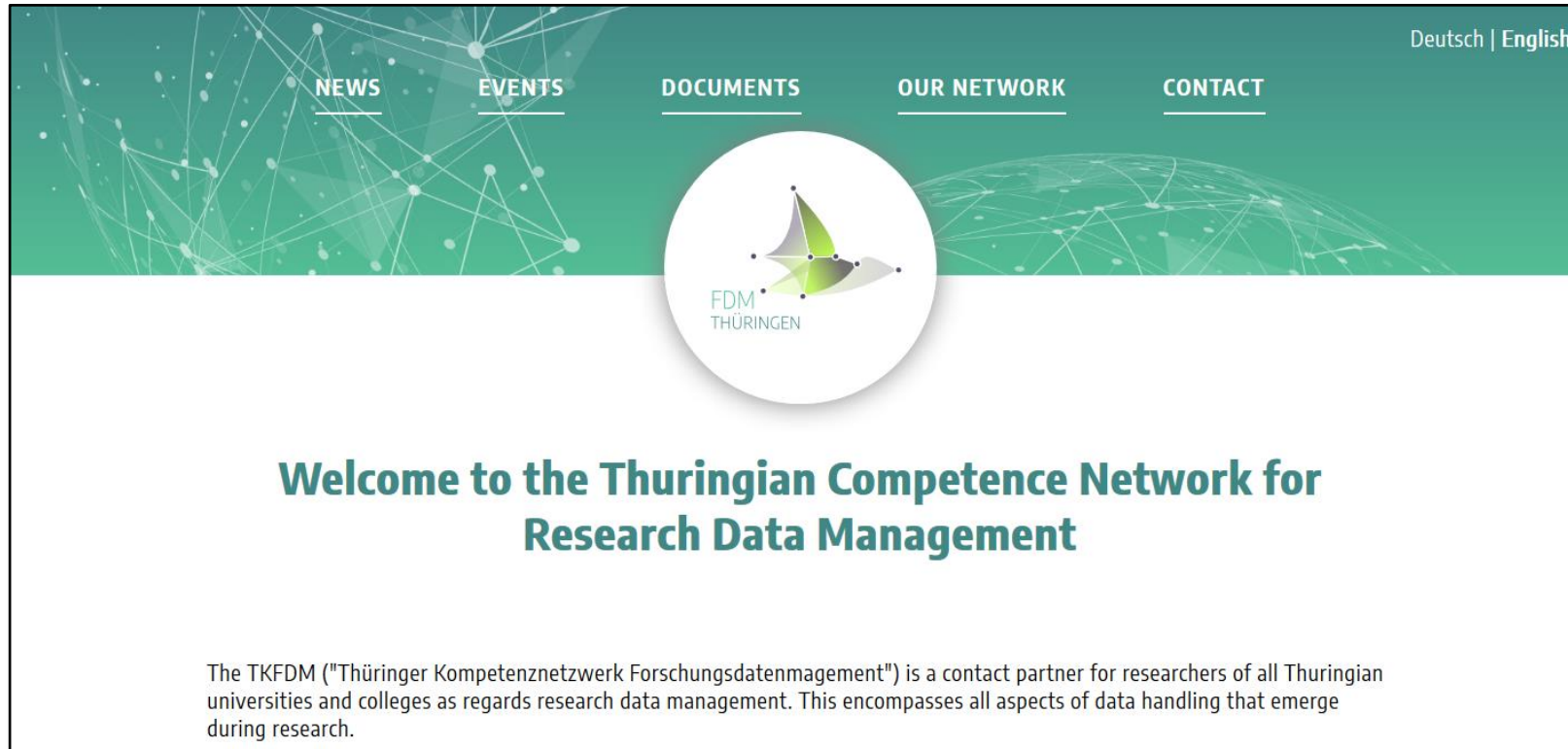
- > The policy for handling research data at the Bauhaus-Universität Weimar
- > The Thuringian Competence Network for Research Data Management
- > The information website forschungsdaten.info
- > The new DFG-Code 2019 and Research Data Management
- > The National Research Data Infrastructure (Nationale Forschungsdateninfrastruktur, NFDI)
- > Free Online Courses

Draft: Recommendations for Handling Research Data

- Extension to the RD-Policy
- Explanations, Models and Principles
- Contents:
 - Planning, Processing, Publishing and Archiving
 - Support and Services
 - Service Center for Computer Systems and Communication (SCC)
 - Research Operations Office
 - University Library
 - Bauhaus Research School
 - ...




Das Thüringer Kompetenznetzwerk Forschungsdatenmanagement



Deutsch | English

[NEWS](#) [EVENTS](#) [DOCUMENTS](#) [OUR NETWORK](#) [CONTACT](#)



Welcome to the Thuringian Competence Network for Research Data Management

The TKFDM ("Thüringer Kompetenznetzwerk Forschungsdatenmanagement") is a contact partner for researchers of all Thuringian universities and colleges as regards research data management. This encompasses all aspects of data handling that emerge during research.

www.forschungsdaten-thueringen.de

TKFDM: Services

- **Consulting**
 - Data Management Plans, Data Protection, Applications, Web Services, Formats, ...
- **Training**
 - Thuringia-wide Information Events, Workshops, Train-the-Trainers or Coffee Lectures
 - also possible on request
- **Networking**
 - between Universities, Research Facilities, Departments, NFDI-Consortia and other interested Persons



Materials

- Various information flyers
- Fact Sheets & Best-Practices
 - RDM Funding and Requirements, Research Data Repositories, Virtual Research Environments, ...
 - Quality Control Methods, eLabFTW, GitLab, LaTeX, BEXIS, RDM in courses, ...
- 23 Things about RDM
- ScaryTales
 - based on "Black Stories" card game
 - over 40 stories about bad data management
 - planned as card game for data horror week



Contests

- **FAIRest Dataset Award**

- award presentation on 29.06. in Erfurt
- Which dataset fulfils FAIR principles best
- 2000€ price money and extras
- Winners:
 - [The SEOSS 33 dataset](#) by Michael Rath and Patrick Mäder (2019, TU Ilmenau)
 - [Webis-Web-Archive-17](#) by Johannes Kiesel et al. (2017, BU Weimar)

- **Open Data Impact Award**

- by Stifterverband/forum innOsci
- 15.000€ price money



Organizations



Rat für
Informations
Infrastrukturen



Deutsche Initiative für
Netzwerkinformation e. V.



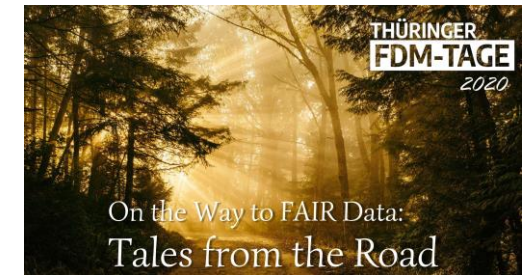
Guest Lecture by Kerstin Helbig

The data management plan and its four FAIR principles

Open Discussion

The FDM-Tage 2020

- Erfurt: **FAIR Together**
 - 29th June, 01:00pm – 03:00pm
- Jena: **On the Way to FAIR Data: Tales from the Road**
 - 30th June, 09:00am – 12:30am
- Weimar: **Data Management Plans: FAIRify your Data!**
 - 1st July, 06:00pm – 08:00pm
- Ilmenau: **FAIR Research Software and Beyond: How to make the most of your code**
 - 2nd July, 12:30am – 03:00pm



Thank you for your attention!

Sources

- Thuringian Competence Network for Research Data Management:
 - [Portal von TKFDM](#)
 - [TKFDM Community auf Zenodo](#)
 - [Research Data Scarytales](#)
- Material from other Websites:
 - [Open Data/EU Horizon 2020 on Labfolders](#)
 - [Organizing data folders with #5SDATA method \(RDA\)](#)
- Stockimages with CC0 Licence:
 - [pixabay.com](#)
 - [unsplash.com](#)