

From pen Access to pen Science - how does it work?



From pen Access to pen Science - how does it work?



Prof. Dr. Rosemarie Tracy

Dr. Sabine Gehrlein

G7 Ministerial Meeting on Science



G7 MINISTERIAL MEETING ON SCIENCE



VENARIA REALE, TORINO 27-28 SEPTEMBER 2017



From pen Access to pen Science - how does it work?



Prof. Dr. Rosemarie Tracy

Dr. Sabine Gehrlein

E-Science Strategy

- Ministry of Science, Research and the Arts
Baden-Württemberg
- [E-Science technical concept \(2014\)](#)
- further development of the scientific research infrastructure
- five central fields of action:
 - licensing of electronic information media
 - digitalisation
 - open access
 - research data management
 - virtual research environments

From pen Access to pen Science - how does it work?



Dr. Ursula Schlichter

Dr. Philipp Zumstein

From pen Access to pen Science - how does it work?

- | | |
|-----------------|---|
| 11:10 – 11:20 h | Introduction to Open Access, Open Data, Open Science
<i>Dr. Philipp Zumstein, Open Access representative</i> |
| 11:20 – 11:45 h | Perspectives of funding organisations – European and National
<i>Mareike Schmitt, European Liaison Office of the German Research Organisations (KoWi), Brussels</i> |
| 11:45 – 12:00 h | Open Science with focus on Open Access
<i>Dr. Nate Breznau, Mannheim Centre for European Social Research (MZES)</i> |
| 12:00 – 12:15 h | Big Open Research Data
<i>Anna Primpeli, Data and Web Science Group, Mannheim</i> |
| 12:15 – 12:40 h | Open Access, Open Data and how we support you
<i>Dr. Ursula Schlichter, EU-liaison officer</i>
<i>Dr. Philipp Zumstein, Open Access representative</i> |
| 12:40 – 13:00 h | Talk & discuss with us over a snack and drinks |

INTRODUCTION TO OPEN ACCESS, OPEN DATA, OPEN SCIENCE

Definition: Open Access

“By ‘open access’ to this literature, we mean its **free availability** on the public internet, permitting any users to **read, download, copy, distribute, print, search**, or **link** to the full texts of these articles, **crawl** them for indexing, **pass** them as data to software, or **use** them for any other lawful purpose, **without financial, legal, or technical barriers** other than those inseparable from gaining access to the internet itself.” ([Budapest Open Access Initiative 2002](#))

NOT Open Access



Step 2 Pricing and access depends on your membership or subscriptions with ACM.

Brought to you by:
UB Mannheim

☒ Download the Article as  PDF



ACM Member

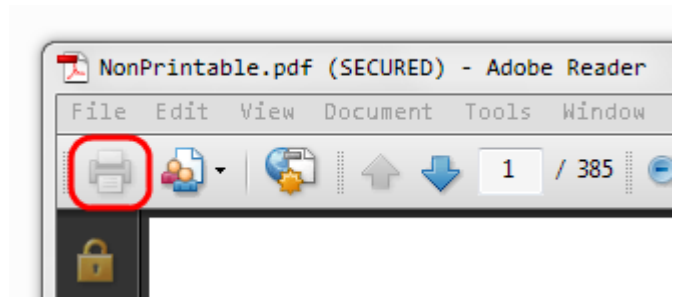
\$10.00

ACM Student Member

\$5.00

Non Member

\$15.00



Join ACM and subscribe to the ACM Digital Library to gain access to all materials

☐ Professional Membership
with an ACM Digital Library subscription

\$198.00

☐ Student Membership
with an ACM Digital Library subscription

Join a sponsoring SIG and access the full text of the sponsor

☐ SIGACT Membership

☐ SIGACT Online Membership

[ZITATION] **Gesellschaftsvertrag** und Erbrecht bei der Offenen
Handelsgesellschaft: Vortrag, gehalten vor der Juristischen Studiengesellschaft
in Karlsruhe am 2. Juli ...

W Siebert - 1958 - Müller

☆ ⓘ Zitiert von: 5 Ähnliche Artikel ⓘ

[ZITATION] Ein neuer **Gesellschaftsvertrag**. Anmerkungen zu einem
transnationalen Krisendis.. kurs

F Deppe - Sozialismus, 1994

☆ ⓘ Zitiert von: 5 Ähnliche Artikel ⓘ

[ZITATION] Von der Souveränität: ein Anti-**Gesellschaftsvertrag**

JM de Maistre - 2000 - Kulturverl. Kadmos

☆ ⓘ Zitiert von: 5 Ähnliche Artikel ⓘ

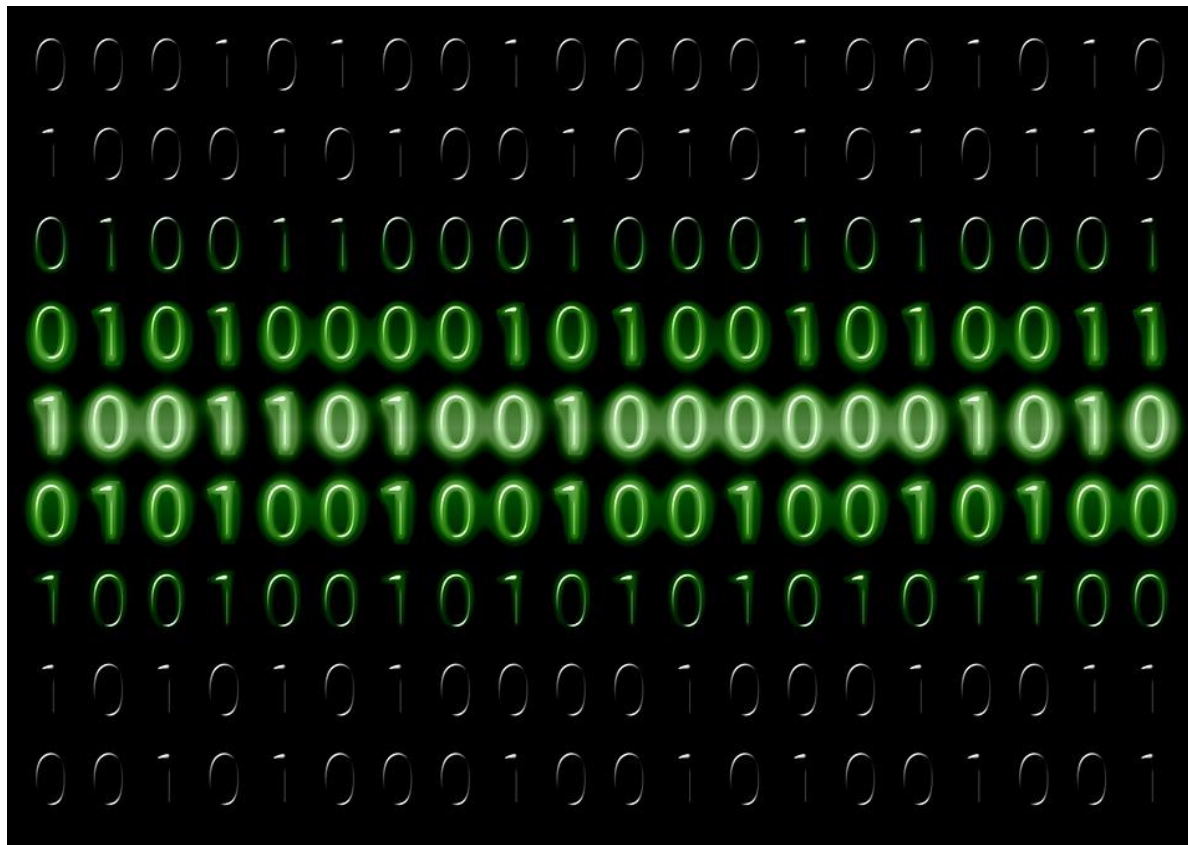
Volltext@UB Ma...

Why Open Access?

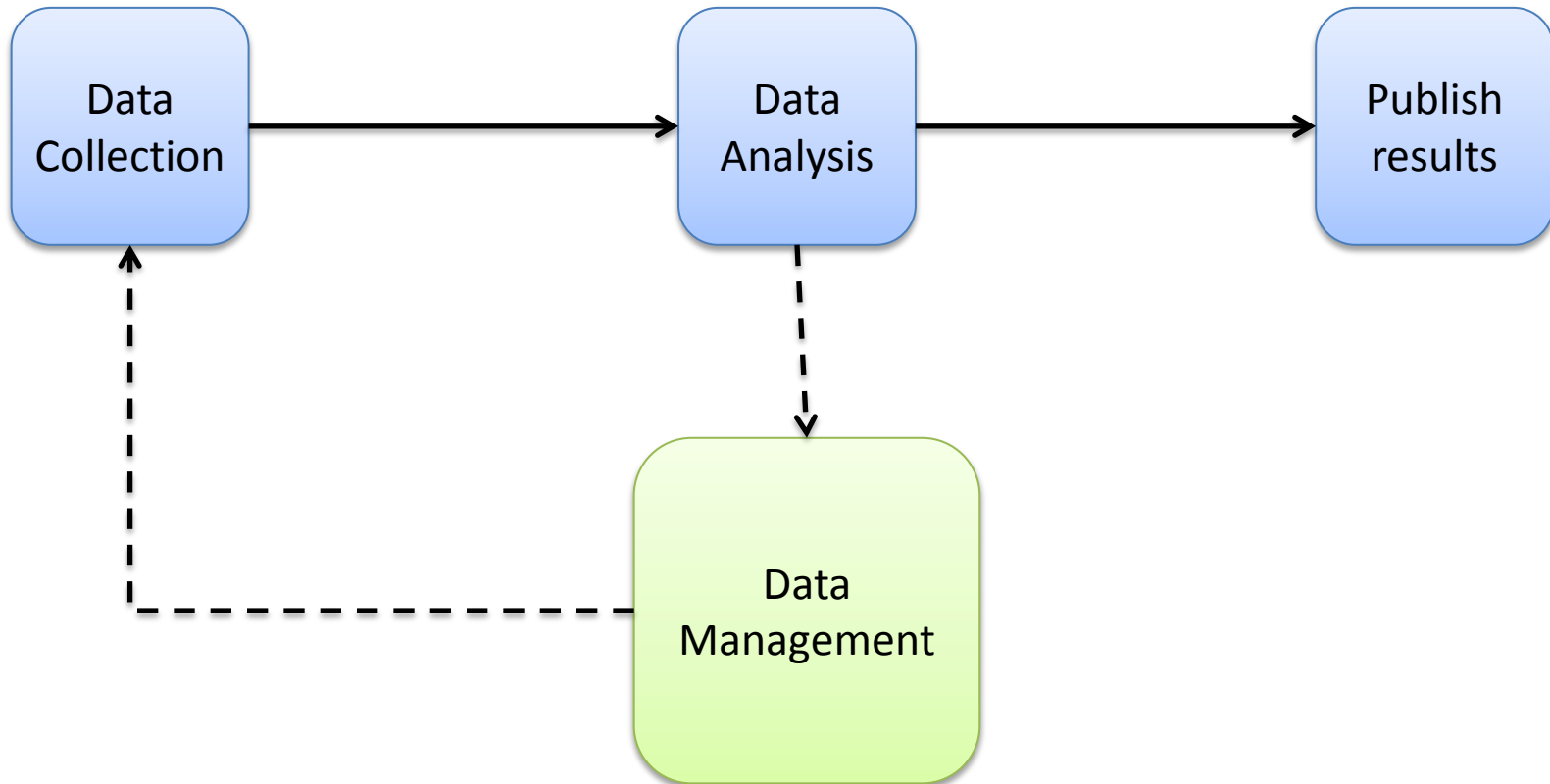


Research Data

- Research data = raw data, not analyzed nor interpreted;
e.g. sensor data, archeological artefacts, survey data



Research Data Life Cycle



Good Research Practice

[Code of good research practice at the University of Mannheim \(2014\)](#), Sect. 2, par. 2, from no. 6:

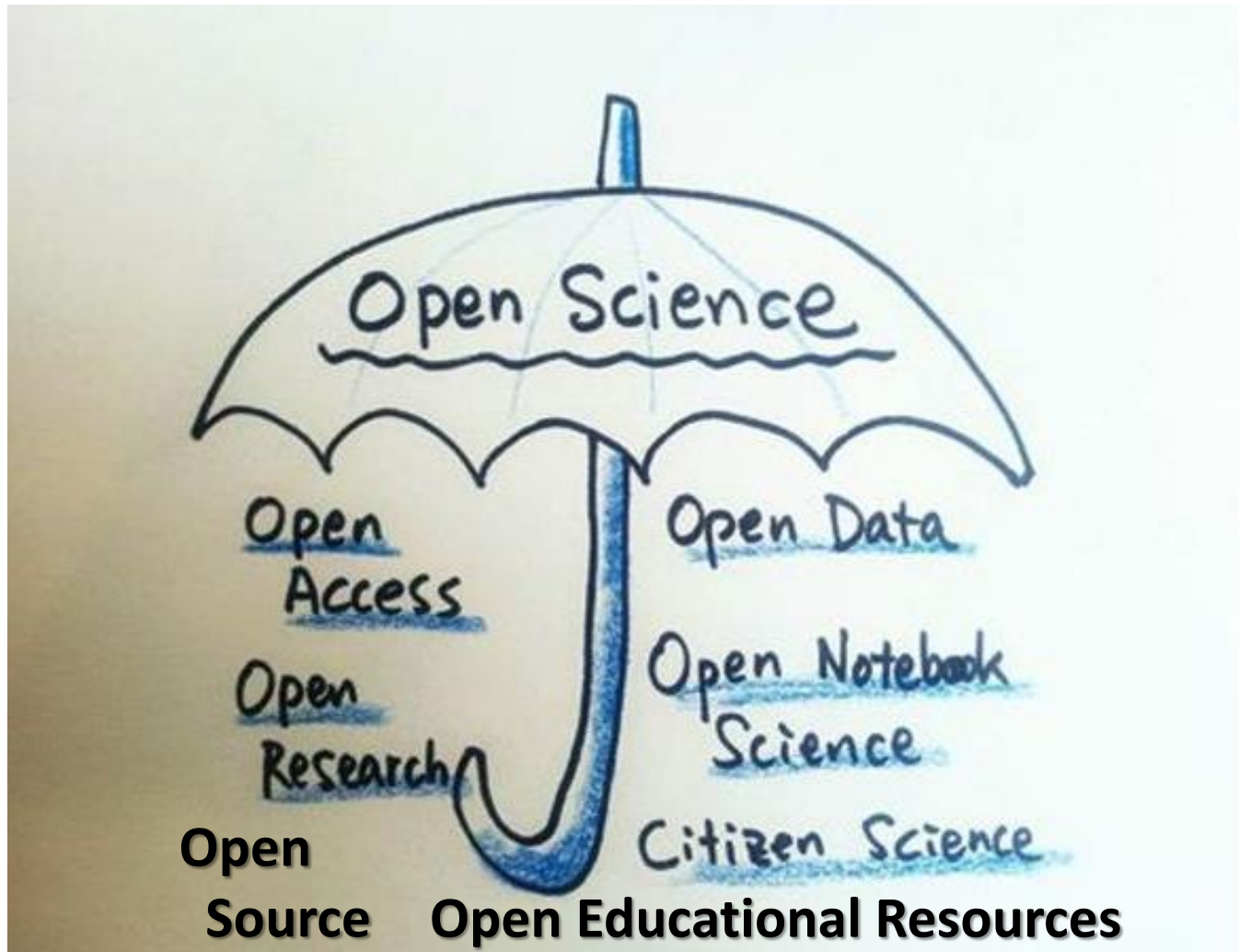
- Studies shall be replicable
- Share your research data, if possible
- Cite data you used

Open Data

“Open data is data that anyone can access, use or share.” [1]

[1] The Open Data Institute: <https://theodi.org/what-is-open-data>

Open Science



Keynote Speakers

Perspectives of funding organisations – European and National

Mareike Schmitt



Open Science with focus on Open Access

Dr. Nate Breznau



Big Open Research Data

Anna Primpeli

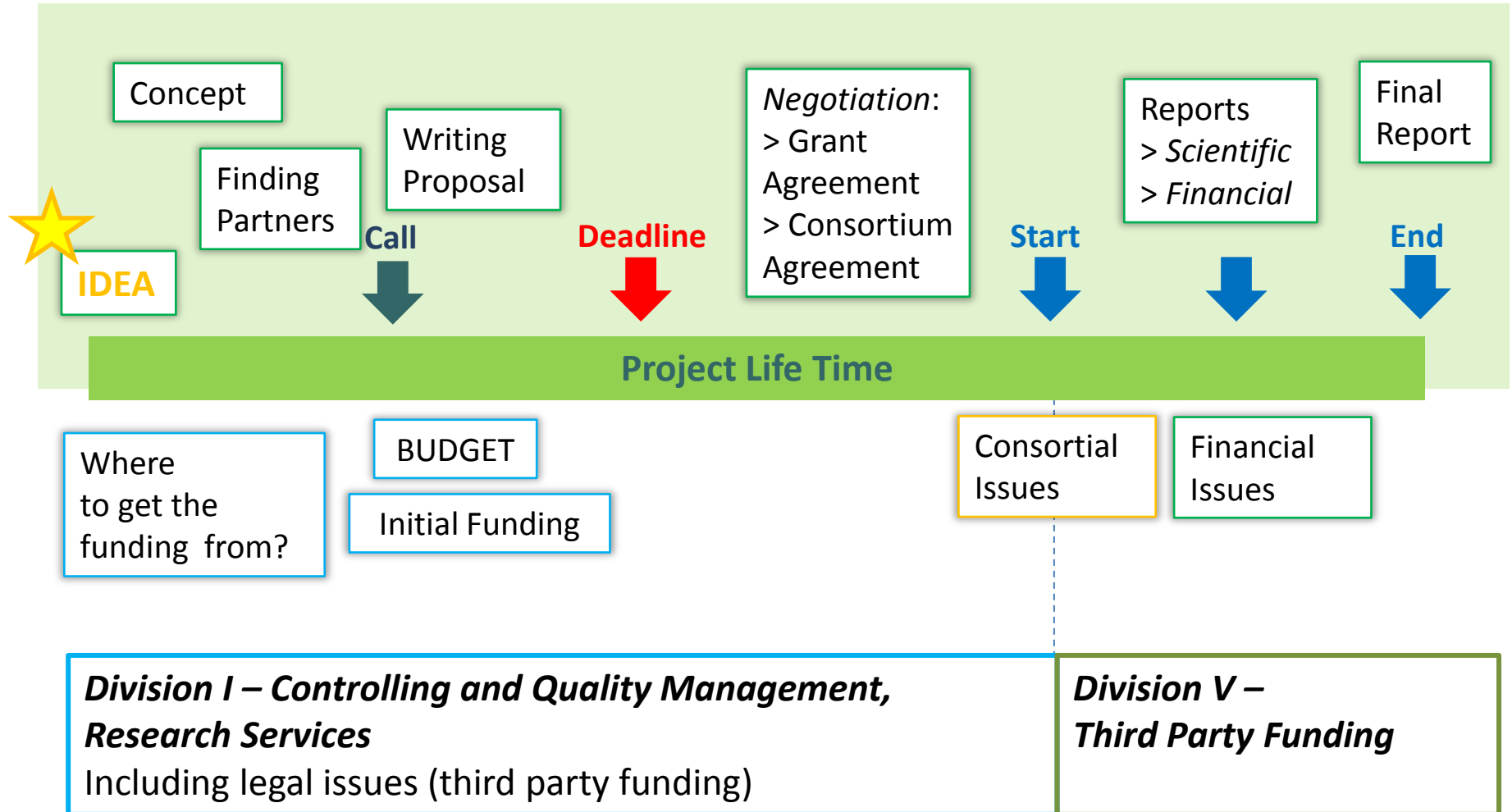
DATA AND WEB SCIENCE GROUP

**OPEN ACCESS, OPEN DATA
AND HOW WE SUPPORT YOU?**

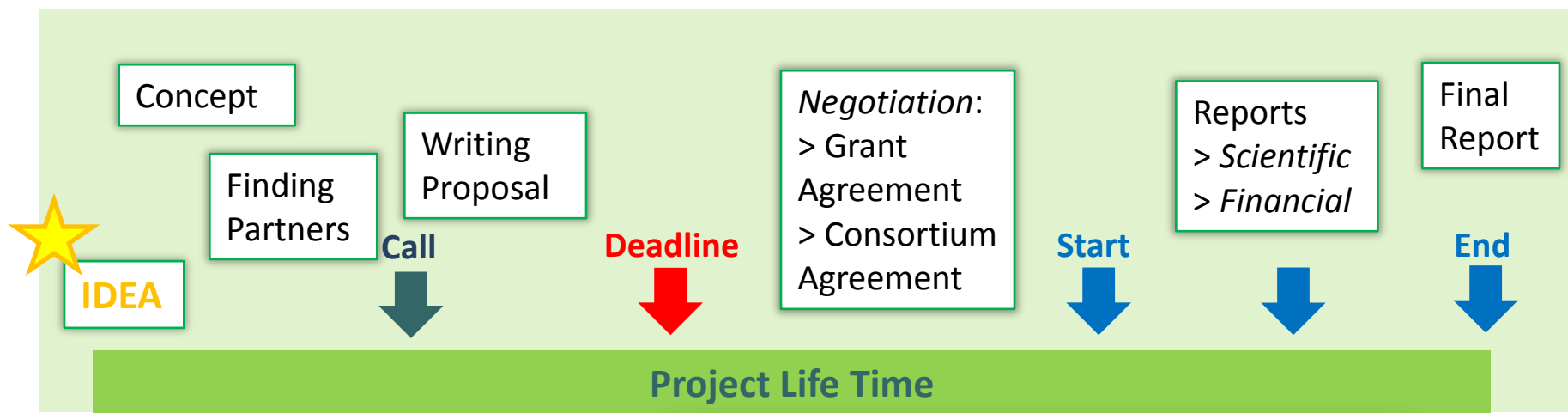
Implement your Research Idea



Many things to think off



Even more things to think off



Data Management Plan

Open Access

Dissemination

IPR

Ethics

Data Protection

Division I – Research Services
Including legal issues
(third party funding, IPR)

University Library
Open Access representative

Different ways to OA

- **Green road**: deposit version in an openly accessible repository
- **Gold road**: publish in an open access journal with article processing charges (APC)
- **Hybrid OA**: subscription-based journal with option to buy out individual articles in open access
- **Licenses with OA-component** (e.g. Alliance licences, DEAL)
- **Diamond OA**: publish in an open access journal by a non-profit institution without APCs, or which is supported by a consortia (SCOAP3, OLH, journals run by libraries, ...)

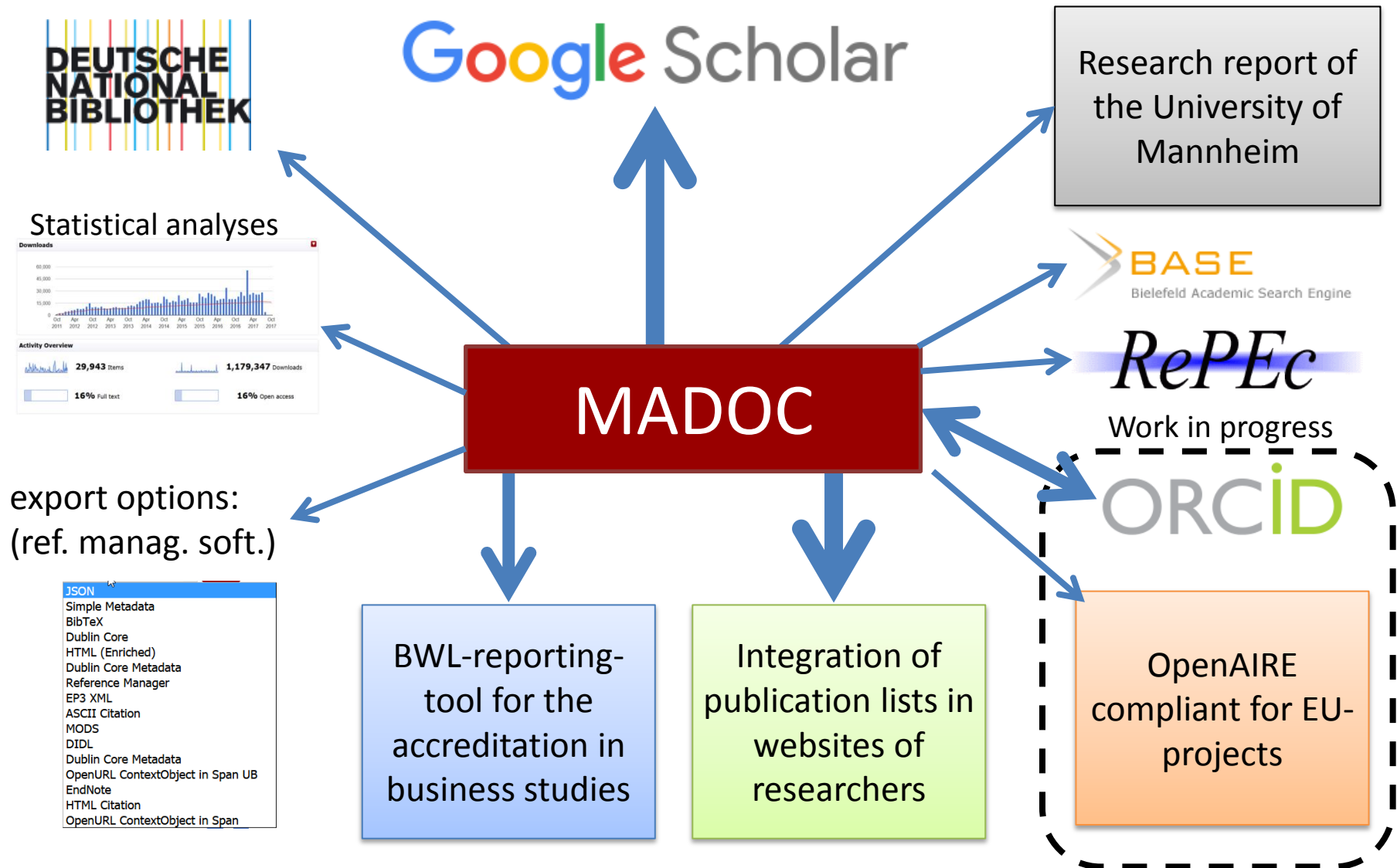
Support for **Green** OA

- MADOC: <https://ub-madoc.bib.uni-mannheim.de/>
 - Publishing server
 - Dissertations
 - Working Paper Series
 - Deposit versions in Open Access
 - University bibliography
 - documentation of the published works (research output) by members of the University of Mannheim
- Subject-specific repositories, e.g. SSOAR
- Preprint repositories, e.g. arXiv, SocArXiv, PsyArXiv
- Platforms, e.g. Zenodo, OSF

1,2 Mio. downloads overall
for 4.800 OA publications
([MADOC Statistics](#))

No cost for you as a researcher!

MADOC: enter once, use multiple times



APC in Gold OA



Support for Gold OA

- Projects funded by DFG, BMBF, EU:
try to get funding for gold OA (APCs)
 - Estimate costs during proposal writing
 - Funds after project ends
- [Open Access Publishing Fund](#)
from the University of Mannheim
 - You are submitting or corresponding author
 - Total APC including taxes (VAT) < 2.000 EUR
 - Pure OA journal without a subscription fee
 - throughout the entire publication process
 - with financial support of the MWK Baden Württemberg



Support for **Diamond** OA

- New initiatives and consortia are appearing
- Publishing Services at Mannheim University Library
- More is coming...



Research Data Repository

- MADATA <https://madata.bib.uni-mannheim.de/>
- Research Data Repository of University of Mannheim
- Aim
 - Archive data set
 - Make data available (Open Data)
 - Documentation of research data produced at the University of Mannheim
- Features
 - DOI for permanent identification and citation
 - Creative Commons Licenses (especially CC0 for data)
 - Availability: own, university, worldwide

Data Management Plan

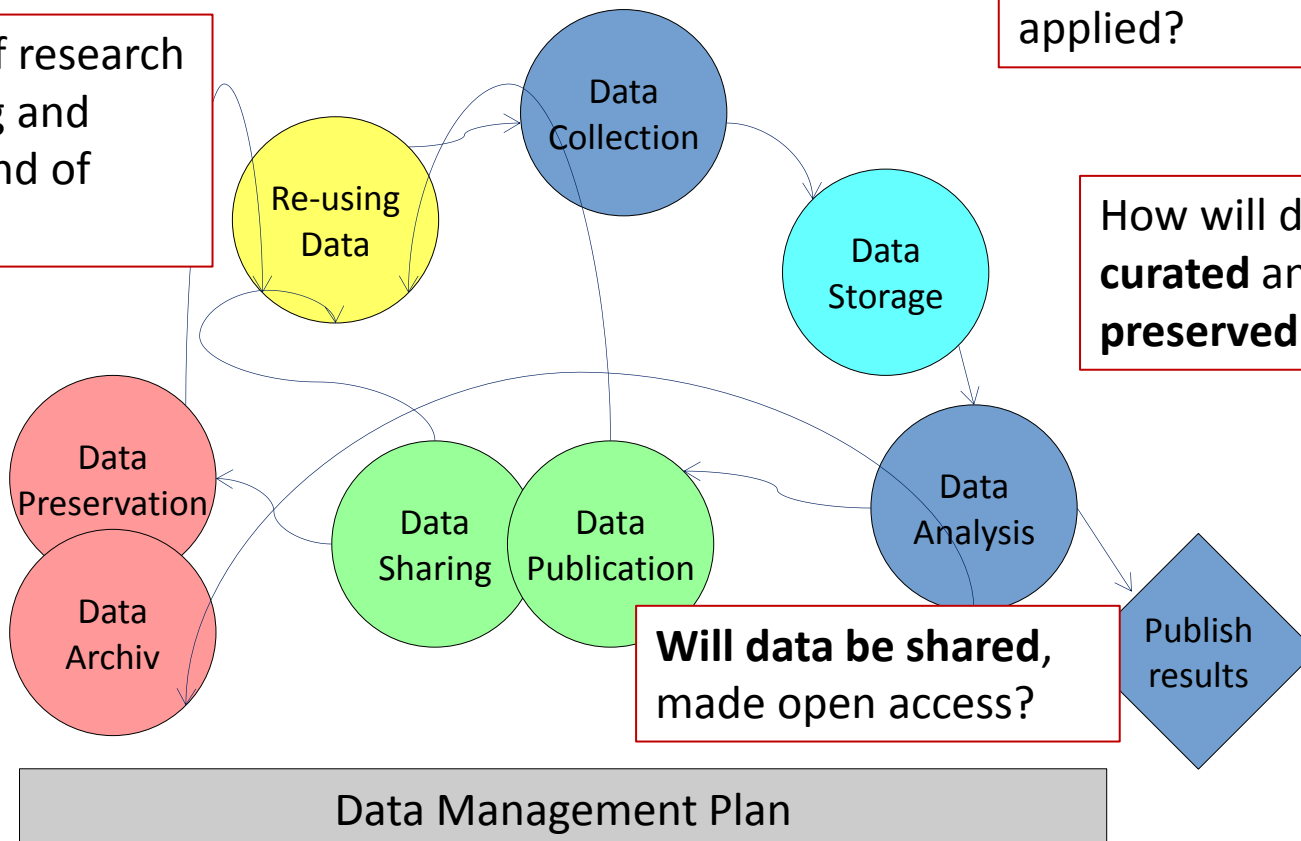
What **data** will be collected, processed and/or generated?

Which **methodology** and **standards** will be applied?

Handling of research data during and **after** the end of project

How will data be **curated** and **preserved**?

Will data be shared, made open access?



Data Management Plan

scope	What data, scripts and documentation do you have to save to make your research replicable?
metadata	How detailed has the metadata to be in order to make the data meaningful?
long-term preservation	Which file formats are sustainable also in the long term? Where and how to save your data for long-term preservation?
ethics, privacy	Are there any ethical or privacy issues with data sharing?
data citations	How will the issue of persistent data citation be addressed?

- plan your data management in advance
- schedule time for managing data throughout project life time

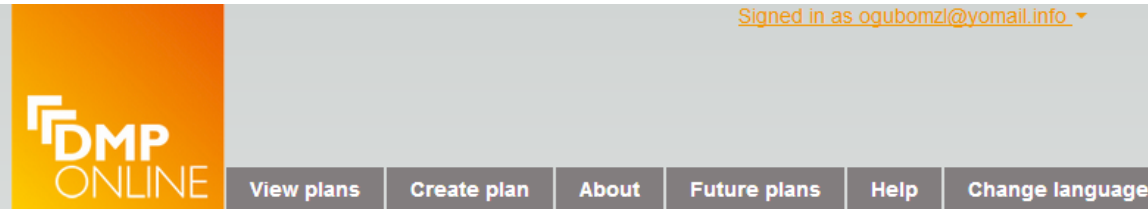
Data Management Plan

Support by Software Tools

e.g. DMPOnline

- Developed by the **Digital Curation Centre**, UK
- adjusted for EU standards
- Questionary with on-spot help and specific features
- Use online: <https://dmponline.dcc.ac.uk/>

DMPOnline



Digital curation center DCC, UK

➤ offers online DMP form

Questionary with on-spot help
and specific features

Amazing Proj



Not answered yet

2.2 Making data openly accessible:

- Specify which data will be made openly available? If some data is kept closed provide rationale for doing so
- Specify how the data will be made available
- Specify what methods or software tools are needed to access the data? Is documentation about the software needed to access the data included? Is it possible to include the relevant software (e.g. in open source code)?
- Specify where the data and associated metadata, documentation and code are deposited
- Specify how access will be provided in case there are any restrictions

The image shows the main content area of the DMPOnline form. It features a rich text editor with a toolbar containing icons for bold, italic, bulleted list, numbered list, link, and table. Below the toolbar is a large text input area with a horizontal scrollbar at the bottom. A Save button is located at the bottom left of the text area.

Not answered yet

Guidance Share note

EC Guidance

Participating in the ORD Pilot does not mean you must make all your research data. Rather, the O...
open as possible, as closed as ne...
encouraging sound data management
best practice.

The Commission recognises that there are some or even all research data generated by a project that need to be shared under restriction, separating legal and contractual reasons.

Note that in multi-beneficiary projects, the Commission encourages beneficiaries to keep their data close to the project, in the consortium agreement and are not required to opt out.

The [Registry of Research Data Repositories](#) is a list of repositories that you can search to

<https://dmponline.dcc.ac.uk/>

Contact us | Terms of use

© 2004 - 2017 Digital Curation Centre

DMP – requirements of funders



Comparison which funders require a DMP and their criteria

Förderinsti- tution	BMBF	DFG	EU Horizon 2020	Wellcome Trust
Was archi- vie- ren?	Forschungs- daten	For- schungsda- ten	Forschungsdaten, un- veröffentlichte Daten, Programmierkode- rung	Forschungsda- ten
Wo archivie- ren?	Datenablage in Datenzen- trum/ Repo- sitorium	Repositori- en frei wähl- bar	Repositorien frei wähl- bar	Keine Vorgaben, Datenablage aber gefordert

Data Management Plan

- Support by providing templates
 - [DMP-Template for Horizon 2020](#)
 - [DMP-Template for DFG](#)
 - [DMP-Template for BMBF](#)

Credit goes to
colleagues from
HU Berlin
- Individual support by contacting us

Example Open Science

- 2017 Nobel prize in physics “for decisive contributions to the LIGO detector and the observation of gravitational waves”



Example Open Science

- 2017 Nobel prize in physics “for decisive contributions to the LIGO detector and the observation of gravitational waves”
- [LIGO Open Science Center](#)
 - Share their data
 - Share software for working with LIGO data
 - Show the computations step-by-step:
<https://beta.mybinder.org/v2/gh/minrk/ligo-binder/master?filepath=index.ipynb>
(interactive IPython notebook, starting a virtual machine for computations)

Ideas for Open Science?

- We support you!



Thank you for your attention!

Dr. Ursula Schlichter,
EU-liaison officer
Tel: (+49) 0621/181-1145
schlichter@verwaltung.uni-mannheim.de

Dr. Philipp Zumstein
Open Access representative
Tel: (+49) 0621/181-3006
philipp.zumstein@bib.uni-mannheim.de

Photo Credits

- Slide 1+12: SchlossMannheim-Pano-130616.jpg / Hubert Berberich [WikiCommons] CC-BY 3.0
<https://commons.wikimedia.org/wiki/File:SchlossMannheim-Pano-130616.jpg>
- Slide 2: The Ministerial Meeting on Science has ended / Italian G7 Presidency 2017. CC-BY 3.0
<http://www.g7italy.it/en/news/the-ministerial-meeting-on-science-has-ended> +
<http://www.g7italy.it/en/legal-note>
- Slide 7: Open Science 우산 (Open Science Umbrella...를 그려봤습니다) / 지우 황 [Flickr] CC-BY 2.0
<https://www.flickr.com/photos/100477638@N03/10204741904>
- Slide 9: Why Open Access? / Danny Kingsely & Sarah Brown. CC-BY 4.0
<https://aoasg.org.au/resources/benefits-of-open-access/>
- Slide 10: Binärcode, Binär, Binärsystem, Byte / [Pixabay] CC0 <https://pixabay.com/de/bin%C3%A4rcode-bin%C3%A4r-bin%C3%A4rsystem-byte-475664/>
- Slide 24: <https://pixabay.com/de/mann-gesch%C3%A4ft-cartoon-kaufmann-1352025/>
<https://pixabay.com/de/checkliste-listen-gesch%C3%A4ft-formular-41335/>
<https://pixabay.com/de/ekstatische-%C3%BCberraschung-computer-2821540/>
<https://pixabay.com/de/beutel-geld-reichtum-einnahmen-147782/> <https://pixabay.com/de/internet-www-maus-web-gesch%C3%A4ft-42583/> <https://pixabay.com/de/word-dokument-dokument-text-150594/> / [Pixabay] CC0
- Slide 26: <https://pixabay.com/de/kristalle-mineralien-salz-155644/> / [Pixabay] CC0
- Slide 31: LLO Control Room.jpg / Amber Stuver [WikiCommons] CC-BY-SA 4.0
https://en.wikipedia.org/wiki/File:LLO_Control_Room.jpg