ISSUES PERTAINING TO LICENSING RESEARCH DATA

Christoph Bruch
Helmholtz Association

2019 Creative Commons Summit,
Museu do Oriente, Lisboa, 09-11.05.2019

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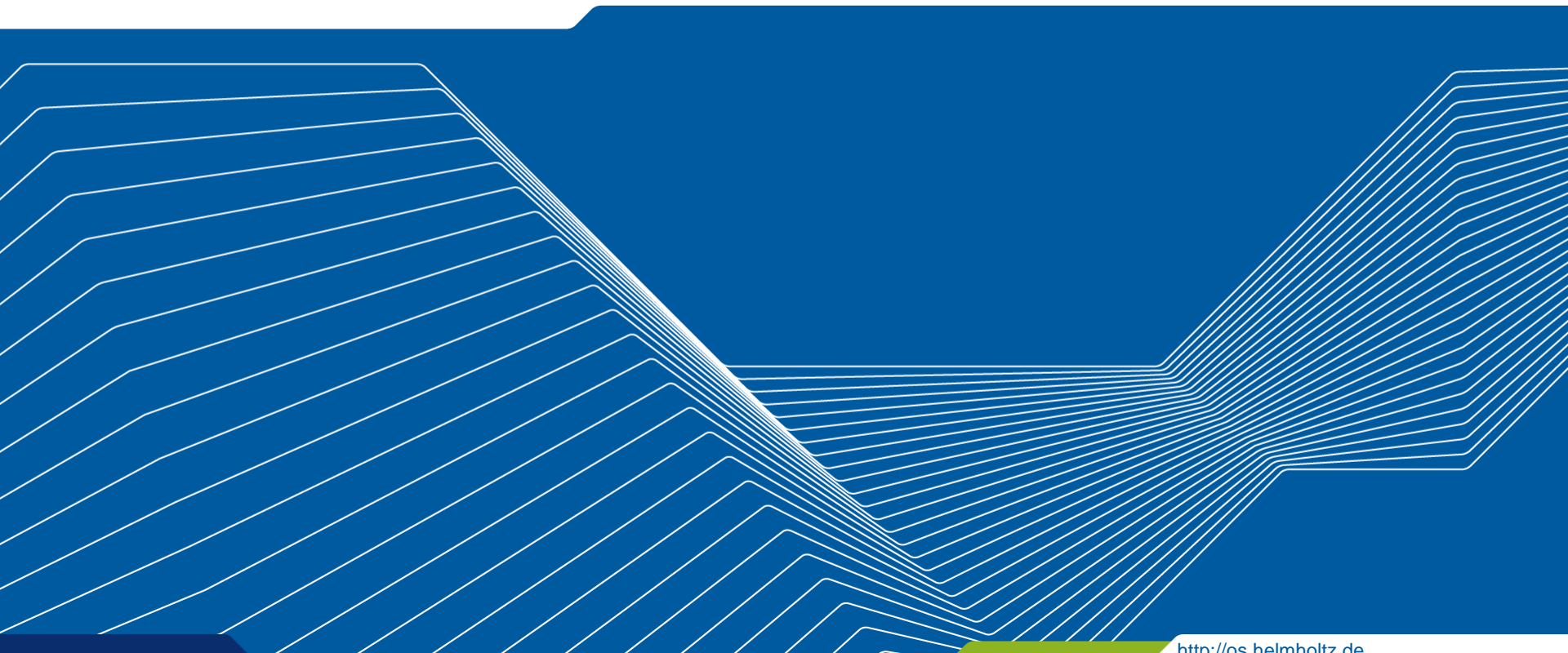
WHAT IS THIS SESSION ABOUT?

Do CC licenses need enhancements in order to be more suitable for making research data publicly available and reusable?

Vote of the participants of this session

on recommendations to CC

to look more closely at this issue.

WHO'S SPEAKING?

HELMHOLTZ

RESEARCH FOR
GRAND CHALLENGES

ABOUT US   CURRENT TOPICS   RESEARCH   RESEARCH INFRASTRUCTURES   TRANSFER   JOBS & TALENT
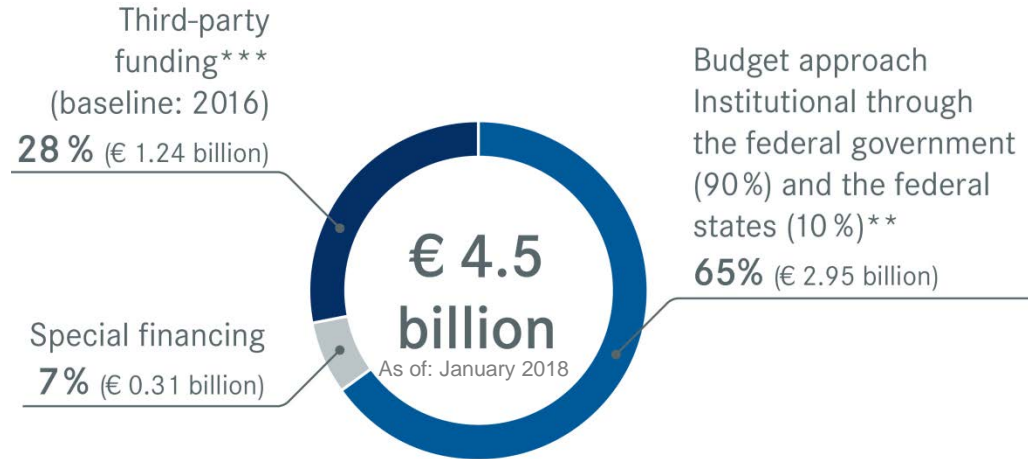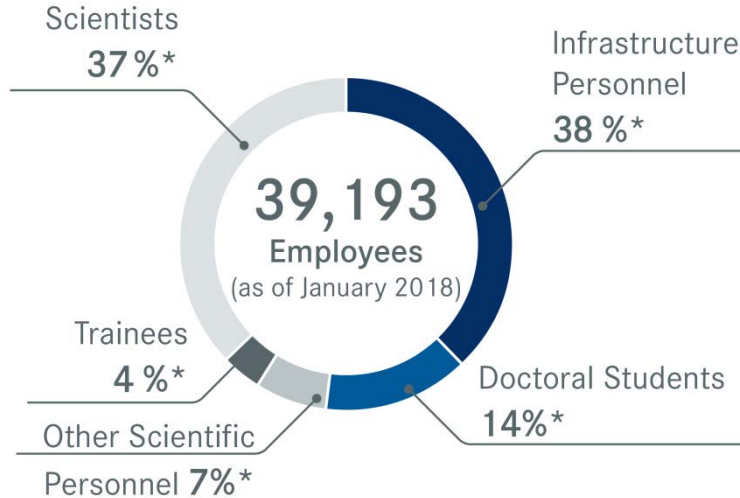
Global report

Monotone nature

Biodiversity is crucial to the survival of humanity. But the latest report from the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) demonstrates just how far we are from using nature in a sustainable way.

Earth and Environment

GERMANY'S BIGGEST RESEARCH ORGANIZATION

Personnel and Students & Budget 2018

Scientists 37%* | **Infrastructure Personnel 38%***

39,193 Employees (as of January 2018)

Trainees 4%*

Other Scientific Personnel **7%***

Doctoral Students 14%*

Third-party funding*** (baseline: 2016) **28%** (€ 1.24 billion)

€ 4.5 billion As of: January 2018

Budget approach Institutional through the federal government (90%) and the federal states (10%)** **65%** (€ 2.95 billion)

Special financing **7%** (€ 0.31 billion)

* Percentage share of employees as of July 2017
** As of 2016, the German federal government alone is financing the pact increase so that the federal government's share is over 90%.
*** Including project sponsorships

RESEARCH

Our six Research Fields focus on the grand and pressing challenges facing our society. Helmholtz develops sustainable solutions for the future and covers the entire spectrum from basic to application-oriented research.

EARTH & ENVIRONMENT

The Research Field Earth and Environment research field investigates the causes and consequences of climate change as well as the relationship between nature and our society. It aims to help preserve the natural basis for our existence over the long term. We also conduct research into the causes and impacts of natural risks and changes occurring within ecosystems.
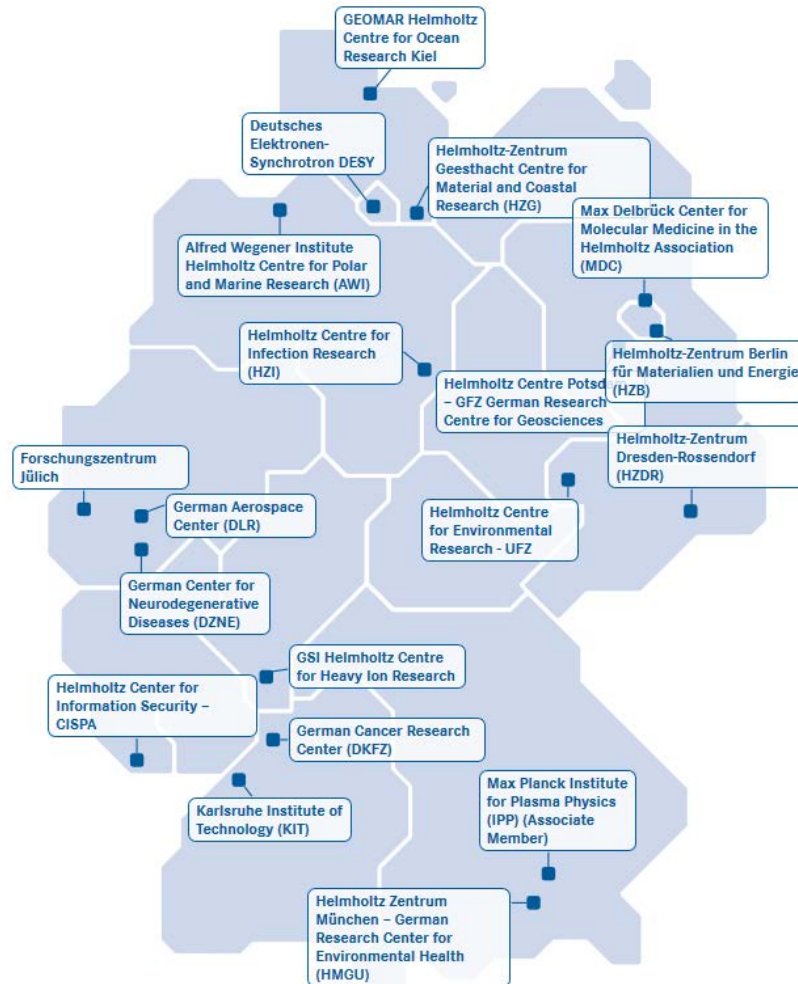
INFORMATION

Research in the field of information is becoming increasingly important in view of the ongoing digitalization of science, the economy, and society. We are keeping pace with this development by applying holistic approaches to conceptual, technical, and sociological aspects of information.

AERONAUTICS, SPACE & TRANSPORT

We develop new, environmentally compatible technologies for the mobility sector of the future. While the Space division uses new satellite missions to research changes in our climate here on Earth, the Aeronautics and Transport divisions create virtual models for vehicles that will enable them to be designed more efficiently and integrated into our mobility system more effectively.

ENERGY

The Research Field Energy focuses on the energy transition. We develop system solutions that aim to link the power, heat, and transport sectors in the best possible way, thereby providing a sustainable supply of energy. In addition, we develop the basic principles for a fusion power plant and conduct research into new storage and conversion concepts, as well as innovative technologies that will make it possible to provide renewable energy at affordable costs.

HEALTH

We examine the complex causes behind important widespread diseases such as cancer, diabetes, and dementia. The Research Field Health also develops new strategies focusing on effective prevention, timely diagnosis, and efficient, personalized treatment. We respond to new diseases and developments in the health care sector in a flexible way.

MATTER

We examine the structures, mechanisms, and functionalities of matter, materials, and biological systems. The Research Field's scope extends from basic physics research, which is carried out within unique research infrastructures, to issues with a technological and application-based focus – for example, involving various materials.

HELMHOLTZ
RESEARCH FOR GRAND CHALLENGES

10

11

https://www.helmholtz.de/fileadmin/user_upload/Helmholtz_Imagebroschuere_EN_web.pdf

19 HELMHOLTZ RESEARCH CENTERS

HELMHOLTZ RESEARCH CENTERS

HELMHOLTZ
Open Science

GEOMAR Helmholtz Centre for Ocean Research Kiel

Deutsches Elektronen-Synchrotron DESY

Helmholtz-Zentrum Geesthacht Centre for Material and Coastal Research (HZG)

Max Delbrück Center for Molecular Medicine in the Helmholtz Association (MDC)

Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research (AWI)

Helmholtz Centre for Infection Research (HZI)

Helmholtz Centre Potsdam – GFZ German Research Centre for Geosciences

Helmholtz-Zentrum Berlin für Materialien und Energie (HZB)

Helmholtz-Zentrum Dresden-Rossendorf (HZDR)

Forschungszentrum Jülich

German Aerospace Center (DLR)

Helmholtz Centre for Environmental Research - UFZ

German Center for Neurodegenerative Diseases (DZNE)

GSI Helmholtz Centre for Heavy Ion Research

Helmholtz Center for Information Security – CISPA

German Cancer Research Center (DKFZ)

Karlsruhe Institute of Technology (KIT)

Max Planck Institute for Plasma Physics (IPP) (Associate Member)

Helmholtz Zentrum München – German Research Center for Environmental Health (HMGU)

HELMHOLTZ
Open Science

Open Science in der Helmholtz-Gemeinschaft Bewusstsein schärfen Projekte Kontakt

Helmholtz Open Science › Open Science in the Helmholtz Association

Open Science in the Helmholtz Association

The Helmholtz Open Science Policy

Open science, the unrestricted access to scientific publications and cultural heritage, is an ongoing and future trend in the scientific landscape worldwide. Research publications and other digital objects such as research data and research software will thus be publicly available on the internet.

The Helmholtz Association was one of the initial signatories of the „Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities" in 2003. This commitment towards open access was then formally approved by its Assembly of Members in 2004.

Since 2016, an Open Access Policy offers a clear and predictable framework for the transformation towards open access. According to this policy, all publications by scientists in the Helmholtz Association will be made freely available within at most 6 months (12 months for publications in the social sciences and humanities). Since 2013, a corresponding regulation is ensuring that beneficiaries of the Helmholtz Initiative and Networking Fund make their publications freely available to the public on the internet.

In October 2016 a position paper on the management of research data in the Helmholtz Association was adopted by the Helmholtz Association's Assembly of Members. In addition to the access to research data, the position paper brings up topics like the training of data specialists and the resourcing of information infrastructures including their organisational and financial safeguarding.

The Helmholtz Open Science Coordination Office

Since 2005, the Helmholtz Open Science Coordination Office supports scientists and their respective Helmholtz Centres in the implementation of

Making information resources more usable

A position paper on the management of research data in the Helmholtz Association[1]

Research data provide the foundation for research processes and in many cases also for economic and social innovation.[2] The ways in which research data are used

MISSION of the Helmholtz Association

We contribute to solving grand challenges which face society, science and industry. We do this by performing top-rate research in strategic programmes (through the

To achieve this [the Helmholtz Association] will:

- **store research data from [its] Centres within suitable data infrastructures and make them available openly and free of charge for subsequent use by science and society;**

- **play an active part in national and international initiatives to coordinate the establishment of the necessary infrastructures;**

O&A Members 56

Active Organisational & Affiliate members

MEMBERSHIP Members: 8257

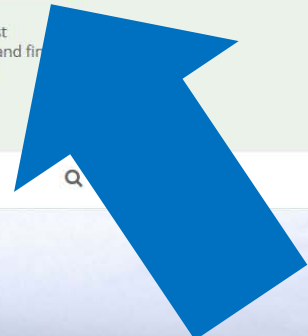Becoming a member of RDA is simple and open to both individuals and organizations

Register now

RDA Groups WG & IGs: 102

Discover what RDA Working and Interest Groups and all other Groups are up to and find out how to join them. **Explore Groups**

RESEARCH DATA ALLIANCE

ABOUT RDA ⌄   GET INVOLVED ⌄   GROUPS ⌄   RECOMMENDATIONS & OUTPUTS ⌄   RDA FOR DISCIPLINES ⌄   PLENARIES & EVENTS ⌄   NEWS & MEDIA ⌄

RDA 14th Plenary Meeting

Helsinki, Finland
23 - 25 October 2019
More Information Here

NEWS & EVENTS   **RECENT BLOGS**   **FOLLOW US**

O&A Members   **56**

Active Organisational & Affiliate members

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RDA/CODATA Legal Interoperability IG

Home » *Working And Interest Groups* » *Interest Group* » *RDA/CODATA Legal Interoperability IG*

ⓘ Group details

Status: Recognised & Endorsed
Chair (s): Robert Chen, Christoph Bruch, Simon Hodson, Gail Clement
Case Statement: Download

✅ IG Established

History

Status: Recognised & Endorsed
The proposed Research Data Alliance – CODATA Working Group on Legal Interoperability of Research Data (RDA-CODATA WG), will be established to address and promote the following objectives:

- Define legal interoperability of research data and articulate why it is important for data interoperability and reuse

RDA/CODATA Legal Interoperability IG

Status: Recognised & Endorsed

Public - accessible to all site users

Join Group

Index   Add new content

WE ARE NOT ALONE!

Science as an open enterprise

June 2012

Immediate & Transparent Publishing

Gates Open Research is a platform for rapid author-led publication and open peer review of research funded by the Bill & Melinda Gates Foundation

SUBMIT YOUR RESEARCH   OR   BROWSE ARTICLES

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OPEN ACCESS POLICY FAQ

The Bill & Melinda Gates Foundation is committed to information sharing and transparency. We believe that published research resulting from our funding should be promptly and broadly disseminated. We have adopted an Open Access policy that enables the unrestricted access and reuse of all peer-reviewed published research funded, in whole or in part, by the foundation, including any underlying data sets.

BILL & M
GA

OECD
BETTER POLICIES FOR BETTER LIVES

Open Science

Open science encompasses unhindered access to scientific articles, access to data from public research, and collaborative research enabled by ICT tools and incentives. Broadening access to scientific publications and data is at the heart of open science, so that research outputs are in the hands of as many as possible, and potential benefits are spread as widely as possible:

- Open science promotes a more accurate verification of scientific results. By combining the tools of science and information technologies, scientific enquiry and discovery can be sped up for the benefit of society.
- Open science reduces duplication in collecting, creating, transferring and re-using scientific material.
- Open science increases productivity in an era of tight budgets.
- Open science results in great innovation potential and increased consumer choice from public research.
- Open science promotes citizens' trust in science. Greater citizen engagement leads to active participation in scientific experiments and data collection.

The OECD is working with member and non-member economies to review policies to promote open science and to assess their impact on research and innovation. See more in the report **Making Open Science a Reality**. As part of this work, it is conducting an assessment of the impact of the **OECD Principles and Guidelines for Access to Research Data from Public Funding** that were published a decade ago.

Furthermore, digitalisation is changing science and although a world of open science and big data holds enormous promise, it presents new challenges for policymakers, scientific institutions and individual researchers. Read our latest insights:

SO, WHAT'S THE PROBLEM?

- The four science paradigms

1. Empirical

2. Theoretical

3. Computational (e.g. simulations)

4. Data exploration

The
FOURTH
PARADIGM

DATA-INTENSIVE SCIENTIFIC DISCOVERY

https//www.microsoft.com/en-us/research/wp-content/uploads/2009/10/Fourth_Paradigm.pdf

EDITED BY TONY HEY, STEWART TANSLEY, AND KRISTIN TOLLE

DataCite

re3data.org
REGISTRY OF RESEARCH DATA REPOSITORIES

Search...   🔍   Search

Data sharing made   2,000 Data Repositories   Three new DOI Fabrica

FAIR Principles

FAIR Principles

- **F1: (Meta) data are assigned globally unique and persistent identifiers**
- **F2: Data are described with rich metadata**
- **F3: Metadata clearly and explicitly include the identifier of the data they describe**

In 2016, the **'FAIR Guiding Principles for scientific data management and stewardship'** were published in *Scientific Data*. The authors intended to provide guidelines to improve the findability, accessibility, interoperability, and reuse of digital assets. The principles emphasise machine-actionability (i.e., the capacity of computational systems to find, access, interoperate, and reuse data with none or minimal human intervention) because humans increasingly rely on computational support to deal with data as a result of the increase in volume, complexity, and creation speed of data.

Findable

The first step in (re)using data is to find them. Metadata and data should be easy to find for both humans and computers. Machine-readable metadata are essential for automatic discovery of datasets and services, so this is an essential component of the **FAIRification process**.

Findable

Accessible

Interoperable

Reusable

Legal *Inter*-operability & *Intra*-operability of Research Data:

The Case of the Research Compendium

Gail Clement,
RDA/CODATA Legal Interop IG Co-Chair
Head of Research Services, Caltech Library
https://orcid.org/0000-0001-5494-4806 | @ repositorian

MORE QUESTIONS ABOUT LICENSING PRACTICES FOR RC

- Does a license in the metadata record inherit all the way through the file directory to apply to all files?

- Can we devise a top level rights statement in the metadata record that links to a more detailed list of licenses associated with each file?

- What is the legal status of a compendium with conflicting licenses?

- Does the license need to appear in each manifestation of the paper?
  (HTML, PDF, and the interactive version)

- What does 'code' mean in the context of computational narrative where the text itself may be computed?

SIX PRINCIPLES ON LEGAL INTEROPERABILITY

1. **Facilitate the lawful access to and reuse of research data.**

2. **Determine the rights to and responsibilities for the data.**

3. **Balance the legal interests.**

4. **State the rights transparently and clearly.**

5. **Promote the harmonization of rights in research data.**

6. **Provide proper attribution and credit for research data.**

RESEARCH DATA ALLIANCE
ISU CODATA

**LEGAL INTEROPERABILITY OF RESEARCH DATA:
PRINCIPLES AND IMPLEMENTATION GUIDELINES**

RDA-CODATA Legal Interoperability Interest Group

September 8, 2016

SIX PRINCIPLES ON LEGAL INTEROPERABILITY

1. **Facilitate the lawful access to and reuse of research data.**
   - **Guideline 1A.** Access to and reuse of research data should be open and unrestricted as a default rule, or otherwise be granted to users with the fewest limitations possible.
   - **Guideline 1C.** The CC0 or PDDL waivers of rights are the preferred voluntary, nongovernmental approaches to facilitate the legal interoperability of research data. The non-restrictive ("common-use, attribution-only, CC-BY 4.0") license may also be considered when disseminating the data for broad use.

2. **Determine the rights to and responsibilities for the data.**

3. **Balance the legal interests.**

4. **State the rights transparently and clearly.**

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4. **S̶ ̶t̶ ̶a̶t̶ ̶t̶h̶ ̶**

5. **Promote ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶data.**

6. **Provide ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ data.**

These guidelines are unacceptable for many researchers and research institutions!

LEGAL INTEROPERABILITY OF RESEARCH DATA: PRINCIPLES AND IMPLEMENTATION GUIDELINES

RDA-CODATA Legal Interoperability Interest Group

September 8, 2016

YES, BUT …

- … I would like to exclude certain utilizations

- … I would like to be named as co-author of ensuing publications

- … I would like to be informed of any utilization

- … I would like to exclude big business utilization

- … I am afraid users do not understand my data and misinterpret them. Does that create a liability issue?

- … I am concerned about liability issues (as a general concern); which translates to: I the disclaimer in the CC licenses sufficient?

- … my publication is "research compendium" (e.g. jupyter notebook) made up of creative works, data, databases and software, are there recommendations what licenses can or should not be combined?

- … How do I deal with the fact that individual components of this research compendium have different groups of authors?

LEGAL UNCERTAINTIES

- Are these data copyright protected? -> What licenses are appropriate?
  - As creative works
  - As data base works
  - As data base

- If I consider my data public domain in my jurisdiction, could they be protected in other jurisdictions? What does that mean in respect to licensing.

- Would waiving my rights with CC Zero change the situation?

SUGGESTIONS TO CREATIVE COMMONS

ROUGH CONSENSUS OF OUR MEETING?

- **The Participants of the 2019 CC Summit Session "Issues pertaining to licensing research data" suggest, …**

- **Creative Commons should consider** inquiring if its licenses need to be adapted or if new CC licenses need to be created in order to answer the needs of the research community, especially in respect to making research data publicly available and reusable legally sound.

- **Creative Commons should consider** engaging with the research community, e.g. via the Research Data Alliance, and other relevant stakeholder to develop standards to communicate the rights situation of any kind of content not only in respect to copyright.

- In this process, **Creative Commons should** not limit its role to possible adaptations of its license suit, but include its expertise in organizing global dialogue on legal issues, building consensus for the acceptance of solutions, and promoting these solutions to broader audiences globally.

Thanks for Your Attention!