# HELMHOLTZ

## Open Science

# Presentation of the Helmholtz Open Science Office

**Speaker**

Helmholtz Association
Helmholtz Open Science Office

**Event, Date**

# Table of contents

- Helmholtz Association
- Helmholtz Open Science Office
- Open Access
  - Task Group Open Access Transformation
- Open Research Data
  - Task Group for the Implementation of Research Data Policies
- Open Research Software
  - Task Group Research Software
- Indicators
  - Task Group Helmholtz Quality Indicators for Data and Software Products
- National and international Network
- Projects of the Helmholtz Open Science Office
- Current topics
- Dialogue

# Helmholtz Association

# Helmholtz Research Mission and Strategy
## Research for Grand Challenges

- Systems solutions for grand challenges based on:
  - Scientific excellence
  - Interdisciplinarity and critical mass
  - long term research programs
- Helmholtz provides a highly attractive environment for talents and brilliant brains
- Profound expertise in large scale research infrastructure
- Helmholtz as a prime strategic partner at the local, national and international level
- Transfer of knowledge into economy and society
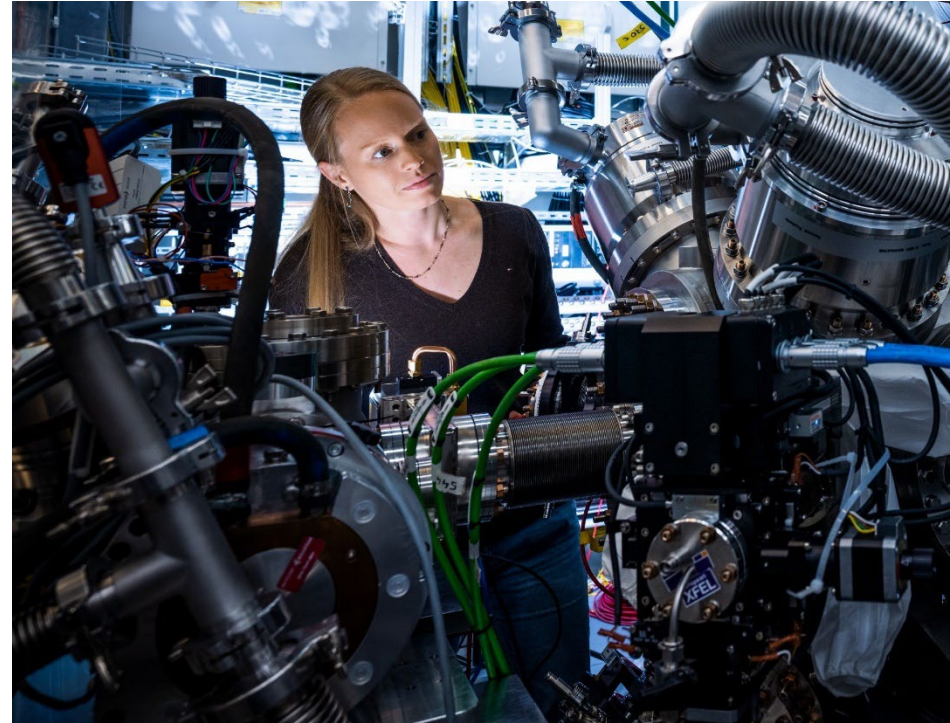
# Helmholtz research centers
## 18 centers in 6 Research Fields

- Alfred-Wegener-Institut Helmholtz-Zentrum für Polar- und Meeresforschung (AWI)

- CISPA – Helmholtz Center for Information Security

- Deutsches Elektronen-Synchrotron DESY

- Deutsches Krebsforschungszentrum (DKFZ)

- Deutsches Zentrum für Neurodegenerative Erkrankungen (DZNE)

- German Aerospace Center (DLR)

- Forschungszentrum Jülich (FZJ)

- GEOMAR Helmholtz-Zentrum für Ozeanforschung Kiel

- GSI Helmholtz Center for Heavy Ion Research

- Helmholtz Munich
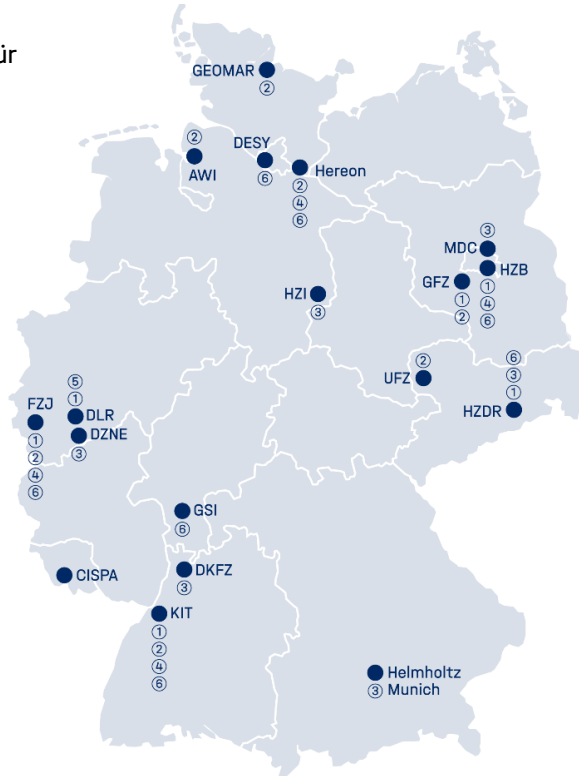
- Helmholtz-Zentrum Berlin für Materialien und Energie (HZB)

- Helmholtz Center Dresden Rossendorf (HZDR)

- Helmholtz Center for Infection Research (HZI)

- Helmholtz Center for Environmental Research – UFZ

- Helmholtz-Zentrum Hereon

- GEOMAR Helmholtz Center for Ocean Research Kiel

- Helmholtz Center Potsdam – German Research Center for Geosciences GFZ

- Karlsruhe Institute of Technology (KIT)

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

Research Fields:
(1) Energy, (2) Earth and Environment
(3) Health, (4) Information
(5) Aeronautics, Space and Transport, (6) Matter

# The six research fields
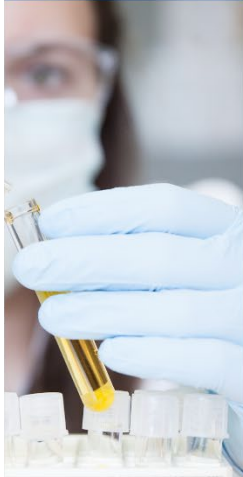# of the Helmholtz Association
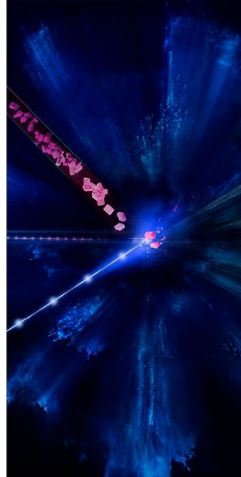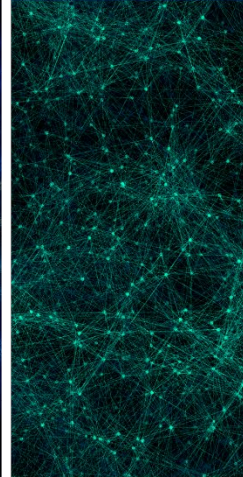
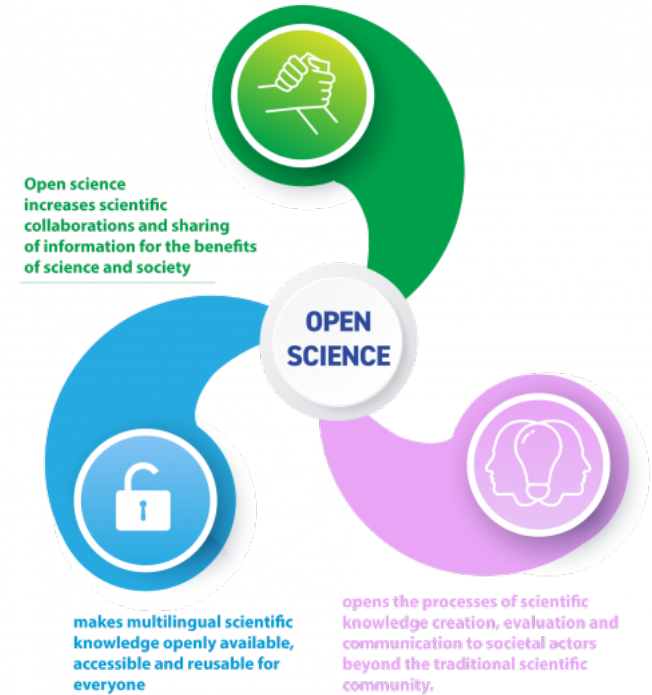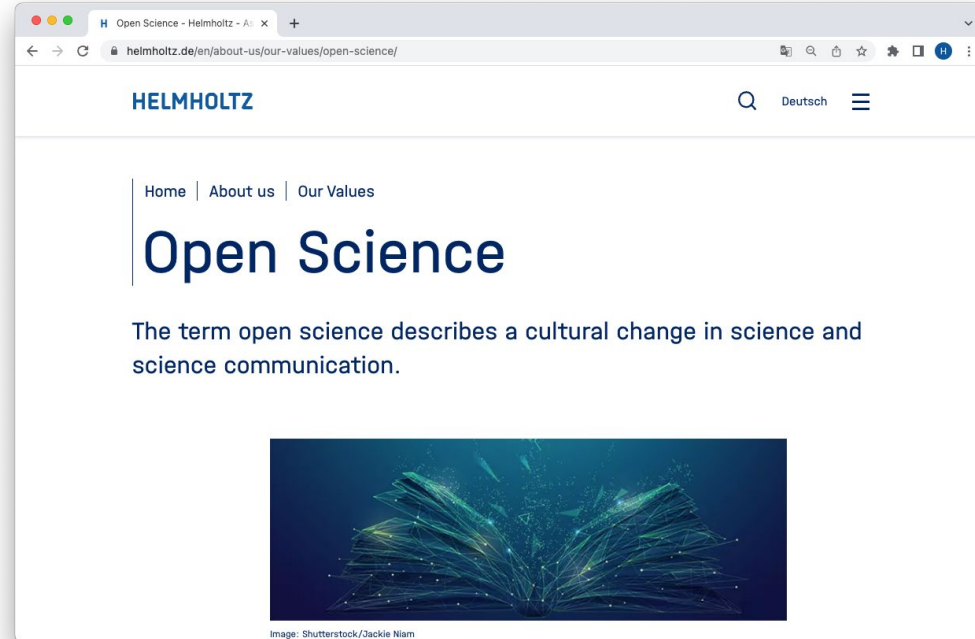| Energy | Earth and Environment | Health | Aeronautics, Space and Transport | Matter | Information |
|--------|----------------------|--------|----------------------------------|--------|-------------|

# Helmholtz Open Science Office

# Open Science

- Cultural change in scientific working methods, organization, and communication.

- Consistently employs digitization to make all components of the scientific process (publications, research data, research software, etc.) open, traceable, reusable, and accessible to everyone (in terms of reducing technical, legal, and financial hurdles).

- Expands transparency and the possibilities for quality assurance, increases the performance of science, and promotes innovations based on scientific findings.

- The development of open science differs in levels of extent in the research fields of the Helmholtz Association, depending on the discipline and respective publication culture.



Open science increases scientific collaborations and sharing of information for the benefits of science and society

OPEN SCIENCE

makes multilingual scientific knowledge openly available, accessible and reusable for everyone

opens the processes of scientific knowledge creation, evaluation and communication to societal actors beyond the traditional scientific community.

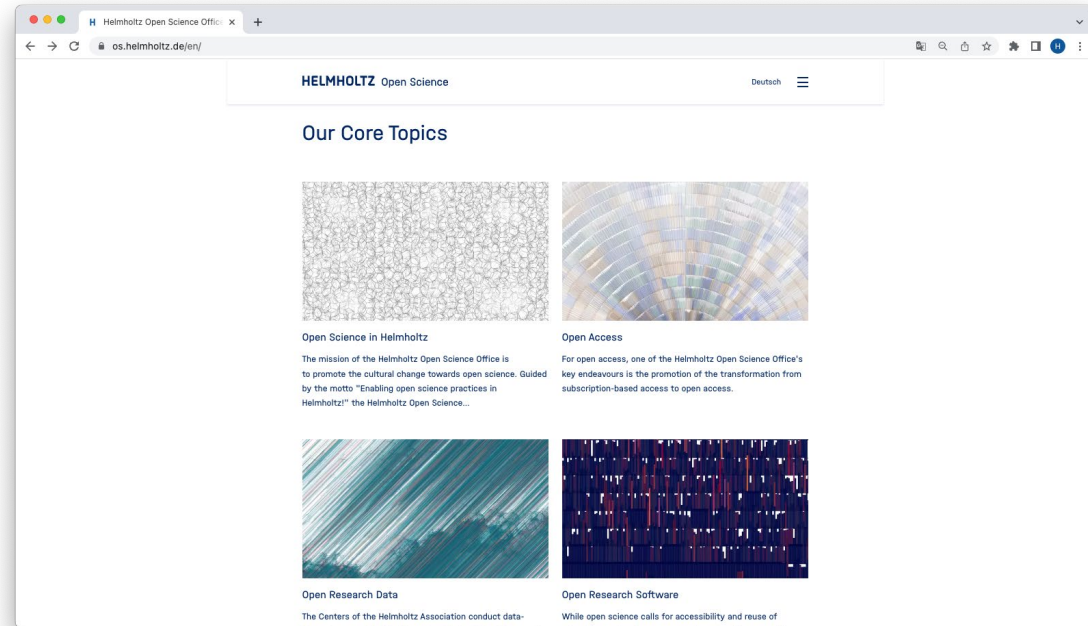Source: UNESCO

# Open Science in Helmholtz

- Open Science is an important cross-cutting topic with numerous points of contact

- In the Centers:
  - digitization, research infrastructures, libraries, data centers, transfer, etc.

- In the entire Association:
  - Digital transformation, KPIs, incubator platforms, Initiative and Networking Fund, transfer, etc.
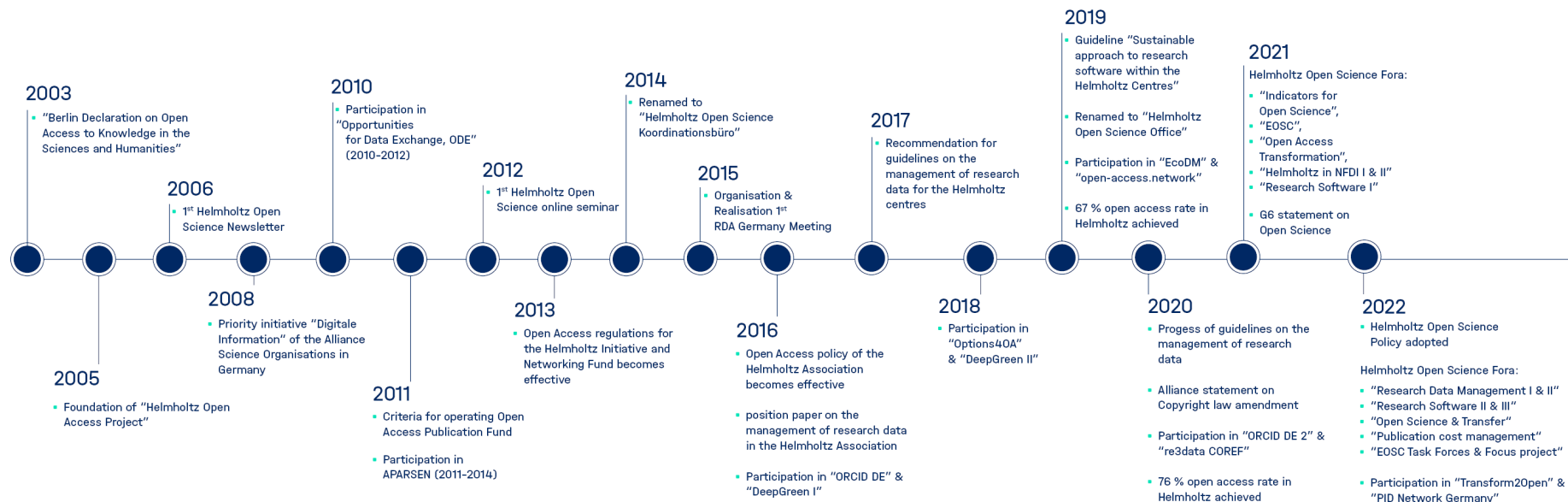


https://www.helmholtz.de

# Open Science in Helmholtz

- Our core topics

  - **Open Access** – access to and re-use of textual publications

  - **Open Research Data** – access to and re-use of research data

  - **Open Research Software** – access to and re-use of research software

  - National and international **network** concerning open science



https://os.helmholtz.de

# Milestones

**2003**
- "Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities"

**2005**
- Foundation of "Helmholtz Open Access Project"

**2006**
- 1st Helmholtz Open Science Newsletter

**2008**
- Priority initiative "Digitale Information" of the Alliance Science Organisations in Germany

**2010**
- Participation in "Opportunities for Data Exchange, ODE" (2010-2012)

**2011**
- Criteria for operating Open Access Publication Fund
- Participation in APARSEN (2011-2014)

**2012**
- 1st Helmholtz Open Science online seminar

**2013**
- Open Access regulations for the Helmholtz Initiative and Networking Fund becomes effective

**2014**
- Renamed to "Helmholtz Open Science Koordinationsbüro"

**2015**
- Organisation & Realisation 1st RDA Germany Meeting

**2016**
- Open Access policy of the Helmholtz Association becomes effective
- position paper on the management of research data in the Helmholtz Association
- Participation in "ORCID DE" & "DeepGreen I"

**2017**
- Recommendation for guidelines on the management of research data for the Helmholtz centres

**2018**
- Participation in "Options4OA" & "DeepGreen II"

**2019**
- Guideline "Sustainable approach to research software within the Helmholtz Centres"
- Renamed to "Helmholtz Open Science Office"
- Participation in "EcoDM" & "open-access.network"
- 67 % open access rate in Helmholtz achieved

**2020**
- Progess of guidelines on the management of research data
- Alliance statement on Copyright law amendment
- Participation in "ORCID DE 2" & "re3data COREF"
- 76 % open access rate in Helmholtz achieved

**2021**
Helmholtz Open Science Fora:
- "Indicators for Open Science",
- "EOSC",
- "Open Access Transformation",
- "Helmholtz in NFDI I & II"
- "Research Software I"
- G6 statement on Open Science

**2022**
- Helmholtz Open Science Policy adopted

Helmholtz Open Science Fora:
- "Research Data Management I & II"
- "Research Software II & III"
- "Open Science & Transfer"
- "Publication cost management"
- "EOSC Task Forces & Focus project"
- Participation in "Transform2Open" & "PID Network Germany"
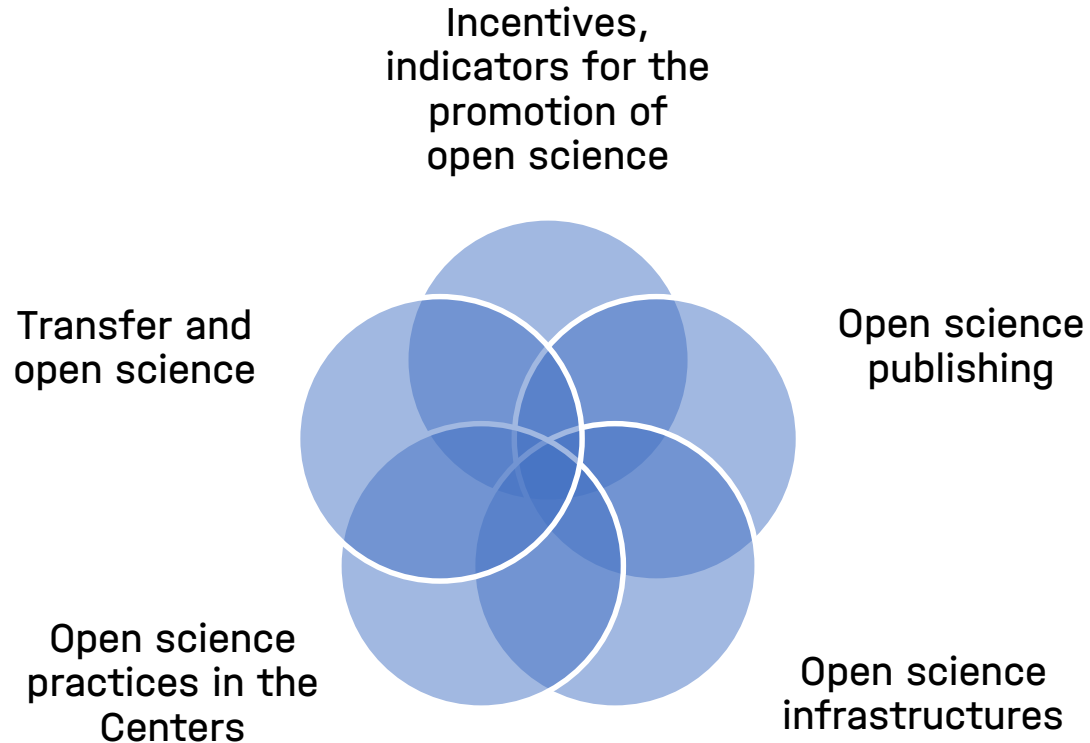
# Helmholtz Open Science Office: Mission

# Enabling Open Science practices in Helmholtz!

- The Helmholtz Open Science Office

  - is a service provider for the Association for the cultural change "from closed to open".

  - promotes dialogue and provides impulses within the Association.

  - offers training and support concerning all aspects of open science.

  - cooperates with the centers in the Open Science working group and in joint task groups

  - delivers a key contribution to the digital transformation.

  - represents Helmholtz positions on open science on a national and international level.

**HELMHOLTZ**
**Open Science**

# Helmholtz Open Science Office:
# Focus topics 2022/2023



Incentives, indicators for the promotion of open science

Open science publishing

Transfer and open science

Open science infrastructures

Open science practices in the Centers

# Helmholtz Open Science Policy

- The Helmholtz Association's General Assembly adopted an Open Science Policy in September 2022.

- The policy stipulates that scientific articles, research data and research software are to be published openly. Open Science thus becomes the standard of publication practice.

- The Helmholtz Open Science Policy is organized into three sections:

  - In the section "A. Strategic Positioning," the Helmholtz Association formulates a commitment to open science in accordance with the principle "as open as possible and as closed as necessary."

  - In the section "B. Monitoring," Helmholtz makes a commitment to open science on the basis of the three current focus areas through specific and verifiable objectives.

  - In the section "C. Implementation and Common Requirements," in line with the funding policy of the European Commission, open science practices are formulated for implementation purposes.

- Further Information:

  - https://os.helmholtz.de/en/open-science-in-helmholtz/open-science-policy

**HELMHOLTZ**
Open Science

**Helmholtz Open Science Policy**

Version 1.0
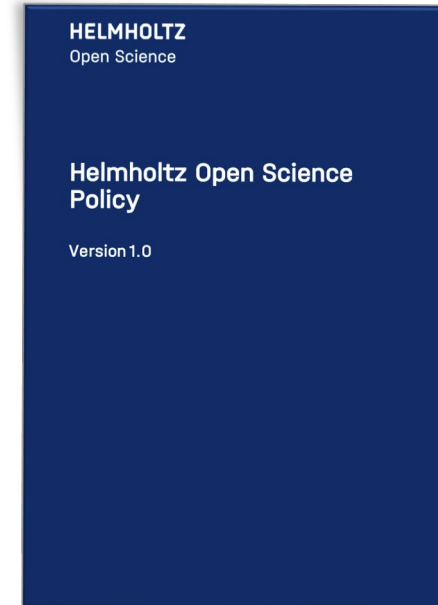
# Open Access

# Open Access

- 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.

- For open access, one of the Helmholtz Open Science Office's key endeavors is the promotion of the transformation from subscription-based access to open access.

- In 2016, and after preparation by the OS Office, the President signed the "Expression of Interest" of the international OA2020 Initiative.

- In 2016, the Assembly of Members specified the [Open Access Policy](#) in concrete terms, offering a framework of action to the Helmholtz Centers for a coordinated transformation towards open access.

- In 2022, the Helmholtz Association's General Assembly adopted the Helmholtz Open Science Policy.

# Helmholtz Open Science Policy
## Open Access

- „1.1 The employees shall ensure that

  - at the time of publication, at the latest, a machine-readable electronic copy of the published version or the final peer-reviewed manuscript accepted for publication is deposited in the Helmholtz Center's repository for scientific publications.

  - the deposited publication is preferably made freely accessible via the repository immediately, namely, under the latest available version of the Creative Commons Attribution International Public License (CC BY) (in the case of monographs and other long-text formats, an alternative license may be chosen),

  - but at the latest 12 months after publication, in accordance with the right of self-archiving (Section 38(4) of the German Act on Copyright and Related Rights [UrhG]).

  - they make available via the repository information on research results as well as tools and auxiliary resources that are necessary to validate the conclusions of the scientific publication.

  For implementation purposes, employees are encouraged to reserve sufficient rights of reuse to fulfil the open access requirements."

HELMHOLTZ
Open Science

Helmholtz Open Science
Policy

Version 1.0
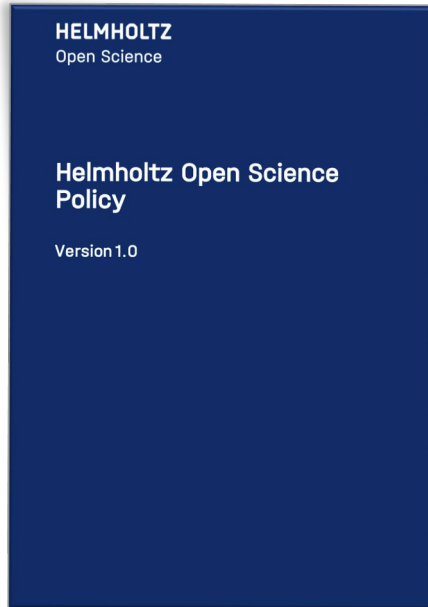
# Helmholtz Open Science Policy

## Open Access

- „1.2 For implementation purposes, the Centers and their information infrastructure facilities shall ensure that

  - the metadata of the deposited publications are accessible under a Creative Commons Public Domain Dedication (CC0) license or another equivalent license; […].

  - the information included in the metadata is identified by means of suitable persistent identifiers (e.g., DOI, ORCID iD, ROR ID, etc.).

  - the publication fees incurred for scientific publications that have undergone peer review and are genuinely open access are funded within the framework of in-house regulations. Further information on the payment of costs can be found in the "Criteria for the Operation of Open Access Publication Funds and the Payment of Open Access Publication Fees" and in the respective internal policies of the Helmholtz Centers."

**HELMHOLTZ**
Open Science

**Helmholtz Open Science Policy**

Version 1.0

# Core topic

# Open Access

- Promotion of the transformation from subscription to open access

- Open Access Green and Open Access Gold are implemented as equal strategies

| Open Access Green | Open Access Gold |
|---|---|
| • Diverse and distributed infrastructure of open access repositories<br>• Participation in disciplin-specific open access infrastructures (e.g., Inspire HEP)<br>• Co-financing of central open access infrastructures (e.g., arXiv.org) | • Framework agreements for the financing of Open Access internationally (e.g., SCOAP[3])<br>• Framework agreements for the financing of Open Access nationally (e.g., Projekt DEAL)<br>• Framework agreements for the financing of Open Access in Helmholtz (opt-in contracts)<br>• Self-publishing activities at the Centers (e.g., KIT Scientific Publishing) |

- Monitoring:
  - National Open Access Monitor at Forschungszentrum Jülich
  - Monitoring in Helmholtz

# Core topic
# Open Access

- The Helmholtz Open Science Office accompanies the transformation process in Helmholtz towards open access with:

- Organization of the Task Group Open Access Transformation

- Events on the subject of open access publishing

  - s. Helmholtz Open Science Online Seminars,
    e. g., Open Access Publishing for Early Career Researchers at Helmholtz

- Resources on the topic of open access publishing

  - FAQs on the topic of "predatory publishing"

  - Criteria for the Operation of Open Access Publication Funds and the Payment of Open Access Publication Fees

- The Helmholtz Open Science Office participates in the BMBF project open-access.network,
  which informs scientists on the subject of Open Access and, among other things, operates a help desk.

## Core topic

# Open Access Transformation

- Joint Task Group of the Working Group Open Science and the Working Group Library and Information Management to promote the open access transformation in the Helmholtz Association, moderated by the Helmholtz Open Science Office

- The Task Group, among other aspects, works on the following elements of the open access transformation:
  - Incentives and metrics
  - Guidelines and policies
  - Cultural change towards open access

# Increasing Open Access Quota



Open Access quota in the Helmholtz Association

| Publication year | Percent |
|---|---|
| 2016 | 43,3 |
| 2017 | 56,2 |
| 2018 | 60,3 |
| 2019 | 66,8 |
| 2020 | 75,8 |
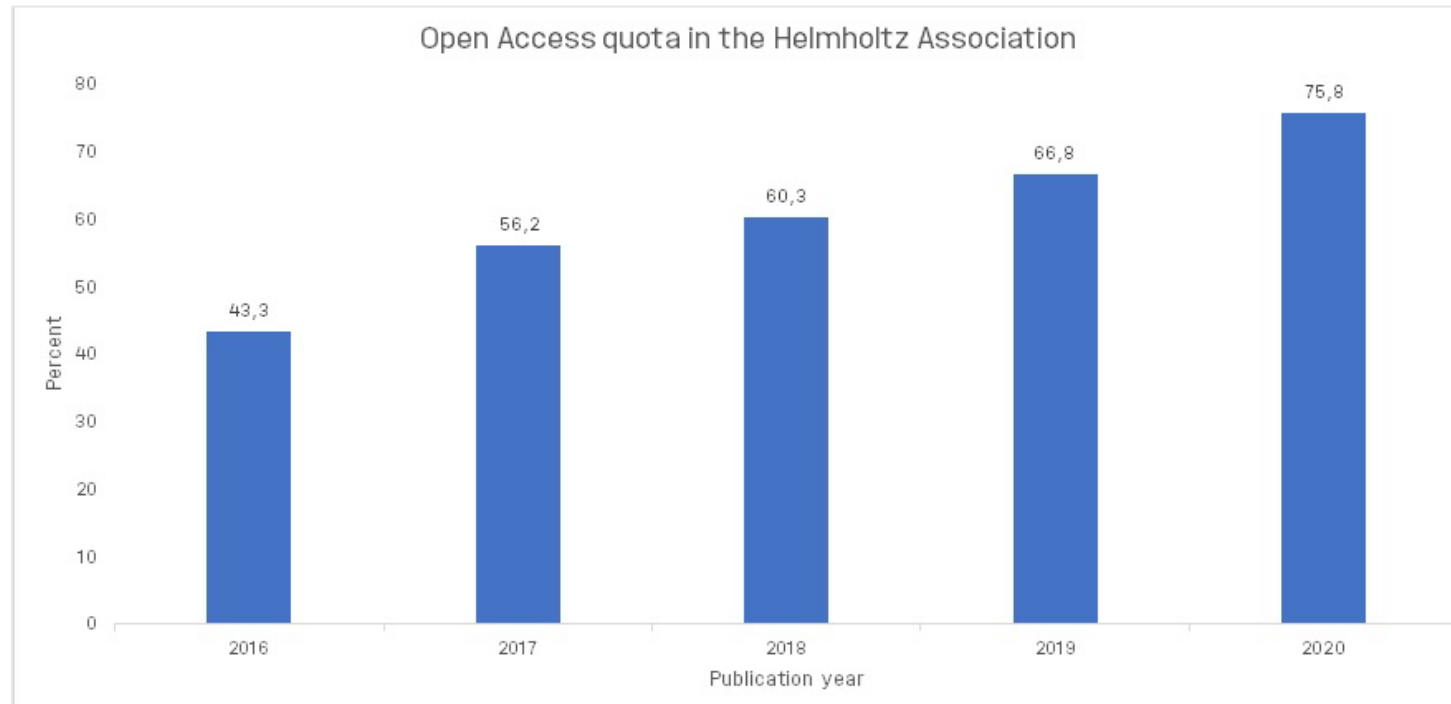
Open Research Data

# Core topic
## Open Research Data

- The Helmholtz Association is leading in generating, managing and providing access to research data.

- In 2016, the Helmholtz Association adopted a position paper with the title Making information resources more usable on the handling of research data.

- In 2017, the Helmholtz Association adopted the Recommendations for guidelines of the Helmholtz centers for handling research data which guides the Centers in the formulation of their respective Research Data Policies.

- In 2022, the Helmholtz Association's General Assembly adopted the Helmholtz Open Science Policy.

- The Helmholtz Open Science Office promotes the coordination of the Centers and supports them in developing policies and related practices in handling digital research data; esp. concerning the utilization of the FAIR principles in Helmholtz.

- The work of the Helmholtz Open Science Office thus complements the developments of platforms in the Helmholtz Incubator.

## Position paper
# "Making information resources more usable!"

- Position paper Making information resources more usable! (2016):

  - foster focused research in the field of information technology and pursue the development and operation of corresponding information infrastructures;

  - store research data from the 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; and

  - education and training in research data management

- These principles are intended to promote the quality, productivity, sustainability and competitiveness of science, in keeping with the mission of the Helmholtz Association.
  They also provide a basis for knowledge transfer.

# Helmholtz Open Science Policy
# Open Research Data

- „2.1 In addition, the employees shall ensure that the following aspects are adhered to:
  - The digital research data that they generate shall be managed responsibly and in accordance with the FAIR Principles.
  - Especially in the case of EU-funded research projects, the employees shall use the data management plan (DMP) tool, and, in doing so, take into account [...]
    - the deposit of research data as early as possible and within the time limits specified in the DMP in a trustworthy repository that is indexed in re3data [...]
    - the principle "as open as possible, as closed as necessary," unless the provision of open access would, in particular:
      - prejudice the legitimate interests of the funding recipients, also with regard to commercial exploitation, or
      - be contrary to other constraints. [...]"

**HELMHOLTZ**
Open Science

**Helmholtz Open Science Policy**

Version 1.0

# Research Data Repositories and Portals in Helmholtz

- The Helmholtz Centers operate about 100 data infrastructures in the Association in which unique and valuable digital research data is curated.

- An overview offers re3data – Registry of Research Data Repositories





https://os.helmholtz.de/en/open-research-data/research-data-repositories
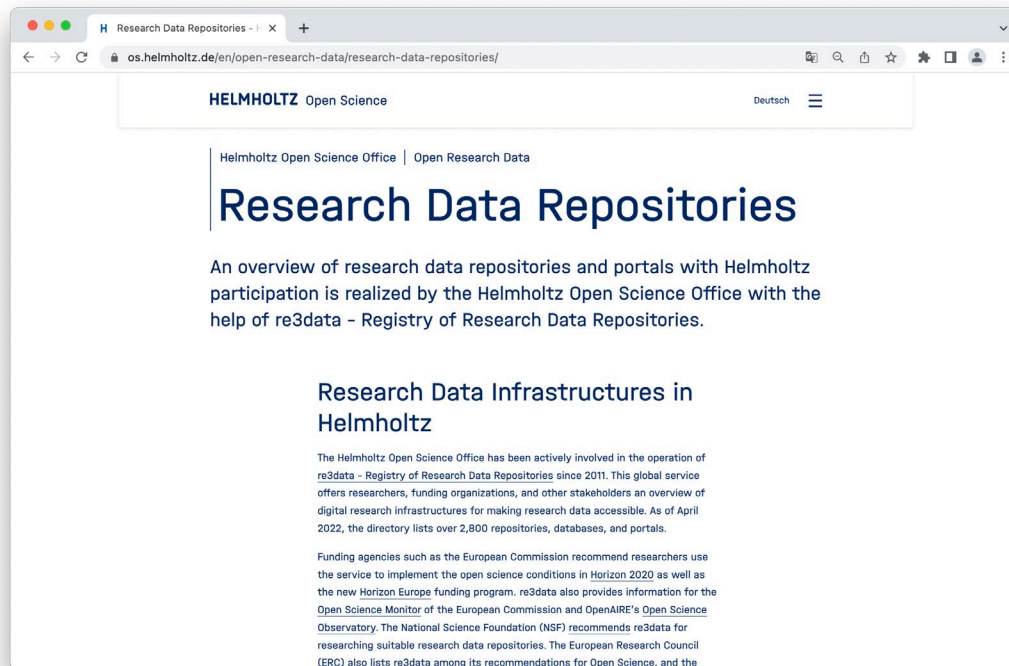
# Open Research Data
## NFDI Participation

- Numerous consortia of the National Research Data Infrastructure (NFDI) are being implemented with substantial Helmholtz participation.

- All Helmholtz Centers are members of the NFDI Association.



NFDI-Konsortien mit Helmholtz-Beteiligung

1: DAPHNE4NFDI
2: DataPLANT
3: FAIRmat
4: GHGA
5: NFDI4BioDiversity
6: NFDI4Cat
7: NFDI4Chem
8: NFDI4DataScience
9: NFDI4Earth
10: NFDI4Health
11: NFDI4Ing
12: NFDI4Microbiota
13: NFDI-MatWerk
14: PUNCH4NFDI
15: Text+
16: FAIRagro
17: NFDI4BIOIMAGE
18: NFDI4Energy
19: NFDI4Immuno
20: NFDI4Objects
21: NFDIxCS

● Alle Helmholtz-Zentren sind Mitglieder im Verein Nationale Forschungsdateninfrastruktur (NFDI) e.V

# Open Research Data
# NFDI Participation

- Helmholtz Centers are involved in the following NFDI consortia (as of March 2023):

  - Base4NFDI: Basic services for the NFDI

  - DAPHNE4NFDI (Participation from Helmholtz: DESY, FZJ, HZB, HZDR, HEREON, KIT)

  - DataPLANT (Participation from Helmholtz: FZJ)

  - FAIRagro (Participation from Helmholtz: FZJ, UFZ)

  - FAIRmat (Participation from Helmholtz: FZJ, HZB, HZDR, KIT)

  - GHGA (Participation from Helmholtz: CISPA, DKFZ, DZNE, HMGU, HZI, MDC)

  - NFDI4BioDiversity (Participation from Helmholtz: AWI, UFZ)

  - NFDI4BIOIMAGE (Participation from Helmholtz: DKFZ, FZJ, UFZ)

  - NFDI4Cat (Participation from Helmholtz: KIT)

  - NFDI4Chem (Participation from Helmholtz: KIT, UFZ)

  - NFDI4DataScience (Participation from Helmholtz: AWI)

  - NFDI4Earth (Participation from Helmholtz: AWI, DLR, FZJ, GEOMAR, GFZ, HEREON, KIT, UFZ)

  - NFDI4Energy (Participation from Helmholtz: GFZ/RIFS, KIT)

  - NFDI4Health (Participation from Helmholtz: MDC)

  - NFDI4Immuno (Participation from Helmholtz: DKFZ, HZI)

  - NFDI4Ing (Participation from Helmholtz: FZJ, DLR, KIT)

  - NFDI4Microbiota (Participation from Helmholtz: DLR, FZJ, GFZ, HMGU, HZI, MDC, UFZ)

  - NFDI-MatWerk (Participation from Helmholtz: FZJ, HEREON, KIT)

  - NFDI4Objects (Participation from Helmholtz: UFZ)

  - NFDIxCS (Participation from Helmholtz: KIT, FZJ)

  - PUNCH4NFDI (Participation from Helmholtz: DESY, DLR, FZJ, GSI, HZDR, KIT)

  - Text+ (Participation from Helmholtz: FZJ)

# Open Research Data
## EOSC Participation

- The European Open Science Cloud (EOSC) has been started in 2015 as a project of the European Commission to make it easier for European researchers to access scientific data, platforms, and services for data processing.

- There are currently 8 Helmholtz Centers involved in a total of 11 on-going EU projects related to EOSC (as of February 2022).

  - These are the following projects: ENVRI-FAIR, ExPaNDS, ESCAPE, EOSC-Pillar, DICE, EOSC Future, EOSC-Life, EOSC-synergy, EGI-ACE, FAIRsFAIR und PaNOSC.

# Task Group
# for the Implementation of Research Data Policies

- The Task Group was founded to create the Recommendations for guidelines of the Helmholtz centers for handling research data.

- The current focus is on monitoring the status of the implementation of Research Data Policies by the Centers:
  - Already 13 Centers have developed their own guidelines for handling digital research data.
  - Since 2020, the Helmholtz Open Science Office, together with the Task Group, annually presents an internal report on the handling of research data and the status of the development or implementation of research data policies at the Helmholtz Centers.

# Open Research Software

# Core topic

# Open Research Software

- The topic of Open Research Software continues to gain importance; while open science calls for reuse and reproducibility of scientific results, in many research areas, this can only be ensured if source code is made openly accessible in addition to the corresponding research data.

- At the Helmholtz Centers, various research software initiatives are currently being implemented.

- Works:

  - 2017: position paper Access to and re-use of research software

  - 2019: Model Policy on Sustainable Software at the Helmholtz Centers

  - 2021: Checklist for the Implementation of Software Policies at the Helmholtz Centers (German only)

  - 2022: Contribution to the campusSOURCE Award 2022 for research software

- In 2022, the Helmholtz Association's General Assembly adopted the Helmholtz Open Science Policy.

# Helmholtz Open Science Policy
# Open Research Software

- „3.1 The employees shall ensure that
  - wherever possible, the program code that is necessary for reusing and/or validating the published data is made openly accessible in a repository.
- 3.2 For implementation purposes, the Centers and their information infrastructure facilities shall ensure that
  - researchers are supported in publishing research software;
  - the metadata of the deposited software/the deposited code are published under a Creative Commons Public Domain Dedication License (CCO) or an equivalent license (insofar as legitimate interests or constraints are respected) and in accordance with the FAIR Principles (especially machine-readability), and that they include at least information about the following: program code (description, date of deposit, version, authors, repository); name, acronym, and number of the funding project; licensing conditions; persistent identifiers and, if possible, organizations and funding. If applicable, the metadata must also include persistent identifiers for related publications and other research results."

**HELMHOLTZ**
Open Science

**Helmholtz Open Science Policy**

Version 1.0
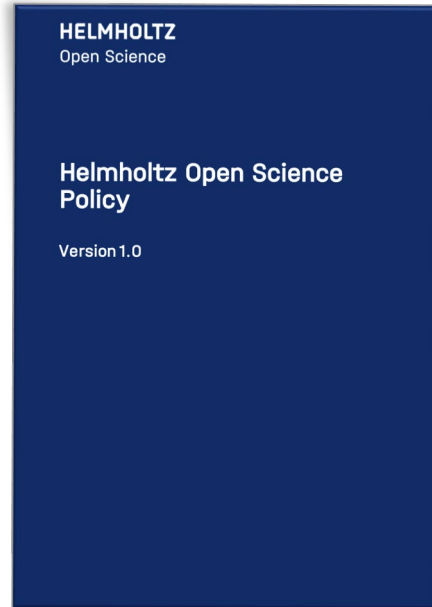
# Task Group

# Research Software

- Close cooperation with HIFIS
- Current project: [Helmholtz Software Spotlights](#)
- Fora on this topic
- Various links to the work of [de-RSE](#)
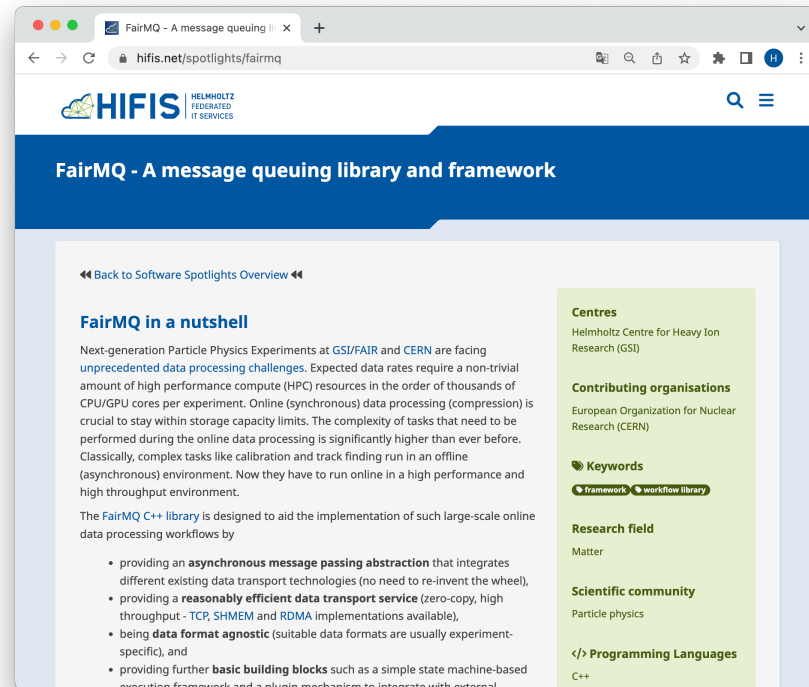
# Indicators

# Core topic

# Indicators

- The goal is to develop incentives and indicators to promote open science at Helmholtz.

- The ongoing discussion process to anchor open science in the process of research evaluation at Helmholtz needs to be further accompanied in order to develop indicators and incentives for open science in the areas of open access, open research data, and open research software.

- In this context, European and international developments in research assessment are considered and continued; see also G6 and Open Science Statement

## Task Group
# Helmholtz Quality Indicators for Data and Software Products

- The [Task Group Helmholtz Quality Indicators for Data and Software Products](#) of the Working Group Open Science of the Helmholtz Association is dedicated to the development of Helmholtz Quality Indicators for Data and Software Products.

- Duration: From March 2022 onwards.

- Relevant products and events:

  - (in German) Diskussionspapier „Indikatoren für Open Science": [https://doi.org/10.2312/os.helmholtz.014](https://doi.org/10.2312/os.helmholtz.014)

  - (in German) Report des Helmholtz Open Science Forum zu „Indikatoren für Open Science": [https://doi.org/10.48440/os.helmholtz.024](https://doi.org/10.48440/os.helmholtz.024)

# National and International Network

# National and International Network

- Selection of current partner organizations
  - [Alliance of the German Science Organizations: Priority Initiative "Digital Information"](#)
  - [Confederation of Open Access Repositories (COAR)](#)
  - [Deutsche Initiative für Netzwerkinformation (DINI)](#)
  - [European Association of Research and Technology Organisations (EARTO)](#)
  - [German Reproducibility Network (GRN)](#)
  - [Network G6](#)
  - [PREMIER](#)
  - [Research Data Alliance (RDA)](#)
  - [RDA Deutschland](#)

# Priority Initiative "Digital Information"

- The Helmholtz Association has been cooperating with other science organizations in the context of the Alliance of Science Organizations in Germany in the [Priority Initiative "Digital Information"](#) since 2008. The focus is currently on the following topics:

  - Scientific publication system

  - Digital tools - software and services

  - Digital data collections

  - Promotion of IT infrastructures

  - Digital learning, teaching, and networking

  - Digitally qualified staff

  - Law for science in the digital age

  - Research practice
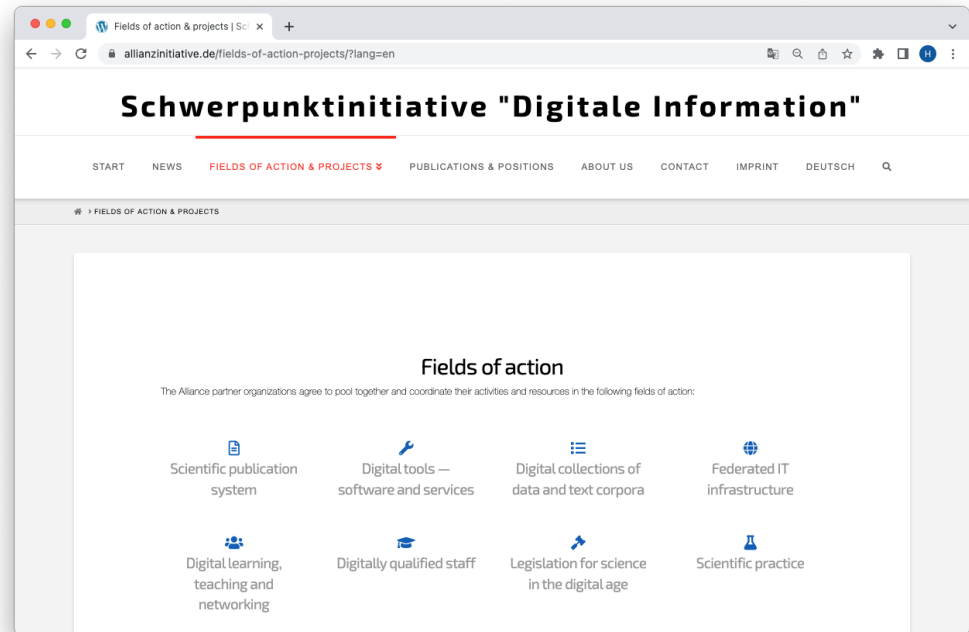
# Research Data Alliance (RDA)

- The Helmholtz Open Science Office has been co-organizing the RDA-DE conference since 2016. Thereby the work of the international Research Data Alliance (RDA) is promoted in Germany and the networking of actors in the field of research data management at the national level is supported.

- Helmholtz is an organisational member of the RDA.

- In 2018, the 11th RDA Plenary Meeting in Berlin with over 660 participants from 41 countries was co-organized by the Helmholtz Open Science Office.

# Network G6

- The six European research organizations CNR (Italy), CNRS (France), CSIC (Spain), the Helmholtz Association, the Max Planck Society and the Leibniz Association draw up joint statements on current scientific and research policy issues under the name "G6".

- Within this framework, the Open Science Task Force of the G6 has developed a statement on the common understanding of open science.

# Projects of the
# Helmholtz Open Science Office

# Projects of the Helmholtz Open Science Office

The Helmholtz Open Science Office participates in relevant third-party funded projects.

- Currently these are:
  - BMBF project: open-access.network
  - DFG project: ORCID DE
  - DFG project: re3data COREF
- Starting in 2023:
  - DFG project: PID Network Deutschland
  - DFG project: Transform2Open
  - Cooperation with Helmholtz Metadata Collaboration (HMC)

Completed projects are

Alliance Permanent Access to the Records of Science in Europe Network (APARSEN), DeepGreen, Ecosystem Data Management (EcoDM), Opportunities for Data Exchange (ODE) and Options4OA.

# BMBF funded project
## open-access.network

- Title: open-access.network
- Projekt partners: Kommunikations-, Informations-, Medienzentrum (KIM) an der Universität Konstanz
  Open-Access-Büro Berlin an der Freien Universität Berlin
  Technische Informationsbibliothek (TIB) Hannover
  Universitätsbibliothek Bielefeld
  Niedersächsische Staats- und Universitätsbibliothek Göttingen
- Approval period: 01/2019 to 11/2022
- Project websites: https://open-access.network
  https://os.helmholtz.de/en/newsroom/projects/open-accessnetwork
- Contact persons: Christoph Bruch, Paul Schultze-Motel

# BMBF funded project
## open-access.network

- Together with another project partner, the Helmholtz Open Science Office is responsible for the three work packages "Editing Internet Platform", "Helpdesk" and "Thematic Workshops".

- Editing Internet Platform: relaunch of the redesigned website https://open-access.network in September 2021 at the Open Access Days

- Helpdesk: ongoing advisory service on OA topics via e-mail and telephone

  - Exchange of experiences with other advisory services in November 2021 is continuing in

  - Focus Group since January 2022

- Thematic workshops: five workshops Budget development in the context of OA transformation (in German) in April and May 2022; a total of 24 workshops are planned in this work package.

# DFG funded project
# ORCID DE

- Title: ORCID DE 2 – Consolidation of the ORCID Information Infrastructure in Germany
- Projekt partners: DataCite

  Deutsche Nationalbibliothek

  Universität Bielefeld
  Technische Informationsbibliothek (TIB) Hannover
- Approval period: 01/2020 to 11/2022
- Project websites: https://www.orcid-de.org

  https://os.helmholtz.de/en/newsroom/projects/orcid-de
- Contact persons: Antonia C. Schrader, Heinz Pampel

# DFG funded project
## ORCID DE

- Over 200,000 registered ORCID iDs in Germany

- 84 members in the ORCID Germany consortium

- Since Feb. 2022, 160,000 ORCID iDs are in the Integrated Authority File (GND)

- 330,000 ORCID links in BASE

- Milestones:

  - Development of the dialogue platform orcid-de.org

  - Organization of workshops and online seminars

  - Launch of the ORCID DE Monitor

  - Publication of the survey on OrgIDs (soon available in English)

  - Further development of the connection between ORCID-GND linking



Number of ORCID iDs in Germany

As of October 2022

# DFG funded project
# re3data COREF
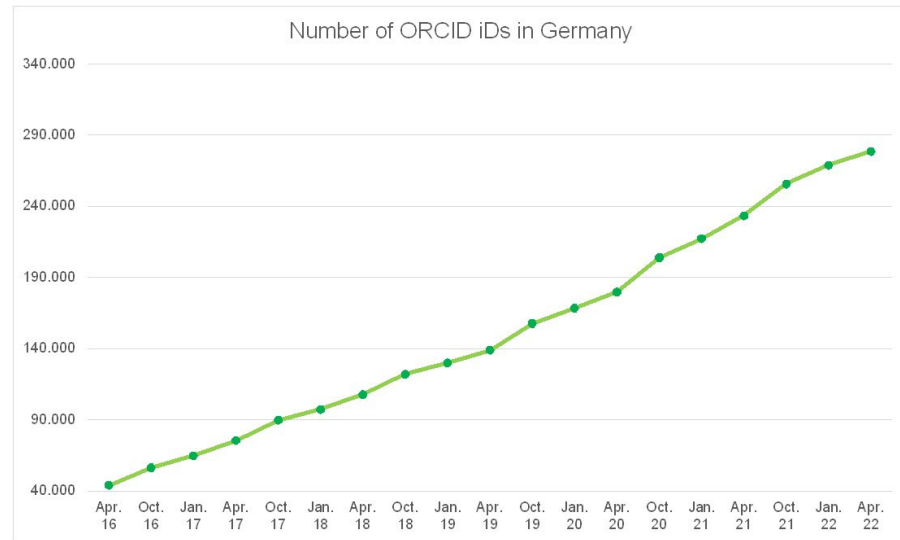
- Title:                 re3data COREF
                         (Community-driven Open Reference for Research Data Repositories)
- Project partners:      DataCite

                         Humboldt-Universität zu Berlin

                         Karlsruher Institut für Technologie (KIT)
- Approval period:       01/2020 to 01/2023
- Project websites:      https://www.re3data.org

                         https://os.helmholtz.de/en/newsroom/projects/re3data-coref
- Contact persons:       Nina Weisweiler, Lea Maria Ferguson

# DFG funded project
# re3data COREF

- re3data is an internationally recognized registry for research data repositories.

- The Helmholtz Open Science Office has been actively involved in the operation of re3data since its launch.

- The main goal of the project is the further professionalization of re3data and the provision of reliable and customizable descriptions of research data repositories.

- re3data lists almost 3000 infrastructures as of October 2022.

  - Of these, around 100 are with Helmholtz participation, see here.

- In 2022, re3data celebrates its 10th anniversary!



Number of research data repositories indexed in re3data per year

As of October 2022
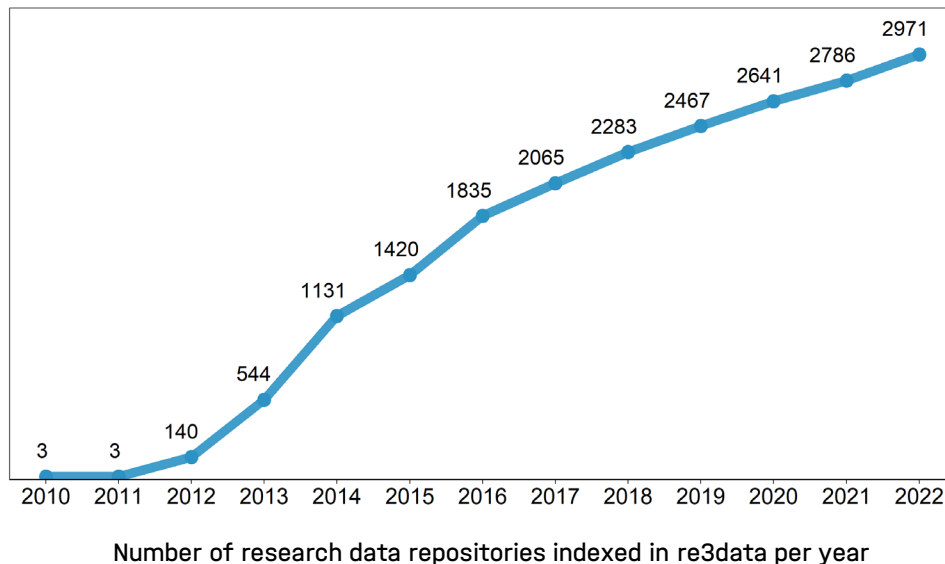
# Current Topics

## Current Topics
# Helmholtz Open Science Fora

- As part of the Helmholtz Open Science Fora, the Helmholtz Open Science Office communicates important developments in the field of open science to the Association and the Centers.

- **Selection**
  - EOSC
  - Helmholtz in the National Research Data Infrastructure (NFDI)
  - Indicators for Open Science (German only)
  - Open Science and Transfer
  - Publication Cost Management
  - Research Data Management
  - Research Software

## Current Topics
# Briefing Papers and Factsheets

- With the Helmholtz Open Science Briefings and Factsheets, the Helmholtz Open Science Office communicates important developments in the field of open science to the Association and the Centers.

- Selection:

  - Checklist Open Science for potential Joint Research Projects as part of the Helmholtz Association's campaign ''The Coronavirus Pandemic: Insight, Coping, and Prevention''
    https://doi.org/10.2312/os.helmholtz.011

  - Factsheet No. 1: Open Access Publishing for Early Career Researchers at Helmholtz
    https://doi.org/10.2312/os.helmholtz.013

  - Factsheet No. 2: Practical Steps Towards Open and Reproducible Research
    https://doi.org/10.48440/os.helmholtz.025

  - Good (Digital) Research Practice and Open Science. Support and Best Practices for Implementing the DFG Code of Conduct „Guidelines for Safeguarding Good Research Practice''
    https://doi.org/10.48440/os.helmholtz.052

  - Open Science & Transfer
    https://doi.org/10.48440/os.helmholtz.051 (in German)

# Dialogue

# Website and Contact
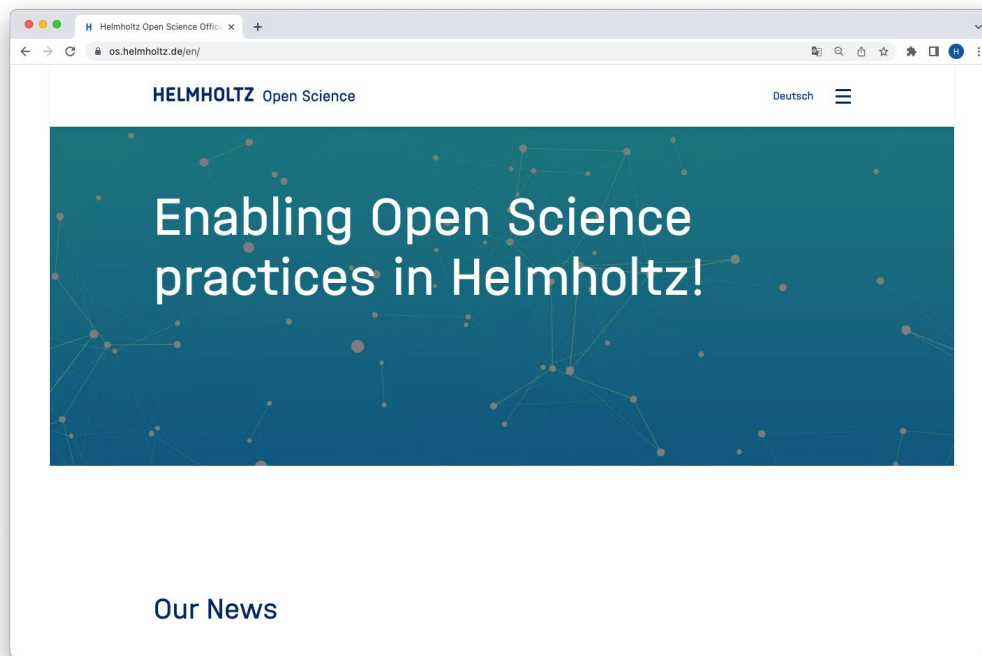


Website https://os.helmholtz.de/en and Contact: open-science@helmholtz.de

# Mailing List



[Link](#)

# Zotero



[Link](#)

# Newsletter



Link

# Twitter



[Link](#)

# LinkedIn



[Link](#)
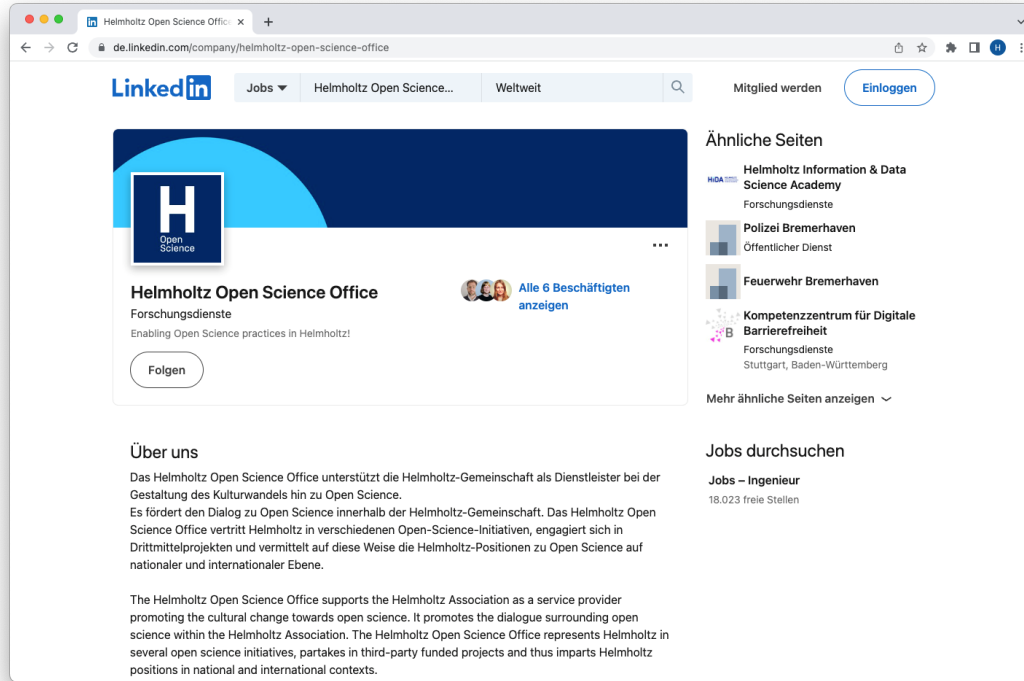
# Team

- Roland Bertelmann (Head)

- Christoph Bruch

- Lea Maria Ferguson

- Heinz Pampel (Assistant Head)

- Antonia C. Schrader

- Paul Schultze-Motel

- Nina Leonie Weisweiler

**HELMHOLTZ**
**Open Science**

[open-science@helmholtz.de](mailto:open-science@helmholtz.de)

# HELMHOLTZ
## Open Science

# Keep in touch

- Email – open-science@helmholtz.de

- Twitter – @helmholtz_os

- Website – https://os.helmholtz.de

- Mailing list for members of Helmholtz – Helmholtz Open Science Professionals

- Open Science Newsletter

# HELMHOLTZ
## Open Science