

# „Data Policies“ - Zuckerbrot oder Peitsche?

Session 1: Policies und Anreize: Was sind sinnvolle und notwendige Richtlinien im Umgang mit Forschungsdaten?

Experten-Workshop „Forschungsdaten-Infrastruktur“ | Potsdam, 17.04.2012

Heinz Pampel | Helmholtz-Gemeinschaft



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# UNSERE MISSION

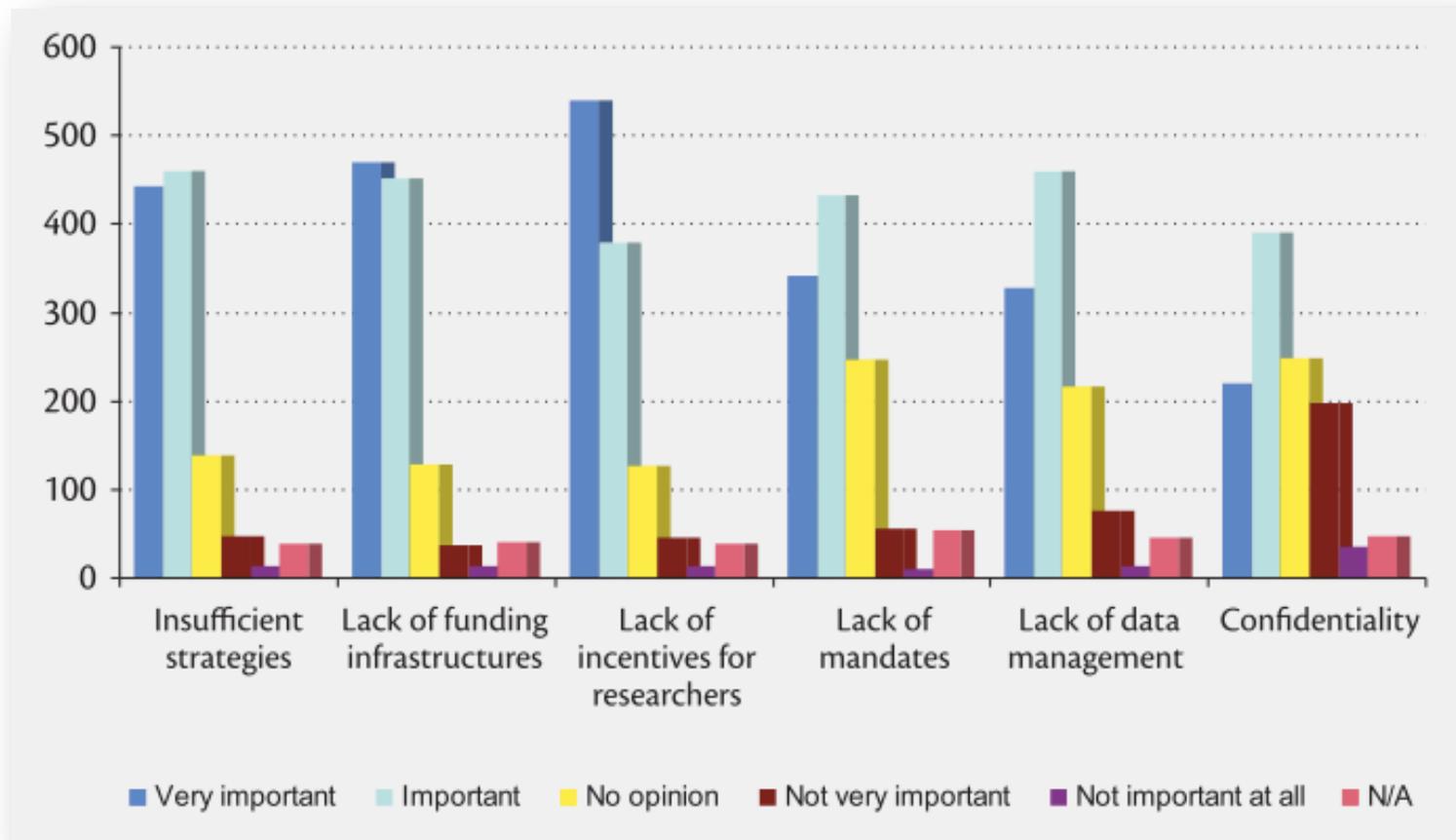
- Forschung zur **Lösung wichtiger Zukunftsfragen** von Gesellschaft, Wissenschaft und Wirtschaft – strategisch und langfristig orientiert
- Bau und Betrieb großer **Forschungsinfrastrukturen** („think big, act big“)
- Erkenntnisse zum **Nutzen** von Gesellschaft und Wirtschaft umsetzen

# EUROPEAN COMMISSION (2012)

- „As for the question of access to research data, the vast majority of respondents (87 %) disagreed or disagreed strongly with the statement that there is **no** access problem for research data in Europe.”
- „The barriers to access research data considered very important or important by respondents were:
  - lack of funding to develop and maintain the necessary infrastructures (80 %);
  - the insufficient credit given to researchers for making research data available (80 %);
  - and insufficient national/regional strategies/policies (79 %).”
- „There was strong support (90 % of responses) for research data that is publicly available and results from public funding to be, as a matter of principle, available for reuse and free of charge on the Internet.”
- „Lower support (72 % of responses) was given for data resulting from partly publicly and partly privately funded research.”

# EUROPEAN COMMISSION (2012)

- „How would you rate the importance of the following potential barriers to enhancing access to research data?



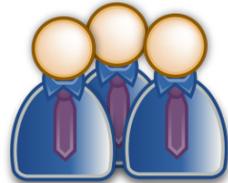
# KUIPERS & VAN DER HOEVEN (2009)

- „Researchers consider the **possibility of re-analysis of existing data** as the most important driver for the preservation of research data; 91% of the respondents thought this to be either important or very important.“
- „Researchers regard the **lack of sustainable hardware, software or support of computer environment may make the information inaccessible** as the most important threat to digital preservation. 80% believe this to be either important or very important.“
- „58% of the research respondents believe that an **international infrastructure for data preservation and access** should be to help guard against some of the above mentioned threats.“
- „25% of the researcher make their data openly available for everyone.“
- „Major barriers for sharing research data are **the fear of researchers regarding legal issues and the misuse of their data.**“

# ANFORDERUNGEN



Förder-  
organisationen



Politik



Repositorien



Forschungs-  
infrastrukturen



Institutionen



Wissenschaftler



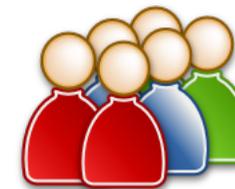
Zeitschriften



Communities



Projekte



Gesellschaft

# BEISPIELE FÜR POLICIES

- Interdisziplinäre Policies
  - DFG: Vorschläge zur Sicherung guter wissenschaftlicher Praxis (1997)
  - Allianz: Berliner Erklärung über offenen Zugang zu wissenschaftlichem Wissen (2003)
  - OECD: Principles and Guidelines for Access to Research Data from Public Funding (2007)
  - Allianz: Grundsätze zum Umgang mit Forschungsdaten (2010)
- Disziplinäre Policies
  - Bermuda Principles (1996)
  - IPY 2007-2008 (2007)
- Institutionelle Policies
  - U Siegen: Verfahrensrichtlinien zur Sicherung einer guten wissenschaftlichen Praxis (2001)
  - STFC: Scientific Data Policy (2011)
- Förderer Policies
  - NIH: Data Sharing Policy (2003)
  - DFG: Leitfaden für Antragsteller (2010)
- Journal Policies
  - Nature: Editorial Policy (2009)
  - PLoS ONE: Editorial Policy (o. J.)

# VAN DER GRAF & WAAIJERS (2011)

Funding organisations requirements	Data plan	Access/sharing	Long-term curation	Monitoring	Guidance	Costs
UK						
AHRC	+	+	+/-	-	+	-
BBSRC	+	+	+	+	+	+
CRUK	+	+	+	+	-	-
EPSRC	+	+	+	+	-	+
ESRC	+	+	+	+	+	+
MRC	+	+	+	-	+/-	-
NERC	+	+	+	+	+	-
STFC	-	+	-	-	+/-	-
Wellcome Trust	+	+	+	+	+	+
Germany						
Deutsche Forschungs Gemeinschaft	(+)	(+)	(+)			(+)
Denmark						
Council for Independent Research	-	-	-	-	-	-
Council for Strategic Research	-	-	-	-	-	-
The Netherlands						
NWO: arts and humanities social sciences	+	+	+	+	+	+
NWO: other scientific disciplines	-	-	-	-	-	-
STW	-	-	-	-	-	-
Sender Novem	-	-	-	-	-	-

# DATA POLICIES: ANMERKUNGEN

- Verschiedene Akteure mit gemeinsamen Interessen
  - Förderung von Nachprüfbarkeit und Nachnutzung
- Spannungsfeld zwischen Empfehlung und Verpflichtung
- Unterstützende Infrastrukturen, Dienstleister und „best practice“ werden benötigt
- Anpassungen im Laufe der Zeit nötig
- Ohne Anreize wenig Chancen auf Umsetzung
- Zentrale Akteure: Förderorganisationen u. Herausgebergremien
- Kulturelle Perspektive muss berücksichtigt werden
  - „sharing & openness“ als Kulturtechnik

# ANREIZE (IN AUSWAHL)

- Verankerung im Reputationssystem (Credit)
- Schaffung einer Publikationskultur (Data Journals)
- Angebot an wissenschaftsnahen Tools (VREs)
- Etablierung von dienstleistungsorientierten Infrastrukturen (Data Repositories)

The collage features five overlapping screenshots of scientific data and publication platforms:

- Earth System Science Data:** A website header with navigation links like Home, Online Library ESSD, and Alerts & RSS Feeds. It displays an article titled "Compilation of ozonsonde profiles to 1992" by G. König-Langlo and H. Gernandt.
- Journal of Open Archaeology Data:** A website header for "UPmetajournals" with a navigation menu. It shows an article titled "Archaeological Survey and Monitoring Data from the Flower of Ugie, Wrecked 1852 in the Eastern Solent, England" by Julian Whitewright.
- LabArchives:** A dashboard interface with a "Notebook Navigator" sidebar showing folders like "Inbox (1)", "pampel", "Search Results", "Protocols", "SOPs", "MSDS", "Templates", "Experimental Data", "Ideas", "Lab Meeting Notes", "Paper Outlines", "Manuscripts", "Published data", "Grants", "Presentation", and "References".
- Gene Expression Omnibus (GEO):** A website header from NCBI with a "GEO navigation" menu including "DataSets", "Gene profiles", "GEO accession", and "GEO BLAST".
- PANGAEA:** A website header with a globe icon and navigation links like "Water", "Sediment", "Ice", "Atmosphere". It includes a search bar and a "Properties 'pampel'" table.

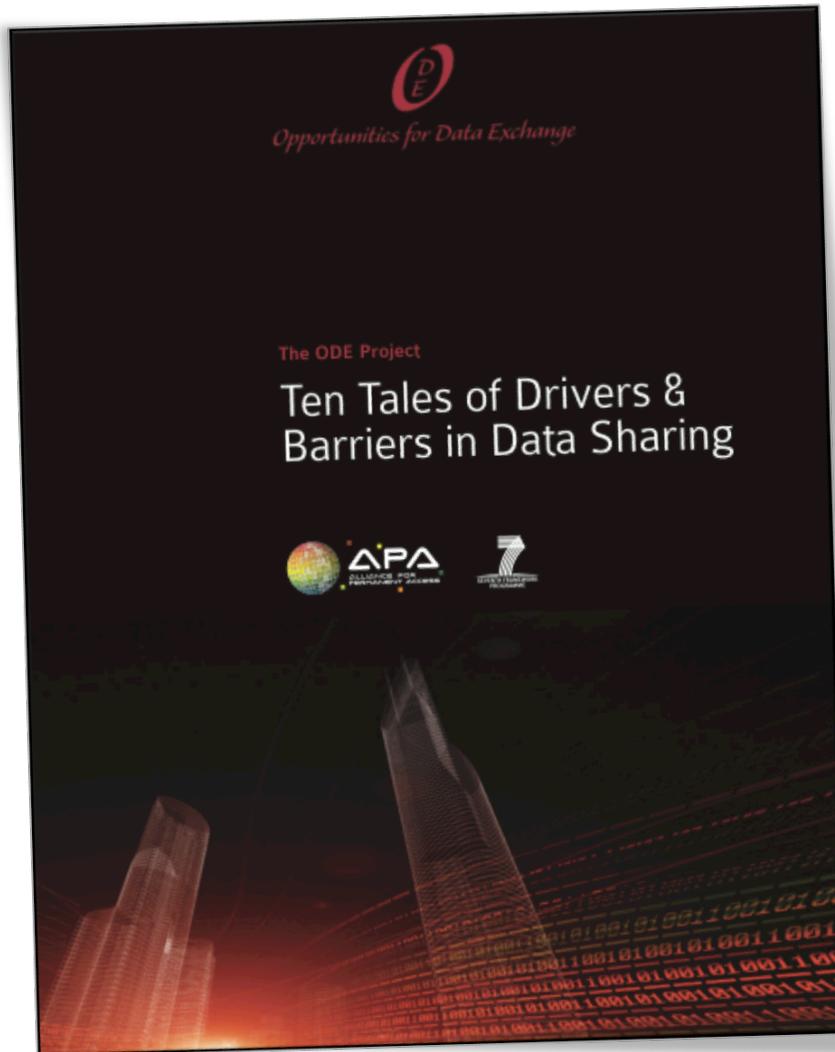
Property	Total
Disk Space Consumed	106 KB
Entries	1
Revisions	1
Folders	14
Pages	1
Pages viewable by anyone	0

Below the table, there is a section for "Entries Created or Last Modified by specific users":

User	Num Entries	Most Recent
Heinz Pampel	1	view

# OPPORTUNITIES FOR DATA EXCHANGE

- <http://ode-project.eu>



Open Access

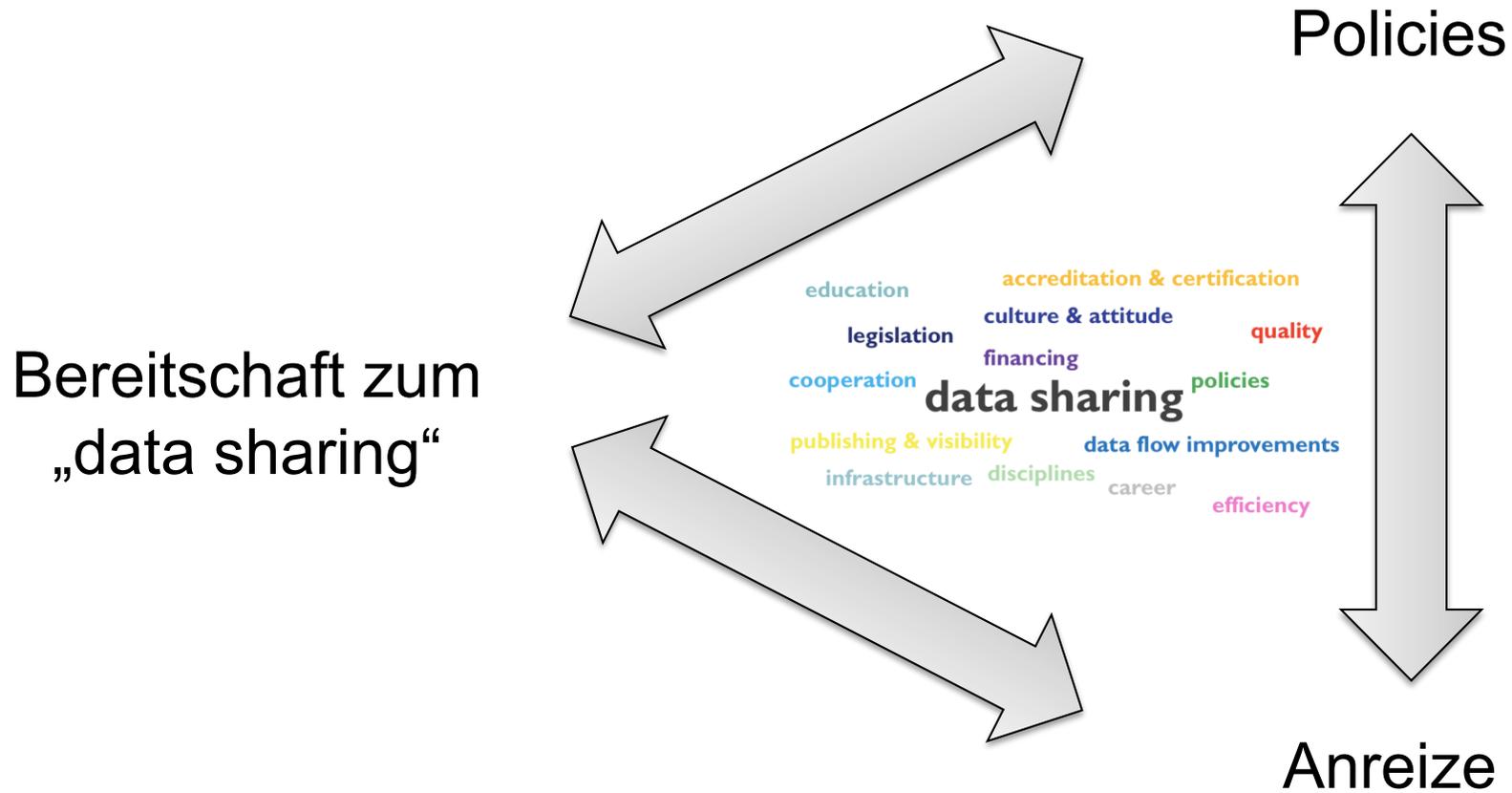
# OPPORTUNITIES FOR DATA EXCHANGE

- Themenfelder, die das „data sharing“ beeinflussen:



Schäfer et al. 2011

# SPANNUNGSFELD



# POLICIES, ANREIZE UND...

- Verankerung in Workflows („Data Curation Continuum“)
- Entwicklung von Standards
- Berücksichtigung in der Ausbildung von Fachwissenschaftlern
- Schaffung von Ansprechpartnern und Dienstleistern
- Aufbau und Vernetzung von Infrastrukturen
- Kooperation und Kollaboration
- Entwicklung neuer bibliometrischer Metriken ([altmetrics.org](http://altmetrics.org))
- Förderung von „Leuchttürmen“
- Übergreifende internationale Initiativen
- Forschung und Entwicklung

# FAZIT

- Policies und Anreize sind zwei von vielen Faktoren
- Data Policies benötigen unterstützende Maßnahmen
- Spannungsfeld zwischen Policies und Anreizen beachten
- Ohne Anreize wenig Chancen auf Umsetzung
- Rahmenbedingungen müssen definiert werden
  - W-Fragen
- Rahmenbedingungen müssen geschaffen werden
- Kooperation und internationale Initiativen fördern

# “SHARING RESEARCH DATA TO IMPROVE PUBLIC HEALTH”

## Sharing research data to improve public health: full joint statement by funders of health research

### Introduction

Recent advances in information technology have revolutionised science - providing new opportunities for researchers to share data and build on one another's work. Informatics and the ability to mine large datasets and combine them with information from many other sources present a huge potential to advance developments in public health. The importance of data sharing in advancing health is becoming increasingly widely recognised, and has been strongly endorsed by the H8 group of global health organisations.

In some research fields - such as genetics and physics - data sharing is well-established and has accelerated the progress of research and its application for the public good. In public health research, however, while research collaborations are growing more common, the sharing of data is not yet the norm, even within the scientific community.

Much of the data collection that could improve public health research is expensive and time-consuming. As public and charitable funders of this research, we believe that making research data sets available to investigators beyond the original research team in a timely and responsible manner, subject to appropriate safeguards, will generate three key benefits:

- faster progress in improving health
- better value for money
- higher quality science.

Each funding institution will work within its own legal and operational framework, and we are committed to working towards these goals together. We intend to establish joint working groups where appropriate. We call on governments and other actors that generate routine health service statistics and other types of public health data to adopt a similar approach.

This Statement establishes guiding principles and desired goals. It recognises that flexibility and a variety of approaches will be needed in order to balance the rights of the individuals and communities that contribute data, the investigators that design research and collect and analyse data, and the wider scientific community that might productively use data for further research.

- Initiative siebzehn lebenswissenschaftlicher Förderorganisationen Walport & Brest (2011)

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# Danke für Ihre Aufmerksamkeit!

Heinz Pampel

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

<http://oa.helmholtz.de>



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