

Umbrella Data Policy for Multi-divisional Research Centers

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Key Points

- 1. Implementation of high level data policy requirements in the Helmholtz Centers
- 2. Challenges of designing one data policy for multi-division research organizations
- 3. Idea of umbrella data policy to address these challenges for DESY

1. Implementation of high level data policy requirements in the Helmholtz Centers



The Helmholtz Centers are implementing high level requirements

Helmholtz centers

- need to be inline with national research funder's guidelines (DFG German Research Foundation): Retention of research data should be guaranteed for 10 years.¹
- need to respond the top funders' and organizations' principles:
 - Science Europe strongly recommends research organizations to have a data policy for sustainability of research data management.²
 - European Open Science Cloud (EOSC), European Research Council (ERC), Horizon Europe, etc. underline importance of open science and FAIR (<u>Findable Accessible Interoperable Reusable</u>) principles.





^[2] Practical Guide to Sustainable Research Data (2021). https://doi.org/10.5281/zenodo.4769703



The Helmholtz Centers are implementing high level requirements

Helmholtz Open Science Policy: all centers should have a data policy in place

"All Helmholtz Centers will establish detailed procedures for managing research data in publicly available policies, and will regularly examine and if necessary adapt these procedures." ³



2. Challenges of designing one data policy for multi-division research organizations



Why is it challenging?

Formulating one data policy for an entire research center composed of various departments or divisions that focus on various research areas is often not feasible.

Divisions or departments may differ in terms of

- · data sizes,
- national and international collaborations & data transfer necessities,
- user groups, role and responsibility allocations,
- · sometimes funding sources,
- data protection requirements.

Example: DESY

DESY has four divisions in two different locations (Hamburg and Zeuthen):

- ACCELERATORS
- PHOTON SCIENCE
- PARTICLE PHYSICS
- ASTROPARTICLE PHYSICS



ACCELERATORS:

The most located division:

- classical onsite research
- the researchers are mostly local: guest users are rare
- → An umbrella policy might be sufficient

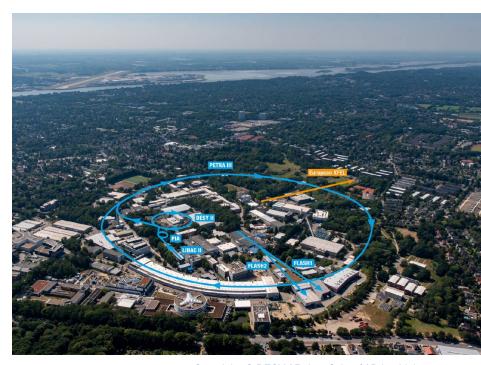


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PHOTON SCIENCE:

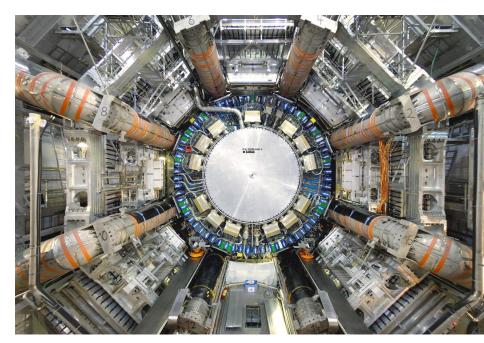
- There are many guest users: researchers are coming from outside and do experiments there.
 - → The responsibility about the data of these guests must be addressed.
- They already have a data policy in place.
- They defined a PI role:
 - → PI takes the full responsibility of the data in this data policy.
- Researchers can bring their own sample and/or equipment.
 - → This can bring extra responsibilities to the researchers: i.e data protection.



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PARTICLE PHYSICS:

- they are doing jointly experiments onsite even outside Germany (ie. CERN, KEK).
- these experiments are longer (even 20-30 years)
 - → Local rules are needed for data management. A common policy can cause a lot confusion here.
- The experiments are located usually only at one place but people are coming from different places
 - → Definition of these researcher group and the management of the data they produced may need special rules and regulations.



CERN - Atlas Detector

ASTROPARTICLE PHYSICS:

- they are doing experiments in all over the world. They are combining different instruments in different locations virtually.
- both the experiments and people can be located in different places.
- → Definition of these researcher group and the management of the data they collected from different locations may need special rules and regulation.

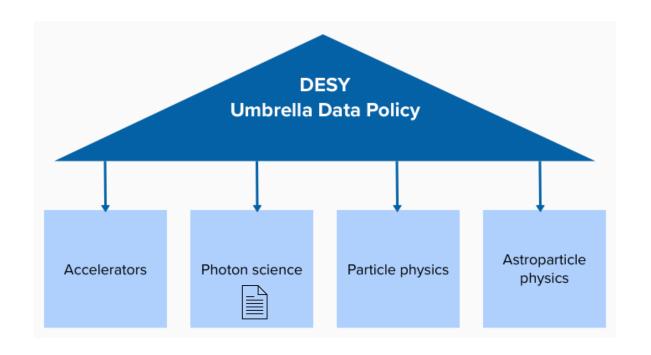


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3. Idea of umbrella data policy to address these challenges for DESY



Suggested Umbrella Policy



External example for an umbrella policy: TU Delft

The TU Delft Research Data Framework Policy⁴ serves as an overarching general policy framework for TU Delft as a whole.

It is expected that faculties should develop their own policies making use of this Framework to do so.



External example for an umbrella policy: TU Delft

TU Delft Research Data Framework Policy

Some rules are listed as university wise, like:

- University-wide roles and responsibilities
- Term definitions

Some rules are listed with two or more choices like roles and responsibilities of:

- Pls
- PhD Supervisors
- Researchers
- PhD Students

Faculty-specific roles and responsibilities

Role and responsibilities for different stakeholders within the faculties are defined in the Faculty Policies. Nevertheless, there are some areas where specific commitments must be made.

In each Faculty Policy, PRINCIPAL INVESTIGATORS are expected to:

Ensure that every research project starts with a data management plan, which needs to be regularly updated and adhered to by all project members



Ensure that all members of the group plan for good data management from the outset of any research project and adhere to good data management practice throughout the project's lifecycle.

DESY Umbrella Policy

- Umbrella policy will be binding for all divisions of DESY.
- The divisions can have additional specific individual rules under their own division policies in addition to the umbrella policy.
- We are writing the policy considering

- FAIRSFAIR
- FAIR-enabling Data Policy Checklist of FAIRsFAIR⁵
- ExPaNDS Guidance Note: Key Policy Elements within a Photon and Neutron Research
 Infrastructure Data Policy Framework⁶ E x P a N D S

^[6] ExPaNDS Guidance Note: Key Policy Elements within a Photon and Neutron Research Infrastructure Data Policy Framework (2022). Zenodo.

Thank you

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