HELMHOLTZ METADATA COLLABORATION (HMC)

1st Project Call 2020

Funded by the Initiative and Networking Fund (INF)

BACKGROUND

The Helmholtz Metadata Collaboration (HMC) develops and implements concepts and technologies to leverage high-quality metadata for research data across research fields and their communities. Its main goal is to make the vast amount of diverse research data produced by Helmholtz Centres findable, accessible, interoperable and reusable (FAIR). HMC liaises closely with the national research data infrastructure (NFDI) and its European counterpart EOSC.

HMC is a cornerstone in the exploitation of Helmholtz' data treasures. Enabling FAIR data across the association unlocks the potential of the diverse datasets and enables new and innovative science across all research areas. One essential component of HMC is the funding of projects that initiate and underpin the growing metadata network within the Helmholtz Association. These project calls initiate new developments, advance the HMC network, enable new cross-discipline collaborations, and increase the visibility of HMC activities.

OBJECTIVES

The objective of this first *Call for HMC Projects* is to initiate and facilitate activities that address practical challenges in the field of **metadata generation and data enrichment**. The call aims at funding promising collaborative projects with the potential to being integrated into the wider HMC framework at the end of the project's lifetime.

Hence, first practical results and promising prototypes are expected by the end of 2021, i.e. one year after the funding starts. The results shall underpin and stimulate the growing HMC network. As part of this, results shall be presented at the HMC implementation workshop, scheduled for the end of 2021. To ensure the project's link to HMC hubs, we encourage all proponents to contact HMC hubs upfront proposal submission (see below for contacts).

GOALS OF 1ST CALL

A HMC project addresses one or more of these three overarching goals:

- further metadata generation with interoperable metadata standards, vocabularies and/or ontologies

- adopt or develop tools for data enrichment, e.g. automated metadata generation for recording dataset descriptions and workflows
- adopt or develop tools to further metadata quality assessment and metadata curation

Projects need to show the potential impact on science, its data services, communities and should demonstrate the potential to being integrated into the wider HMC framework at the end of the project's lifetime. This includes links to respective infrastructures at participating Helmholtz Centres and includes impact on research data curation practices in the respective domains. In summary, projects should contribute to the overall development of the emerging HMC community and they should enable transfer of technologies, methods and best practices across programmes and research fields.

CRITERIA

Projects shall be aligned with the goals formulated above. Proposals that meet the following criteria will be evaluated based on the evaluation criteria (see below).

Thematic criteria:

1. The project must further one or more of the goals of this call
2. The project must demonstrably support the FAIR principles

Further criteria:

- Budget

The maximum funds requested cannot exceed 400.000 EUR per proposal. 50% of the requested sum will be provided by the Helmholtz Association centrally (Impulse and Networking Funds, INF), the other 50% will be provided by the funded Helmholtz Centres. The latter has to be confirmed by a signed letter from the board of directors when submitting the proposal.

Staff, travel expenses and cost for consumables are eligible for funding; investments are excluded.

Funding will be provided for Helmholtz Centres only. In clearly documented cases, funding can also be provided for highly qualified university partners. The provided funds will NOT be eligible for overhead costs.

- Duration of Projects

Projects must start as soon as possible (within 3 months) after positive notification by the Head Office. Projects may run for no longer than two years. First deliverables/prototypes need to be presented after 12 months upon the start of the project.

- Proponents and Eligibility

Any eligible proposal must comprise partners from at least two different Helmholtz Centres (or two AST programmes respectively).

Proponents must specify a coordinating centre and person. Coordinators can only lead three projects, but can participate in multiple other project proposals.

Proposals submitted for this call must not have been submitted to another funding line of the Helmholtz Association or any other funding line.

HMC staff members and members of the HMC steering board are not eligible to submit proposals.

- Exclusion Criteria

Proposals will be rejected by the following arguments:

1. Extensions of existing projects cannot be funded.
2. Deadline for submission was not met or the submission is incomplete.
3. Guidelines for proposal content, format, and/or length were not followed exactly.

RIGHTS AND OBLIGATIONS

1. During the funding period, project partners commit to participate in HMC's cross-field activities, such as progress workshops, method exchange workshops or hackathons, and to present their results.

2. Funded projects commit to share short updates about ongoing projects (e.g. on the HMC website) regularly.

3. Annually and at the end of their respective funding period, all projects will submit a short written (final) report demonstrating progress and results (referencing deliverables) to HMC. These reports form part of the general reporting of the HMC platform.

PROPOSALS

- Submission

To submit a proposal please use our submission system at
https://proposals.helmholtz-metadaten.de/

- Proposal Structure

Section 1:

- Cover Sheet (fill in attached form)
- Important elements on the cover page include:
    1. Title and acronym
    2. Up to 10 keywords

3. Names and contact information of principal investigator(s)
4. Names of participating centres and external partners
5. Budget, incl. requested funds and matching funds
6. Abstracts (German and English)

Section 2: (maximum 6 pages in total, see the template provided for details):

- State of the research field
- Objectives
- Approach
- Expected Results
- Expected impact and link to HMC
    ◦ Incl. sustainability beyond project lifetime
- Implementation and management

Section 3:

- References (max 2 pages)
- Work plan, draft time line, and milestones
- Brief description of proposed staffing incl. timeline
- Detailed budget plan (personnel, consumables)
- A list of independent experts as potential reviewers can be provided. The proposed experts need to be unbiased.
- Confirmation letter by the leading Helmholtz Centre concerning the co-funding provided.
- Brief CVs of the principal investigators and potential staff members.

- Format

A proposal MUST be submitted **as a single PDF file** and formatted as follows:
- A maximum of 6 pages for the proposal section 2 as outlined before. Page format is A4. The six-page limit includes figures but excludes references, staffing, work plan etc.
- Font: Arial, 12pt
- Line spacing: 1.5 , Border Top/Left/Right/Bottom 2.5/2.5/2.5/2.0cm
- Language: English

EVALUATION PROCESS AND SELECTION

Proposals are subject to the following evaluation procedure. Proposals are checked with regard to formal requirements. Proposals are evaluated by a panel of independent experts (no presentation), on the basis of the evaluation criteria listed below. For all proposals at least two external reviews will be solicited. The panel performs a pre-assessment of all proposals (all proposals subject to the pre-assessment will also be assessed in the panel meeting). Based on this evaluation, the panel will recommend a list of projects for funding. The steering board is notified and forwards the list to the president. The president will review the list of ranked proposals and decide which projects shall be funded.

Staff at the Helmholtz Association's Head Office and Helmholtz Metadata Collaboration's administrative office will jointly manage the evaluation procedure and the handling of proposals. The Head Office will manage the evaluation meeting. The HMC collaboration board members and HMC steering board members will have no access to submitted proposals or assessments at any stage during the evaluation procedure. They will not contact the panel of experts.

EVALUATION CRITERIA

Innovation potential	• Clarity of the objective and extent to which the proposed project addresses one or more of the call's goals
	• Extent to which proposal is beyond the current state of the art in the respective community
	• Potential to open new and sustainable pathways in handling data and with that enabling new science
Impact on tools/services in domain and HMC	• Extent to which the output(s) of the project would contribute to advance the development/ implementation/use of tools/services in the domain and HMC
	• Extent to which the outputs are reusable and adaptable by other communities/centres
	• Extent to which the expected project outcome addresses a specific demand by a community
Impact on community building in domain and HMC	• The potential to contribute to establishing and strengthening a long-term cooperation between the partners

	• Potential to cross-fertilize other developments and to enable transfer to multiple communities, research fields, HMC...
	• Potential to impact, advance and harmonize RDM practices and community in the domain/hub/HMC
Quality and efficiency of the implementation	• Quality and effectiveness of the work plan
	• Complementarity of the partners and balance of expertise to achieve the goal
	• Readiness of proponents to commence the project within the timeline indicated in the call

INQUIRIES

For **formal questions** concerning this call, please write to ***hmc-proposals@geomar.de*** to reach the HMC Office and the Helmholtz Association's Head Office.

For **topic-related questions** please contact your relevant HMC Hub at:

AST	Dr.-Ing. Christian Langenbach, DLR, phone: +49 2203 6012704, email: christian.langenbach@dlr.de
Earth and Environment	Dr. Emanuel Söding, GEOMAR, phone: +49 431 600 4256, email: esoeding@geomar.de
Energy	Dr. Wolfgang Suess, KIT, phone: +49 721 608 25722; email: wolfgang.suess@kit.edu
Health	Prof. Dr. Frank Ückert, DKFZ, phone: +49 6221 425101, email: f.ueckert@dkfz.de
Matter	Heike Görzig, HZB, phone: +49 30 806242683, email: heike.goerzig@helmholtz-berlin.de
Information	Dr. Michael Denker, FZJ, phone: +49 2461 61-947, email: m.denker@fz-juelich.de

TIMELINE

29.07.2020	Publication of the Proposal Call
14.10.2020	Deadline for the submission of proposals
November/December 2020	Evaluation committee meets to discuss ranking of proposals
December	Funding decision made by the Helmholtz president

ANNEXES

- Template for proposal submission
- Conflict of interest for suggested reviewers
- Data protection information

GLOSSARY

AST	Research field Aeronautics, Space and Transport conducted by DLR.
EOSC	The European Open Science Cloud (EOSC) is a trusted digital platform for the scientific community.
FAIR	The FAIR Data Principles are a set of guiding principles in order to make data findable, accessible, interoperable and reusable (Wilkinson et al., 2016).
HMC	Helmholtz Metadata Collaboration
INF (IVF)	Initiative and Networking Fund (Impuls und Vernetzungsfond), a Helmholtz funding scheme.
NFDI	National Research Data Infrastructure (Nationale Forschungsdateninfrastruktur), a national funding scheme.
RDM	Research Data Management