

A road to data liberation in Helmholtz

Data are constantly being produced as part of research activities. A powerful and future-oriented research data management can improve the efficiency of this research, the long-term availability of the produced data and the reproducibility of the results. Metadata are an essential building block for this, as outlined by the FAIR Principles.

In order to address this topic, the Helmholtz Association of German Research Centres has launched the Helmholtz Metadata Collaboration (HMC) platform. Our mission is to provide comprehensive services, consulting, information, and tools for an efficient handling of metadata and, consequently, to improve the FAIRness of Helmholtz research data.

Of high importance for success of HMC is the acceptance among the communities of the Helmholtz research fields (Energy; Earth & Environment; Health; Matter; Information; Aeronautics, Space and Transport). To accomplish this, HMC relies on a distributed structure of six discipline specific Metadata Hubs tasked with engaging with these respective communities. The Hubs activate competences, nurture ideas, and collect demands of their domains to develop solutions to current metadata challenges. A central service unit, tasked with the technical developments, will help implement recommended solutions, services or tools.

Developments within our platform will be reusing existing infrastructures and concepts, where appropriate, e.g. FAIR Digital Objects concept, existing standards, ontologies or vocabularies. First technical services are available and will be distributed to science communities. Generically usable processes, technical solutions, training, education and data consulting services are being set-up and made available. We are in close contact with relevant open science key players within Helmholtz and are part of a larger Helmholtz funding scheme, tackling the challenges of digitalisation of research. Furthermore, our activities are embedded in national and international context (e.g. RDA, EOSC, NFDI), along the scientific domains as well as information and data science to ensure compatibility to the larger science community.

The ultimate goal is not only to set up an internal Helmholtz platform, but to establish a public, open, long-term available community service handling metadata.