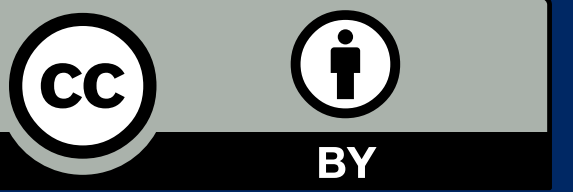


The Helmholtz Metadata Collaboration: FAIR data for Helmholtz

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The Helmholtz Association of German Research Centres set up the Helmholtz Metadata Collaboration (HMC) platform at the end of 2019 to address the topic of metadata within its organization and continuously increase the connectivity of its distributed research data ecosystem on all levels. To this end, HMC intends to provide comprehensive services, consulting, information, and tools for efficient metadata handling through jointly developed, shared, and consolidated resources. The vision is to create a sustainable, distributed FAIR Helmholtz data space with semantically enriched data assets.

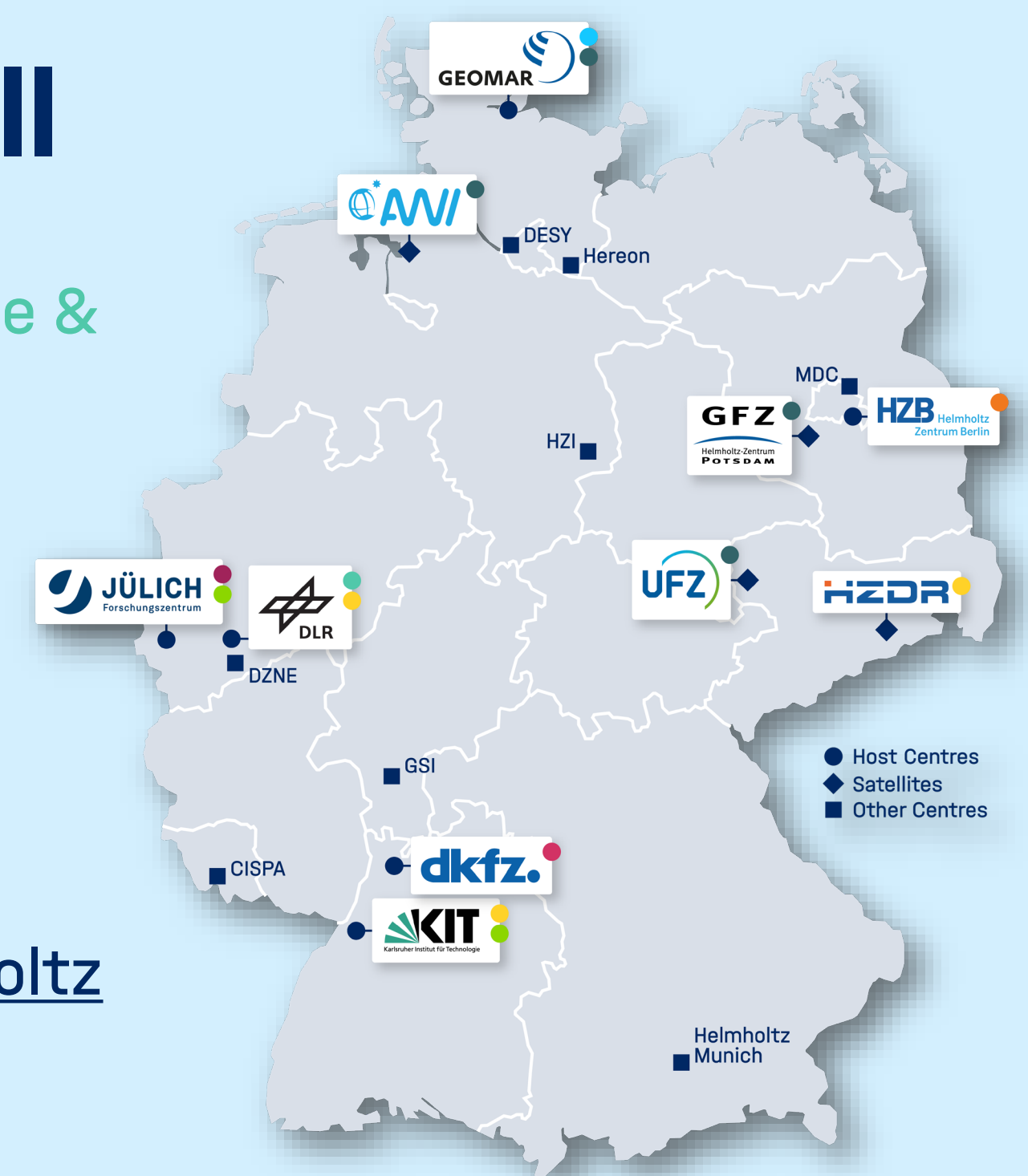
Over the course of the first four years that HMC worked on its vision, three key strategic areas (KSA) emerged: KSA 1 focused on understanding the FAIR status quo within Helmholtz and informing our way forward, KSA 2 on providing technical solutions on a individual and on a infrastructural level and KSA 3 on enabling our community to improve their FAIR data practices.

HMC in a nutshell

8 HMC Units (Aeronautics, Space & Transport, Earth & Environment, Energy, Health, Information, Matter, FAIR Data Commons, HMC Office)
at **6 Helmholtz host centres**



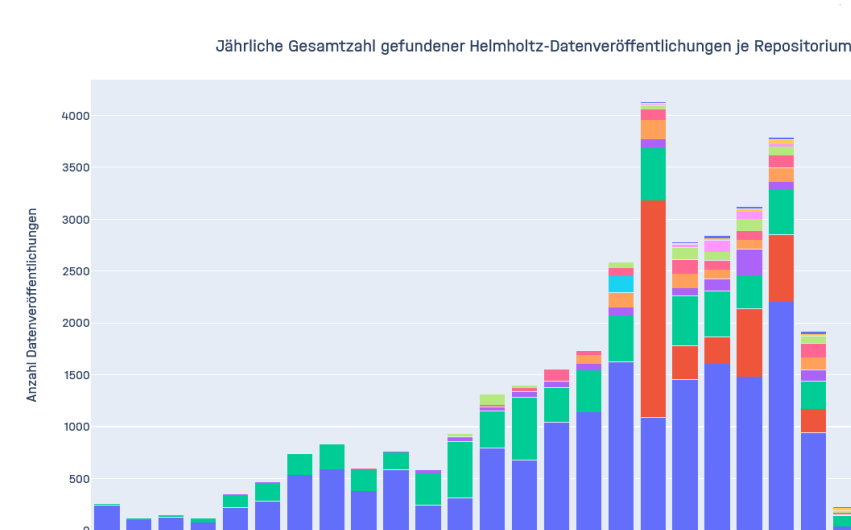
Find out more here:
<http://www.helmholtz-metadaten.de>



Key strategic area 1: Assessing and monitoring the state of FAIR data across Helmholtz



- (1) Community surveys address different stakeholders (2021: researchers, 2024: data professionals)
- (2) Automated FAIR assessment, results are available via the HMC FAIR Data Dashboard



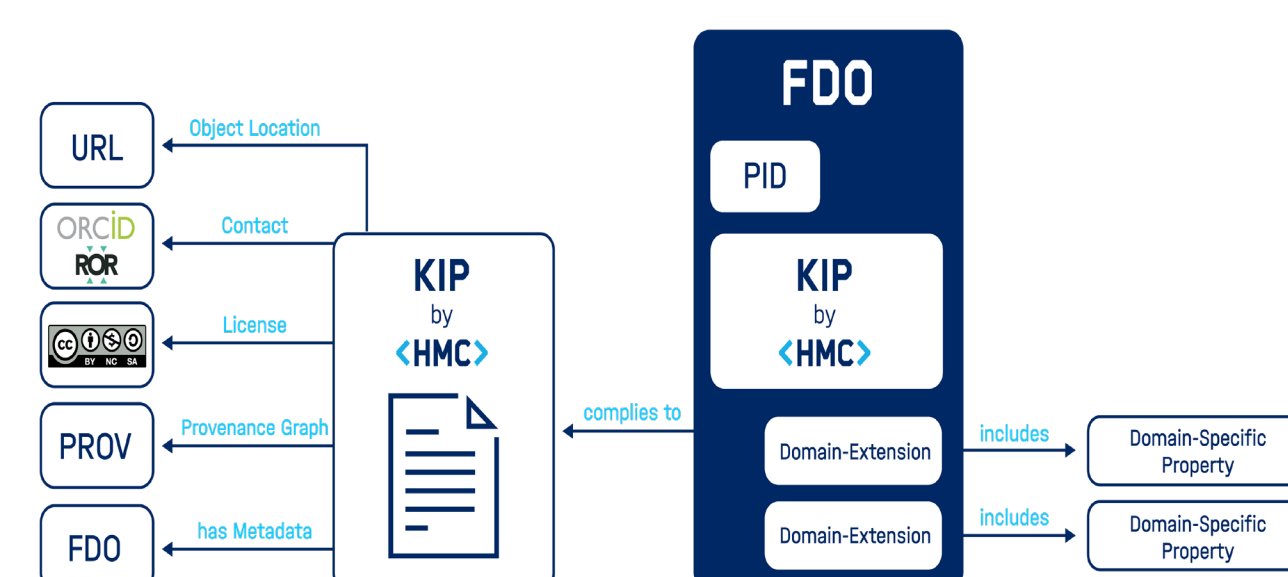
- (3) Information on e.g. repositories, metadata standards, terminologies, ontologies are accessible via our Information Portal



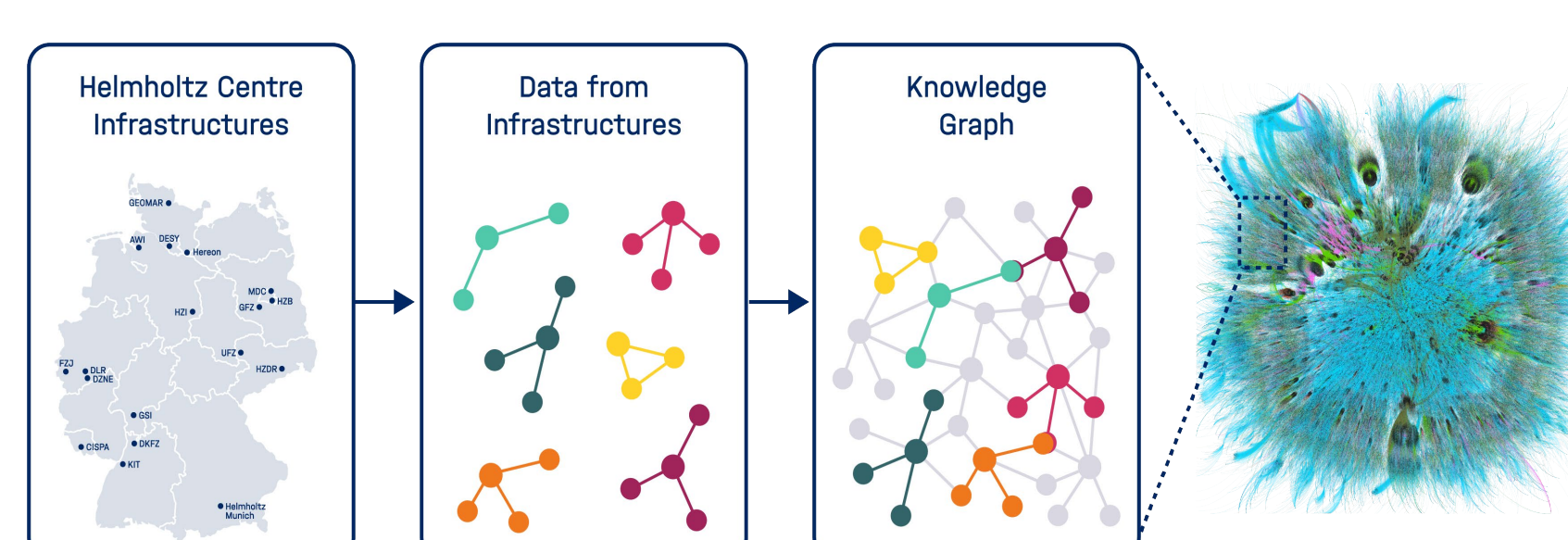
Key strategic areas 2: Facilitating connectivity of Helmholtz research data



- (1) Metadata tools support specific tasks, like a metadata catalogue, data annotation validating metadata, and more.
- (2) FAIR Digital Objects (FDO) increase the liability and interoperability of data sets



- (3) Support for semantic interoperability through the development of domain-level semantics
- (4) Semantically enriched data can be connected in a Helmholtz Knowledge Graph



Key strategic area 3: Transforming (meta)data recommendations into implementations

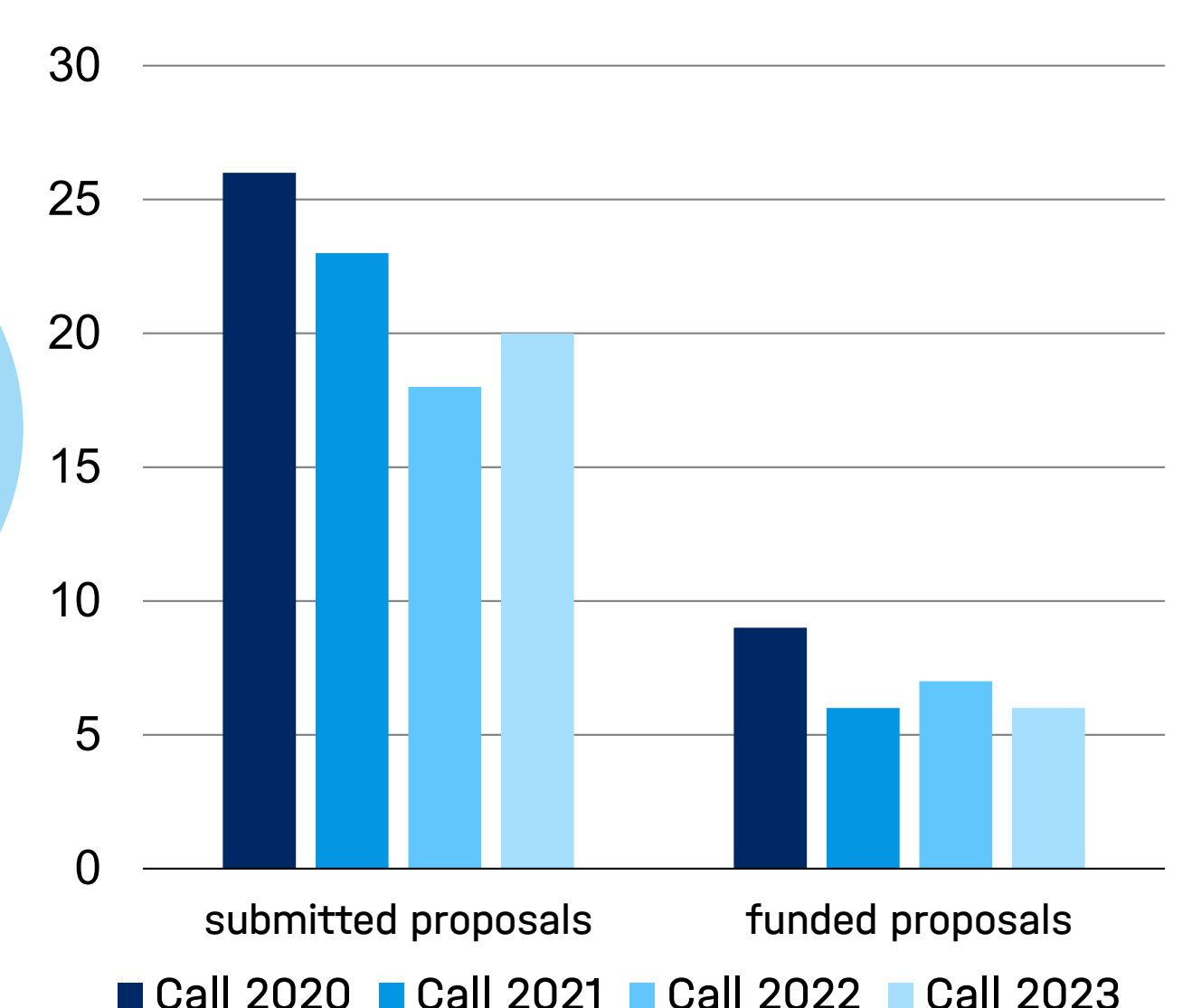


- (1) Easy to digest documents for better metadata handling
- (2) Seminars, workshops, and trainings provide practical knowledge



- (3) Moderated community processes, like EM Glossary
- (4) HMC Projects implement specific community solution (annual call, forth in review)

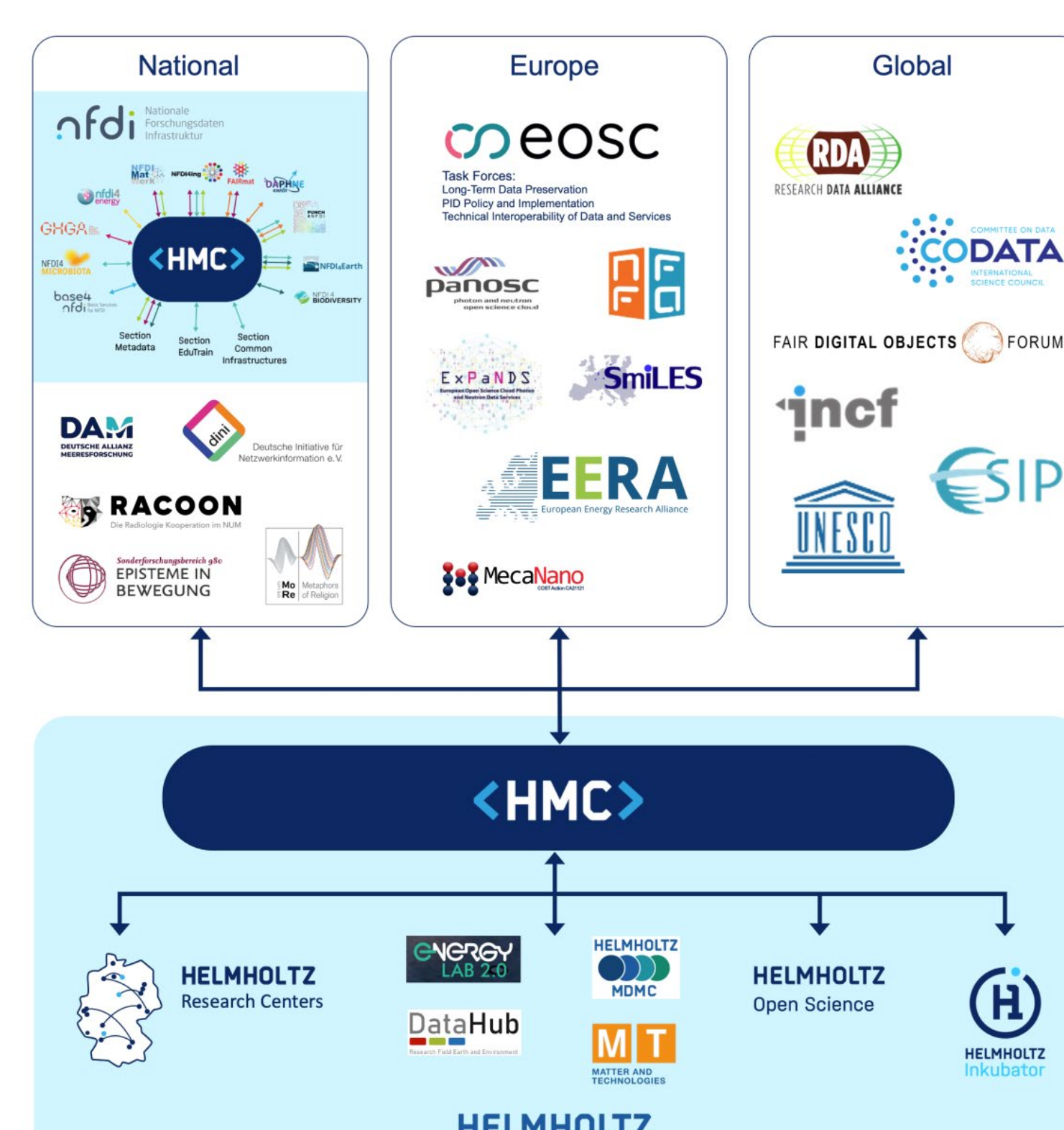
28
Projects from
15 different
centres funded



Our Stakeholders

- Scientific community producing data
- Data professionals
- Research data infrastructures
- Technicians and administration responsible for research infrastructure
- Expert panels, strategists and administrative stakeholders who adopt recommendations and issue policies

Our Network



Lessons learnt

- Technical solutions and community work equally relevant
- Project call good for solving concrete metadata problems within the Helmholtz community
- Need for diverse services and assistance within community
- International connectivity / interoperability key to success