

# From local to global: Community services in interdisciplinary research data management

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## Our Background

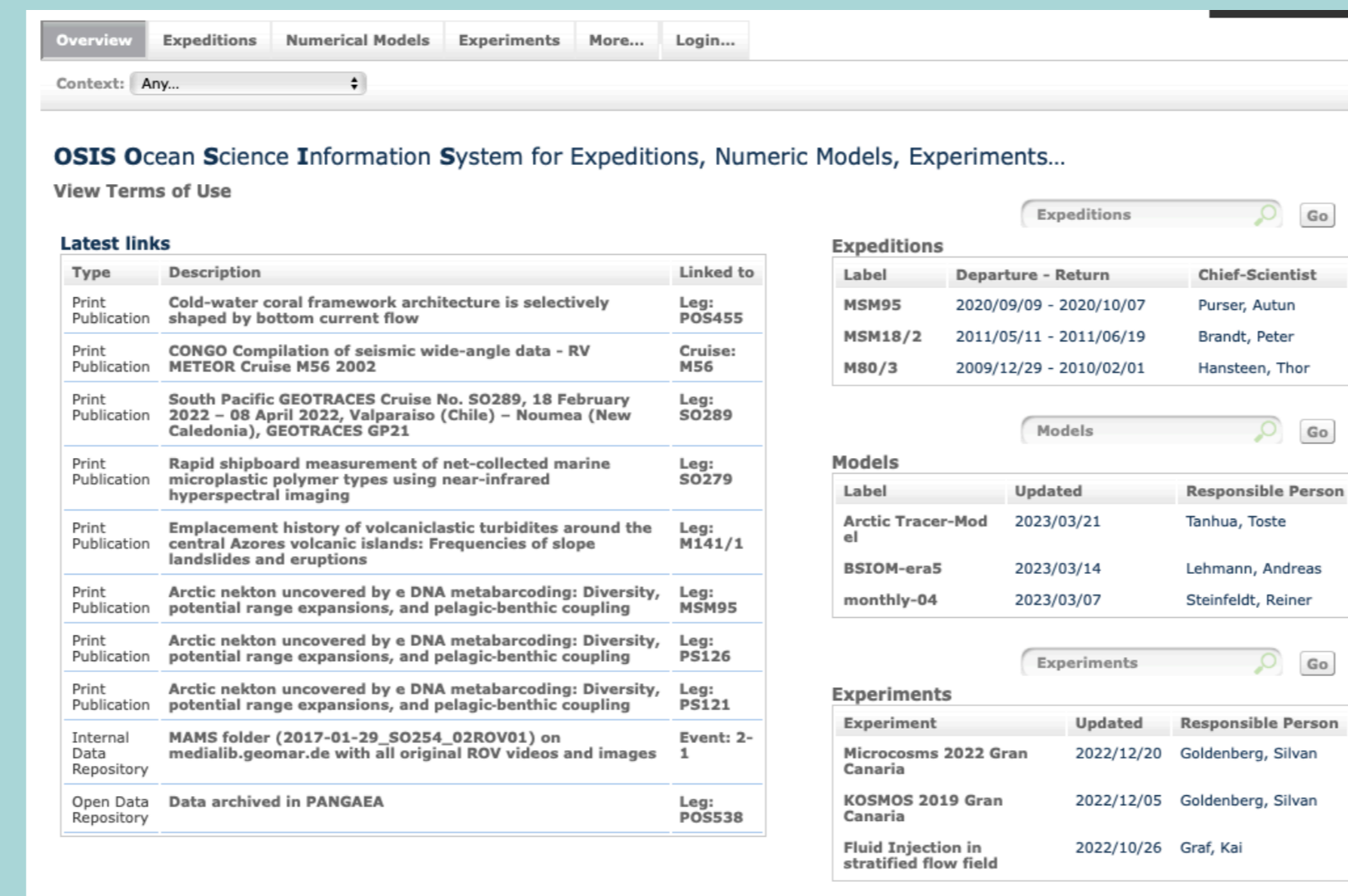
- Institutional department (Digital Research Services)
- develop and provide advice and tools to support scientific data workflows
- metadata service for expeditions, model experiments, lab experiments, and samples

## Our Focus

- standardized internal data exchange in large interdisciplinary scientific projects
- citable data and software publications in discipline specific repositories to meet the FAIR principles

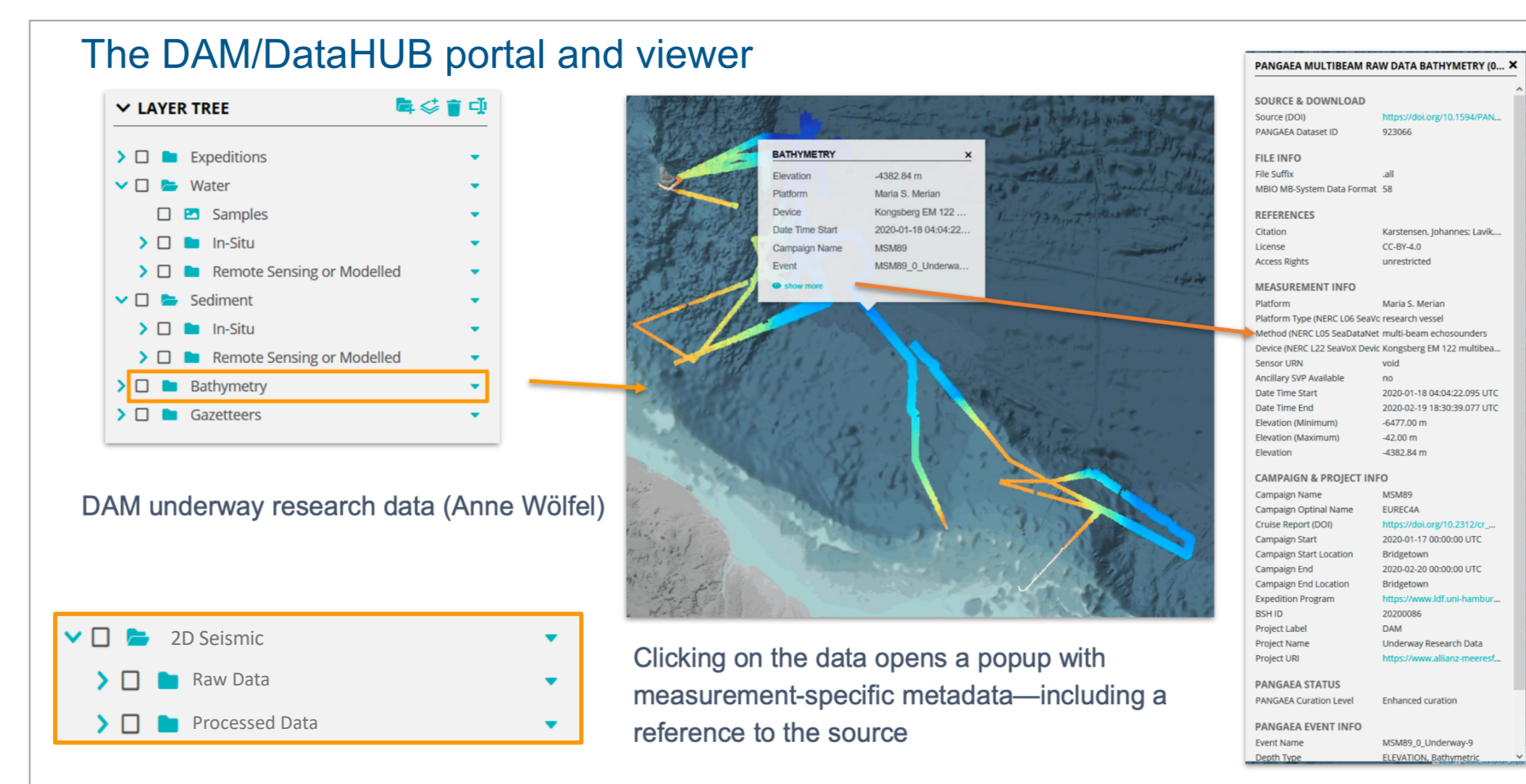
## Our Aim

- To provide interdisciplinary services not only internally but as a collaborative RDM platform for marine projects as a **community service**
- jointly with other research institutions in community projects:
  - e.g. within the **DAM** (German Alliance of Marine Research),
  - the **DataHUB**, an initiative of seven research centres within the Helmholtz research area Earth and Environment,
  - and within the national research infrastructure **NFDI4Earth**, a network of more than 60 partners.



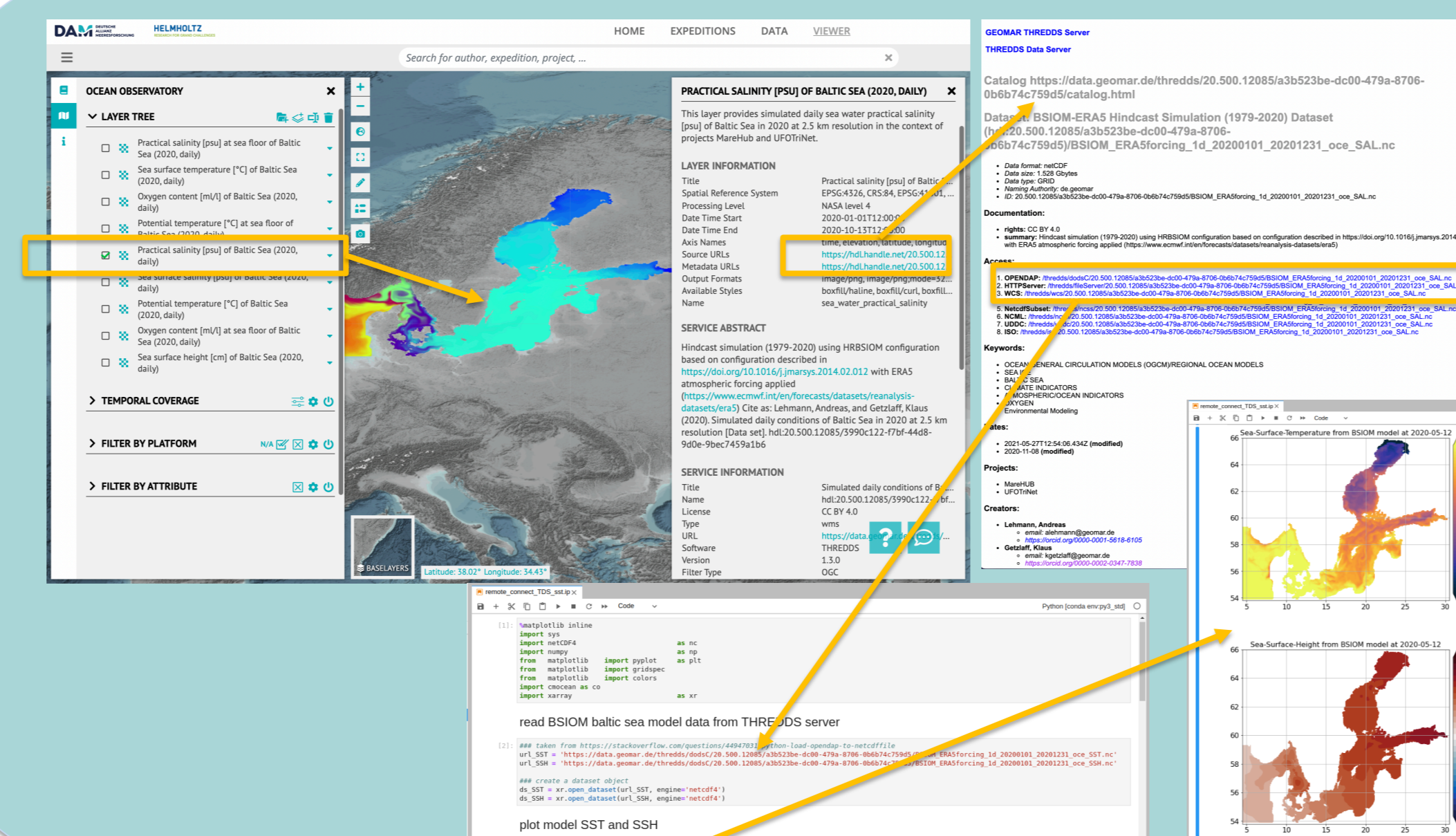
## Central Information System OSIS (GEOMAR)

- the Ocean Science Information System **OSIS** is the central data information hub with open access metadata and internal data exchange
- Linked to OceanRep, the institutional repository for publications and research software
- Linked to PANGAEA, the recommended Data Publisher
- Serves as IGSN landing page and metadata catalogue



## 2D Multi Channel Seismic Reflection Data (DAM)

- the DAM portal harvests marine data from various sources
- 5 partners have agreed to harmonize seismic reflection data and to establish workflows and a metadata scheme for the German marine seismic community (NFDI4Earth pilot 2022/2023),
- data are to be published in PANGAEA and will be displayed in the **DAM portal** as well as via WFS similar to bathymetry data

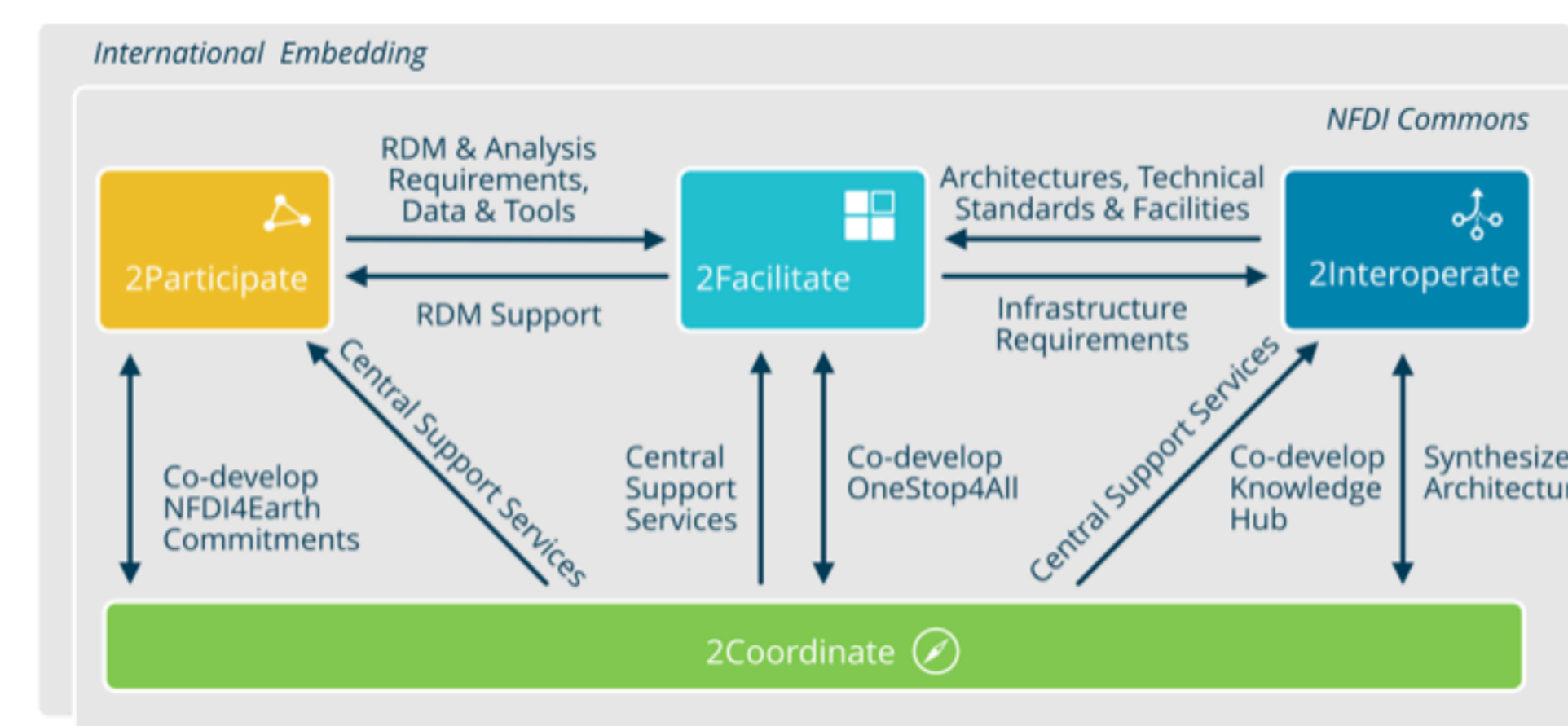


## Numerical Model Simulations (DataHUB)

- establish process to integrate numerical simulation output into DataHUB viewer using WMS service
- data access possible by integration of data repository, for example with OPeNDAP or other OGC standard interfaces
- establish a common standard to exchange numerical model configurations

## User Support Network (NFDI4Earth)

- the distributed, cross-institutional User Support Network (USN) is based on the existing and well embedded user support structures of the participating institutions
- serves as a single point of contact for user requests that require individual consulting. GEOMAR RDM staff are agents of the USN helpdesk and give interdisciplinary RDM support for marine researchers in the fields of their specific expertise



Major interactions between the NFDI4Earth task areas – their embedding via NFDI Commons and international networks is indicated by grey boxes.

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