



**SERVICES FOR SHARING RESEARCH DATA ACROSS  
BORDERS AND DISCIPLINES**

---

*Debora Testi (CINECA, EUDAT user engagement coordinator)*



eudat.eu



@eudat\_eu

# Challenges

1. Research data management is complex (tailored solutions are often needed)
2. Research communities are heterogeneously organised (some mature, some just starting)
3. Data management and storage services cannot easily be dissociated from computing services (but behave differently)
4. Storage services require a specific kind of commitment over a long period (typically >10 years)

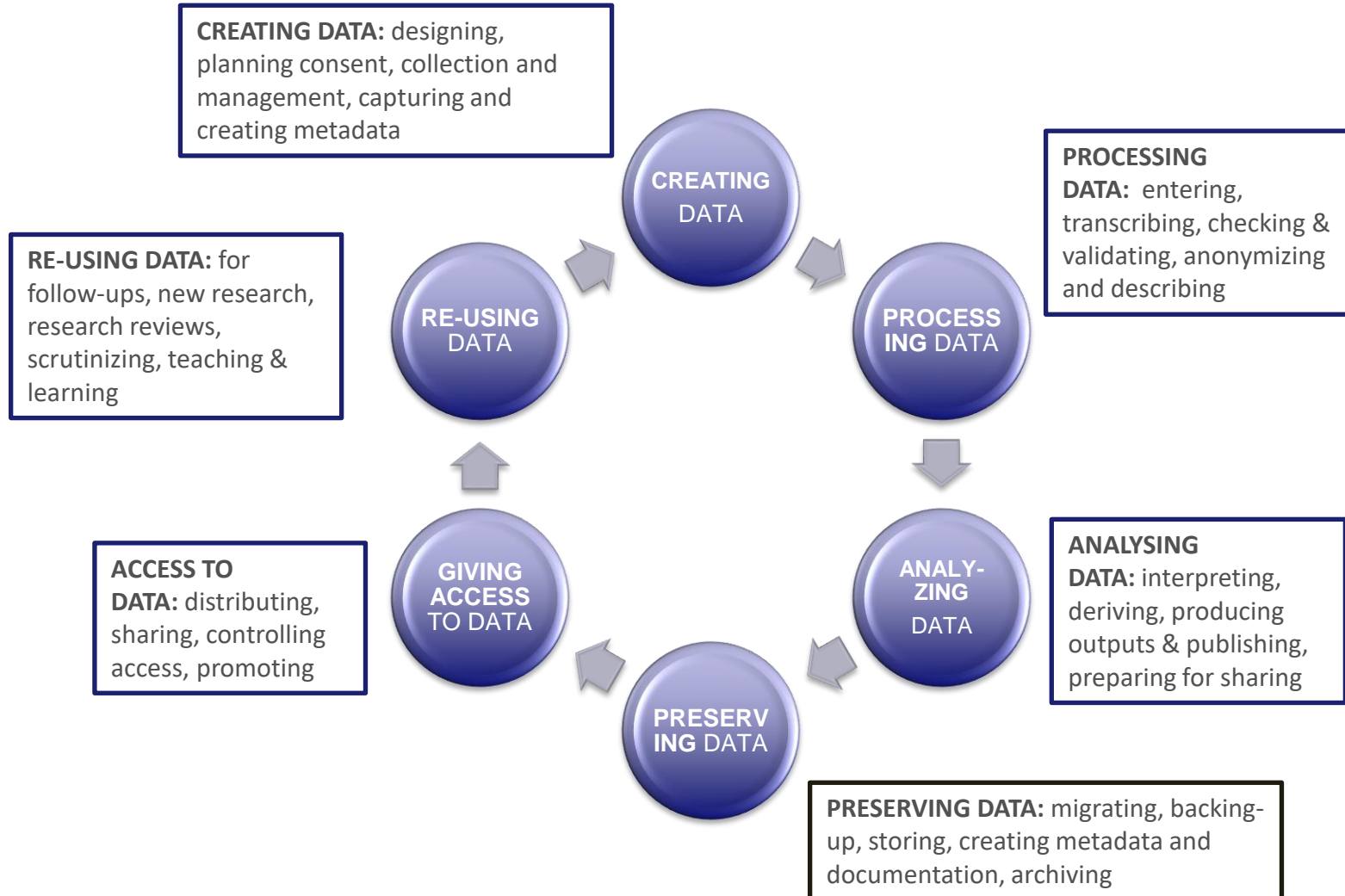


- The EUDAT Collaborative Data Infrastructure (EUDAT CDI) is one the major e-infrastructures supporting research in Europe
- EUDAT's vision:

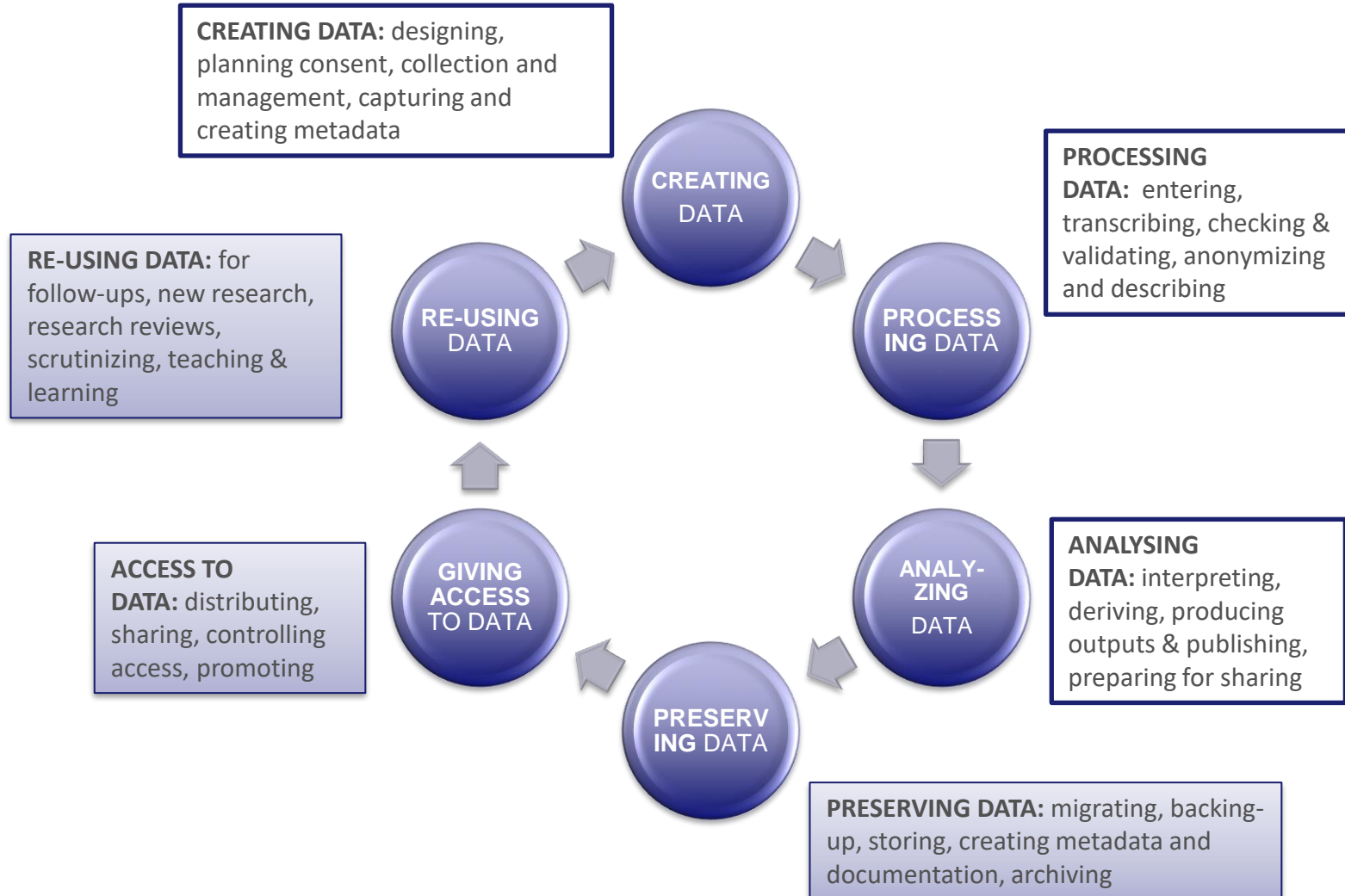
Data is shared and preserved across borders and disciplines

- According the vision, EUDAT provides a set of interoperable services that support European researchers in different steps of the research data life cycle

# Research Data Life Cycle



# Research Data Life Cycle



## Data Discovery

Making FAIR research data findable

## Data Repository

Long term data resources, accessible from computing facilities to store non-active FAIR data

## Policies based Data Archive

Mid-long term data resources, accessible from computing facilities to store non-active research data, high level data management

## Data Archive

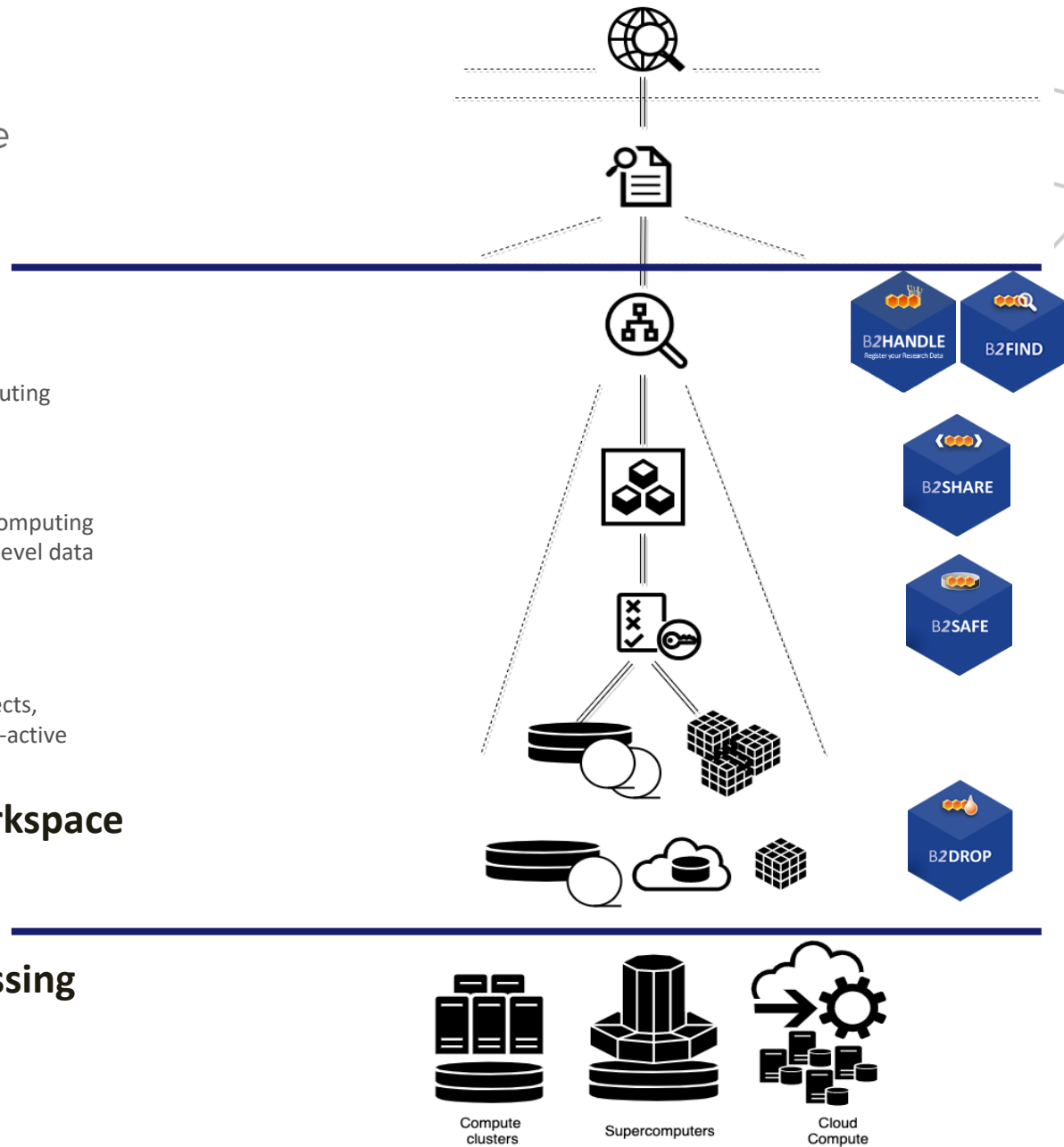
Mid term storage resources after/between projects, accessible from computing facilities to store non-active research data, bitwise preservation

## Personal and/or Project workspace

Mid-term storage resources during project, Good connection to computing facilities, To storage active resource data

## Data Analysis and/or Processing

Short term storage resources, tightly coupled to computing resources, used during data processing and analysis



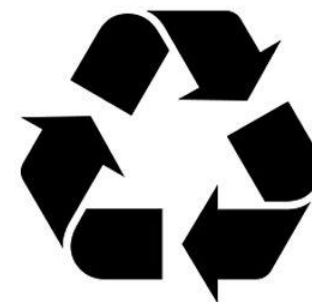
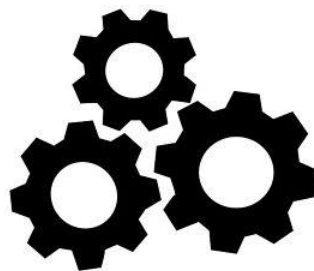


**F**  
Findable

**A**  
Accessible

**I**  
Interoperable

**R**  
Reusable





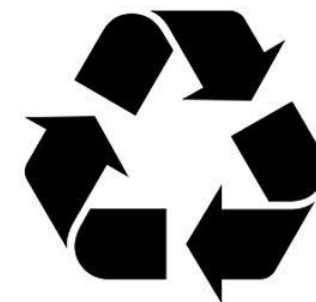
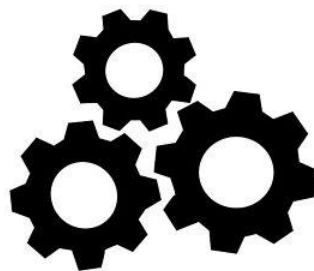
More on the EUDAT services in the session “EUDAT Service Showcase & Developments Overview”

**F**indable

**A**ccessible

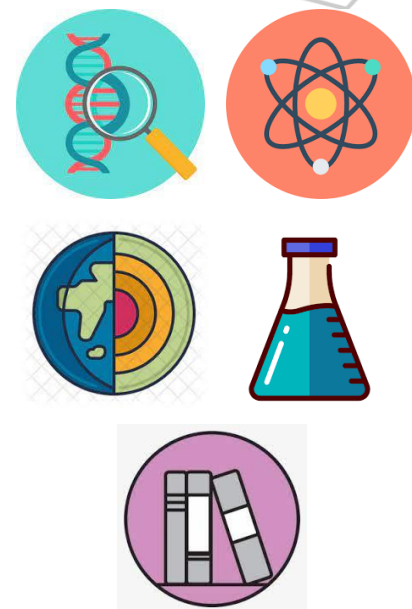
**I**nteroperable

**R**eusable



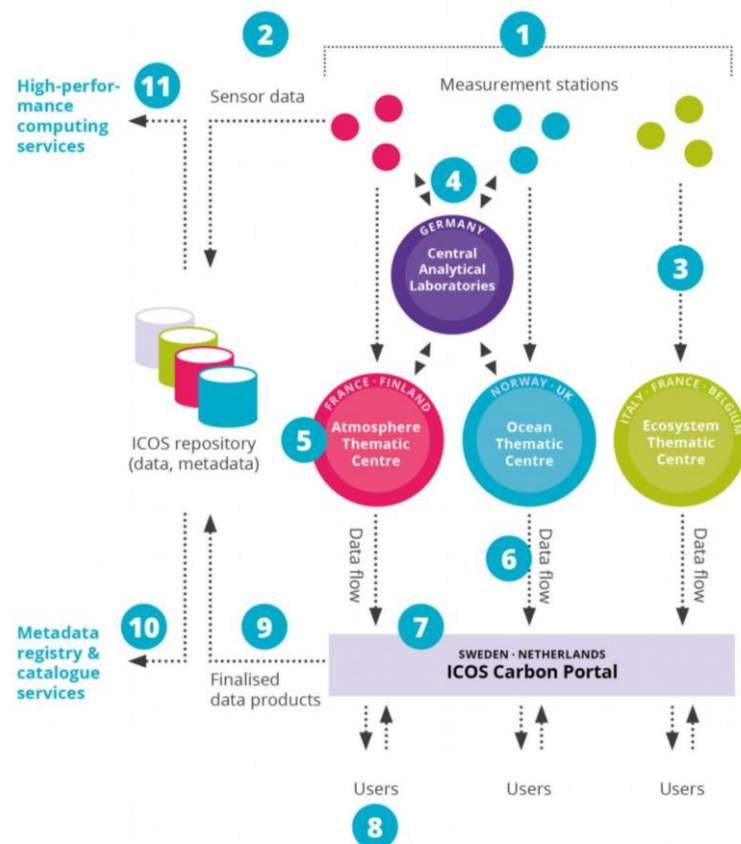
## EUDAT support to communities

- EUDAT services are designed and implemented to be generic and be used in any scientific domain
- For end-users and single researchers
  - Free generic services (i.e. B2DROP, B2SHARE, B2FIND)
  - Use of community services
- For data managers of communities and projects
  - Data storage, replication and transfer for computing on B2SAFE
  - Sync and share data service with B2DROP
  - Registration of prefixes and hosting of PIDs with B2HANDLE
  - Community specific metadata and collections in B2SHARE
  - Harvesting of community repositories in B2FIND
- For research organisations and research infrastructures
  - Contracted customised services or solutions



All FAIR aspects addressed, with a focus on reproducibility.

Extension of the ICOS community platform into a benchmarking Environment for so called atmospheric inverse transport models , by storing the data from ICOS and staging it for analysis at computing platforms. Alternative service for publishing results in addition to the ICOS Carbon Portal.



More use cases in the session “Data Management Use Cases”



**THANK YOU**

---



[eudat.eu](http://eudat.eu)



[@eudat\\_eu](https://twitter.com/eudat_eu)