DICE
Data Infrastructure Capacity for EOSC

Data Storage provision with HSM

Barcelona Supercomputing Center
Centro Nacional de Supercomputación

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BSC - Barcelona Supercomputing Center

The MareNostrum 4 supercomputer
Total peak performance: **13,9** Pflops/s

The Ágora HSM Storage
Total capacity: **150 PB**

PRACE
Access: prace-ri.eu/hpc-access

RES
RED ESPAÑOLA DE SUPERCOMPUTACIÓN
Access: bsc.es/res-intranet

BSC
Barcelona Supercomputing Center
Centro Nacional de Supercomputación

DICE
Data Infrastructure Capacity for EOSC
Access: marketplace.eosc-portal.eu

BSC multidisciplinary shared storage

Materials, Chemistry & Nanoscience

Engineering

Astro, High Energy & Plasma Physics

Life Sciences & Medicine

Earth Sciences
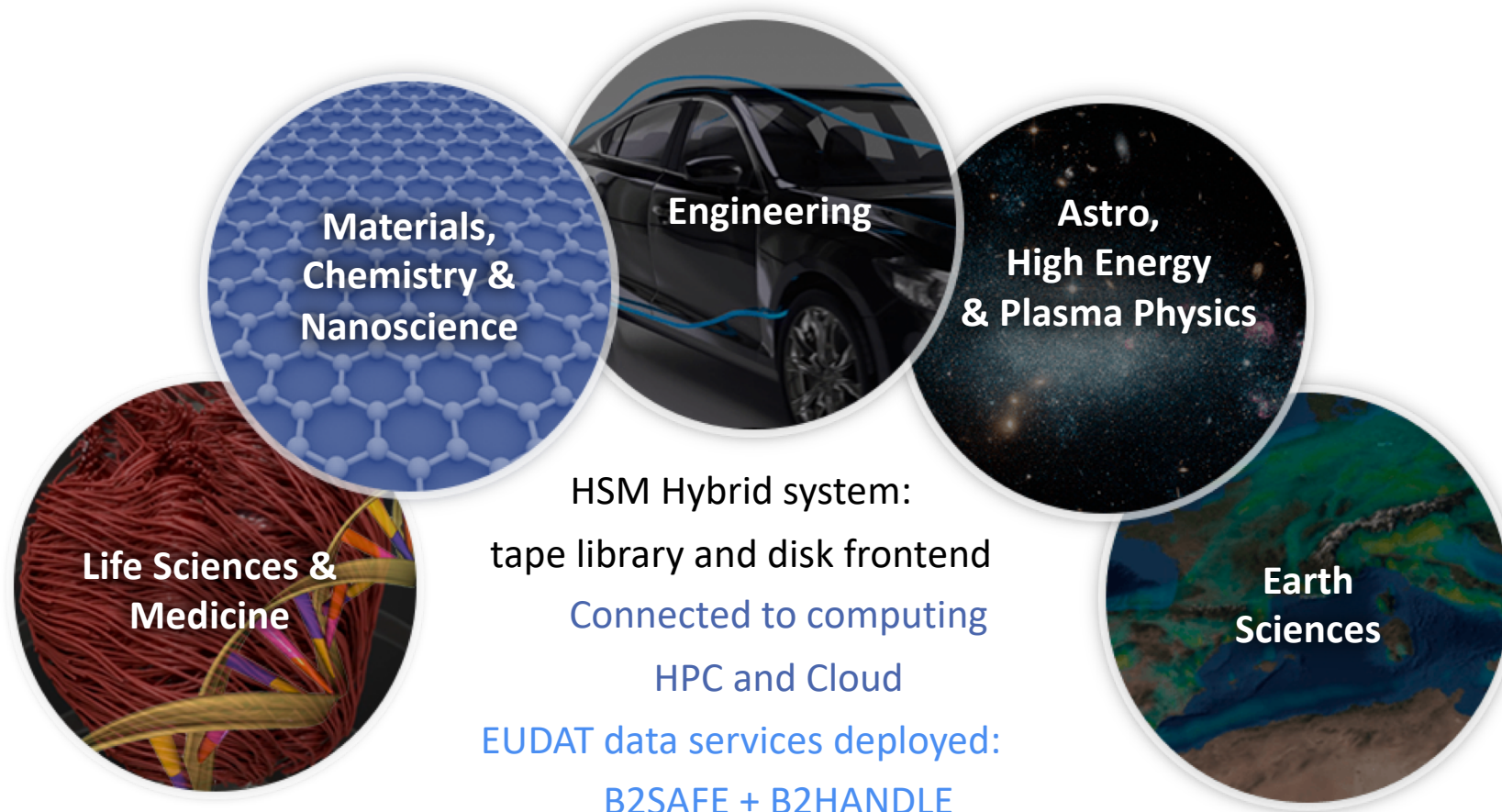
HSM Hybrid system:

tape library and disk frontend

Connected to computing

HPC and Cloud

EUDAT data services deployed:

B2SAFE + B2HANDLE

B2DROP for BSC collaborations
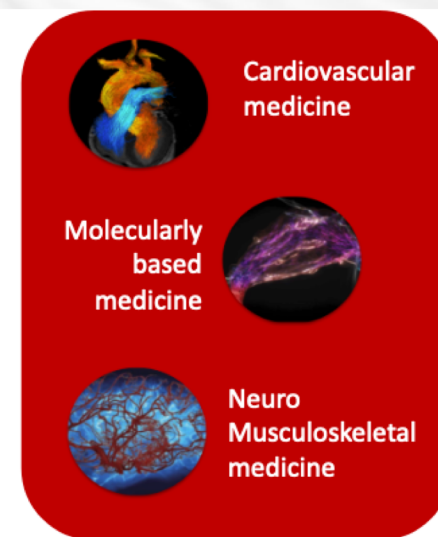
Use case: CompBioMed data support

Development of a data management workflow to facilitate simulations using large datasets and for Exascale simulations.

Promote the access to the workflow to different HPC (e.g.: LRZ, EPCC), research and medical centers in the future.

CompBioMed Applications

Computational Resources

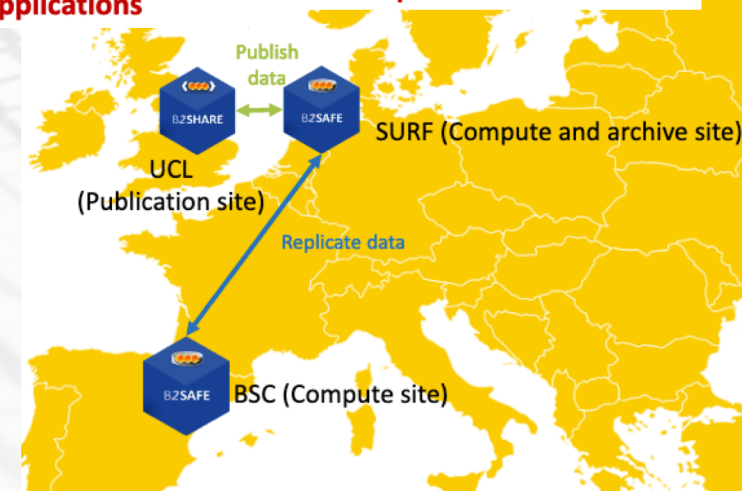Data Repository for data publication. Metadata schema Integrated with B2FIND for harvesting data and findability   *UCL*

Data staging and safe replication of research data between HPC centers, on tape that facilitate long-term preservation of the data.   SURF, BSC

VA services provision

	Service	Access
During DICE	HSM storage • mid/long term (+computing) • Typical Project size: 10-100 TB Possibility to provide B2SAFE under request B2DROP access only for BSC new projects	Virtual Access: 500 TB per day total HSM storage Granted until the end of the DICE Project (mid 2023) Direct request: datamanagement@bsc.es

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• Pure storage • Data services • Storage + computing for data exploitation	PEER-REVIEW mechanisms: - FENIX ICEI / EC calls - Spanish Supercomputing Network calls

During DICE (first row, left label)

After DICE (second row, left label)

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