# Status of the EGI-ACE Open call for use cases

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EGI Community Managers meeting

Dissemination level: label

# Agenda

- Overview of the EGI-ACE Open call
- The user support pipeline
- Success stories
- Statistics
- Opportunities to collaborate - Discussion
  - Your input is needed!

# The EGI-ACE Call for use cases - overview

https://www.egi.eu/egi-ace-open-call/

## Objectives

- **Offers** access to the EOSC Compute Platform
- **Provide** dedicated consultancy, user support and training
- **Increase** the EOSC Thematic Service / Data Spaces portfolio

## Who should apply

- Individual Researchers
- Projects & Research Infrastructures
- Research Communities

## Marketing campaign

- Sent ~150 emails
  - H2020 Projects working on cloud, AI/ML and Big Data ESFRI RIs and clusters

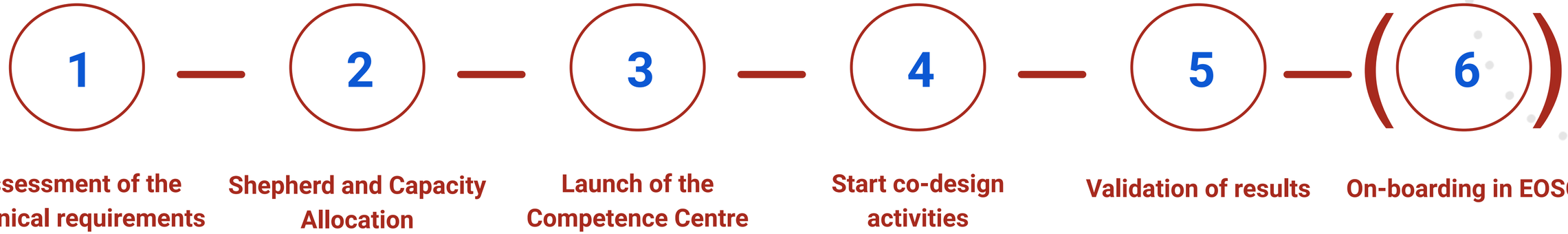
## Timeline

- Next cut-off date: **15th. of October 2022**

Submit your application now

# The user support pipeline

https://www.egi.eu/egi-ace-open-call/




- **Establish Competence Centres**
  - Use-case specific support groups consisting of service and resource providers, technical experts and other interested parties providing assistance for a Use Case.

# The EGI-ACE open call for use cases - Statistics/1

https://www.egi.eu/egi-ace-open-call/

- Launched in **April, 2021**
  - **9** round of selection
  - **40** Applications received [*]
  - **37** Applications selected for support [**]
- **~25** applications already integrating with the EOSC Compute Platform
- **3** new Thematic Services:
  - AiiDAlab (CH), MOBIS (NL), OpenBioMaps (HU)
- **1** new software on-boarded in EOSC (in progress):
  - BioISI (PT)
- **20** Shepherds from **7** organizations involved:
  - EGI Foundation (11), UPV (2), IFCA (1), INFN (3), CNRS (1), CESNET (1), CMCC (1)

[*] including no.1 request for support (Serbia)
[**] APPROVED, IN PROGRESS, NATIONAL FUNDING

# The EGI-ACE open caall for use cases - Statistics/2

https://www.egi.eu/egi-ace-open-call/

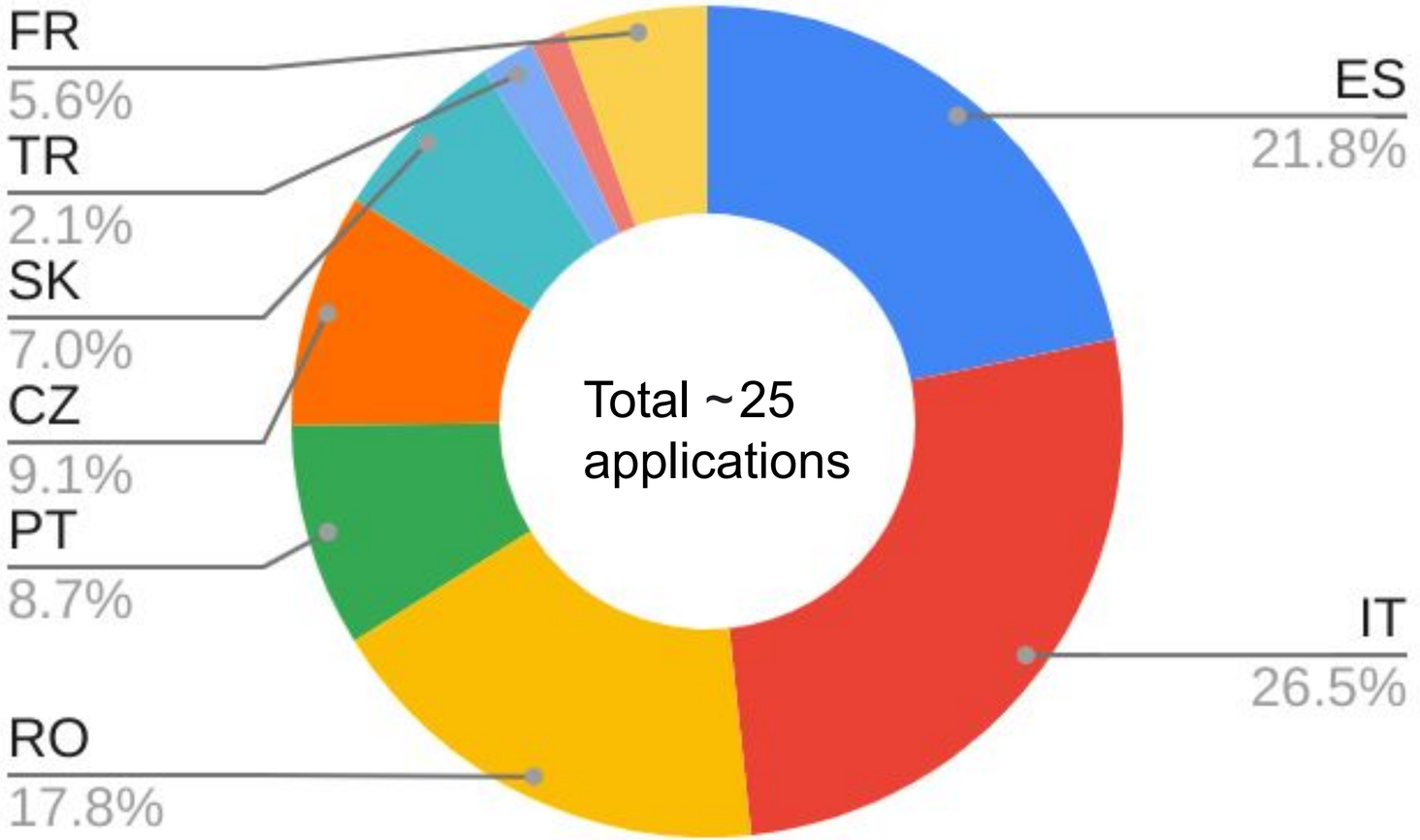
- **11** (resource) providers involved in the support
  - UPV-GRyCAP, IFCA-LCG2 and CESGA (ES),
  - INFN-CLOUD-BARI and INFN-CLOUD-CNAF (IT),
  - TR-FC1-ULABIM (TR), CLOUDIFIN (RO),
  - IN2P3-IRES (FR), SCAI (DE),
  - IISAS (SK) and NCG-INGRID-PT (PT)

- **7** (service) providers involved in the support
  - IM (UPV, ES), DataHub (CYFRONET, PL), DODAS (INFN, IT),
    DEEPaaS Training facility (IFCA-LCG2, ES),
    Cloud/Container/High-Throughput Compute, Online Storage, AAI Check-in, Notebooks (EGI, NL),
    PaaS Orchestrator (INFN, IT),
    ENES Data Space (CMCC/IPSL, IT/FR)

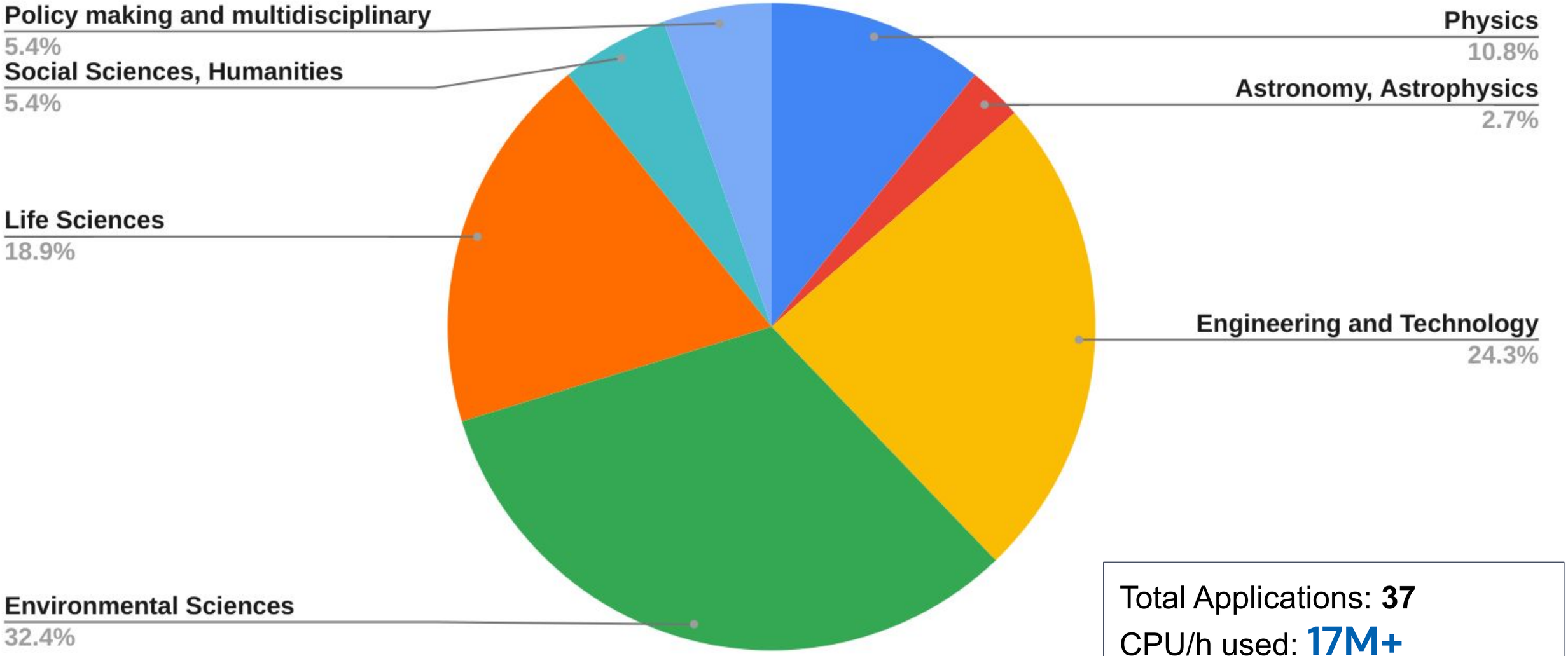
# The EGI-ACE open call for use cases - Statistics/3

https://www.egi.eu/egi-ace-open-call/

- **17M+** million of CPU/h consumed (M21)
  - IT (5 use cases): 4,281,642
  - ES (8 use cases): 3,527,374
  - RO (2 use cases): 2,881,757
  - CZ (4 use cases): 1,473,408
  - PT (1 use case): 1,406,899
  - SK (1 use case): 1,136,413
  - FR (1 use case): 906,116
  - TR (2 use case): 334,686
  - DE (2 use case): 214,826
  - vo.access.egi.eu: 3,043,702
    - (DE, FR, ES, IT, SK, TR)



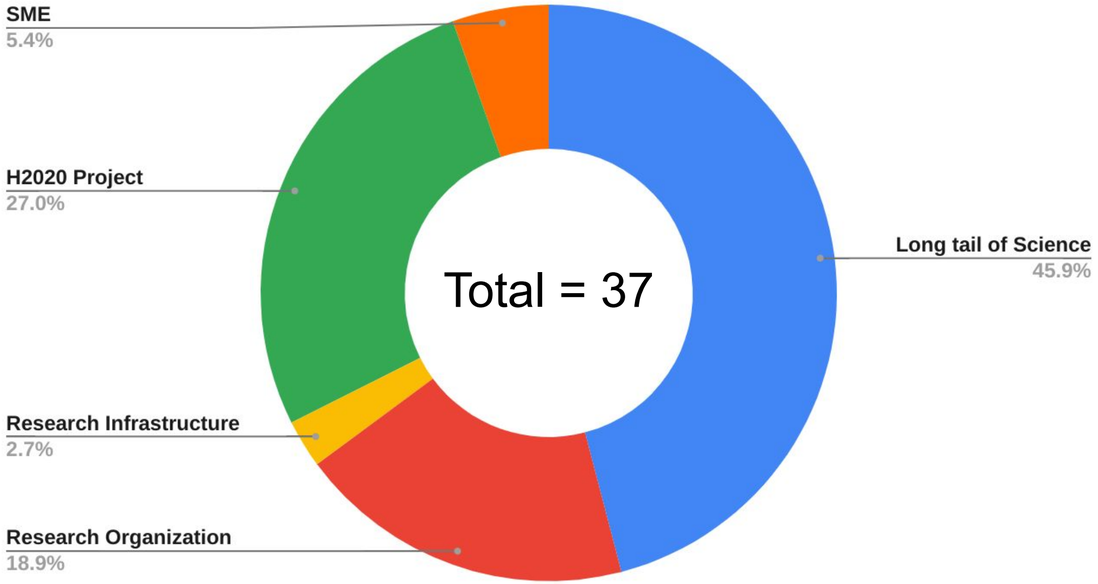
# The EGI-ACE open call for use cases – Statistics/4




Total Applications: **37**

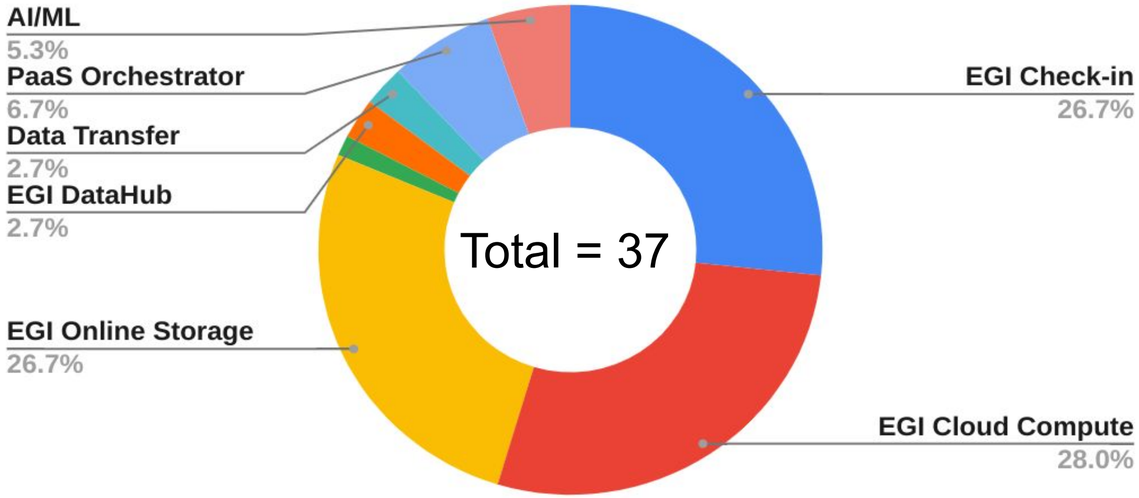
CPU/h used: **17M+**

# The EGI-ACE open call for use cases – Statistics/5




## Entities distribution

*Entities (RI, Research Organization, SME, H2020 projects, etc.) supported by the EGI-ACE project*




## Services demand

*Distribution of the services type requested by the selected use cases applications*

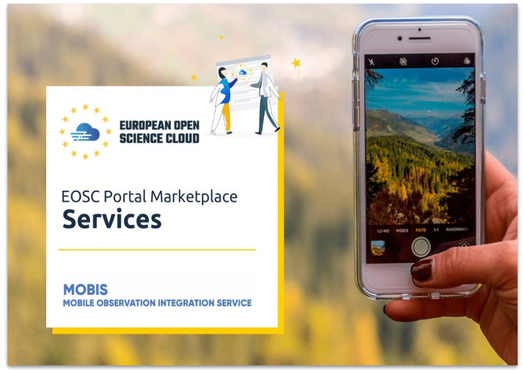
# The EGI-ACE open call for use cases: Success Story /1

https://www.egi.eu/egi-ace-open-call/

The **Mobile OBservation Integration Service (MOBIS)** service to report environmental and biodiversity observations.

DDQ | Pocket Science

Cos4Cloud




EOSC in practice story #1

EOSC Future

Keywords:
#data, #app, #sensor, #citizenscience, #citizenobservatory, #mobile, #EOSCinPractice #cross-disciplinary

## Connecting researchers, developers and citizen scientists in a unique mobile app environment.

An EOSC in Practice Story where heterogeneous data are collected via mobiles or sensors, and made accessible in a secure, open and easy way.

### The project involved

Cos4Cloud

Cos4Cloud **(Co-designing Citizen Observatories Services for the EOS-Cloud)** is a European Horizon 2020 project funded under Grant Agreement no 863463. The project aims at boosting citizen science technologies. One of the biggest challenges of citizen science is the **quality of data**, as well as maintaining the citizen observatories used to collect this data. Cos4Cloud is addressing these challenges by developing twelve technological services to improve citizen science platforms.

### The Users

This EOSC in practice story targets three main types of users: (1) the **citizen and citizen scientists** who collect valuable data, (2) the **researchers** who use and benefit from the data collected by citizens via smartphones and sensors, and (3) **software developers**.

### The Challenge

Currently there are **thousands of citizen science apps constituting a fragmented ecosystem**. Each app comes indeed with its own login system and with a separate database accessible to specific groups of researchers. Most of these apps are still listed in app stores, but are actually abandoned, since they were created only for the purpose of a project. Beyond all concerns coming from these apps being unsustainable, it

*"What we frequently experience with funded projects is their time limitation. Projects last mostly 4 years, then they end, the funding ends... and the community is gone. This is why we really started early in the project to think about its future sustainability"*

**Norbert Schmidt, Owner @DDQ & Partner @Cos4Cloud**

### The solution




*A MOBIS user measuring air quality near Brasov (Romania)*

The proposed solution is called **MOBIS (Mobile Observation Integration Service)** and it provides a service that makes it easier to gather all kinds of data, and keep them open. MOBIS collects and processes data from different mobile observatories (most of them via smartphones with or without sensors). It can be used as a back end service for (citizen-) science apps with a single login. MOBIS is openly available to researchers & citizens. The final aim is for MOBIS to become a large repository for citizen science data, including environmental and bio diversity

## Impact:

- MOBIS back-end integrated in the EOSC Compute Platform
- Improved service performance
- On-boarded in EOSC as new service

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- **160** vCPU cores, **320 GB** RAM and **60 GB** of disk per VM
- **580,874** Cloud CPU/h consumed (M19)

# The EGI-ACE open call for use cases: Success Story /2

https://www.egi.eu/egi-ace-open-call/

- AiiDA is a workflow manager for computational science with a strong focus on provenance and performance.
  - It supports a wide range of simulation codes and makes them available for use through the Python programming language
- AiiDAlab lets you run and manage AiiDA-powered workflows through tailored web applications in the browser.
  - Use the App store to pick and install apps from the application registry or write your own in just a few lines of python using jupyter widgets and appmode

**Impact:**

- Leverage the ECP to develop a new service for helping theoretical as well as experimental scientists to easily prepare and run simulations through a web browser.
- On-boarded in EOSC as new service

AiiDAlab

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- **Devel: 4** vCPU cores, **16 GB** RAM
- **Staging: 8** vCPU cores, **32 GB** RAM
- **746,448** Cloud CPU/h consumed (M21)

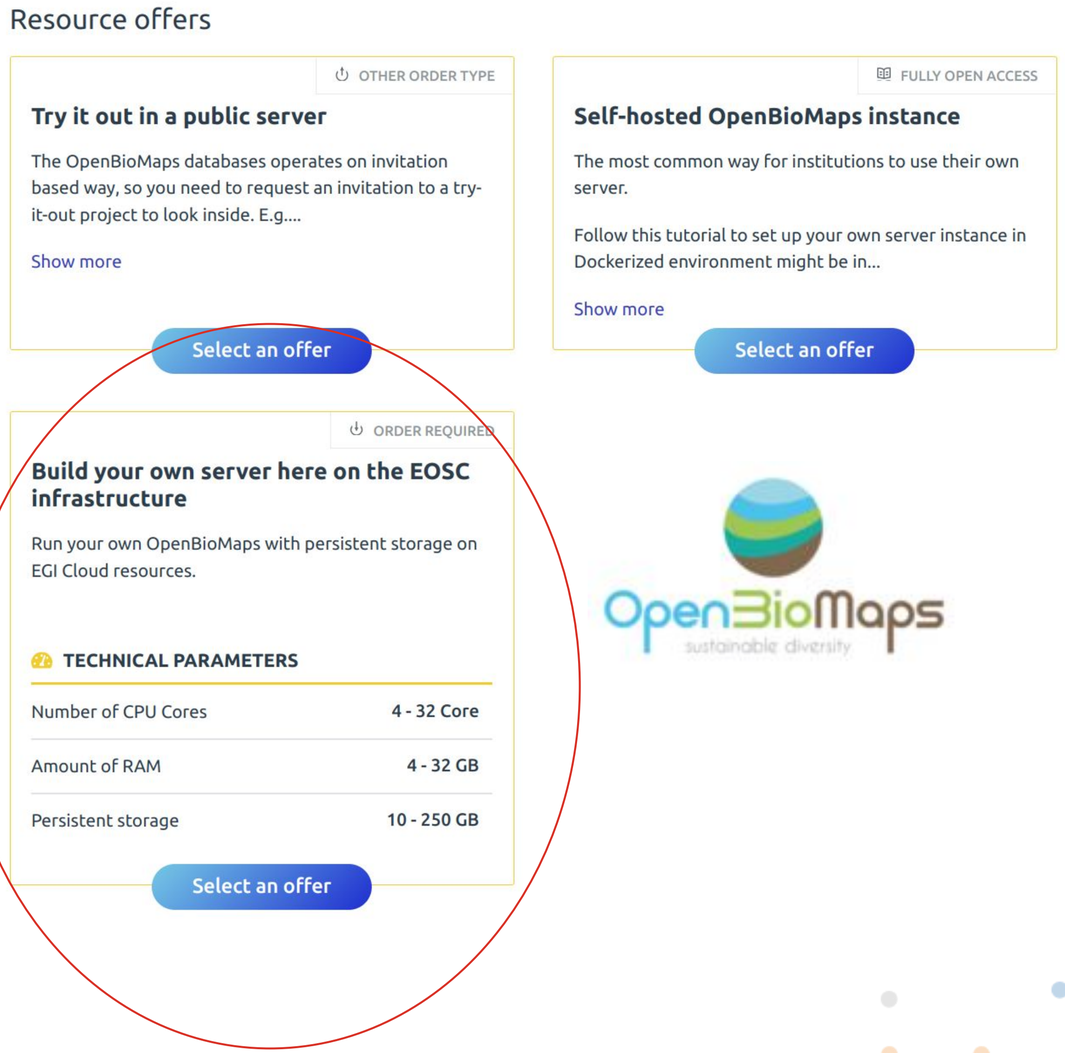
# The EGI-ACE open call for use cases: Success Story /3

https://www.egi.eu/egi-ace-open-call/

OpenBioMaps is a data management platform for biological data, with a special focus on biodiversity data.

**Impact:**

- Extend the computational abilities of OBM service network and improve the integration ability of services.
- On-boarded in EOSC as new service

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- **160** vCPU cores with **320 GB** RAM and **60 GB** of disk

# The EGI-ACE open call for use cases: Success Story /4

https://www.egi.eu/egi-ace-open-call/

## Protein pK a and isoelectric point calculations (Software)

BioISI
Biosystems and Integrative Sciences Institute

**Impact:**

- Establish an easy-to-use cloud service that allows for fast pKa and isoelectric point calculations using user-provided protein structures or those obtained from the Protein Data Bank (PDB).
- On-boarding the new software in EOSC (in progress)

- **116** vCPU cores, **260 GB** of RAM, up to **2 TB** of block storage
- **1,522,347** Cloud CPU/h consumed (M21)

# Opportunities to collaborate - Discussion

- **Contribute** as resource/service providers
- **Support** the integration plans of the selected use cases in the EOSC Compute Platform (shepherding activities)
  - Handbook for the EGI-ACE shepherds
  - EGI documentation for users/service providers

**Actions:**

- Send invitations and share the abstracts of the received upcoming use cases (Giuseppe)
- Provide regular updates during the upcoming EGI Community Managers meetings (Giuseppe)

→ **PROVIDE YOUR COMMENTS/FEEDBACK**

Contact us

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Let's talk. Or
meet in person

# Get in touch with us

www.egi.eu

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