

Computational Resources for HPC/AI Projects on EuroHPC JU Systems

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EuroHPC
Joint Undertaking



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- EuroHPC JU is an EU body & a legal and funding entity.
- Created in 2018 and autonomous since 2020.



EuroHPC
Joint Undertaking

Mission:

Build and maintain	Build and maintain a world-class supercomputing, quantum computing, and data infrastructure ecosystem in Europe.
Establish	Establish AI factories to boost a competitive and innovative AI ecosystem across the EU.
Support	Support the development of advanced supercomputing technologies and applications to strengthen Europe's supply chain.
Expand	Expand access to HPC, AI, and quantum technologies for public and private users while fostering key skills in Europe.



- 35 participating countries
- The European Union (represented by European Commission)
- 3 private partners





Each member is represented in the EuroHPC JU's Governing Board.

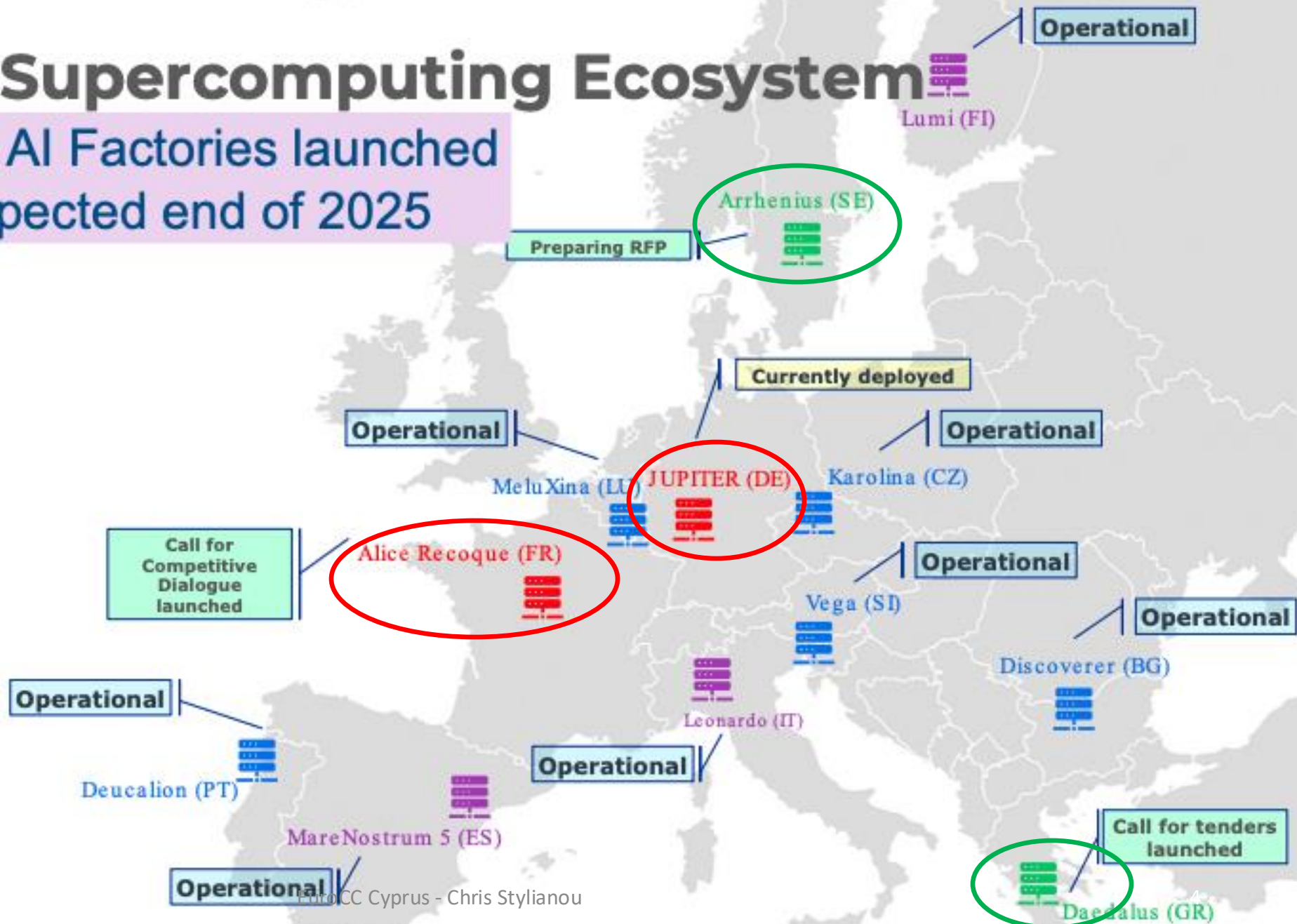
The Governing Board takes advice from the EuroHPC Industrial and Scientific Advisory Board.



The EuroHPC Supercomputing Ecosystem

Call for selection of AI Factories launched
First systems expected end of 2025

-  EXASCALE
-  PRE-EXASCALE
-  PETASCALE
-  MID-RANGE





893 PFlops Aggregated sustained LINPACK performance

8 Systems Online - 20 partitions

15,597 CPU Nodes

- AMD/Intel x86
- Fujitsu ARM

7,869 GPU Nodes / 43,476 GPUs

- NVIDIA A100/H100
- AMD MI250X

FPGA, Visualisation and Cloud Capabilities



Who is Eligible?

- Academic and research institutions
 - Public sector organisations
 - Industrial enterprises and SMEs
 - Established in the EU or H2020 associated countries
- Open to all fields of science and industry

Types of Access:

- Multiple access modes to serve different demands and application areas.
- **90 million node hours** per year across all EuroHPC systems
- Defined in the EuroHPC Access Policy approved by the JU Governing Board.

General Conditions for Access:

- Computing resources are used primarily for research and innovation (with exception for SMEs and startups)
- the use of the resources is acknowledged in the related publications
- users contribute to dissemination events
- users produce and submit a report after completion of a resource allocation

More info: https://eurohpc-ju.europa.eu/access-our-supercomputers_en



BENCHMARK ACCESS CALL

For **scaling tests & benchmarks**
 Fixed amount of allocation for 2 or 3 months
 Continuously open with **monthly cut-offs**
 Results and access to system: **2 weeks from cut-off date**



DEVELOPMENT ACCESS CALL

For **code and algorithm development**
 Fixed amount of allocation for 6 or 12 months
 Continuously open with **monthly cut-offs**
 Results and access to system: **2 weeks from cut-off date**



REGULAR ACCESS CALL

For projects that require **large-scale HPC** resources
 Allocation duration: for 12 months
 Continuously open with **2 cut-offs per year**
 Peer-review process duration: **4 months**



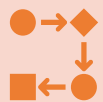
EXTREME SCALE ACCESS CALL

For **high-impact, high-gain projects** that require **extreme large-scale HPC resources**
 Allocation duration: for 12 months
 Continuously open with **2 cut-offs per year**
 Peer-review process duration: **6 months**



AI AND DATA INTENSIVE APPLICATIONS ACCESS CALL

For projects intending to perform **artificial intelligence and data-intensive activities**
 Fixed allocation for 12 months on first-arrived-first basis
Bimonthly cut-offs (6 per year)
 Peer-review process duration: **1 month**



Fast-track, simplified process for peer-review evaluation

Peer-review process duration: 1 month
Bi-monthly cut-offs (6 per year)



No ranking | First Come First Serve Approach

Proposals scientifically reviewed by 2 experts.
No consensus or panel meetings.
Scores above threshold are allocated resources.



Pre-fixed amount of node-hours per GPU partition



12 months allocations.



1 Month

Proposal Submission

Technical Assessment

Proposals Award List



Admin Check

Expert Evaluation

Access to the systems

- Evaluation Criteria:**
- Excellence
 - Innovation and Impact
 - Quality and Efficiency of the Implementation

- Scoring System:**
- Grade 0-5 per criterium
 - **Minimum grade per criterium: 3**
 - Overall grade sum: 0–15
 - **Overall grade sum minimum: 10**




Per cut-off	Vega GPU	MeluXina GPU	Karolina GPU	LUMI-G	Leonardo Booster	MareNostrum5 ACC	TOTAL
Total Offer (Node Hours)	7,100	25,000	7,500	351,455	545,865	129,377	1,065,918
Fixed Allocation (Node Hours)	7,100	25,000	7,500	35,000	50,000	32,000	

1 million node hours awarded so far via the AI and Data Intensive Applications Access calls



EuroHPC Joint Undertaking **Calls** Login Sign Up

Open Calls for Proposals




Cut-off ends in **10 days**

EuroHPC Benchmark Access Call

● **Open**

The EuroHPC Benchmark call is designed for code scalability test...




Cut-off ends in **31 days**

EuroHPC AI and Data-Intensive A...

● **Open**

The EuroHPC JU AI and Data-Intensive Applications Access cal...




Cut-off ends in **10 days**

EuroHPC Development Access Call

● **Open**

The EuroHPC Development call is designed for projects focusing on...

All Calls **Open Calls**




Cut-off ends in **10 days**

EuroHPC Benchmark Access Call

● **Open**


The EuroHPC Benchmark call is designed for code scalability test...



EuroHPC Benchmark Access Call

● **Closed**

The EuroHPC Benchmark call is designed for code scalability test...



EuroHPC Regular Access Call

● **Closed**

The Regular Access mode is designed to serve research...

<https://access.eurohpc-ju.europa.eu> (currently migrating from old web address)

Questions on access calls: access@eurohpc-ju.europa.eu



Thank you for the attention!



More information:



<https://castorc.cyi.ac.cy/>
<https://eurocc.cyi.ac.cy/>



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Republic of Cyprus



RESEARCH
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FOUNDATION



EuroHPC
Joint Undertaking

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