

EuroHPC and the allocation of Union Access time to supercomputers.

Some early information

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EuroHPC

- **Leading the way in European Supercomputing**
- The European High Performance Computing Joint Undertaking (EuroHPC JU) is a joint initiative between the EU, European countries and private partners to develop a World Class Supercomputing Ecosystem in Europe.
- <https://eurohpc-ju.europa.eu/>

EuroHPC Supercoputers

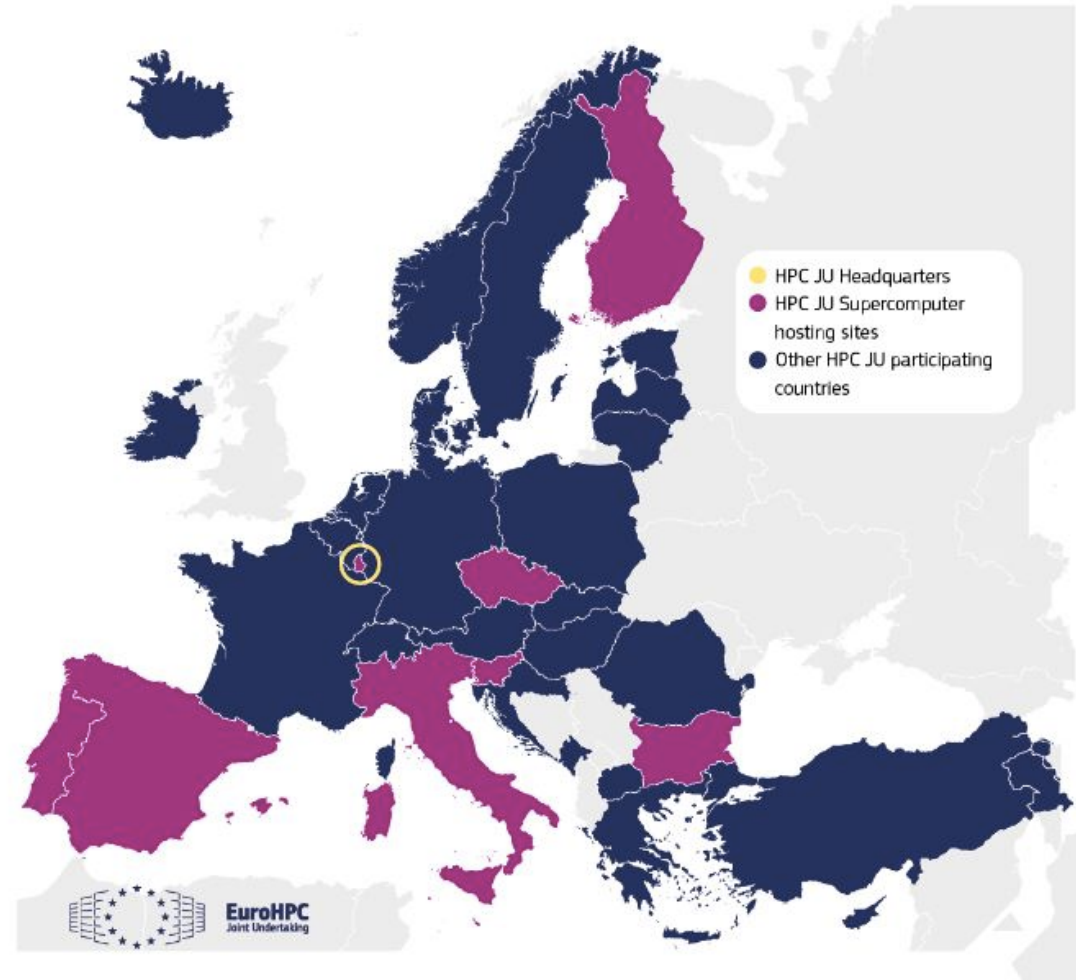
3 Pre-exascale:

- Leonardo (Italy- Cineca)
- Lumi (CSC)
- MN5 (BSC)

5 Petascale

- Vega (Slovenia)
- Meluxina (Luxembourg)
- Karolina (CR)
- Discoverer (Bulgaria)
- Deucalion (Portugal)

<https://eurohpc-ju.europa.eu/discover-eurohpc-ju#ecl-inpage-211>



Types of access

The role of PRACE:

Access Modes are based on those of PRACE and that have been adapted to meet specific requirements introduced by EuroHPC.

- Continuous calls

6 Types:

- **Extreme Scale Access**: for applications with **high-impact, high-gain innovative research**, justifying the need for and the capacity to use extremely large allocations in terms of compute time, data storage and support resource
- **Scientific excellence** for calls targeting public research and academia. The proposed research must demonstrate scientific excellence and a potential for high European and international impact.
- 1Y, Pre-exa
- **Regular Access**: for applications with a case to enable progress in the domains covered.
- 1Y, Pre-exa

Types of access

6 Types:

- **Benchmark Access:** for users to collect performance data on a target system in order to document the technical feasibility of their applications to be submitted to other access modes
 - - 2-3m, all systems
- **Development Access:** for projects focusing on code and algorithm development and developing a science portal or other infrastructure software components.
 - 1Y, all systems
- **Fast Track Access for Academia:** This access mode supports needs that are exceptional and cannot be anticipated.
 - <6m, all systems
- **Fast Track Access for Industry Access:** as above for Industry
 - 1Y, all systems

Types of access

Access Mode	Extreme Scale	Regular	Benchmark	Development	Academic Fast Track	Industry Fast Track
Duration	1y renewable	1y renewable	2 to 3 months	1y renewable	< 6 months	1y renewable
Periodicity	Continuous calls, bi-yearly cut-offs	Continuous call, cut-offs every four months (3 cut-offs per year).	Continuous call, monthly cut-offs	Continuous call, monthly cut-offs	Continuous call, cut-offs ev. 2w/1m	Continuous call, cut-offs ev. 2w/1m
Share of resources (indicative)	60 - 90% of participating systems	60 - 90% of participating systems	~5%	~5%	~5%	~5%
	Mostly pre-exascale	Mostly petascale	All systems	All systems	All systems	All systems
Data storage needs	Large storage for medium to long term	Large storage for medium to long term	Limited	Data processing environment and platform		
Accessible to industry	Yes – Open R&D With specific evaluation criteria	Yes – Open R&D With specific track	Yes – Open R&D	Yes – Open R&D	No – use industry Fast Track instead	Exclusively Open R&D
External sc. Peer-review	Yes	Yes	No	No	No / Pre-identified	No / Pre-identified
Tech. assessment	Yes	Yes	Yes	Yes	Yes	Yes
Data Management Plan required	Yes	Yes	No	No	Yes	Yes
Application type	Full application	Full application	Technical application	Technical application	Light request + support documents	Full application
Prerequisite	Benchmark	Benchmark	None	None	Previous allocation or Benchmark	Previous allocation or Benchmark
Submission period	> 2 months	> 2 months	N/A	N/A	N/A	N/A
Duration of evaluation process	3 months	2 months	≥1 week <2 weeks	≥1 week <2 weeks	≥2 weeks <1 month	≥2 weeks <1 month

EuroHPC JU Benchmark and Development Access Calls

- <https://prace-ri.eu/hpc-access/eurohpc-access/eurohpc-ju-benchmark-and-development-access-calls/>