



EuroHPC
Joint Undertaking

EuroHPC JU

STATE OF PLAY ON AVAILABLE SYSTEMS & ACCESS CALLS

5 November 2024

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Peer Review Team, EuroHPC JU

Overview

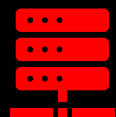
- Infrastructure status and updates
- Access Modes and statistics
- R&I projects for Users and Applications support
- Future activities
- The Peer review team



Infrastructure status and updates



The EuroHPC Supercomputing 2019-2026



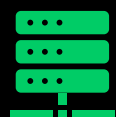
EXASCALE



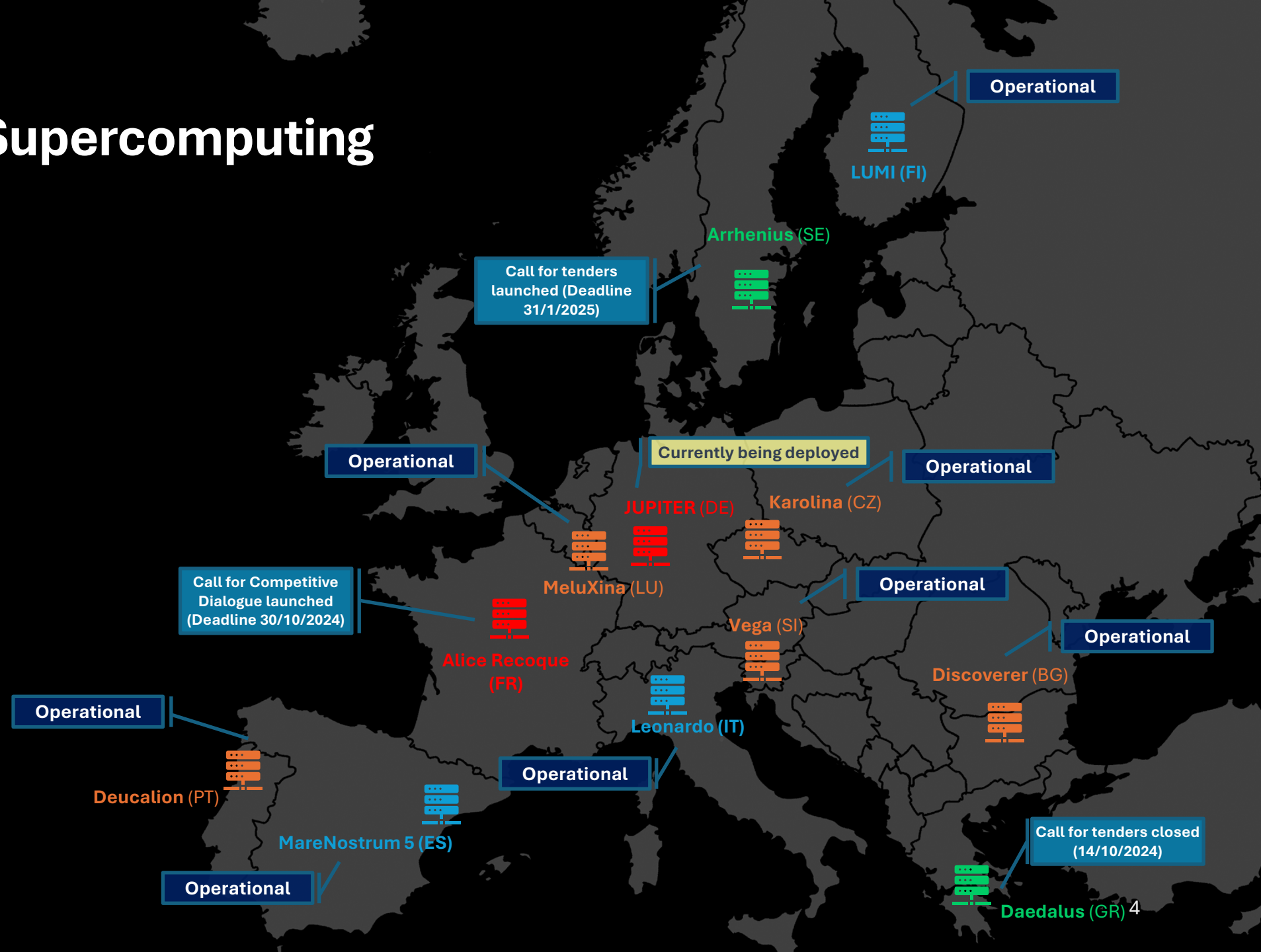
PRE-EXASCALE



PETASCALE



MID-RANGE



EuroHPC
Joint Undertaking

Infrastructure updates

EXASCALE SYSTEMS

JUPITER

- First deliveries of the modular data centre (MDC) on-site
- JUPITER Research and Early Access Program (JUREAP) ongoing
- JEDI (JUPITER Exascale Development Instrument) installed and benchmarked in May - #1 in Green500 – To be offered through the Early Access Program

ALICE RECOQUE

Call for Participation to the Competitive Dialogue
published on 9 September 2024

Deadline for submissions: 30 October 2024

- Modular system targeting to support traditional HPC, AI training workloads, combination of HPC with AI inference workflows



Infrastructure updates

PRE-EXASCALE AND PETASCALE SYSTEMS

LISA – UPGRADE OF LEONARDO

Call launched on 18 September 2024

Closing date on 8 November 2024

Project start in March 2025

- The targeted system architecture is designed to address new evolving user needs involving AI workloads in the user workflows
- In conjunction with the HPC capacity of Leonardo, LISA will offer an AI-optimised partition, complementing the computing service portfolio of the whole infrastructure

DISCOVERER+

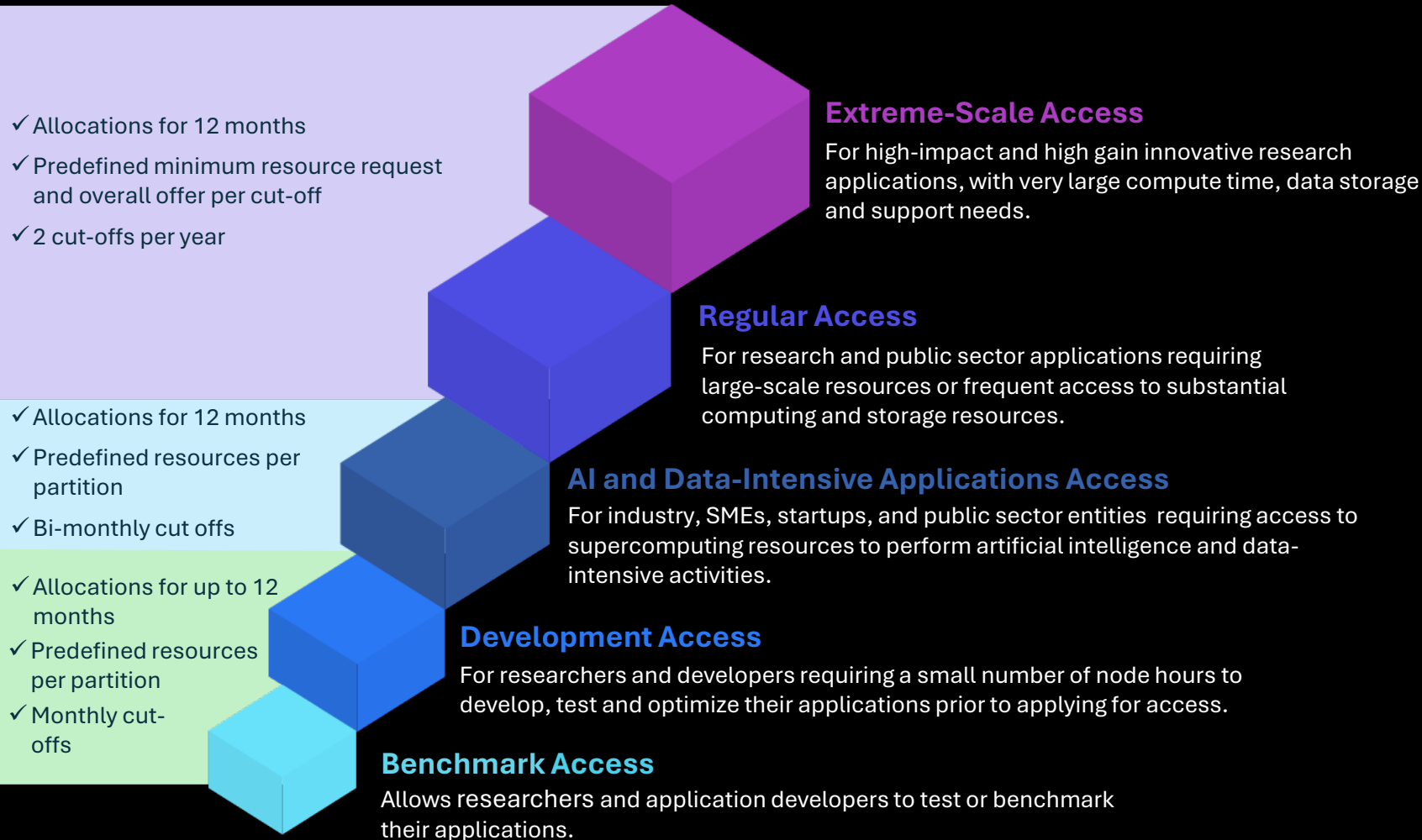
- Hardware deliveries expected mid-October 2024
- GPU installation planned in November 2024



Access to the EuroHPC JU infrastructure

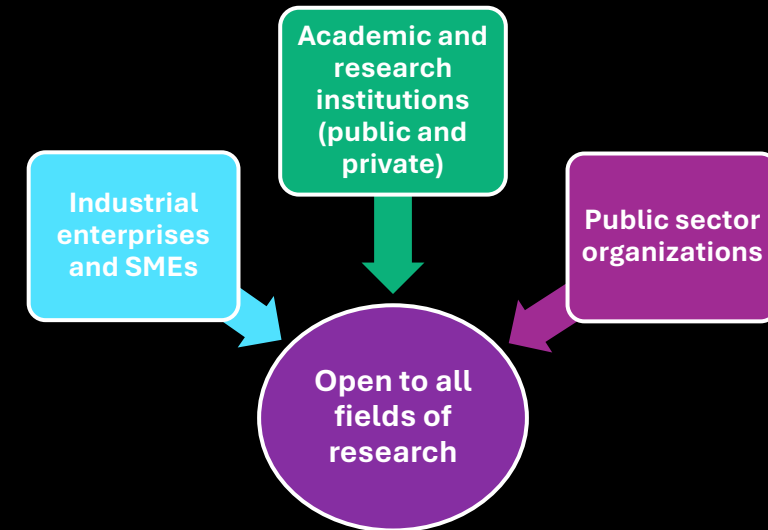
Access modes

OVERVIEW



WHO IS ELIGIBLE?

Principal Investigators and Team Members affiliated with organizations located in countries associated to Horizon 2020



Access modes

CUT-OFFS TIMELINE

REGULAR ACCESS:

- December 2021
- March 2022
- July 2022
- November 2022
- March 2023
- July 2023
- November 2023
- March 2024
- September 2024 (under evaluation)
- **March 2025 (TBC)**
- **September (TBC)**

EXTREME SCALE ACCESS:

- December 2022
- May 2023
- October 2023
- April 2024
- October 2024 (under evaluation)
- **April 2025 (TBC)**
- **October 2025 (TBC)**

AI AND DATA-INTENSIVE APPLICATIONS ACCESS :

- April 2024
- June 2024
- October 2024 (under evaluation)
- **22 November 2024**
- **6 cut-offs in 2025 (TBC)**

Access modes

AI AND DATA-INTENSIVE APPLICATIONS – 22 November 2024



Fast-track, simplified process for peer-review evaluation

Reduce the evaluation time (Submission to Allocation) - 1 month



No ranking | First come first serve approach

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



Pre-fixed amount of node-hours per GPU partition.



12 months allocations.

| PARTITION | NODE HOURS |
|------------------|------------------|
| Vega GPU | 7,100 |
| MeluXina GPU | 25,000 |
| Karolina GPU | 7,500 |
| LUMI-G | 351,455 |
| Leonardo Booster | 545,865 |
| MareNostrum5 ACC | 129,377 |
| TOTAL | 1,065,918 |

Evaluation process

INVOLVED ACTORS

THANK YOU!

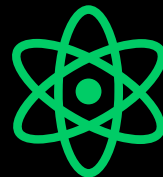
Evaluations of proposals' technical feasibility



Technical experts:

Computing centre representatives
Technical reviewers

Evaluations of proposals' scientific excellence, innovation and impact, quality and efficiency



Scientific experts:

Committee Chairs
Domain Panel Chairs
Rapporteurs
External reviewers

**ACCESS RESOURCE
COMMITTEE
ESTABLISHMENT IN
2024/2025**

Evaluation process

ADVICE FOR APPLICANTS

- Consult the [EuroHPC JU](https://access.eurohpc-ju.europa.eu/) website for updates
- Respect the cut-off dates and deadlines
- Use correct, up-to-date proposal templates
- Perform scalability tests on time on the preferred system
- For technical concerns contact the HPC centers
- Submit your Final Reports on time
- Take the Committee comments into consideration

Apply via:

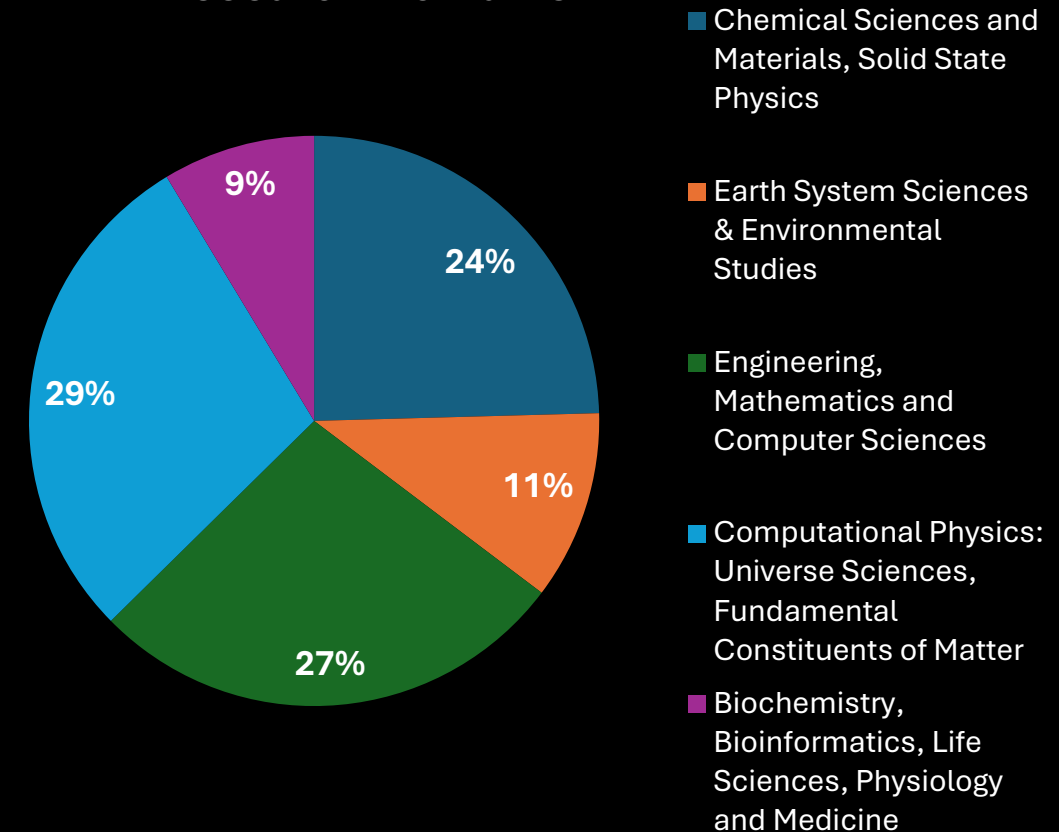
<https://access.eurohpc-ju.europa.eu/>

Access calls statistics

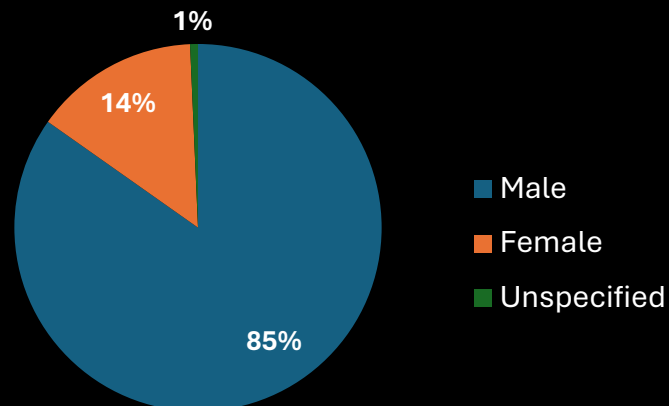
AWARDED PROJECTS

| ACCESS CALL | PROPOSALS AWARDED | NODE HOURS AWARDED |
|------------------------------------|-------------------|--------------------|
| EXTREME SCALE | 75 | 63 Million |
| REGULAR | 189 | 26 Million |
| AI AND DATA INTENSIVE APPLICATIONS | 25 | 1 Million |
| TOTAL | 289 | 90 Million |

Research Domains

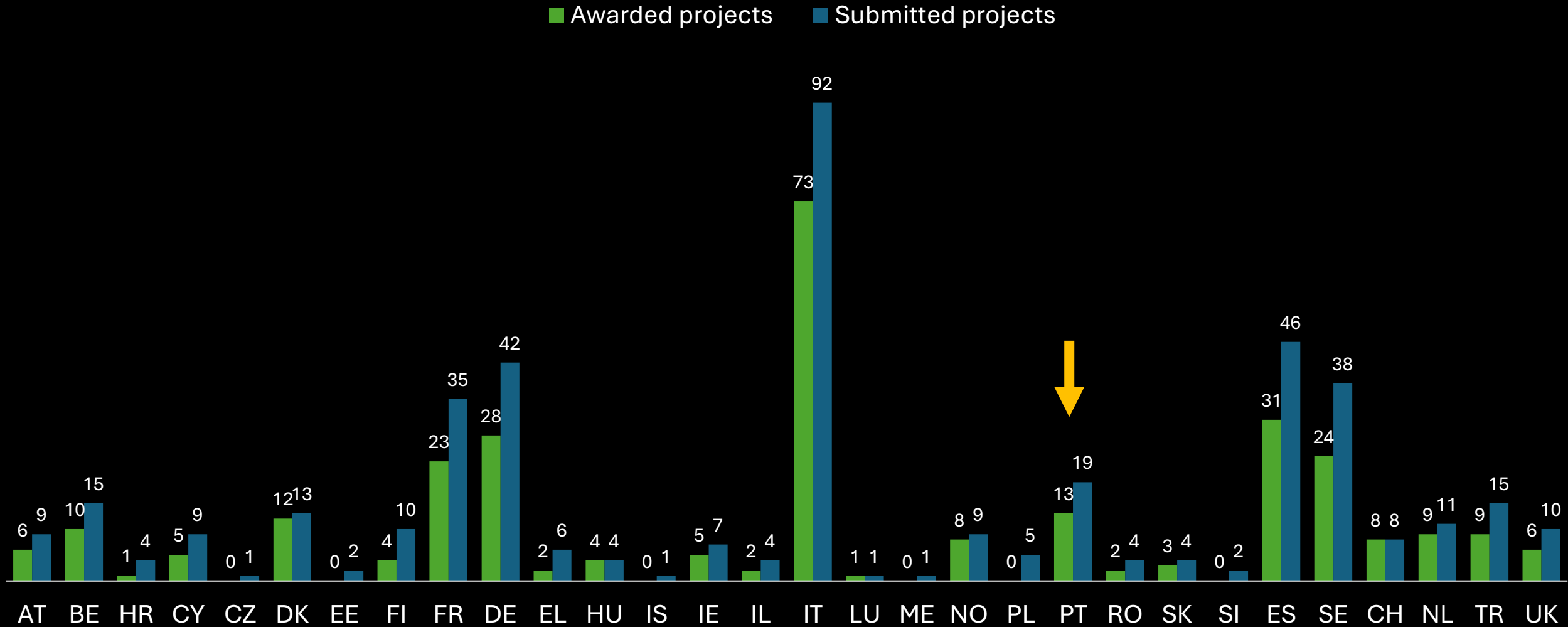


Principal Investigator gender distribution



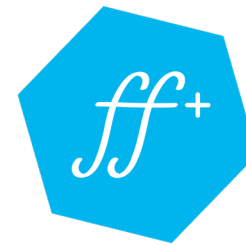
Access calls statistics

PRINCIPAL INVESTIGATOR AFFILIATION COUNTRY





R&I EuroHPC JU projects for Users and Applications Support



FORTISSIMO
PLUS



MINERVA

European Support Centre for
Scalable AI Research and
Deployment.

Future Activities

Future Activities



AI factories – ‘one stop shop for AI applications’



Delivery of 2nd Exascale supercomputer: Alice Recoque supercomputer (Jules Vernes Consortium) in France



Procurement and deployment of quantum computers



Research and Development of applications for exascale and quantum systems

Benchmark suite for HPC, Quantum Computing, and AI



People: more skills development and training, launch of the EuroHPC Virtual Training Academy

The Peer-Review Team



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Dora Marton



Catarina Guerreiro



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EuroHPC
Joint Undertaking

Thank you!

For more information, feel free to visit
our website and social media:



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