

EuroHPC: What it is and how to engage

DeiC Conference, 27th October 2026

EuroHPC
Joint Undertaking

Mads Engelund
Programme officer

ABOUT THE EUROHPC JOINT UNDERTAKING

EuroHPC Joint Undertaking

- An EU body and funding entity based in Luxembourg, established in 2018 and autonomous since 2020
- Governed by a Board composed of the European Commission, 38 Participating States and 3 Private Members



Digital Europe Programme

2.1B EUR

- **Infrastructure**
- **Federation of supercomputing services**
- **Widening usage and skills**

Horizon Europe Programme

1.7B EUR

- **Technology**
- **Applications**
- **International Cooperation**
- **Quantum R&I**

Connecting Europe Facility

320M EUR

- **Hyperconnectivity**
- **Data Connectivity**

- Procure, deploy and maintain **High Performance Computing, AI Factories, AI Gigafactories and Quantum infrastructure** in Europe
- **Fund innovative Research and Innovation projects**, to develop European skills, applications, software and hardware and foster a European supply chain
- Provide **access to High Performance Computing, AI Factories, AI Gigafactories and Quantum resources** and user support
- Support state-of-the-art fundamental and applied research and innovation in **Quantum technologies**



Your Representation in EuroHPC

Denmark is represented by two board members in the Governing Board

Two organisations are tasked with funnelling concerns and ideas to the board members

DeiC

- **Most issues**
- **Always good starting point**

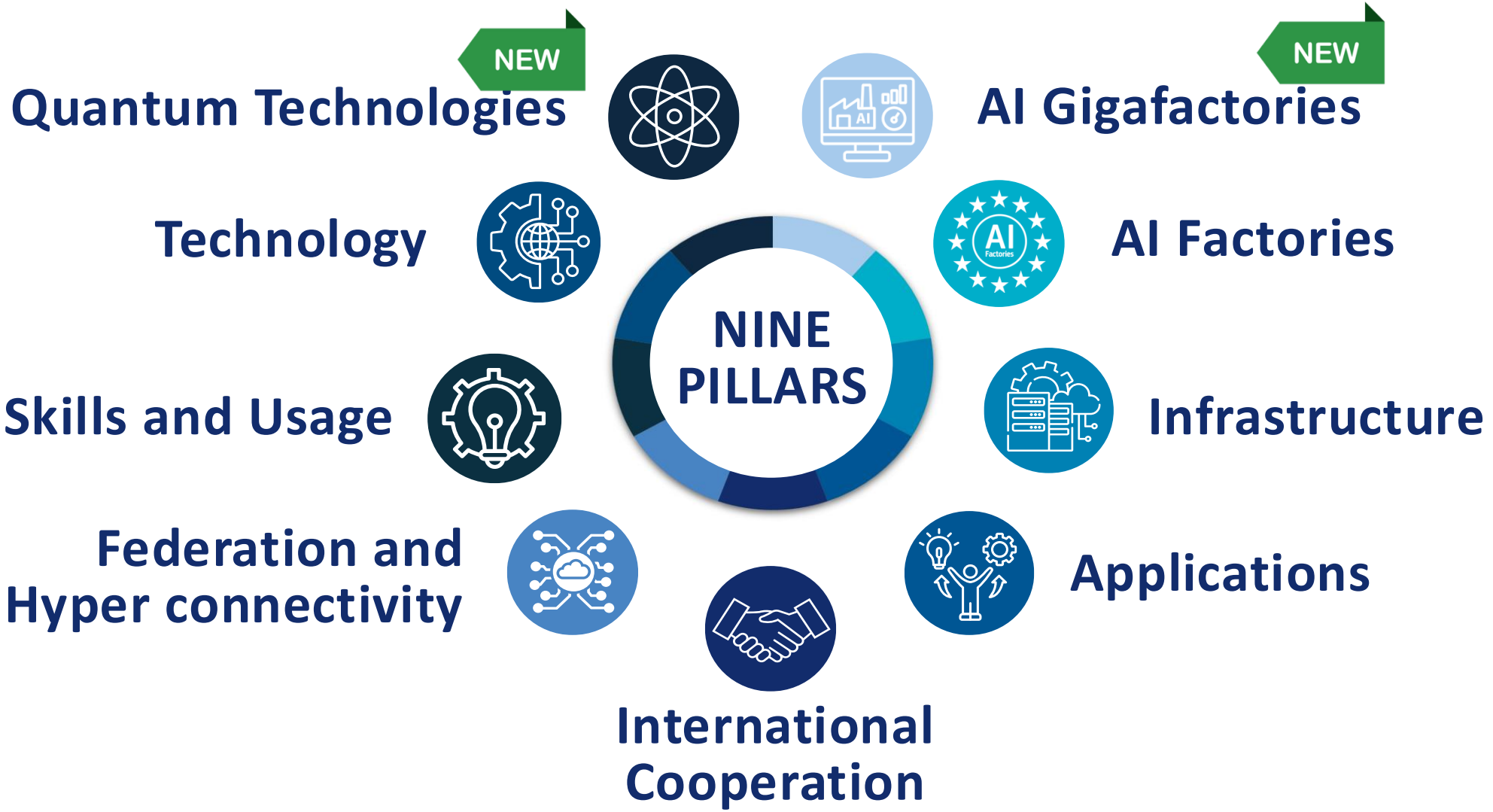
Uddannelses- og Forskningsstyrelsen

- **Formal policy**
- **Funding positions**



NINE PILLARS OF EUROHPC JU

EuroHPC Joint Undertaking



AI FACTORIES

Building Europe's AI ecosystem

Infrastructure, expertise and access for European startups, SMEs and researchers

€2.6 billion
investment

19
AI Factories

13
AI Factory Antennas



Switzerland's participation is contingent upon the ratification of its accession to Horizon Europe.
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the European Union.
This designation shall not be construed as recognition of a State of Palestine and is without prejudice to the individual positions of the Member States on this issue.
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Cartography: Eurostat – IMAGE, 05/2025

What does AI Factories provide?

A complete environment for developing and testing AI

01 **Sophisticated hardware and software environment**

02 **Data**

03 **Expert consultation**

04 **AI legislation consultation**

05 **Testing and modelling**

06 **Software and hardware expertise**



So what will AI Gigafactories be?

A scale-up extension of the AI Factories ecosystem

01 **Raw power and extreme scale-up**



02 **Connected to the existing AI Factories eco-system**



How do I gain access?

You can ask us directly

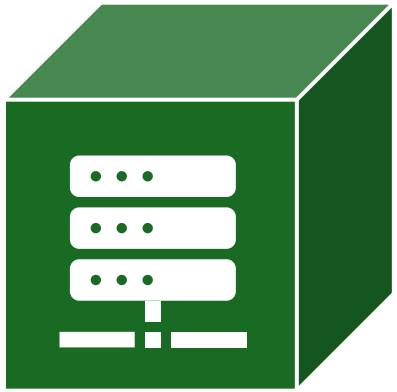
01 National allocation on LUMI through DeiC

02 EuroHPC allocation on several systems through EuroHPC directly



EuroHPC JU Access Calls

HPC APPLICATIONS



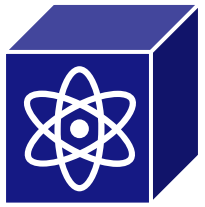
Preparatory and production access calls types

AI APPLICATIONS



Scientific and industry call types

QUANTUM APPLICATIONS



Pilot stage

FREE ACCESS TO EUROHPC INFRASTRUCTURE

EuroHPC Joint Undertaking

Access for "traditional" HPC

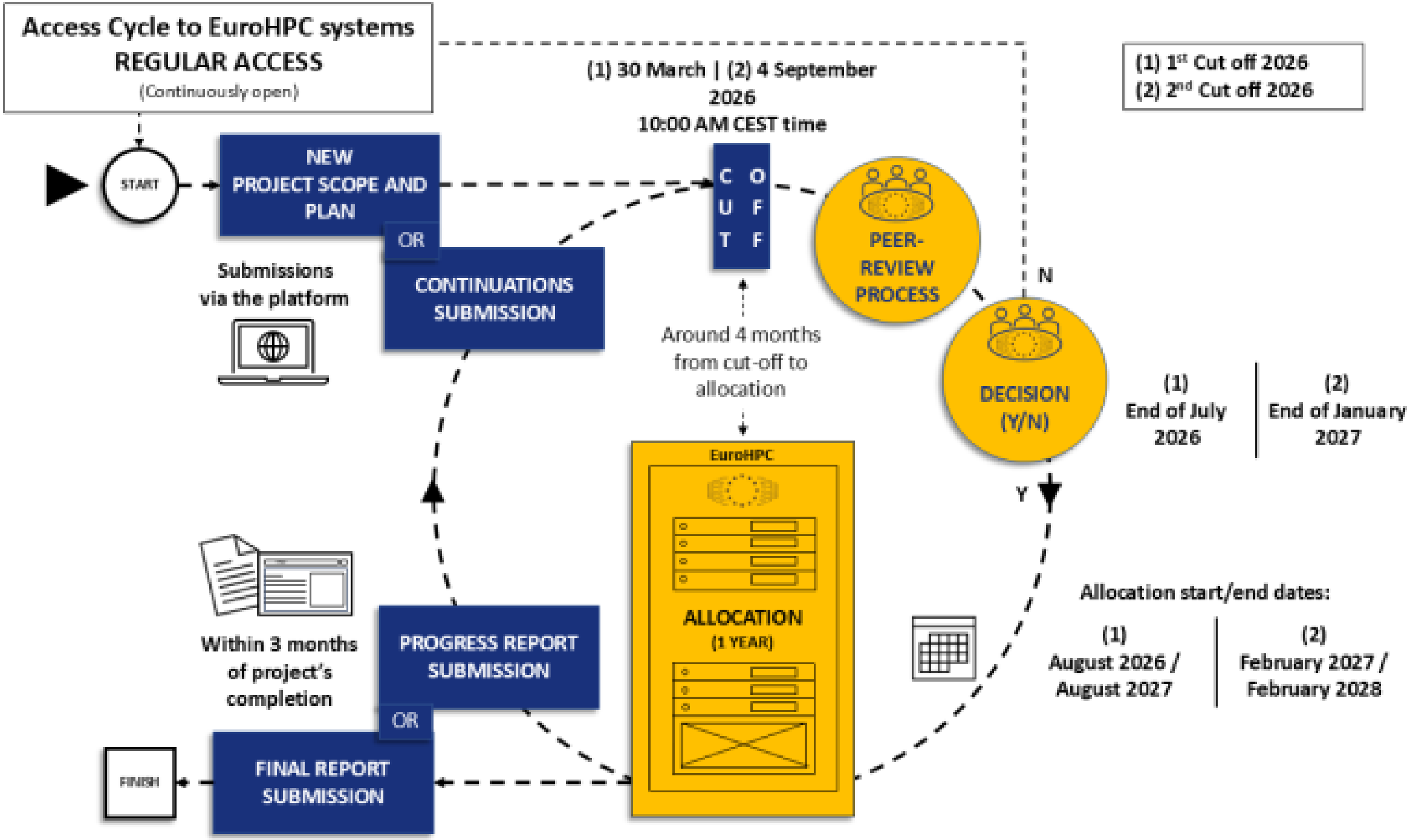
BENCHMARK	DEVELOPMENT	REGULAR	EXTREME SCALE
For scaling tests & benchmarks	For code and algorithm development	For projects that require large-scale HPC resources	For high-impact, high-gain projects that require extremely large-scale HPC resources
Fixed amount of allocation for 2 or 3 months	Fixed amount of allocation for 6 or 12 months	Allocation duration: for 12 months	Allocation duration: for 12 months
Continuously open with monthly cut-offs	Continuously open with monthly cut-offs	Continuously open with 2 cut-offs per year	Continuously open with 2 cut-offs per year
Results and access to system: 2 weeks from cut-off date	Results and access to system: 2 weeks from cut-off date	Peer-review process duration: 4 months	Peer review process duration: 6 months

AI Access

AI FOR SCIENCE AND COLLABORATIVE EU PROJECTS	INDUSTRIAL INNOVATION
For **scientific projects** intending to perform artificial intelligence and data-intensive activities	• **PLAYGROUND** • **FAST LANE** • **LARGE SCALE**
Fixed allocation for 12 months on first-in / first-served basis	SELECTION: AIF Industrial Innovation Group
Bimonthly cut-offs	
Peer-review process duration: 1 month	**Up to 30% of EU access time**

TECHNICAL SUPPORT




Access Cycle to EuroHPC systems
REGULAR ACCESS
(Continuously open)
(1) 30 March | (2) 4 September 2026
10:00 AM CEST time
(1) 1st Cut off 2026
(2) 2nd Cut off 2026
START
NEW PROJECT SCOPE AND PLAN
OR
CONTINUATIONS SUBMISSION
Submissions via the platform
CUT OFF
PEER-REVIEW PROCESS
N
DECISION (Y/N)
Y
Around 4 months from cut-off to allocation
(1) End of July 2026
(2) End of January 2027
EuroHPC
ALLOCATION
(1 YEAR)
Allocation start/end dates:
(1) August 2026 / August 2027
(2) February 2027 / February 2028
Within 3 months of project's completion
PROGRESS REPORT SUBMISSION
OR
FINAL REPORT SUBMISSION
FINISH

MADE IN EU

EuroHPC quantum computers

are developed by European companies, and will help scientists to break unsolvable problems, boosting EU competitiveness, strategic autonomy and sustainable prosperity.

EuroHPC Joint Undertaking

Piast-Q (PL)
Digital quantum computer
Trapped-ions

Lucy (FR)
Digital quantum computer
Photonics

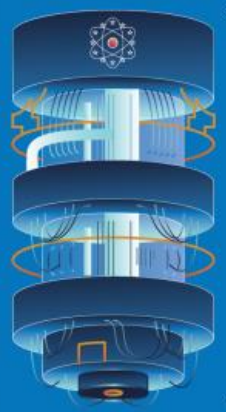
Ruby (FR)
Analogue quantum simulator
Neutral atoms

Euro-Q-Exa (DE)
Digital quantum computer
Superconducting
Crystal

JADE (DE)
Analogue quantum simulator
Neutral atoms

Neutral atoms

Superconducting



VLQ (CZ)
Digital quantum computer
Superconducting
Star-shaped

SOL (IT)
Hybrid analogue/
digital quantum simulator
Neutral atoms

EuroQCS Spain (ES)
Analogue quantum computer
Superconducting
Annealing

Semiconductor

EuroSSQ-HPC (NL)
Digital quantum computer
Semiconductor
Spin Qubits

MeluXina-Q (LU)
Digital quantum computer
Semiconductor
Spin Qubits

EuroHPC JU

LEADING THE WAY IN EUROPEAN SUPERCOMPUTING

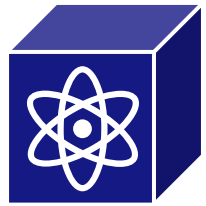
QUANTUM APPLICATIONS

System	Site (Country)	Technology/modality	Min-Max request (QPU hours)
Ruby	GENCI/CEA (FR)	Analogue simulator/Neutral atoms	10-25
Euro-Q-Exa	LRZ (DE)	Digital/Superconducting	1-10
Lucy	GENCI/CEA (FR)	Digital/Photonic	10-25
PIAST-Q	PCSS (PL)	Digital/Trapped Ions	10-25
VLQ	IT4I (CZ)	Digital/Superconducting	1-10

Quantum Access Pilot

For collecting performance data, code and algorithm development, development of workflows and QC trainings

Access duration 3-6 months
Allocation process duration – 2 weeks after the cut-off date (monthly cut-off dates)



Submission of an **online form**

Evaluations based on **technical feasibility**

Final results communication per system applied to

Emulator benchmark assignment for proposals to obtain feasibility proof

Quantum Technologies Calls are open!

CALL STATUS: OPEN

Neutral-Atom Platform Technologies

This call aims to advance neutral-atom quantum technologies by delivering scalable, industry-ready quantum processors for simulation and computing.

CALL STATUS: OPEN

Next-Generation QKD Systems

This call aims to strengthen Europe's strategic autonomy in quantum-secure communications by advancing core Quantum Key Distribution (QKD) technologies.

CALL STATUS: OPEN

Quantum Experimental Pilot Lines for Quantum Technologies

This call seeks to bridge the gap between academic quantum research and industrial-scale production by advancing experimental pilot line capacities.

CALL STATUS: OPEN

Quantum-Testing Infrastructure for Quantum Technologies

The call aims at establishing a pan-European open-access testing infrastructure for quantum technologies, creating a comprehensive framework for validation and certification of quantum components and systems.

CALL STATUS: OPEN

Superconducting Platform Technologies

This call aims to advance Europe's superconducting quantum computing capabilities by developing a 1,000-qubit quantum processor with high performance characteristics including long coherence times, fast operations, and error correction capabilities.

CALL STATUS: OPEN

Trapped-Ion Platform Technologies

This call aims to advance Europe's leadership in trapped-ion quantum computing by developing a full-stack quantum computer with over 1,000 qubits, fully integrated with high-performance computing systems and accessible via cloud platforms.

CALL STATUS: OPEN

Quantum Machine Learning

This call aims to strengthen Europe's scientific and technological capabilities in quantum computing and accelerate the industrial uptake of quantum-enhanced AI solutions.



RESEARCH AND INNOVATION

HPC SPECTRA

HPC·TRAIN

HPC IN EUROPE

EVITA

EuroHPC Virtual Training Academy

Training and financial support: HPC in Europe Portal, HPC Training Academy, HPC SPECTRA, EVITA, FFplus.

FORTISSIMO PLUS

Traineeships, training material, course materials, a master programme.

If interested, contact the projects directly



RESEARCH AND INNOVATION

16+ **Centres of Excellence**, to improve performance of algorithms in strategic domains and enable, and adapt applications to future advancements and user needs, provide training and services to users (community building)



RESEARCH AND INNOVATION

23 **New grants in preparation, a mix between CoEs and 2 new types of grants:**
Transversal CoEs – Focused on developing HPCs tools
Lighthouse Codes – Focused on the performance of one code

Some new projects are continuations of existing ones while others are new submissions – which ones were continued is not yet public



RESEARCH AND INNOVATION

23 **New grants in preparation, a mix between CoEs and 2 new types of grants:**
Transversal CoEs – Focused on developing HPCs tools
Lighthouse Codes – Focused on the performance of one code

3-year cycles, window is closed for now.

But, 2.5 years goes faster than you think – better start thinking about your future consortium!



That has to be all, right?

No, there is more

01 **Chip Development**

02 **Connectivity (data cables)**

03 **Federation of AI Factories eco-system**

04 **International Collaboration (Japan, India, South America)**



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