EuroHPC JU
Calls for Access & Peer-Review

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Programme Officer

ISC 2023 Workshop - What's Next in European Supercomputing and How to Get Access to Europe's Biggest Supercomputers for Free?

25 May 2023

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Calls for Access

PREPARATORY ACTIVITIES

Benchmark Access
Development Access

PRODUCTION ACTIVITIES

Regular Access
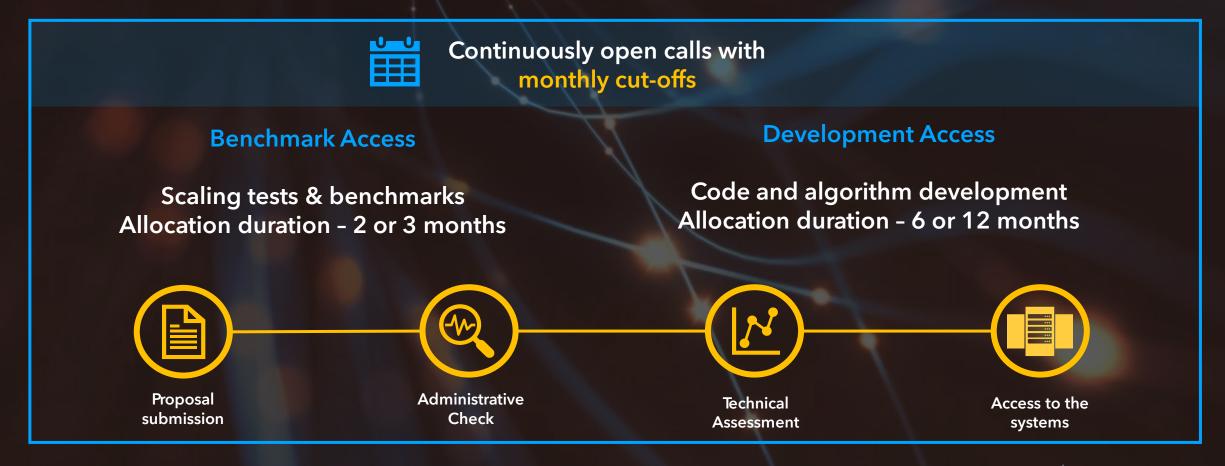Extreme Scale Access

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Calls for Access - Eligibility

- **Principal Investigators** and **Team Members** affiliated in organizations from countries associated to Horizon 2020

- Principal Investigator's employment contract should be valid for more than 3 months after the end allocation date

- Specific terms and conditions stated in the Terms of Reference per access mode

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Calls for Access – Benchmark and Development Access

Continuously open calls with **monthly cut-offs**

Benchmark Access

Scaling tests & benchmarks
Allocation duration – 2 or 3 months

Development Access

Code and algorithm development
Allocation duration – 6 or 12 months

Proposal submission

Administrative Check

Technical Assessment

Access to the systems

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Calls for Access – Benchmark and Development Access

Predefined resources available per partition

Resources offers per proposal				
System/partition	**Benchmark Access**		**Development Access**	
	Node hours	**Core hours**	**Node hours**	**Core hours**
Vega CPU	5,000	640,000	10,000	1,280,000
Vega GPU	400	51,200	1,000	128,000
Karolina CPU	7,000	896,000	15,000	1,920,000
Karolina GPU	1,000	128,000	3,000	384,000
MeluXina CPU	5,000	640,000	10,000	1,280,000
MeluXina GPU	1,000	64,000	3,000	192,000
MeluXina FPGA	1,500	N/A	5,000	N/A
Discoverer CPU	7,000	896,000	15,000	1,920,000
LUMI-C	7,000	896,000	15,000	1,920,000
LUMI-G	20,000	1,280,000	10,000	640,000
Leonardo Booster	3,500	112,000	3,500	112,000

System/partition	**Storage hours (TB hours)**
LUMI-C	105,498
LUMI-G	105,498

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Calls for Access – Regular Access

📅 Continuously open call with **3 cut-off dates per year** in March, July and November

Intended for projects that require large-scale HPC resources

Peer-review process duration: 4 months

Next cut-off date: 7 July 2023

Proposal submission → Administrative Check → Technical Assessment → Rapporteur Reports → Domain Panel meeting → Super Panel meeting → RAP meeting → GB ranking list adoption → Communication of results → Access to the systems

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Calls for Access – Regular Access

Available resources & thresholds per partition on petascale and pre-exascale systems

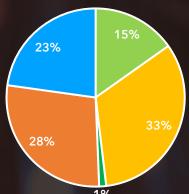| System	Architecture	Site (Country)	Resources offered (node hours)	Resources offered (core hours)	Minimum resources request (node hours)	Minimum resources request (core hours)
Vega CPU	BullSequana XH2000	IZUM Maribor (SI)	585,938	75,000,000	80,000	10,240,000
Vega GPU	BullSequana XH2001	IZUM Maribor (SI)	11,719	1,500,000	4,000	512,000
Karolina CPU	HPE Apollo 2000Gen10 Plus and HPE Apollo 6500	VSB-TUO, IT4Innovations, (CZ)	468,750	60,000,000	80,000	10,240,000
Karolina GPU	HPE Apollo 2000Gen10 Plus and HPE Apollo 6500	VSB-TUO, IT4Innovations, (CZ)	46,875	6,000,000	8,000	1,024,000
MeluXina CPU	BullSequana XH2004	LuxProvide (LU)	511,719	65,500,000	80,000	10,240,000
MeluXina GPU	BullSequana XH2005	LuxProvide (LU)	173,438	11,100,000	30,000	1,920,000
Discoverer CPU	BullSequana XH2000	Sofiatech, (BG)	812,500	104,000,000	80,000	10,240,000
LUMI-C	HPE Cray EX	CSC (FI)	376,719	48,220,033	37,000	4,736,000
LUMI-G	HPE Cray EX	CSC (FI)	738,665	47,274,560	50,000	3,200,000
Leonardo DCGP	BullSequana XH2000	CINECA (IT)	132,347	14,822,903	13,000	1,456,000
Leonardo Booster	BullSequana XH2000	CINECA (IT)	300,563	9,618,018	20,000	640,000
MN5 GPP	Lenovo ThinkSystems SD650	BSC (ES)	376,719	48,220,033	38,000	4,256,000

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Calls for Access – Regular Access

Statistics – December 2021 - November 2022 cut-offs

Awarded projects - research domains distribution across all cut-offs

- Biochemistry, Bioinformatics, Life Sciences, Physiology and Medicine
- Chemical Sciences and Materials, Solid State Physics
- Earth System Sciences
- Computational Physics: Universe Sciences, Fundamental Constituents of Matter
- Engineering, Mathematics and Computer Sciences

Awarded resources

HPC Centre	Core hours awarded
IZUM (SI)	383,379,687
IT4I (CZ)	140,900,667
SofiaTech (BG)	151,310,720
LuxProvide (LU)	121,207,896
CSC (FI)	765,204,976
TOTAL	1,562,003,946

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Calls for Access – Extreme Scale Access

📅 Continuously open call with **2 cut-off dates per year** in late April and late September

Intended for high-impact, high-gain projects that require extremely large-scale HPC resources

Peer-review process duration: **6 months**

Next indicative cut-off date: **28 September 2023**

Proposal submission → Administrative Check → Technical Assessment → Scientific Evaluation → Response Phase → Rapporteur Reports → ARC meeting → RAP meeting → GB ranking list adoption → Communication of results → Access to the systems

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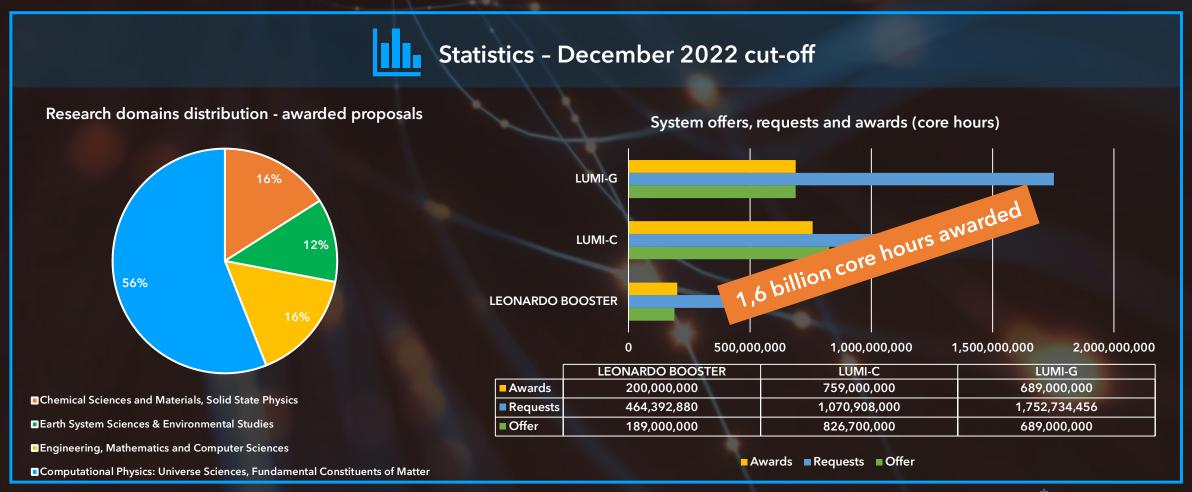
Calls for Access – Extreme Scale Access

Available resources & thresholds per partition on pre-exascale systems

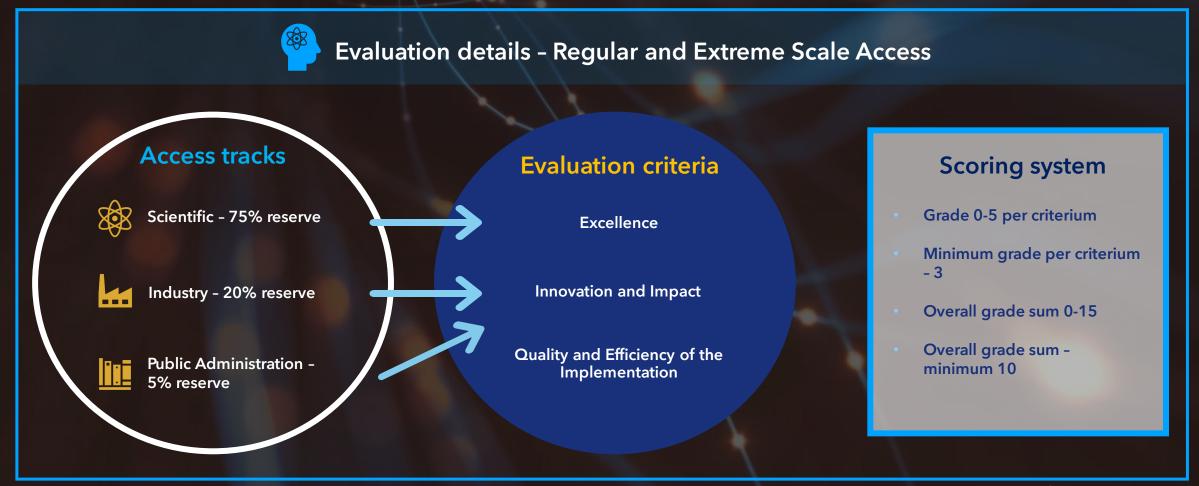| System	Architecture	Site (Country)	Resources offered (node hours)	Resources offered (core hours)	Minimum resources request (node hours)	Minimum resources request (core hours)
LUMI-C	HPE Cray EX	CSC (FI)	3,955,550	506,310,350	390,000	49,920,000
LUMI-G	HPE Cray EX	CSC (FI)	7,755,983	496,382,880	775,000	49,600,000
Leonardo DCGP	BullSequana XH2000	CINECA (IT)	1,852,863	207,520,645	185,000	20,720,000
Leonardo Booster	BullSequana XH2000	CINECA (IT)	4,207,883	134,652,246	420,000	13,440,000
MN5 GPP	Lenovo ThinkSystems SD650	BSC (ES)	3,955,550	506,310,350	400,000	44,800,000

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Calls for Access – Extreme Scale Access

Statistics – December 2022 cut-off

Research domains distribution - awarded proposals

- 16%
- 12%
- 56%
- 16%

- ■ Chemical Sciences and Materials, Solid State Physics
- ■ Earth System Sciences & Environmental Studies
- ■ Engineering, Mathematics and Computer Sciences
- ■ Computational Physics: Universe Sciences, Fundamental Constituents of Matter

System offers, requests and awards (core hours)

1,6 billion core hours awarded

	LEONARDO BOOSTER	LUMI-C	LUMI-G
■ Awards	200,000,000	759,000,000	689,000,000
■ Requests	464,392,880	1,070,908,000	1,752,734,456
■ Offer	189,000,000	826,700,000	689,000,000

■ Awards ■ Requests ■ Offer

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Calls for Access – Evaluations

Evaluation details – Regular and Extreme Scale Access

Access tracks

Scientific – 75% reserve

Industry – 20% reserve

Public Administration – 5% reserve

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

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Calls for Access – Evaluations

Resource allocation procedure– Regular and Extreme Scale Access

PROPOSAL INFORMATION		EVALUATION MEETING RESULTS			RESOURCE ALLOCATION PANEL (RAP) OUTCOME	
Proposal ID	**Requests on System X**	**Meeting grade**	**Result**	**Rank**	**Awarded resources**	**RAP result**
1111	20,000,000	15	Above threshold	1	20,000,000	Awarded
2222	60,000,000	14	Above threshold	2	60,000,000	Awarded
3333	70,000,000	10	Above threshold	3	0	Not awarded
4444	10,000,000	8	Below threshold	4	0	Not awarded
5555	40,000,000	7	Below threshold	5	0	Not awarded

System X offer: 80.000.000 core hours
Total resources requested: 200.000.000 core hours
System oversubscription: 120.000.000 core hours
System oversubscription percentage: 60%

System X available resources: 80.000.000 core hours
System X available resources: 60.000.000 core hours
System X available resources: 0 core hours

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Calls for Access – Evaluations

Involved experts – Regular and Extreme Scale Access

Evaluations of proposals' scientific excellence, innovation and impact

Evaluations of proposals' technical feasibility

Technical experts:

- Computing centre representatives
- Technical reviewers

Scientific experts:

- Committee Chairs
- Domain Panel Chairs
- Rapporteurs
- External reviewers

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Application forms and documents

BENCHMARK & DEVELOPMENT ACCESS FORMS

The Project
- Title, summary and keywords
- Research fields
- Project duration

Principal Investigator & Team Members
- Basic personal and contact information
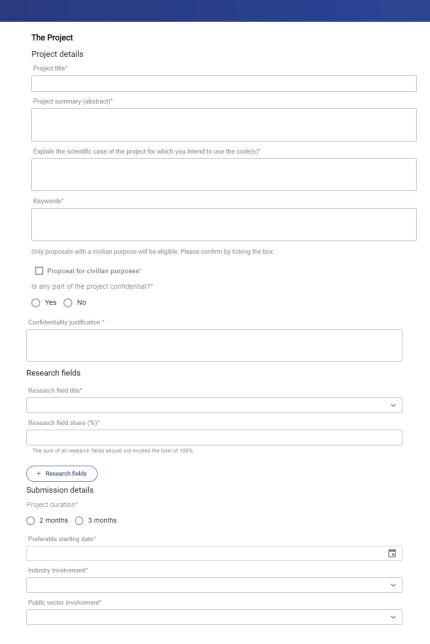- Organization details

Partitions
- Partition selection & resources request
- Memory, data transfer details & I/O

Code details, development & feasibility
- Scalability and performance
- Optimization of the work proposed

REGULAR & EXTREME SCALE ACCESS FORMS

The Project
- Title, summary and keywords
- Research fields
- Project duration
- Project Scope and Plan upload

Principal Investigator & Team Members
- Basic personal and contact information
- Organization details
- PI track record and CV upload

Partitions
- Partition selection & resources request
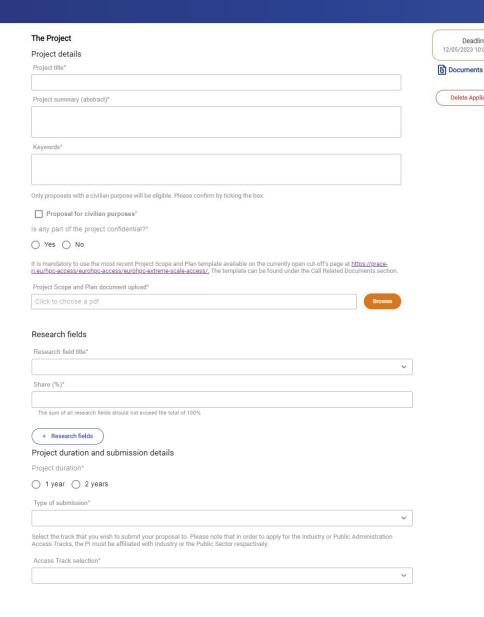- Storage, memory, jobs, I/O

Code details and development
- Description of codes development
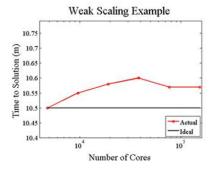
Dissemination strategy

Collaboration and Funding

EuroHPC Extreme Scale Access Call
Proposal ID: EHPC-EXT-2023E01-008
Draft

Deadline
12/05/2023 10:00:00 AM

Documents

Delete Application

Project Application
- The Project
- Principal Investigator
- Contact Person
- Team Members Information
- Partitions
- Code Details and Development
- Special Needs
- Dissemination Strategy
- Collaboration and Funding
- Suggested Reviewers
- Excluded Reviewers
- Acceptance of the Terms of Reference

The Project

Project details

Project title*

Project summary (abstract)*

Keywords*

Only proposals with a civilian purpose will be eligible. Please confirm by ticking the box.

☐ Proposal for civilian purposes*

Is any part of the project confidential?*
○ Yes   ○ No

It is mandatory to use the most recent Project Scope and Plan template available on the currently open cut-off's page at https://prace-ri.eu/hpc-access/eurohpc-access/eurohpc-extreme-scale-access/. The template can be found under the Call Related Documents section.

Project Scope and Plan document upload*

Click to choose a pdf   **Browse**

Research fields

Research field title*

Share (%)*

The sum of all research fields should not exceed the total of 100%

+ Research fields

Project duration and submission details

Project duration*
○ 1 year   ○ 2 years

Type of submission*

Select the track that you wish to submit your proposal to. Please note that in order to apply for the Industry or Public Administration Access Tracks, the PI must be affiliated with Industry or the Public Sector respectively.

Access Track selection*

Project Scope and Plan

Project Scope and Plan = proposal template

Detailed proposal information
- Overview of the project and resources request justification
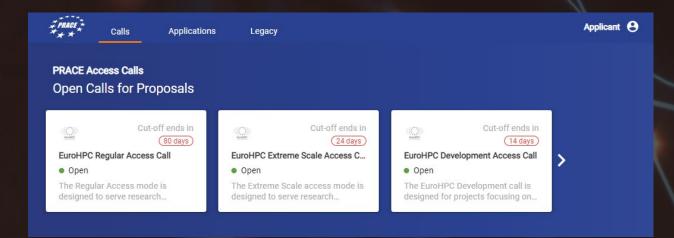- Data management
- Performance of the software

Milestones & Gantt chart

Personnel and Management plan

How to apply?

Proposal submission via the Peer-Review Platform available at https://pracecalls.eu

Login at:
https://pracecalls.eu/auth/login

Register at:
https://pracecalls.eu/auth/register

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Thank you for your attention!

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