



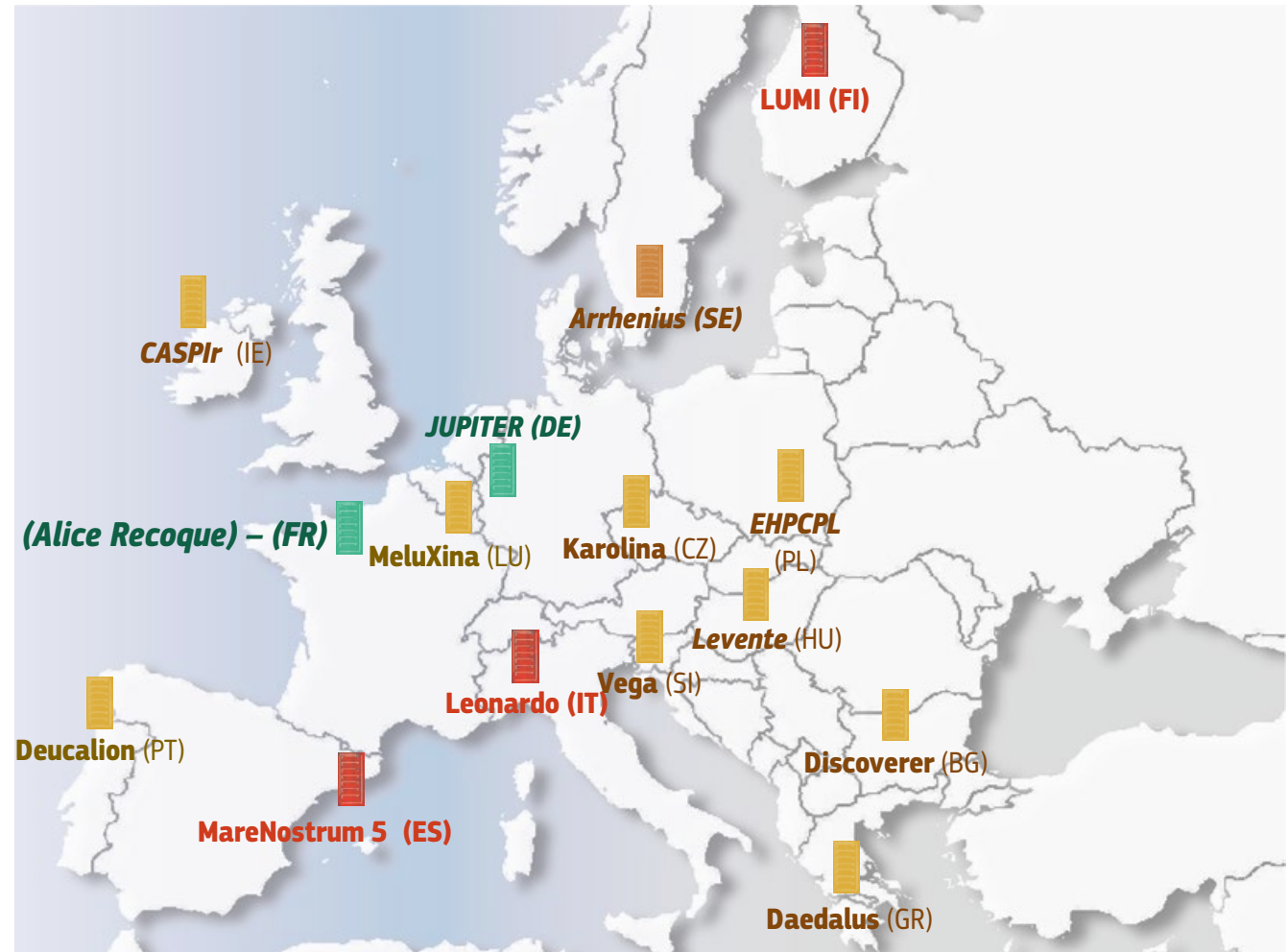
AI Factories Access Policy

GenAI & Health – Info and Brokerage Event

06/06/2025

The EuroHPC Joint Undertaking 2021-2027

- EU body and funding entity, established in 2018, based in Luxembourg
- Governed by a Board composed of the EC, 35 Participating States and 3 Private Members
- Mission:
 - Acquire, deploy and maintain a HPC and quantum Infrastructure in Europe
 - Fund R&I projects to develop HPC applications, software and hardware and foster a European supply chain
 - Provide access to HPC and quantum users across Europe and support the development of skills
 - Develop and operate AI Factories to support the growth of a competitive and innovative AI ecosystem in Europe



Global standing of EuroHPC supercomputers

Supercomputer	Top 500	Green 500
LUMI	#8	#25
Leonardo	#9	#48
MareNostrum 5	#11	#30
JETI (JUPITER)	#18	#6
MeluXina	#112	#55
Karolina	#165	#165
Discoverer	#223	#223
JEDI (JUPITER)	#224	#1
Deucalion	#259	#94
Vega	#266	#268

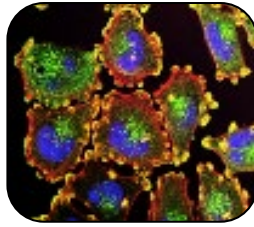
[TOP500, Nov 2024](#)

HPC fuels major innovations and scientific advances

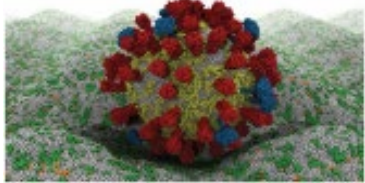
Science



Personalised health



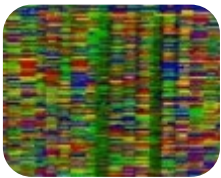
Cancer



Drug discovery



Drug design



Genomics



Weather & climate

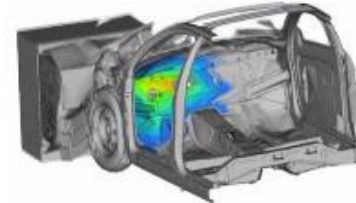
Industry



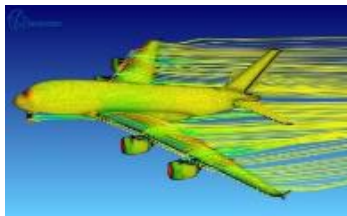
Wind plant modelling



Oil & gas exploration



Crash simulations



Aerodynamics & structural analysis

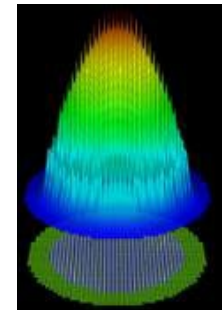


Pharmaceuticals

Security



Cybersecurity



Nuclear reactor simulations



Complex encryption technologies

More than 800 scientific and industrial applications

Enabling European Research & Innovation



12+ **Centres of Excellence**, to improve performance of algorithms in strategic domains, and adapt applications to exascale and future post-exascale supercomputing

e.g., Solid Earth; Biomolecular Research; Weather and Climate; Engineering; Materials Design; Astrophysics; Plasma; Global Challenges



30+ **National Competence Centres**, acting as point of access for HPC in each country, supporting adoption of HPC, delivering trainings, mapping skills, interacting with industry, etc.



Hardware and software, with projects like **DARE (RISC V)** developing the first European chip for HPC, that will power future EuroHPC supercomputers



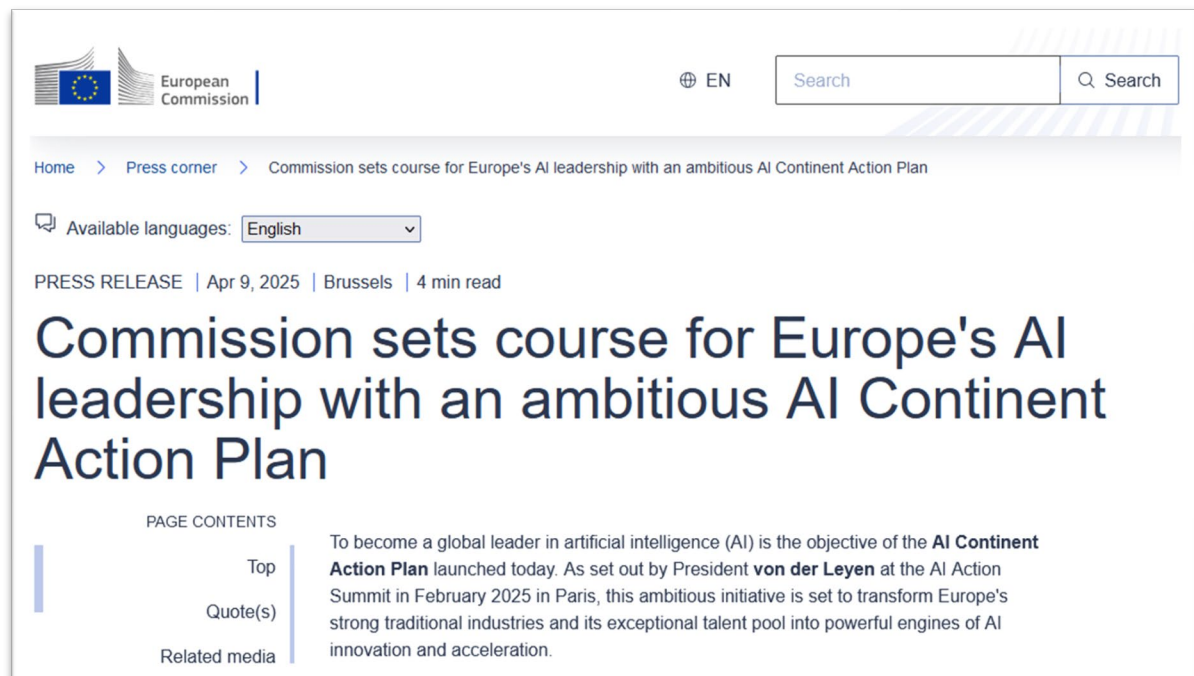
Training courses for the next generation of European HPC experts: **EUMaster4HPC**, **HPC SPECTRA**, **FFplus**, **EPICURE** and more in the future

EU HPC projects in health

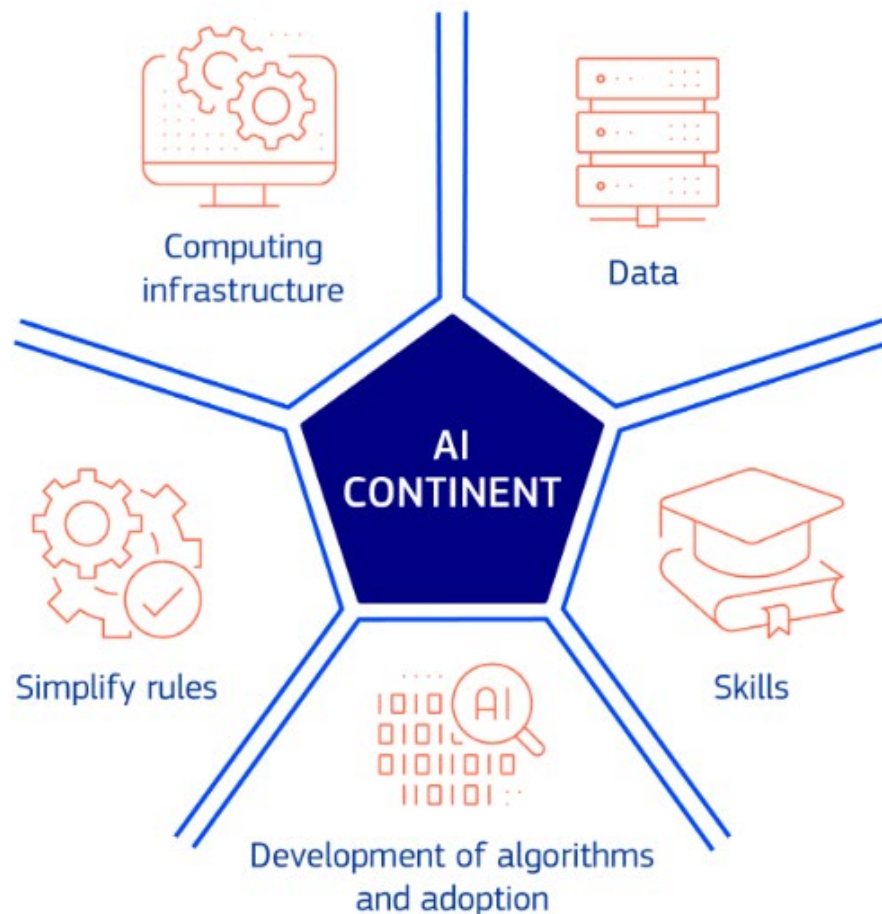


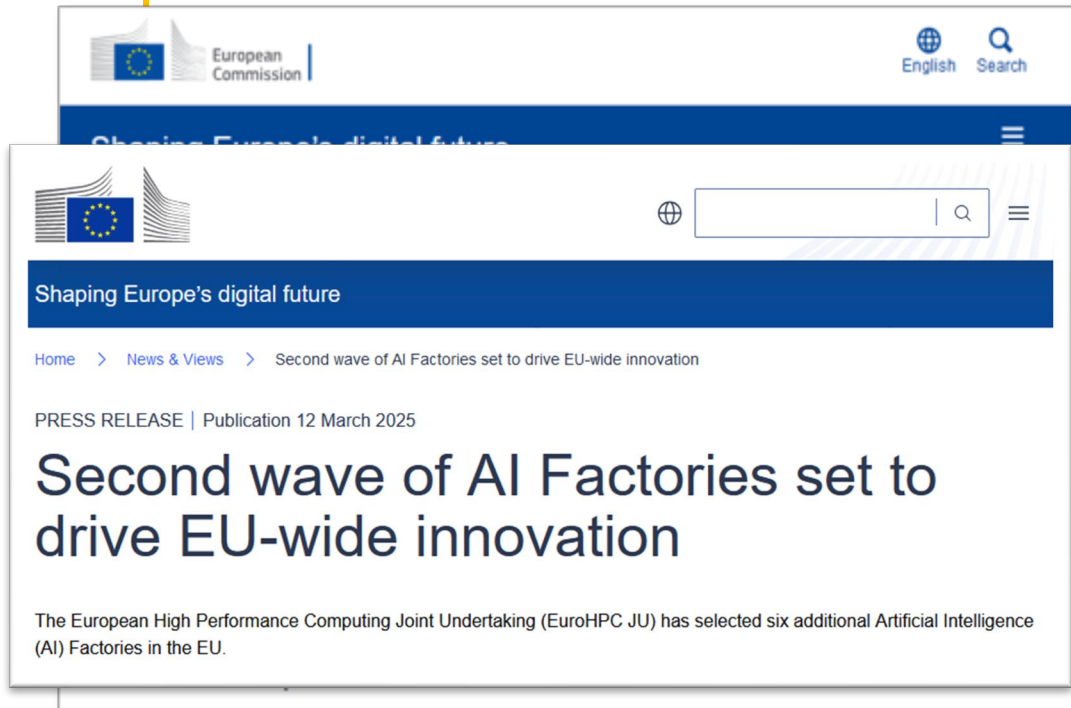
European Health Data Space (EHDS) holds significant potential for advancing AI in the healthcare sector in Europe. By establishing common standards for health data, the EHDS will facilitate the aggregation of data from various sources across Europe. Additionally, it will provide a secure and privacy-preserving framework for data sharing, allowing researchers and developers to access and analyse large volumes of health data while ensuring patient confidentiality. **This will enable the development of AI models that learn from real-world data patterns and can contribute towards to the further development of health-related trustworthy AI applications in Europe.**

Towards the creation of the AI Continent

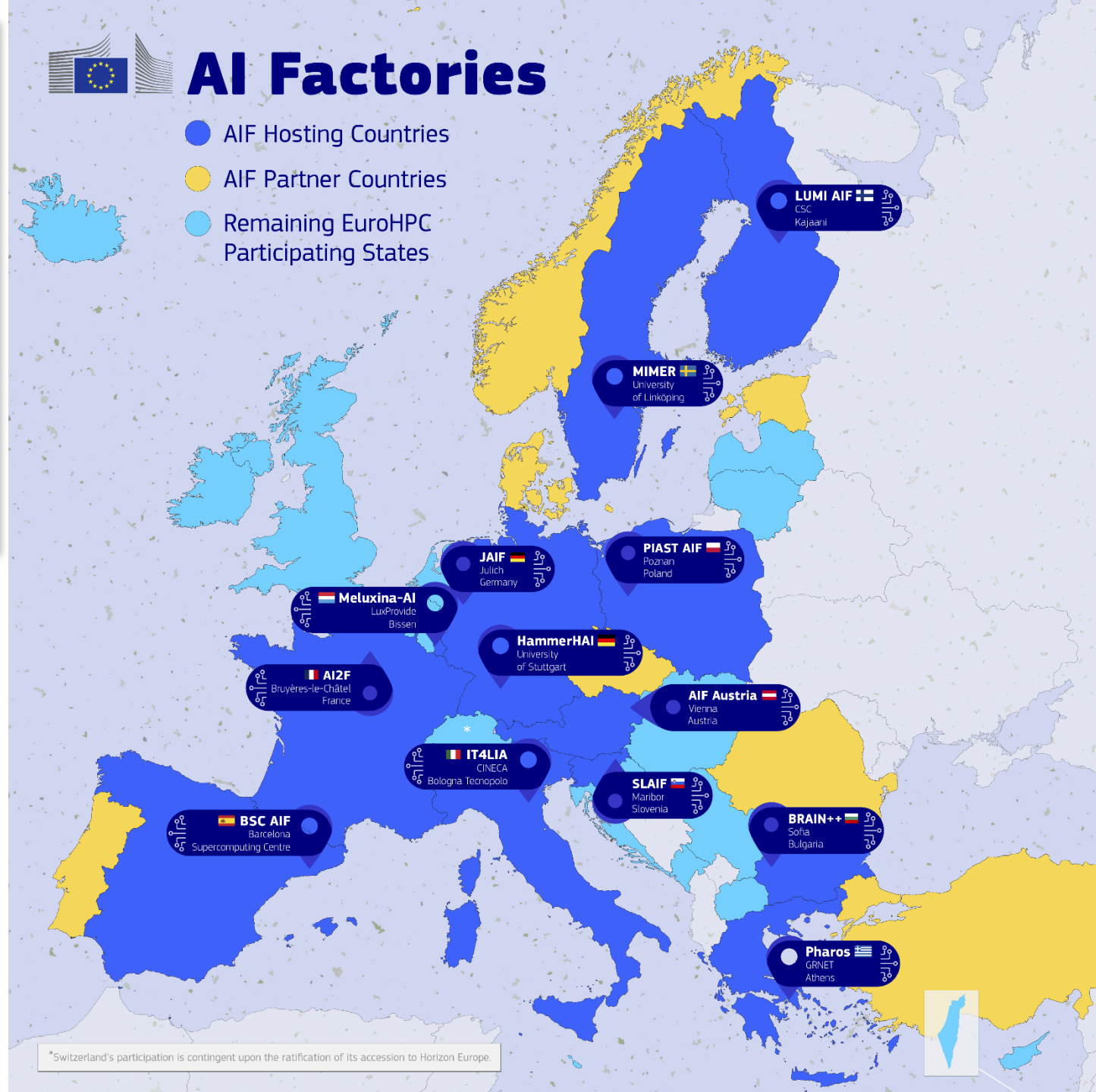


The 5 strategic areas of the action plan





- **13 AI Factories** across 17 Member States and two EuroHPC Participating States
- Nine new **AI-optimised supercomputers** and one **upgrade**
- Overall investments in supercomputing infrastructures and AI Factories in the EU will reach **EUR 10 billion** over 2021-2027
- AIFs will be **interconnected** and establish a collaborative framework for effective networking



AI Factories

- **Dynamic ecosystems, including AI-optimised supercomputers, data capacities, programming and training facilities, and human capital** to support the EU AI industrial and research ecosystems in developing large AI models and applications.
- Novel approach to AI innovation based on a **network of public supercomputers providing an open environment to AI developers**.
- At least **15 AIFs + several AIF Antennas** expected. Operational as of 2025 – 2026.
- **Strategic sectors:** Health/Life Science; Manufacturing; Climate/Environment; Space; Finance; Cybersecurity; Agri-tech/Agrifood; Education/Arts/Culture; and more.
- Largest AIFs expected to have each around **25 000 advanced AI processors**.

AI Factories components



AI Factories strategic sectors

Key Sectors	AT	BG	DE	EL	ES	FI	FR	IT	LU	PL	SE	SI
Health & Life Sciences	●		●	●	●	●	●	●		●	●	●
Technology & Digital		●		●	●	●	●	●	●	●	●	●
Environment & Sustainability		●	●	●	●		●	●	●	●	●	●
Education & Culture	●	●	●	●	●		●	●			●	●
Manufacturing & Engineering	●	●	●			●	●				●	●
Finance & Business	●		●		●		●	●	●		●	
Agriculture & Food	●				●		●	●			●	●
Cybersecurity & Dual use							●	●	●			
Space & Aerospace		●					●		●	●		
Public Sector	●		●		●					●		

AI Factories bring unique strengths and specialised focus areas, playing a pivotal role in advancing AI applications across strategic sectors.

EuroHPC access policy

Traditional HPC

BENCHMARK	DEVELOPMENT	REGULAR	EXTREME SCALE
<ul style="list-style-type: none"> - 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 	<ul style="list-style-type: none"> - 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 	<ul style="list-style-type: none"> - 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 	<ul style="list-style-type: none"> - For high-impact, high-gain projects that require extremely large-scale HPC resources - Allocation duration: for 12 months - Continuously open with 2 cut-offs per year - Peer review process duration: 6 months

AI

SCIENCE AND COLLABORATIVE EU PROJECTS	INDUSTRIAL INNOVATION
<ul style="list-style-type: none"> - For scientific and collaborative EU projects intending to perform artificial intelligence and data-intensive activities - Fixed allocation for 6 months - Bimonthly cut-offs - Peer-review process duration: 1 month 	<ul style="list-style-type: none"> - Playground - Fast Lane - Large Scale <p>Selection (Large Scale): AIF Industrial Innovation Group</p>

EuroHPC Access Policy for AI Industrial Innovation

EuroHPC AIF Industrial Innovation Access Track

- Users residing, located in a Member State, or in a third country associated to Horizon 2020, the Digital Europe Programme or to Horizon Europe are eligible.
- Up to 30% of the overall EuroHPC share of access time.
- Open and free-of-charge to AI SMEs (including startups) for innovation purposes.
- Applications of EIC accelerator challenge awards are passed without further evaluation and have priority.

AIF Industrial Innovation Access Modes

1. Playground

- Entry-level users / small resources - "plug and play"
- Very fast FCFS access (no cut-off dates)
- Onboarding support provided by the hosting AIF

2. Fast Lane

- Users familiar with HPC / requiring a medium amount of GPU time
- Fast FCFS access (no cut-off dates)
- Expert support provided by the hosting AIF

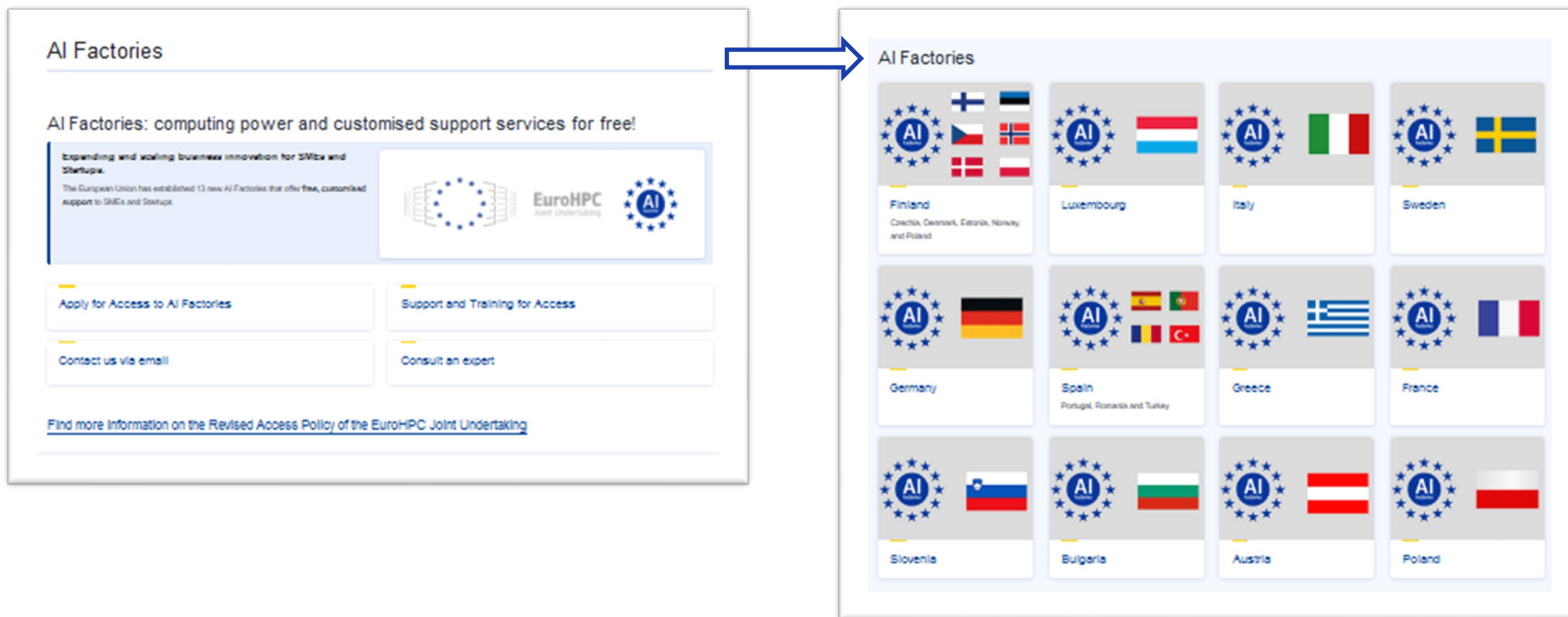
3. Large Scale

- AI models and applications requiring a large amount of GPU time
- Access calls with a cut-off date
- Selection based on evaluation by EuroHPC panel of experts
- Onboarding expert support provided by the hosting AIF

EuroHPC Access Policy for AI for Science

- Support AI applications for science, with a focus on ethical artificial intelligence, machine learning, and cutting-edge foundation models and generative AI.
- Up to 25% of the overall EuroHPC share of access time.
- Users from academia, research institutes, public authorities and industry, established in a Member State, or in a third country associated to Horizon 2020, the Digital Europe Programme or to Horizon Europe, are eligible to apply to the Union's share of access time to EuroHPC supercomputers.
- All types of scientific users (whether funded or not by national or European programmes), users from public sector, as well as industrial users participating in R&I projects funded by EU Programmes such Horizon Europe or the Digital Europe Programme.
- All submitted applications are peer reviewed. Applications of EU-funded research projects, are passed without further evaluation and have priority.

Single gateway to AI Factories



Thank you