

Moderator



Evangelos Floros
Head of Unit, Infrastructure
EuroHPC Joint Undertaking



Juan Pelegrin
Deputy Head of Unit
High Performance
Computing and
Applications, European
Commission



Stephane Requena
Director of Technology and
Innovation, GENCI

PANELISTS



James Harkin
Interim Director, Ireland AI
Factory Antenna



Stefanos Kollias
Chairman, Board of
Directors, National
Infrastructures of Research
and Technology – GRNET

James Harkin

Interim Director, AI Factory Antenna Ireland · ICHEC

From neutrons to neurons

Twenty years of turning 0's into 1's

Physics first

BSc Physics & Electronics
Galway

MSc Theoretical Physics
Strasbourg

Then Software

Embedded software on ARM

Call-routing algorithms

Red-Eye Reduction in-camera

Then Data

Co-founder & CTO, Element

50 msec data-mining budget

Chief Data Officer at LiveScore

50M+ monthly active users

Then AI

ICHEC: Interim Director of
Ireland's AI Factory Antenna

BioInnovate AI Advisory Panel

Bringing HPC and AI closer
together

ICHEC

Ireland's national supercomputing centre since 2005



Five (+1) machines, 20+ years

Providing Ireland's research & innovation communities with national supercomputing resources for over two decades.

Not just research

In partnership with Met Éireann, ICHEC operated Ireland's national weather and climate forecasting for 10+ years.

People, not only petaflops

Training, user support and code optimisation - and Ireland's route into the EuroHPC systems, from Jean-Zay to MeluXina.

AI Factory Antenna Ireland

Raising the AI maturity of Ireland's innovators

What it is

One of 13 Antennas in the EuroHPC AI Factory network.

Linked to both French and Luxembourg AI Factories.

Who it is for

Startups, SMEs and researchers who have big ambitions but limited access to large-scale computing power.

What we give them

Innovation without friction.

Sovereign CPU & GPU capacity

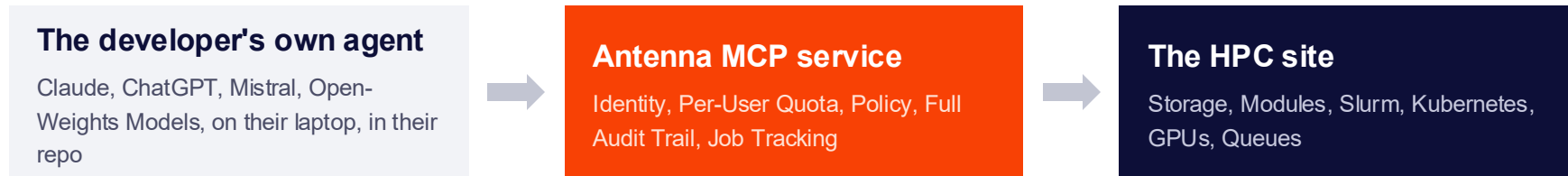
...plus engineers, data scientists, skills and training alongside the compute.

The measure of success

How many entrepreneurs and SMEs are empowered to experiment at scale, and bring AI products to market.

Agent-native access to HPC

Pilot with LuxProvide - because code is no longer typed by a human



The agent does the plumbing

Stages data, loads modules, configures environments. Interacts directly with Kubernetes or Slurm, reads the logs, fixes its own mistakes.

Same Security Posture

Accounts provisioned in advance, no shared credentials, every action attributable, SSH key control.

Why now

From startups to large-enterprise - they are all using coding agents to automate their workflows. People log in only when workflows need attention.

Thanks

James Harkin · Interim Director, AI Factory Antenna Ireland · ICHEC

<https://aifactory.ie>



EuroHPC
User Days

Dublin Ireland
22→24
September 2026



EuroHPC
Joint Undertaking



AI Factories, AIF Antennas: Cooperation and Innovation in Action

AI Factories: Accelerating Innovation, Enabling Adoption



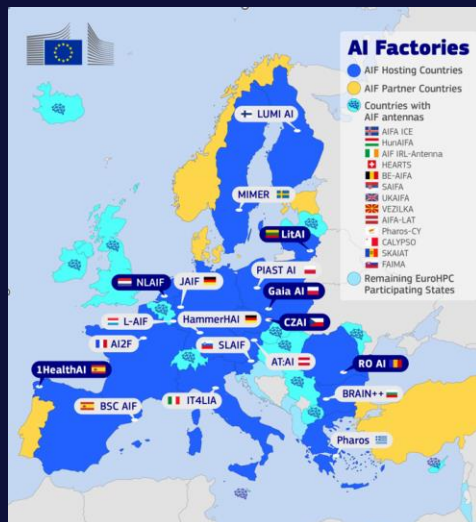
Enabling Europe's sovereignty through the AI Factories ecosystem



- AI Continent Action Plan
- Apply AI Strategy
- Cloud and AI Development Act
- Quantum Act
- Tech Sovereignty Package
- AI Gigafactories

The goal is not only more EuroHPC Computing, but more European breakthroughs and successful startups

AI Factories and Antennas as innovation-driven integrated platforms

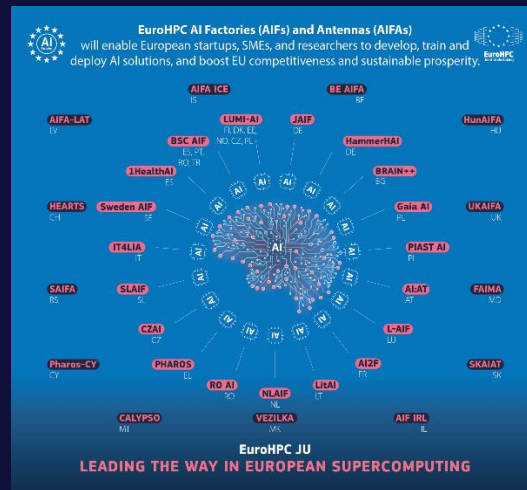


- Comprehensive platforms providing **key assets**:
 - + **Compute**
 - + **High-quality data**
 - + **Technical expertise**
 - + **Developer support**
- Targeting directly **national and regional innovation clusters**
- Empowering local/national champions in **health, transport, agri-food, manufacturing, and defence and space**
- A **cooperative** and **networked** endeavour

**A pan-European, inclusive AI infrastructure,
directly responsive to regional strengths and needs**

AIFs as catalysts of industrial transformation and startup growth

- Lowering barrier for high-risk **innovation**
- Facilitating cross-border **synergies**
- Connecting **HPC**, **NCCs**, **DIHs**, **TEFs**
- **Prototyping** locally, **scaling** widely
- **AI Gigafactories**



Placing EuroHPC Capabilities into the hands of European innovators and delivering tangible impact to cement Europe as the home of trustworthy, competitive AI

Next frontier: seamless integration towards AI Gigafactories



- Call launched **30 July 2026**
- **Industry-led** public-private investment
- **€10bn public funding** catalyst to de-risk investments
- **EU sovereignty** + location only in **Member States**
- **Users** only from like-minded countries
- **Sustainable business model**: Large set of user industries and a solid market forecast
- Focus on **power capacity**, **sustainability** and **energy-efficiency**, **cutting-edge networks**, and **AI-driven automation**
- **EU-added value**

The EU's flagship to create industrial-scale AI compute capacity in Europe, using a public-private model to crowd in major private investment

Thank you



EuroHPC
User Days

Dublin Ireland
22→24
September 2026



EuroHPC
Joint Undertaking



GRNET - the Pharos AI Factory

Stefanos Kollias

Professor NTUA, GRNET Chairman, PHAROS AIF Coordinator

GRNET - National Infrastructures for Research and Technology (<https://grnet.gr/en/>)

- It operates under the auspices of GR Ministry of Digital Governance & AI.
- It provides advanced network, cloud computing, IT infrastructures & services to academic & research institutions, public agencies, broader public and private sector.
- It contributes to GR Digital Transformation via in-depth analysis, technological studies, standard solutions and specialized know-how.
- It operates the national HPC competence center, the National & European Quantum Communication Infrastructure and the National & European Digital Identity Wallet.
- It serves since 1998 hundreds of thousands of users in Public Administration, Education, Research, Health and Culture.



Daedalus supercomputer

HPC DAEDALUS (@89 Petaflops) is the basis of these developments

- Installed in a new data center at NTUA technological and cultural park in Lavrion, Greece
- Operational 10-11/2026 / 31st position TOP500 benchmarking June 2026



DAEDALUS is now ranked:

- **#31** on the Top500 list (performance in FP64 flops/s)
- **#23** on the Green500 list (performance per watt consumed—energy efficiency)
- **#19** on HPCG ranking: <https://www.top500.org/lists/hpcg/list/2026/06/>

The PHAROS AI Factory

The PHAROS AI Factory



- National Infrastructure (2025-2028) to support and develop the AI innovation ecosystem based on the launch of the new GRNET Daedalus Supercomputer
- Synergies of Academic and Research Networks with the Private Sector: training of new Generative and Agentic AI Models, cloud and model inference
- Implementation according to the AI-Act regulatory framework: PHAROS will be a reliable source for the development of trustworthy AI in the related sectors

The PHAROS CONSORTIUM

- GRNET is coordinating PHAROS AI Factory, being the Hosting Entity for DAEDALUS, the new mid-range supercomputer of Greece
- Academia and Research Institutes
 - NCSR-D, NTUA, ATHENA
- A business entity,
 - PHAROS SA, part of GROWTHFUND, the National Investment Fund of Greece
- In addition, GRNET's affiliated partners are:
 - Academia and Research Centers (CERTH, FORTH, NKUA, AUTH, Piraeus Univ)
 - NDC, IDIKA

VISION

- Launch and maintain a Trusted AI Factory for South-Eastern Europe
- Capitalise on existing investments on HPC, AI and data centers
- Empower on start-ups and SMEs
- Thematic Areas: Health, Culture & Language, Sustainability

Leveraging CH Data for AI Development

- Culturally-aligned LLM Models sensitive to Greek and EU cultural nuances will enhance understanding of cultural references, traditions, and heritage contexts.
- Multipurpose and multitask LLMs will target different audiences (e.g. educational, CH professionals, researchers)
- Improving multilingual, multimodal, cross-cultural capabilities
- Potential for new services & research collaborations leveraging CH data.



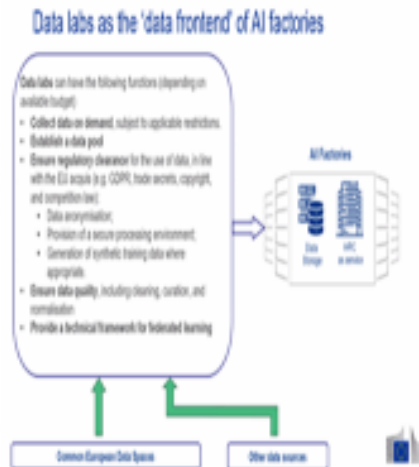
Pharos

The Greek AI Factory for
accelerating AI innovation



AIF Data Lab in Language & Culture (led by PHAROS)

Data labs as the 'data frontend' of AI Factories



- AI Factories are central to Apply AI Strategy; AI Factories can help enhance 2D/3D digitisation, access and reuse, provide scalable automation, computing power, data infrastructure, sector-specific model development, expertise and know how.
- Evolution must be built on ethical AI for public interest, human centered values, transparency, respect for data sovereignty.
- We should maximise the potential of the emerging AI ecosystem in Europe (including the Data Space for CH, AIFs & Data Labs).
- PHAROS is chairing the Language & Culture Data Lab with at least 6 AI factories (PIAST, IT4LIA, LUMI, BSC, LAIF).
- PHAROS SA (partner of PHAROS) will be joining Europeana consortium as a strategic partner, collaborating on creating AI ready data and developing use cases for the LAM sector.
- We will develop a joint Conference on AI & CH during the Greek Presidency (October 2027).



THANK YOU!

PHAROS has received funding 50% from the EuroHPC Joint Undertaking, Grant Agreement Number 101234269, and 50% from National Resources (Ministry of Digital Governance & AI).

Thank you

Update on AI Factory France

S. Requena (GENCI)



GENCI : a RI serving >2400 projets / yr

EuroHPC
Joint UndertakingALICE RECOQUE
BEYOND HPC

TGCC/CEA - Ile de France

- Hosting Site for the **2nd Exascale system (EuroHPC)** called Alice Recoque within the Jules Verne consortium (FR, NL, GR)
- Hosting Site for the **1st hybrid HPC + Quantum computing, 3 QPUs (being) installed** : Pasqal (neutral atoms), Quandela (photonics) and Alice&Bob (cat qubits)



IDRIS/CNRS - Ile de France

- **1st FR converged HPC/AI system (#AIForHumanity)**
- Bring **sovereign** computing facilities / services to AI research community
- **3800 GPUs in 2026**

France
Universités

CINES/FU - Montpellier

- **> 70 PF** with AMD next gen GPUs (>2000) & CPUs (>100k)
- Used for **HPC and now AI workloads**

>1700 AI projects in 2025

AI Factory France : Consortium



- 20 contractual partners, 30M€, 3 years:



- Over 40 potential associated partners inc:



AI Factory France : Objectives



Provide the AI community with a **one-stop-shop of tailored AI services** (compute, data, skills)



Computing capacity



Data access



Models access



Training services



Support services



Ecosystem
development

AI Factories will provide **computing power, users support, data and tools**, to offer a wide range of **services to industrial** (startups, SMEs and large companies) **and academic researchers**, willing to push forward **AI research and AI applications** both for commercial and public purpose.

Serving 12 applications verticals



Finance



Cyber/Defense



Materials science



Robotics



Health



Earth science



Aerospace



Energy



Edtech



Agriculture



Mobility



Humanities

Public / private compute continuum

Sillon the 1st open source sovereign model from



- First open source SLM developed by RATP in collaboration with  pleias
- 600-million-parameter specialized reasoning model for RATP to detect and interpret safety signals in Parisian Subway users' messages
- **Trained during 3 months on Jean Zay (IDRIS/GENCI) on synthetic data using AI Factory France services**
- But also **deployed on Scaleway** private infrastructures for production inference services as part of the collaboration between Scaleway, GENCI and CNRS
- Sillon is **100% sovereign** and even 100% developed in Paris region FR
- Beating closed models 200x times its size
- Announced at Vivatech 2026 🚀

Model	Parameters	Fine-tuning	Accuracy
Claude Sonnet 4.5	—	—	72.2
Gemini 2.5 Pro	—	—	71.5
Mistral 3 Large	675B	—	78.5
Qwen3.5	397B	—	67.5
Distress Reasoner (ours)	600M	Synth. tweets, EN reasoning	78.0
Distress Reasoner (ours)	600M	Synth. tweets, FR reasoning	79.5

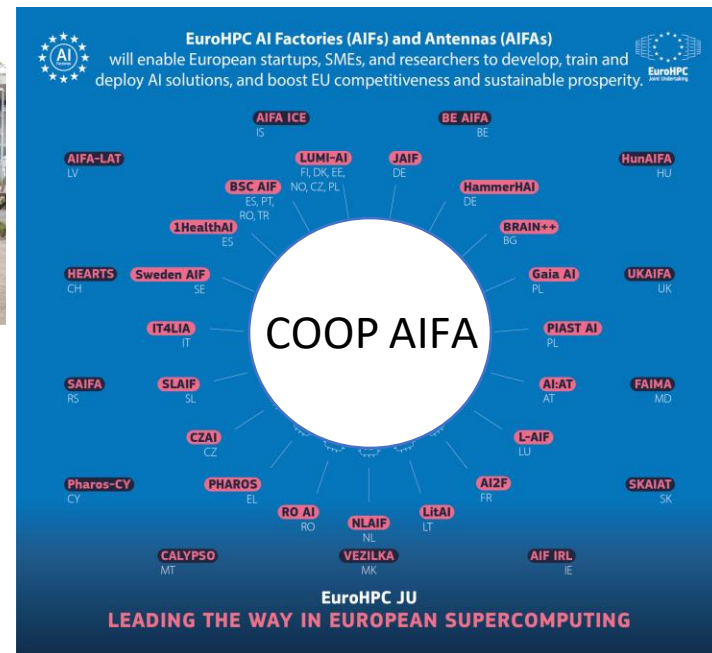
Collaboration between AIF(A)s is a MUST

With AI Factory Ireland

- Common datasets, repo and data services
- Complementarity on applications verticals
- Joint training / education
- Unique link with EOSC, EDIHs, TEF, EDICs, inter. collaboration
- Share best practises and a
- Common offer toward « AI Co Scientist » (agentic AI) and link with AIGFs



With Maroc



Between all of us 😊