EUSAiR
BRIDGING INNOVATION AND COMPLIANCE IN AI

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The EU AI Ecosystem: Key Findings from Mapping and Interviews

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eusair-project.eu | info@eusair-project.eu

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Table of Abbreviations and Acronyms

Abbreviation	Meaning
AI	Artificial Intelligence
AI Act	Regulation (EU) 2024/1689 laying down harmonised rules on artificial intelligence (Artificial Intelligence Act)
AI Board	The European Artificial Intelligence Board
AIoDP	AI-on-Demand Platform
AIRS	AI Regulatory Sandbox
CEN	The European Committee for Standardization
CENELEC	the European Committee for Electrotechnical Standardization
EDPS	European Data Protection Supervisor
ENISA	The European Union Agency for Cybersecurity
EU	European Union
EuroHPC	European High Performance Computing Supercomputers
EuroHPC JU	European High Performance Computing Joint Undertaking
ICSC	National Research Center in High Performance Computing, Big Data and Quantum Computing
JTC	Joint Technical Committee
MSs	Member States
NCAs	National Competent Authorities
SMEs	Small and Medium-sized Enterprises
WG	Working Group

Introduction

This "Stakeholder Mapping" maps relevant stakeholders within the EU AI Ecosystem which could be beneficial for the establishment and operation of AI Regulatory Sandboxes (AIRS).

Based on the AI Act, AIRS are defined as: "*a controlled framework set up by a competent authority which offers providers or prospective providers of AI systems the possibility to develop, train, validate and test, where appropriate in real-world conditions, an innovative AI system, pursuant to a sandbox plan for a limited time under regulatory supervision*" (art 3 (55), AI Act, 2024).

Given the significant impact of AI and the AI Act across all domains, sectors and society as a whole, a broad range of stakeholders can and/or should play a role in the establishment and operations of AIRS. These stakeholders are divided into two groups:

- Primary Stakeholders at National and EU Levels, that have a direct interest in the creation and operation of AIRS
- Secondary Stakeholders at National and EU Levels, that can be intermediaries to primary stakeholders and/or have valuable insights for the establishment and operation of AIRS.

Mapping of Primary Stakeholders at National and EU Levels

Primary stakeholders of EUSAiR are stakeholders with direct import to the creation and operation of AIRS due to their role under the AI Act, or their specific capabilities, expertise or technical infrastructure. Primary stakeholders can share (technical) capacity, challenges, and existing practices for effective establishment and operation of AIRS. Primary Stakeholders include:

- National and EU authorities tasked with the setting up or participating in at least one AIRS, namely, National Competent Authorities (art. 57 AI Act, 2024)
- European Data Protection Supervisor
- Public and private AI providers that could participate in an AIRS
- AI Office
- AI Board
- AI Factories
- EuroHPC JU
- Testing and Experimentation Facilities (TEFs)
- EU Digital Innovation Hubs (EDIHs) with a focus on AI

1. National Competent Authorities of the 27 Member States

- **Background Information on the National Competent Authorities**

National Competent Authorities (NCAs) are defined as: *"a notifying authority or a market surveillance authority"* in art. 3 (48) AI Act. Based on the AI Act, each Member

State should *"establish or designate as national competent authorities at least one **notifying authority** and at least **one market surveillance authority** for the purposes of this Regulation"* (Art. 70 AI Act, 2024) by August 2025.

At the time of writing this document, a few member states have officially designated their NCAs, while others have not yet formally made their designations nor have revealed their potential candidates. The EU AI Act official web page offers an overview mapping the designated NCAs (MSAs, Single Point of Contact (SPoC) and/or NAs), and expected NCAs (EU Artificial Intelligence Act, 2025e).

- **NCAs Relevance to AIRS:**

Under the AI Act, NCAs are required to solely or jointly establish an AIRS by August 2, 2026 (art. 57(1) AI Act, 2024). Therefore, it is paramount to establish a connection with NCAs and identify their needs and challenges in setting up AIRS as well as those that have already started designing, planning, or piloting AIRS to identify best practices.

- **Preliminary Insights from Meetings with NCAs[1]:**

Recent discussions with NCAs and Member State representatives have highlighted several key aspects regarding the current landscape of AI technology regulation. Notably, there are existing sandbox pilot projects aimed at testing AI applications, some of which focus on ensuring compliance with the General Data Protection Regulation (GDPR). While the implementation of the AI Act is still in its early stages, there are observable, albeit limited, plans for the establishment of a comprehensive AI Regulatory Sandbox that includes necessary infrastructure. Furthermore, there is an ongoing initiative to create a horizontal AIRS that would facilitate coordination across various jurisdictions. However, cross-border collaboration remains limited at this point, and interactions with other national authorities are still in their nascent stages.

The stakeholders involved share common goals as they work towards creating an operational AIRS that fosters innovation, particularly for SMEs. There is a concerted effort to promote stakeholder engagement, along with a willingness to embrace learning and improvement throughout the process. Nevertheless, several challenges persist, including regulatory uncertainty surrounding the AI Act's requirements and a limited technical infrastructure. Additionally, there is a lack of clarity regarding essential elements such as funding, personnel, and the overall capacity needed to effectively support the implementation of AIRS. Addressing these issues will be crucial in advancing a cohesive and effective regulatory framework for AI technologies.

2. European Data Protection Supervisor (EDPS)

- **Background Information on the EDPS**

The European Data Protection Supervisor is the competent authority in charge of supervision of EU institutions, bodies, and agencies that develop or deploy AI systems.

[1] Preliminary interviews were held with 6 NCAs and/or MS representatives; four trilateral meetings with the participation of the AI Office and two bilaterals. Additional insights from other NCAs will be gathered throughout the EUSAiR project.

- **EDPS' Relevance to AIRS**

The EDPS may also establish an AIRS for Union institutions, bodies, offices and agencies (art. 57(3) AI Act, 2024). It is, therefore, important to coordinate with them and understand their plan, efforts, and challenges in creating AIRS.

The EDPS has been active in the AI sphere and remains an important stakeholder in the coordination of personal data protection in the context of AI systems. They recently submitted comments to the European AI office's multi-stakeholder call for consultation where the EDPS underlines potential discrepancies between personal data processing in certain AI developments and deployments (EDPS, 2024).

3. AI Providers

- **Background Information on AI Providers:**

AI providers are potential participants in AIRS, and they can be private or public actors. We adopt the AI Act's definition of AI providers as *"a natural or legal person, public authority, agency or other body that develops an AI system or a general-purpose AI model or that has an AI system or a general-purpose AI model developed and places it on the market or puts the AI system into service under its own name or trademark, whether for payment or free of charge"* (art. 3(3) AI Act, 2024).

- **AI Providers relevance to AIRS:**
  - **Private AI Providers**

The AI market in Europe is projected to exceed 42 billion euros by the end of 2024, nearly doubling its value from 2020. This market is expected to continue growing, reaching over 190 billion euros by 2030 (statistica, 2024).

  - **Public AI Providers**

There is a growing interest in using AI to redesign governance processes, improve policymaking, and enhance public service delivery (European Commission, 2020). The Politecnico di Milano, with the European Commission's Joint Research Centre, studied over 900 AI projects developed by the public sectors worldwide from 2018 to 2022. They found 64% of European projects were prototypes, waiting for testing of feasibility. Many EU countries are testing AI in tax systems, social security allocations, and border control for instance (Gastaldi, 2024). Hence public actors at national, regional and local level developing AI systems are important as they could be potential users of AIRS.

- **AI Providers Survey:**

An AI provider survey was conducted to assess the understanding, expectations and challenges around AI regulatory compliance and AIRS. The outcomes of the survey are described in "**Insights from the AI Provider Survey**" as part of the follow up package.

4. The European AI Office (AI Office)

- **Background Information on the AI Office:**

The European AI Office (AI Office) was established in early 2024 within the EC acting as a single European AI governance system (European Commission, 2024). The AI office is tasked with the oversight of the coherent implementation and enforcement of the AI Act.

- **AI Office's Relevance to AIRS**

EUSAiR is a coordination and support action for the establishment of AIRS as per the AI Act. The AI office may develop implementing acts for detailed arrangements for, and functioning of, AIRS (art. 58 AI Act, 2024), a first one being envisioned for the fall of 2025. EUSAiR's work is intended to support the EC, namely the AI Office, under its guidance and supervision, and also the Member States, in a coordinated and complementary manner, in the establishment of AI Regulatory Sandboxes.

5. The AI Board Sub-group on AI Sandboxes

- **Background Information on the AI Board Sub-group on AI Sandboxes**

The AI Board is an advisory body, supported by the AI office, which includes representatives from each EU Member State. Its role is to "*ensure the effective implementation of the AI Act across the EU by coordinating national authorities, sharing technical and regulatory expertise, and providing advice on AI policy, innovation, and international partnerships*" (European Commission, 2025a). The AI Board installed a sub-group on AI Sandboxes which have been actively meeting since its establishment.

- **The AI Board Sub-group on AI Sandboxes' Relevance to AIRS**

The AI Board sub-group on AI sandboxes, which is composed of representatives of member states' governments and of some NCAs, meets regularly to coordinate and discuss their challenges and efforts around AIRS, share best practices and exchange information on national existing and upcoming AIRS projects and pilots.

6. AI Factories

- **Background Information on AI Factories**

The European AI Factory network is a cornerstone of the EU AI infrastructure. The map below outlines the up-to-date distribution of AI Factories across the EU.

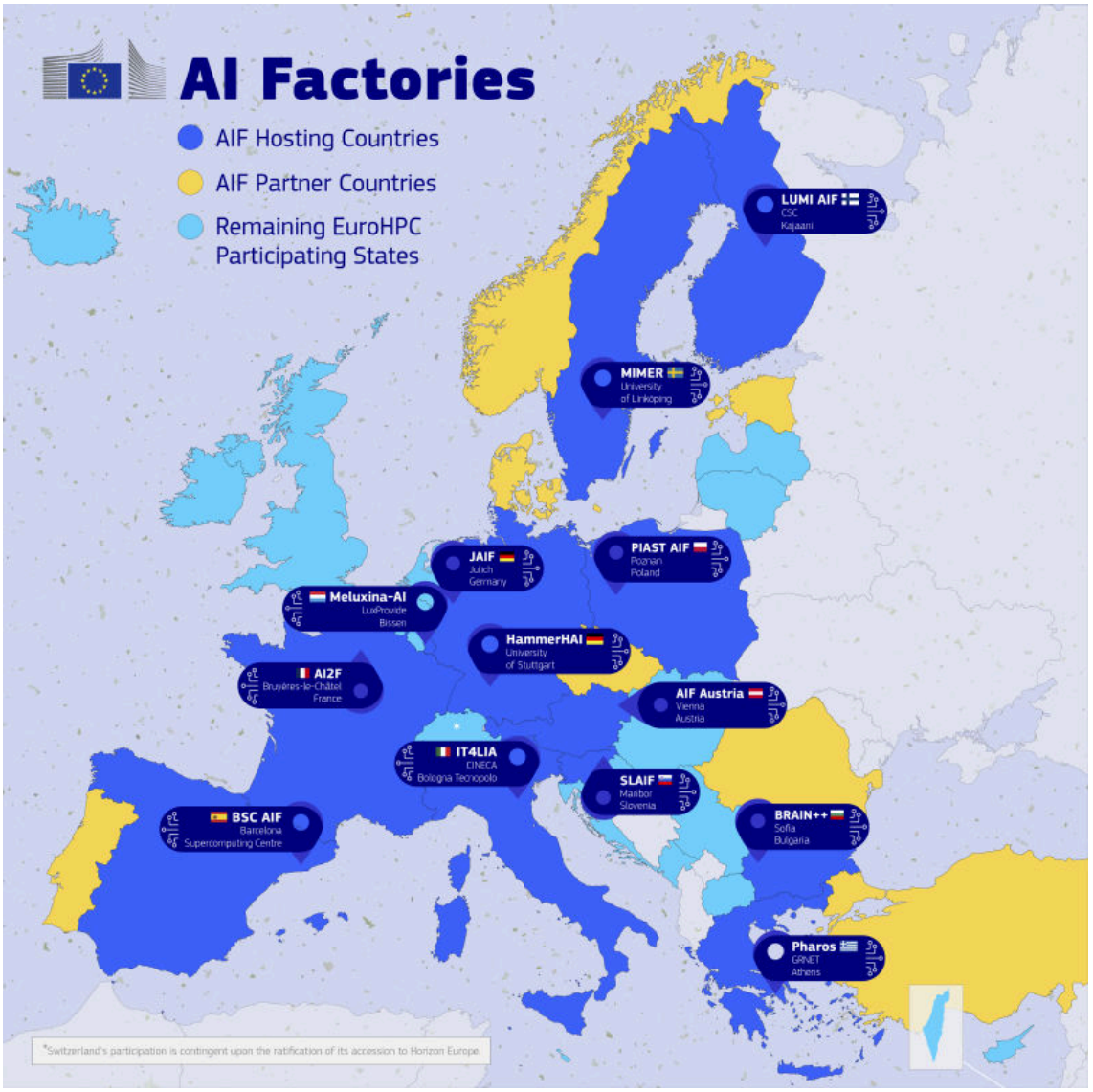


Figure 1: Distribution of AI factories in the EU (European Commission, 2025a)

The first selection, comprising seven facilities across 15 member states and two EuroHPC participating states, includes:

- Spain's BSC AIF at the Barcelona Supercomputing Centre
- Italy's IT4LIA at CINECA
- Finland's LUMI AIF at CSC Kajaani
- Luxembourg's Meluxina-AI at LuxProvide Bissen
- Sweden's MIMER at the University of Linköping
- Germany's HammerHAI at the University of Stuttgart
- Greece's Pharos at GRNET Athens

The second selection includes 6 AI Factories as follows:

- AIF Austria (Austria)
- JAIF (Germany)
- PIAST AIF (Poland)

- BRAIN++ (Bulgaria)
- AIF2 (France)
- SLAIF (Slovenia)

Additionally, the **AI Continent Plan** announced the preparation for five **Gigafactories**, each equipped with over a million advanced processors dedicated to the development and training of sophisticated AI models. These monumental centres will focus on transformative sectors, including healthcare, biotechnology, industry, robotics, and scientific research. By federating with EuroHPC, comprehensive ecosystem-wide integration will be ensured, along with creating a collaborative environment that fuels innovation and accelerating progress across multiple disciplines (European Commission, 2025f).

It further stipulates the full operation of **15 AI Factories by 2026**, each with a set of sectoral focus, and a network of **advanced antennas**. These facilities will be intricately integrated with powerful supercomputers and cutting-edge data and training hubs, offering seamless remote access to AI-optimized computing through the strategically placed antennas (European Commission, 2025f).

- **AI Factories' Relevance to AIRS**

AI Factories serve as resource centres, integrating advanced computing infrastructure with expertise and data management capabilities. Their scope encompasses support for various stakeholders, including both SMEs and established researchers, enabling the development of both large-scale language models and sector-specific AI systems. AI Factories extend across sectors including healthcare, manufacturing, environmental sustainability, finance, autonomous systems, cybersecurity, agriculture, education, cultural preservation, and space technology (European Commission, 2024a).

To this end, each AI Factory offers a range of services including AI model training, capacity building, technical consultation, and collaborative networking opportunities (Ugalde, 2024). Their infrastructure includes AI-optimized computing resources, data storage systems, high-speed networking capabilities, and extensive datasets for AI model development (Ugalde, 2024). These technical resources are complemented by expert teams specializing in AI, supercomputing, software development, and data science. This infrastructure can be valuable for the co-establishment of AIRS where AI factories could play an active role for technical testing and evaluation of AI systems.

- **Preliminary Insights from Interviews with AI Factories on their modalities and services**[2]

The summarized insights are attached to the shared PowerPoint presentation "**Presentation_Interviews and AI-provider survey results**" as part of the Follow Up Package. Based on the interviews, several synergies between AI Factories and AIRS were identified. Notably, the service offerings of the factories, their sectoral focus, technology-agnostic approach, target clients, infrastructure, and coordination with the EU AI ecosystem can be seamlessly integrated into AIRS' cross-regional and cross-sectoral pipelines.

[2] Based on preliminary insights from interviews held in the early stages of the EUSAiR project with BSC, CSC, CINECA and L-AIF. Additional insights from other AI Factories will be gathered throughout the EUSAiR project.

Services: The services of AI Factories encompass compute and storage capabilities, AI testing and validation, model updates and training, educational resources, thorough documentation, support for AI development and inference, maintenance of software environments, help desk support, AI sandbox environments, and access to data and datasets. All services are managed in-house or within the consortium without any current outsourcing.

Technological Focus: Generative AI has emerged as the most requested technology across all factories. However, various types of artificial intelligence are considered, such as machine learning (ML), natural language processing (NLP), computer vision (CV), robotics, and digital twin simulations based on client needs. However, in-house expertise constraints, particularly at the CSC, pose certain limitations.

Sectoral Focus: The majority of the interviewed AI Factories span across all sectors, including agrifood, manufacturing, climate and weather, cybersecurity, and health. Nevertheless, the recently released AI Continent Plan outlines a sector-specific focus for each factory with which one of the factories interviewed already aligns by concentrating on four areas: finance, green economy, space, and cybersecurity.

Training & Support: Comprehensive training, development, and validation services are available, featuring hackathons, internships, AI campus opportunities, and consultation.

Cost Structure: For private and large companies, services can incur fees, while SMEs, academic institutions, and the public sector benefit from free access. There is no standard cost model at present; pricing remains customized for each AI provider.

Cross-Collaboration: Cross-collaboration discussions among AI Factories are still informal, hampered by technical incompatibilities and proprietary data sharing issues.

Additionally, all AI factories are planning a regulatory sandbox timeline of three years, anticipating roles that extend beyond mere observation to include technical and evaluative functions.

Ecosystem Coordination: A couple of AI Factories have a strong collaboration with TEFs and EDIHs. They are also exploring MoUs to create smooth transitions from EDIH to AIF services. They are also interested in integrating with common data spaces. However, this remains difficult because data spaces have proprietary data. The other AI Factories remain open to knowledge exchange with homologues and can redirect customers as necessary, although formal agreements are yet to be established.

7. Testing and Experimentation Facilities (TEFs)

- **Background Information on TEFs:**

The European Testing and Experimentation Facilities (TEFs) are key for the development and market readiness of AI technologies across four sectors:

- Agrifood (agrifoodTEF)
- Healthcare (TEF-Health)
- Manufacturing (AI-MATTERS)
- Smart cities and communities (Citcom.AI)

These TEFs provide testing and validation services to help AI providers increase the time to market. TEFs can play a role in enabling trustworthy AI by offering infrastructure and technological environments for testing and experimentation of AI Systems.

Although each TEF's services and facilities are distributed via 'nodes' across multiple countries (including Austria, Belgium, Denmark, France, Italy, the Netherlands, Poland, Spain, and Sweden) each TEF has a designated coordinator located in a single EU member state. These coordinators serve as the central point of coordination for their respective TEFs. Additionally, the AI Continent Plan stipulates the creation of new TEFs in 2026 to broaden sectoral testing capacity (European Commission, 2025b).

- **TEFs Relevance to AIRS**

TEFs could also support the development of regulatory sandboxes by providing controlled environments for AI providers to test whether their AI systems and models meet safety standards and regulatory requirements, under the supervision of competent national authorities.

- **Preliminary Insights from Interviews with TEFs on their modalities and services[3]**

All TEFs expressed strong willingness to collaborate with AIRS and host regulatory testing within their sectors. They offer technology testing and validation at TRL levels 6 to 8, including flexibility for TRL 4 based on customer needs. TEFs provide compliance-enabling infrastructure, secure data management, and expertise in cross-border issues. However, challenges exist, such as the need for formal collaboration mechanisms with NCAs and potential funding restrictions for SMEs. Despite these challenges, TEFs can serve as testing environments for regulatory sandboxes, provide validated services, and raise awareness while coordinating with EDIHs to support AI providers based on their development stages.

Services: Several TEFs offer services to help companies align with the AI Act, including awareness-raising, compliance testing, and consultancy. One TEF is exploring a structured "graduation" model to show progress toward compliance.

Technological Focus: TEFs follow a technology-agnostic approach, depending on the demand and the internal expertise of the solicited node.

Sectoral Focus: One TEF is focused on assessing the implications of the AI Act on the manufacturing sector. While the overall risk is considered low, challenges may arise from overlaps with sector-specific regulations. Another TEF is centred on AI in healthcare and is working with ministries in Germany and France to establish a cross-border AI sandbox. It aims to serve as a sectoral and cross-border regulatory sandbox aligned with the AI Act in the health sector. A third TEF supports cities (e.g., Valencia) in developing local AI sandboxes, with a focus on areas such as mobility, energy, and connectivity. Their approach is tailored to urban needs and public sector collaboration.

[3] Based on preliminary insights from interviews held in the early stages of the EUSAiR project with TEFHeath, Citcom.ai, and AI Matters. Additional insights from TEFs, including AgrifoodTEF, will be gathered throughout the EUSAiR project.

Cost Structure: The costs are based on market rates and may be reduced for SMEs, depending on the funding, the TEF node, and the value of services provided by the SME.

Cross-Collaboration: The manufacturing-focused TEF (AI Matters) is coordinating with national authorities via a Dutch node. The healthcare TEF (TEF Health) is in active discussions with German and French ministries and is exploring potential funding support via EDIH structures. The urban TEF (Citcom.ai) is involved in cross-border and EU-level projects, including partnerships in Sweden and Belgium.

The summarized insights are attached to the shared PowerPoint presentation "**Presentation_Interviews and AI-provider survey results**" as part of the Follow Up Package.

8. European Digital Innovation Hubs (EDIHs)

- **Background Information on EDIHs:**

European Digital Innovation Hubs (EDIHs) support SMEs and larger organisations in their digital transformation journeys. Many EDIHs are part of networks such as the Enterprise Europe Network (EEN), European Industrial Clusters (EIC), and Start-up Europe. EDIHs offer services such as technical expertise, testing environments for "test-before-invest" opportunities, innovation consulting (including financing advice, training, and skills development), and solutions for addressing environmental challenges through digital technologies for sustainability (European Commission, 2025c).

We identified 250 EDIHs with a strong focus on AI, the coordinators of which will serve as our primary points of contact to engage with the selected EDIHs.

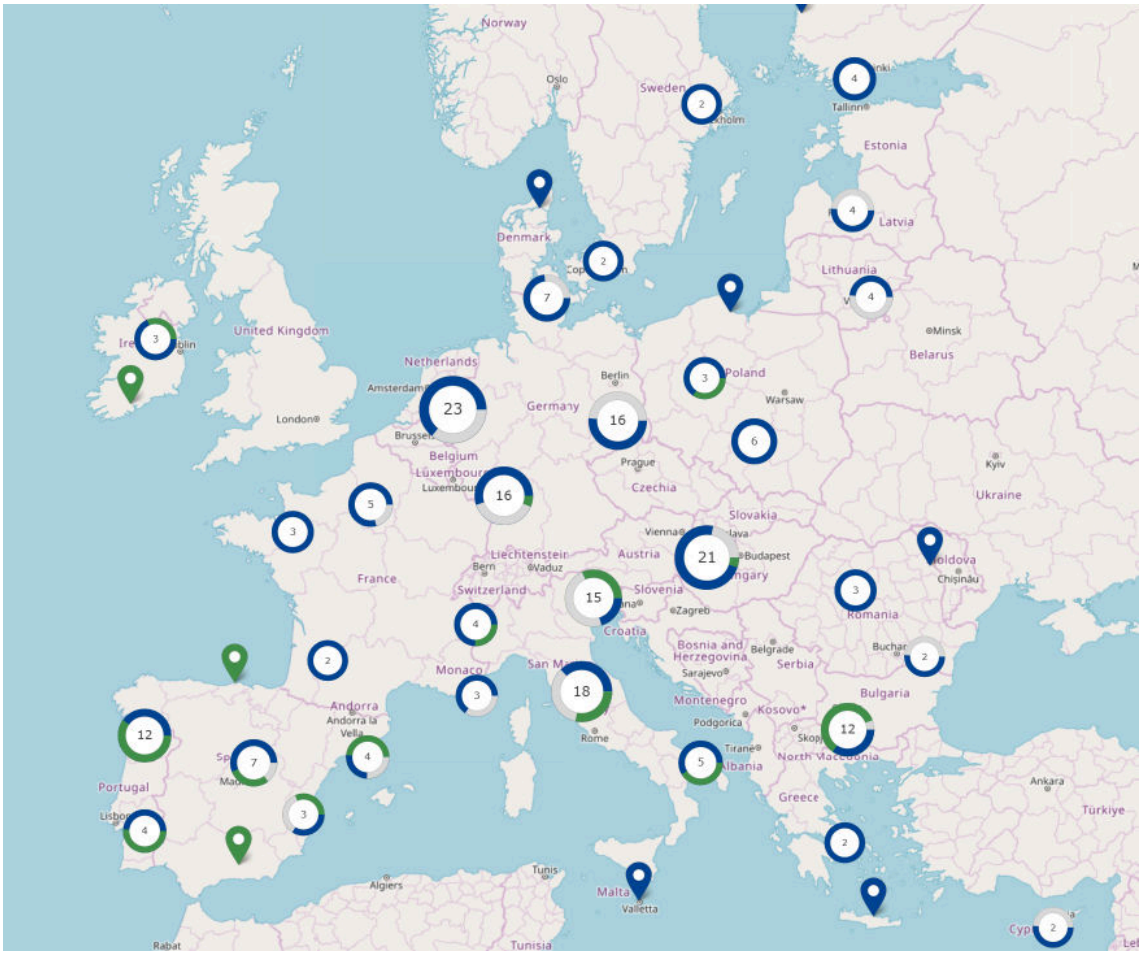


Figure 2: Distribution of EDIHs with a focus on AI across EU member states (European Commission, 2025c)

Additionally, the AI Continent Plan stipulates the extension of EDIHs into the AI focus. Starting in December 2025, EDIHs will evolve into vibrant AI Experience Centres, becoming pivotal hubs for sector-specific AI adoption and support. These centres will not only facilitate innovative solutions but will also foster collaboration, creating powerful synergies with AI Factories and Giga Factories to drive advancements in technology and industry (European Commission, 2025b).

- **EDIHs Relevance to AIRS**

The involvement of EDIHs is important for several reasons. Their integration within local innovation ecosystems provide access to a broad network of businesses, ranging from start-ups and SMEs to larger enterprises and as a result can serve as a bridge to AI providers (potential participants in AIRS).

The relationship between TEFs and European Digital Innovation Hubs (EDIHs) demonstrates the interconnectivity of the EU's AI ecosystem reinforcing further their relevance to AIRS. While EDIHs serve as regional catalysts, building local networks and guiding digital transformation through their "test before invest" approach, TEFs provide the infrastructure needed for validating emerging technologies (European

Commission, 2024b). This complementary relationship enables a support system whereby EDIHs connect AI providers and SMEs with localized testing opportunities, while TEFs offer the advanced facilities and tools necessary for rigorous pre-market validation of emerging technologies (European Commission, 2023).

9. The European High Performance Computing Joint Undertaking (EuroHPC JU)

- **Background Information on the EuroHPC JU**

The European High-Performance Computing Joint Undertaking (EuroHPC JU) is a public-private partnership dedicated to high-performance computing (HPC). It brings together resources from the European Union, participating EU member states, associated states under the Horizon Europe and Digital Europe programmes, and private stakeholders. Its dual mission is to establish a pan-European supercomputing infrastructure and to advance research and innovation in the field.

As part of the EuroHPC JU, 19 supercomputing and quantum computers have been established across 14 EU member states, with hosting sites in Bulgaria, Czechia, Finland, France, Germany, Greece, Italy, Luxembourg, the Netherlands, Poland, Portugal, Slovenia, Spain, and Sweden. As such, whilst the EuroHPC JU has procured these supercomputers, each supercomputer is operated by the supercomputer centres (known as Hosting Entities) across the EU.

The table below outlines the 19 EuroHPC supercomputers (S) & quantum computers (Q):

Country	Computer Name	Type of Computer	Status
Bulgaria	DISCOVERER	Supercomputer	Operational
Czechia	LUMI-Q	Quantum computer	Under construction
Czechia	KAROLINA	Supercomputer	Operational
Finland	LUMI	Supercomputer	Operational
France	ALICE RECOQUE	Supercomputer	Pending signature of the procurement contract
France	Ruby	Quantum computer	Under construction
Germany	EURO-Q-Exa	Quantum computer	Under construction
Greece	DAEDALUS	Supercomputer	Pending signature of the procurement contract
Italy	LEONARDO	Supercomputer	Operational

Italy	EuroQCS-Italy	Quantum computer	Pending signature of the procurement contract
Luxembourg	MeluXina-Q	Quantum computer	Pending signature of the procurement contract
Luxembourg	MELUXINA	Supercomputer	Operational
Netherlands	EuroSSQ-HPC	Quantum computer	Pending signature of the procurement contract
Poland	Piast	Quantum computer	Under construction
Portugal	Deucalion	Supercomputer	Operational
Slovenia	VEGA	Supercomputer	Operational
Spain	MareNostrum5	Supercomputer	Operational
Spain	MareNostrum-Ona	Quantum computer	Under Construction
Sweden	ARRHENIUS	Supercomputer	Pending signature of the procurement contract

Table 1: An overview of EuroHPC's 19 supercomputing and quantum computers across EU member states

Figure 3: An overview of EuroHPC's 19 supercomputing and quantum computers across EU member states (EuroHPC JU, n.d.a)

- **EuroHPC JU's Relevance to AIRS**

The quantum and supercomputing capabilities available through EuroHPC JU offer potential value to developing, operationalising and sustaining AIRS in multiple ways. First, these computers could potentially be utilized within AIRS for testing and development, particularly for data-intensive applications, providing regular and extreme-scale access (EuroHPC JU, n.b.d). In addition, the current free-of-charge access model (for accepted participants) presents a compelling opportunity for EUSAIR's objective of democratizing access to AIRS and associated services (EuroHPC JU, n.d.b). This accessibility is especially valuable for small and medium enterprises (SMEs), which might otherwise face prohibitive barriers to entry for high-performance computing resources.

EuroHPC JU manages the allocation of access time for these supercomputers, ranging from 35% of the total capacity for petascale systems and 50% for pre-exascale systems (EuroHPC JU, n.d.b). As a result, there exists a valuable opportunity for AIRS to partner with EuroHPC JU to secure access to these world-class computing resources and their associated services.

Mapping of Secondary Stakeholders at National and EU Levels

Secondary stakeholders include all other parties that could provide expertise, assets, resources, insights, networks that can help co-create the Union AI RSF such as:

- Authorities protecting Fundamental Rights
- EU Data Spaces
- AI Scientific Board
- AI Forum
- AI-on-Demand Platform
- AI Pact
- Civil Society Actors

As part of the extended EUSAIR co-creation strategy, we have identified a broad range of secondary stakeholders, including authorities protecting fundamental rights, Dataspaces, AI Forum, and AI Scientific Panel. We additionally seek to establish collaboration with relevant EU initiatives, including the European AI-on-demand Platform (AIoDP), the AI Pact, and the recently launched InvestAI Initiative.

1. Authorities Protecting Fundamental Rights (National Public Authorities)

- **Background Information on the Authorities Protecting Fundamental Rights**

The AI Act requires Member States to identify national public authorities or bodies which will *"supervise or enforce the respect of obligations under Union law protecting fundamental rights, including the right to non-discrimination, in relation to the use of high-risk AI systems referred to in Annex III"* (art 77 (1), AI Act, 2024).

- **Authorities Protecting Fundamental Rights' Relevance to AIRS**

National Authorities Protecting Fundamental Rights have the power to request and access documentation for the execution of their mandate under the AI Act. Their role within AIRS can be collaborative with NCAs, when relevant. For instance, if an AI provider is testing an AI system's risk to fundamental rights (art. 9 AI Act), a fundamental rights protection agency should coordinate with NCAs in this regard, giving their assessment on the system's risk.

2. Dataspaces

- **Background Information on Dataspaces**

Common European Data Spaces are EU-wide, interoperable environments where data pooling and sharing take place within sectors. "*Funded by the European Commission as part of the Digital Europe Program, the Data Spaces Support Centre is aimed at the public sector and companies that want to create sovereign data spaces*" (Data Spaces Support Centre, 2024). We identified 36 Data Spaces as follows:

Dataspaces	Domain
AgriDataSpace, Divine, CrackSense, ScaleAgData, AgDataValue, 4Growth, Dig4Live	Agriculture
Europeana pro, Eureka3D, 5Dculture, DE-BIAS, AI4Europeana	Cultural Heritage
IntNET, OMEGA-X, EDDIE, Enershare, Synergies, Data cellar	Energy
GREAT, AD4GD, B-Cubed, FAIRiCUBE, USAGE, DS4SSCC	Green Deal
MyHealth@EU, HealthData@EU Pilot, Joint Action Towards the European Health Data Space – TEHDAS, EUCAIM, GDI	Health
European language data space	Language
Data Space 4.0, SM4RTENANCE, UNDERPIN	Manufacturing
TEMS	Media
PrepDSpace4Mobility, deployEMDS	Mobility
OOTS - Once Only Technical System, PPDS	Public Administration
The European Open Science Cloud (EOSC), Skills4EOSC, EOSC Focus, FAIR-IMPACT, RDA TIGER, FAIRCORE4EOSC, AI4EOSC, EuroScienceGateway, FAIR-EASE, RAISE, SciLake, EOSC4Cancer, GraspOS, CRAFT-OA, AquaINFRA, Blue-Cloud2026, OSCARS, EVERSE, OSTrails, EOSC Beyond, EOSC-ENTRUST, SIESTA, TITAN	Research and Innovation
DS4Skills	Skills
DATES, DFST	Tourism

Table 2_Overview of Data spaces across sectors

Additionally, the AI Continent Plan stipulates the creation of Data Labs which will be part of AI Factories connecting AI providers to Data spaces and national datasets. These Data Labs will bring together and federate data from different AI Factories covering the same sectors (European Commission, 2025b). Data spaces are developed to meet the specific needs of each sector.

- **Dataspaces' Relevance to AIRS**

Each data space is tailored to its sector, yet they all share two core elements; (1) the technical tools and infrastructure needed to use and exchange data; and (2) appropriate governance mechanisms to ensure safe and responsible data sharing (European Commission, 2025d). Both these elements are crucial for AIRS's design and operations of data management.

From the perspective of EUSAiR, dataspaces could be of particular value due to their secure and privacy-preserving infrastructure for pooling, accessing, sharing, processing, and using data. For those AI providers who seek to utilise an AIRS without inputting their own proprietary data, dataspaces could provide access to public data, which could be used for testing, validating performance and leverage existing, curated datasets for development. In addition, shared data pools could streamline testing processes and promote a more efficient use of resources. This is particularly important for EUSAIR's vision of regulatory sandboxes as aiming to provide an environment that facilitates experimentation and development while ensuring sustainability.

3. The AI Scientific Panel

- **Background Information on the AI Scientific Panel**

The AI Act requires the creation of a scientific panel composed of independent experts (art 68, AI Act, 2024). This panel will provide guidance and support to the AI Office in the implementation and enforcement of the AI Act. Additionally, upon request, the panel could also support market surveillance authorities (art 68 (3.b), AI Act, 2024).

At this stage, the AI Scientific Panel has not yet been established. The EC should deliver an implementing act where the tasks of the panel will be listed.

- **The AI Scientific Panel's Relevance to AIRS**

The scientific panel will be relevant to AIRS for scientifically based support and guidance during AIRS operations.

4. The Advisory Forum (AI Forum)

- **Background Information on the AI Forum**

The AI Act promulgates the creation of an Advisory Forum (AI Forum) where representatives of industry, startups, SMEs, civil society, and academia with expertise in the field will be selected (art 67, AI Act, 2024). The AI Forum will also include the European Union Agency for Cybersecurity (ENISA), the Fundamental Rights Agency, the European Committee for Standardization (CEN), the European Committee for Electrotechnical Standardization (CENELEC), and the European Telecommunications Standards Institute (ETSI) (art 67 (5), AI Act, 2024).

At this stage, the AI Forum is not yet established, but EUSAiR will align with its stakeholders once more details are revealed in this regard.

- **The AI Forum's Relevance to AIRS**

All stakeholders constituting the AI Forum are relevant to the operations of the AIRS, as they can provide crucial insights from their unique perspectives and constituencies.

5. Standardization Bodies: National Standardization Institute & CEN-CENELEC JTC 21

- **Background Information on CEN-CENELEC JTC21**

CEN-CENELEC JTC21 is tasked with developing standards in response to a European Commission standardisation request (C (2023)3215) of 22 May 2023. The committee's work is divided into several working groups focusing on strategic advice, operational processes, engineering aspects, foundational and societal components, and cybersecurity for AI systems (CEN-CENELEC Topics; Artificial Intelligence, 2025).

- **CEN-CENELEC JTC21's Relevance to AIRS**

Since JTC21 is currently working on the development of standards for several EU AI Act requirements, an understanding of the progress of such work is important for AIRS.

6. Civil Society Actors

- **Background Information on Civil Society Actors**

Civil society encompasses various social actions undertaken by individuals or groups that operate independently of government control or association. A civil society organisation is a structured entity whose members work for the common good through a democratic approach, acting as a bridge between citizens and public authorities (EUR-Lex, 2025).

For AIRS, the following civil society actors could be relevant:

- ETUC (workers)
- EUROCADRES (managerial staff)
- BEUC (consumers)
- BusinessEurope (employers)
- EASME (SME employers)

Other civil society actors that could be included:

- Environment protection agencies
- Child protection agencies
- Representatives of people with disabilities

- **Civil Society Actors' Relevance to AIRS**

Civil society representatives are important for the operations of AIRS since they bring direct feedback from groups they represent or on societal aspects in light of AI innovation.

7. The AI-On-Demand Platform (AIoDP):

- **Background Information on the AIoDP:**

The AI-on-Demand Platform (AIoDP) serves as a collaborative space for the AI community, enabling engagement with peers and experts, sharing opportunities, applications, and knowledge, and accessing AI-related assets and tools (AI On Demand Platform, 2024).

- **The AIoDP's Relevance to AIRS:**

Given that the AIoDP brings together a network of stakeholders, relevant for AIRS, such as industry, SMEs, tech providers, EDIHs, and other EU-funded projects, it could

8. The AI Pact:

- **Background Information on the AI Pact**

Over 130 companies have signed the **AI Pact** representing a range of sectors such as IT, telecommunications, healthcare, banking, automotive, and aeronautics. These signatories include both large organisations and SMEs. These organisations are significant AI providers and potential users of regulatory sandboxes, making them important stakeholders for engagement.

- **The AI Pact's Relevance to AIRS**

The AI Pact's 'Pillar 1' focus on stakeholder exchanges offers an ideal platform to showcase AIRS and promote innovation and regulatory alignment, supporting the responsible deployment of AI technologies across various industries.

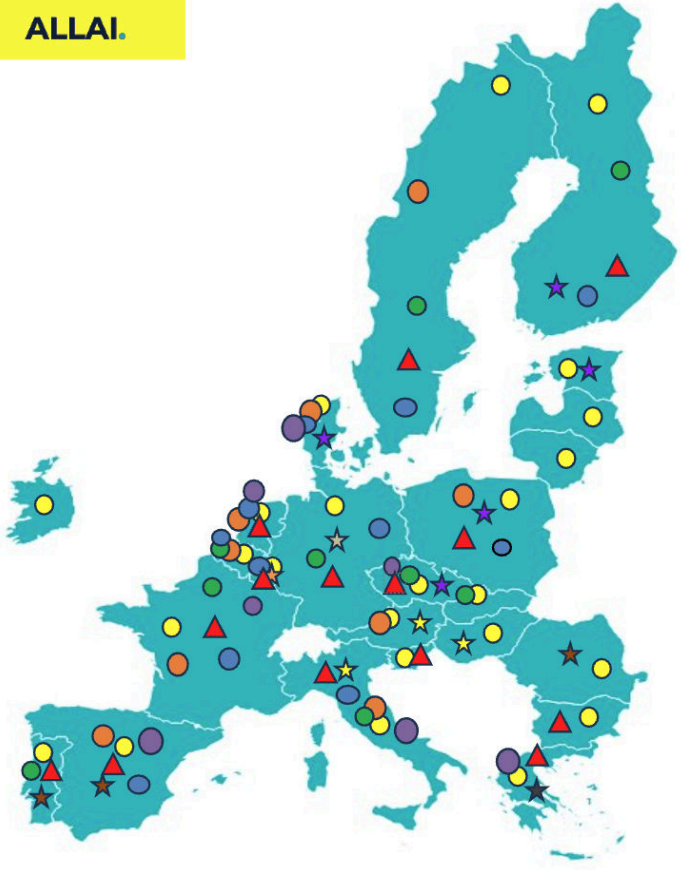
Conclusion

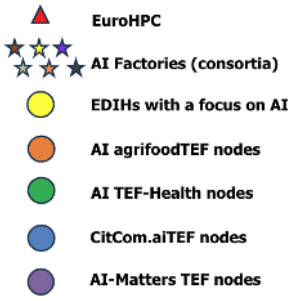
EUSAiR aims to continuously include a wide range of stakeholders in the co-creation of the Union AI Regulatory Sandbox Framework and the learning paths, to foster communality and acceptance, and respect inclusivity and diverse viewpoints.

The overall aim is to simplify compliance, particularly for SMEs including startups, and under resourced public administrations, and encourage innovation in compliance with the AI Act.

EU AI Ecosystem Map

ALLAI.





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