



# AI4EU: An AI on-demand Platform and ecosystem

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[www.ai4eu.eu](http://www.ai4eu.eu)



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# WWW.AI - World Wide (War) of AI in one slide...



## GAFA or GAFA(M) / NATU – FMCG positioning

**Strategy of buying technology everywhere in the world, seeking a single target, the FMCG (Fast Moving Consumer Good) market**

*4P replaced by 3W, What do you want to buy, why you should buy it, when is the better time for you to buy it.*

*Augmenting the user experience*

*Increasing the producer revenue and the marketer revenue (advertising) **Free Data.***

## China – The B2B manufacturing positioning

A road for AI is a strategic research agenda developed by the Chinese government totally oriented on making Chinese businesses stronger in delivering value to their business customer through a new mastering manufacturing technologies. The acquisition of Kuka in Germany is the best example of that strategy.

Strong involvement of Chinese companies in making sure that their point of view is understood by EU regulations through memberships in standard body (through their own European research centers and/or European Business Association). **Standardization.**

## Japan – The service to the person positioning (The home appliance - IOT)

Since 2010 the Softbank diversification is the emerging part of a solid iceberg.

Japan has been buying robotics platform (Boston robotics, Aldebaran etc...) worldwide. Investment in South Korean start-ups, investment fund with Soudia Arabia...

Toshiba investments with European research centers (INRIA in Paris for example). **Funding instruments.**

## Where is South Korea?

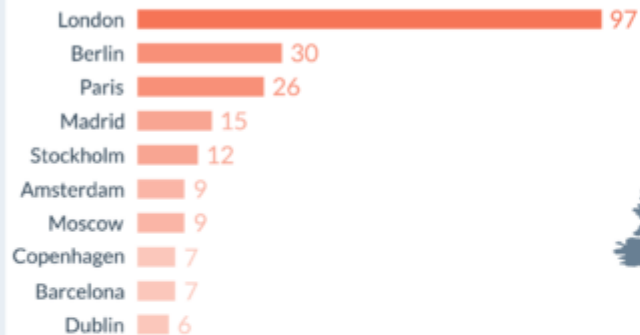
Samsung strange posture on the AI topics ... In it without being in it? In fact Researchers have been filling patents since 2010 impacting all electronic consumer goods (SK is N°3 in the world behind US and Japan). **Patents on electronic consumer goods.**

# AI from consumers to critical domains – The B2B challenges



	Data	Storage	Algos	Validation	Business model
<b>GAFA (M)</b>	Your personal data, given for <b>free</b> in exchange of “ <b>services</b> ” can be combined with <b>open data</b>	Taken care by <b>GAFA (AWS and alike)</b> No guarantee on the <b>location</b> , predominantly <b>USA</b>	<b>Deep learning</b> Recognition & prediction of <b>consumer activities</b> (voice, image, video)	<b>Not a real concern</b> <b>Trust</b> could be enough.	<b>Service offer</b> Indirect business model: <b>advertisement, e-business</b>
<b>Air Transport</b>	<b>Critical data</b> (navigation), need to be secured and validated Use of <b>open data</b> (weather for instance)	<b>Private</b> clouds <b>Trusted</b> third parties' clouds <b>High level cybersecurity</b> protection mandatory	<b>Data and knowledge driven</b> <b>Real Time algos</b> Optimisation and prediction of <b>systems' behaviour</b> (not humans)	<b>Provable trust:</b> AI will have to be <b>explainable</b> and systems based on AI will need to be <b>certified</b>	<b>Added value</b> services for <b>airlines, airport authorities, navigation authorities</b> . Indirect services to the <b>end-users</b>
<b>Security</b>	<b>Confidential data</b> Not necessary massive data, use of <b>synthetic data</b> <b>Cybersecurity</b> at highest level	Non critical part can be in secured private cloud <b>Gvt private cloud</b> for the most sensible part	<b>Embedded (hard) real time algos</b> Optimisation and prediction of <b>systems' and humans' behaviour</b>	AI will have to be <b>explainable</b> and fully protected. There is <b>a legal responsibility</b> as well & <b>ethics</b>	<b>Operational</b> superiority <b>Logistic</b> optimisation <b>Sovereignty</b>

### Top 10 Artificial Intelligence Startup Hubs





### The market place for shopping for Talents & Brain ...

### The 2018-2020 program had a major line on AI / ICT26.

- Building on “AI on demand” eco system and platform, **defining a strategic research agenda** for Europe.
- A 36 months project – Research and Innovation Action – 100% funded.
- The Commission considers that proposals requesting a contribution from the EU of up to 20 million € would allow this area to be addressed appropriately (**20 million including 3 million cascade funding**).

## Our convictions: An European based answer. AI4EU



The core consortium must be constituted with **only European organizations** and not foreign organizations that are headquartered outside of the EU. We believe this is key for the creation of **unique European leadership** in the AI space. Therefore, we cannot accept any organization whose HQ is outside Europe as core decision-makers in the consortium. This, however, is not to say that such organization cannot have any involvement in the consortium. Their involvement, however, must be limited.

We must promote actively the European values (**United in diversity**) both internally toward the European AI ecosystem and community, and externally toward associated partners. It is important that **European values** are reflected in the AI-on-demand platform, knowledge, and its broader AI community.

We **welcome excellence** in all areas: including, but not limited to, research, innovation, community building, and business development. High-level experts provide the pillars of that excellence both during the proposal writing phase and during project execution. However we strongly believe that **it is a community duty and privilege to nurture decisions bearing in mind the experts advices**.

# Quick Overview



AI4EU is a collaborative H2020 Project that aims to

- **Mobilize the entire European AI community** to make AI promises real for the European Society and Economy
- Create a leading **collaborative AI European Platform** to nurture economic growth.

## Key figures

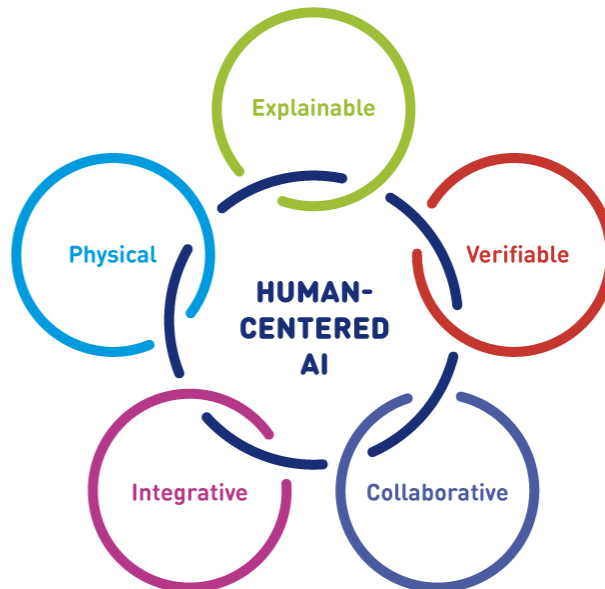
- **79 members** (60 leading research institutes)
- **21 partnering countries**
- **€3m Cascade Funding**

## Fed by 8 pilots experiments

- Citizen, Robotics, Industry, Healthcare, Media, Agriculture, IoT, Cybersecurity

3 open calls for Start-up, SMEs and AI talent and an ambitious technology transfer program

Based on 5 Research Areas



Ethical Observatory

Strategic Research and Innovation agenda

# AI4EU : What for?



- The **mobilization** of the largest possible European AI Ecosystem
- **Five scientific research domain** in AI (explainable, verifiable, collaborative, hybrid, physical)
- **8 industrial pilots** experiments to demonstrate the added value of the platform facilities
- A strong focus on the **EU human-centred** approach
- A **funding mechanism** to select and operate promising prototypes and experiments
- **An European Platform** to offer a consistent and high quality set of AI related services to all stakeholders
- **An AI4EU Foundation** scheduled to sustain and perpetuate the programme
- A sustainable European AI platform with **an European Governance**

# The AI4EU Platform

*A One-stop-shop access to the latest AI knowledge, collaboration, expertise and technology available in Europe*



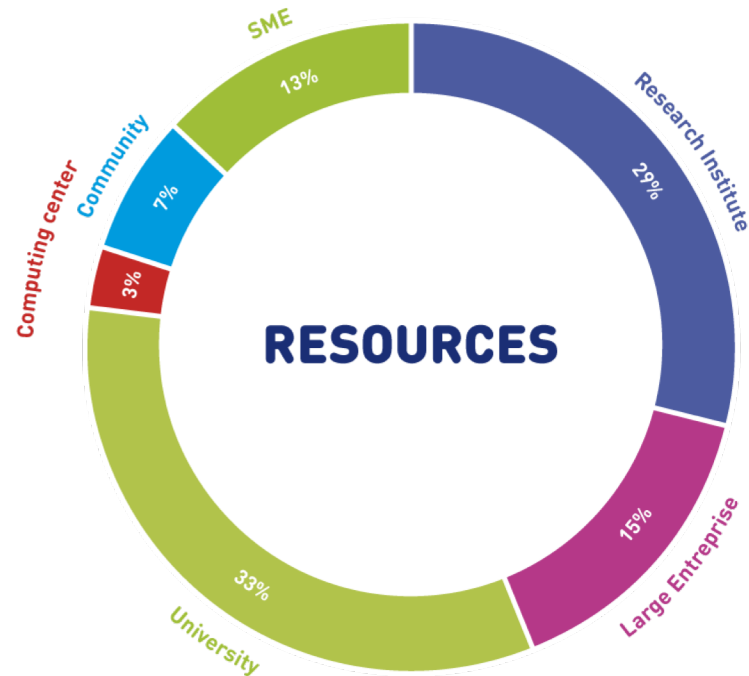
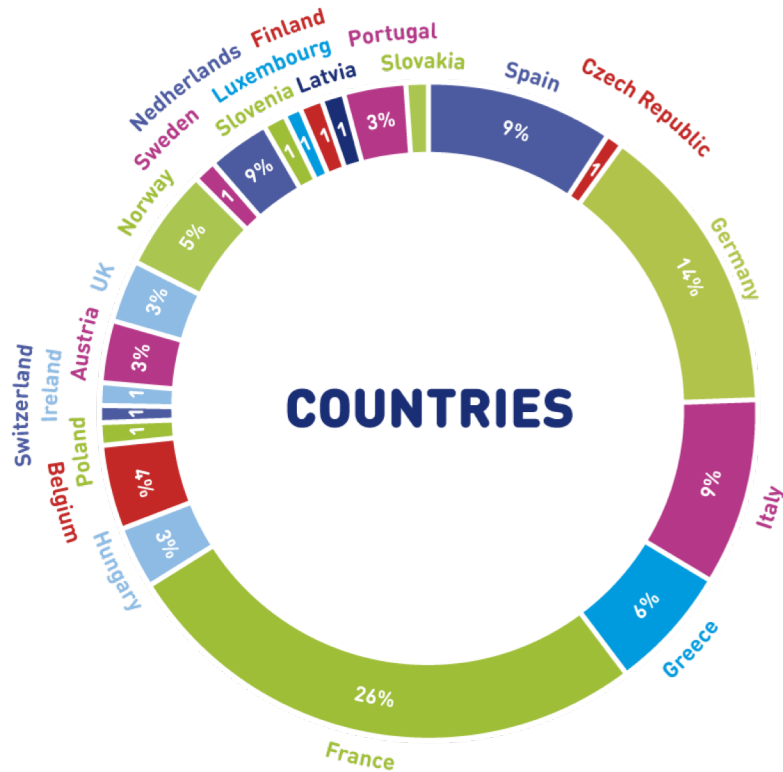
- A strong collaborative system to support the AI Community
- An AI resources repository to publish and promote quality assets for AI
- An advanced AI search engine relying on AI technology
- Multiple design studios to allow experimentations and prototyping
- Interconnection with numerous platforms of many kinds and purposes
- A collaborative approach for publishing, evaluating and disseminating contents

# Consortium



AI4EU: 79 members – 21 countries

A balanced consortium of research and industry





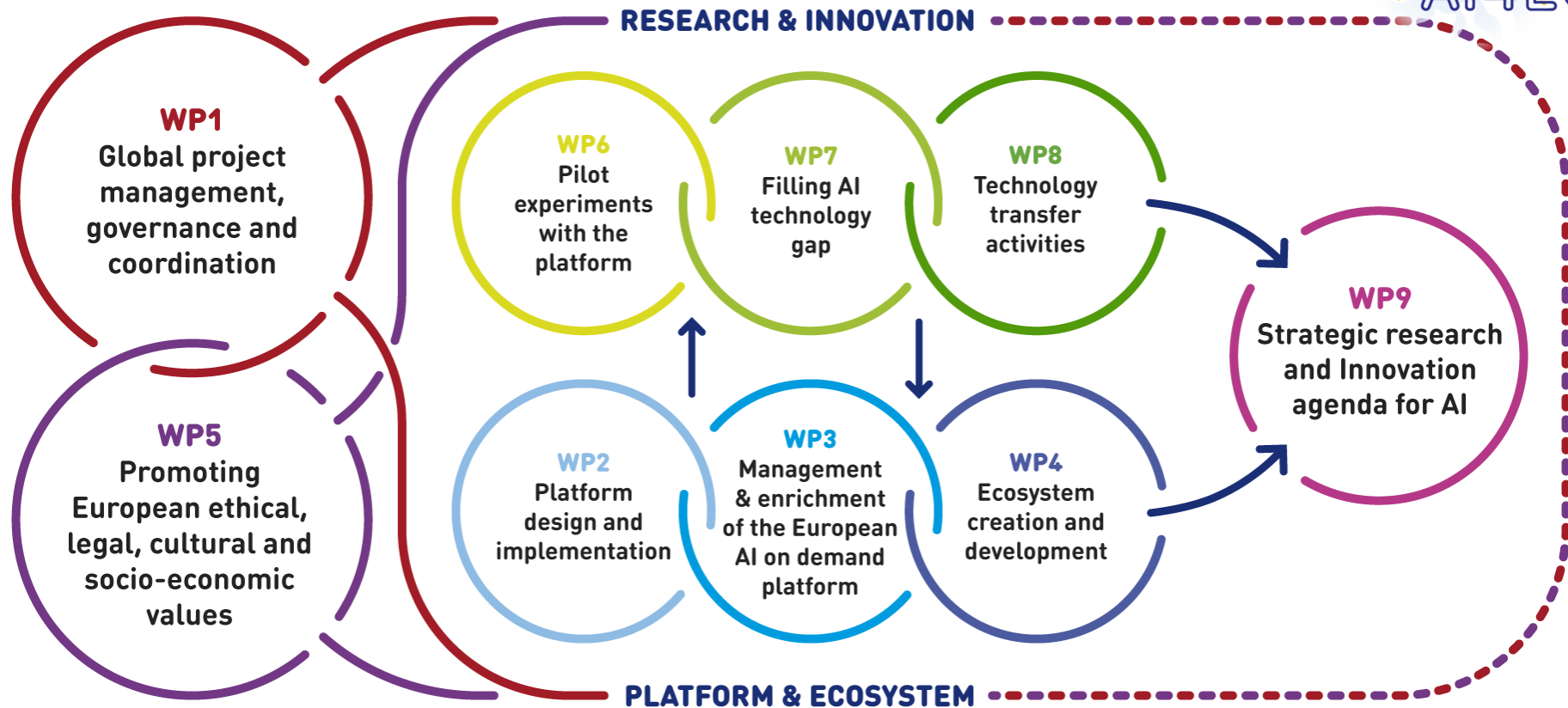


**A 500 B €  
Turnover  
consortium**

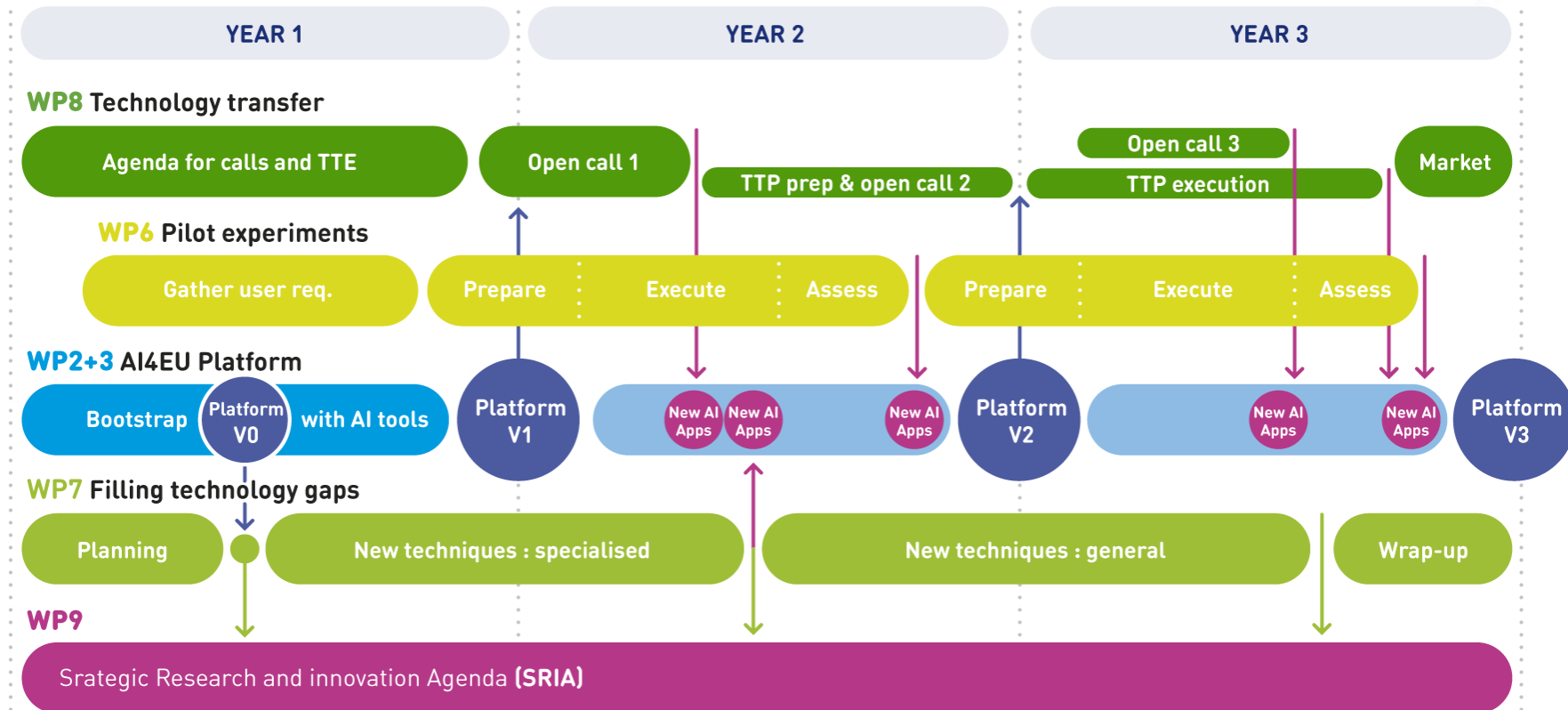
**A 12000  
researchers  
community**



# WPs: Work Package or Sub Project?



# An ambitious timeline



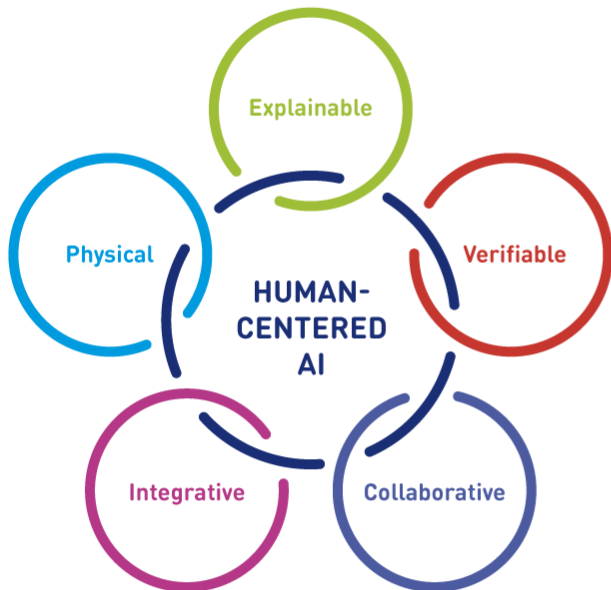
# Innovation and research activities nurturing pilots



Five research areas



Eight pilots experiments



Pilot experiments	Description	Research areas
<b>P1 AI4 Citizens</b>	An AI-powered advisor for EU Citizen (focus on higher education)	Collab. AI, Explain AI
<b>P2 AI4 Robotics</b>	Intelligent performance Analytics for industrial robots	Verif. AI, Explain. AI
<b>P3 AI4 Industry</b>	AI-Driven digital Companion for production facility	Hybrid AI, Verif. AI
<b>P4 AI4 Healthcare</b>	Fostering confidence by estimating model uncertainty	Explain. AI, Physical AI
<b>P5 AI4 Media</b>	AI-based 3D-generation of animated video	Collab. AI
<b>P6 AI4 Agriculture</b>	Crop quality assessment through computer vision	Hybrid AI, Explain AI
<b>P7 AI4 IoT</b>	Advanced analytics on air quality monitoring	Physical AI
<b>P8 AI4 Cybersecurity</b>	AI-driven attacks learner	Hybrid AI, Explain. AI, Collab. AI, Verif. AI

Coupled with an ambitious Technology Transfer Program  
(3 open call foreseen, major Ecosystem Development)



# The AI4EU Ethical Observatory to tackle ELSEC\* issues



- **To stimulate reflection**, discussion and due consideration of ELSEC-AI issues within the EU AI community (researchers, educators and practitioners) and with the European Parliament, member states, and AI industry.
- **To provide resources** to educate the general EU public more accurately about state of the art in AI.
- **To survey legal issues** for the deployment of AI systems in the EU and identify sources of expertise for industries applying AI.
- **To identify/elicit and monitor values and societal acceptance** of decisions and policies.
- **To develop methodological guidelines** for the integration of ELSEC considerations in the design and development of AI systems.
- **To avoid negative bias**, such as on gender or other forms of discrimination, which implicitly play a role in AI decision systems.

# Interconnection with many leading platforms in a seamless way



The AI4EU Platform will seamlessly interconnect with a large number of other Platforms:

- Human Brain Simulation Platform
- Copernicus Data Platform
- Beat (Idiap) Platform
- Bonseye
- Fiona Platform
- DIH's Platforms

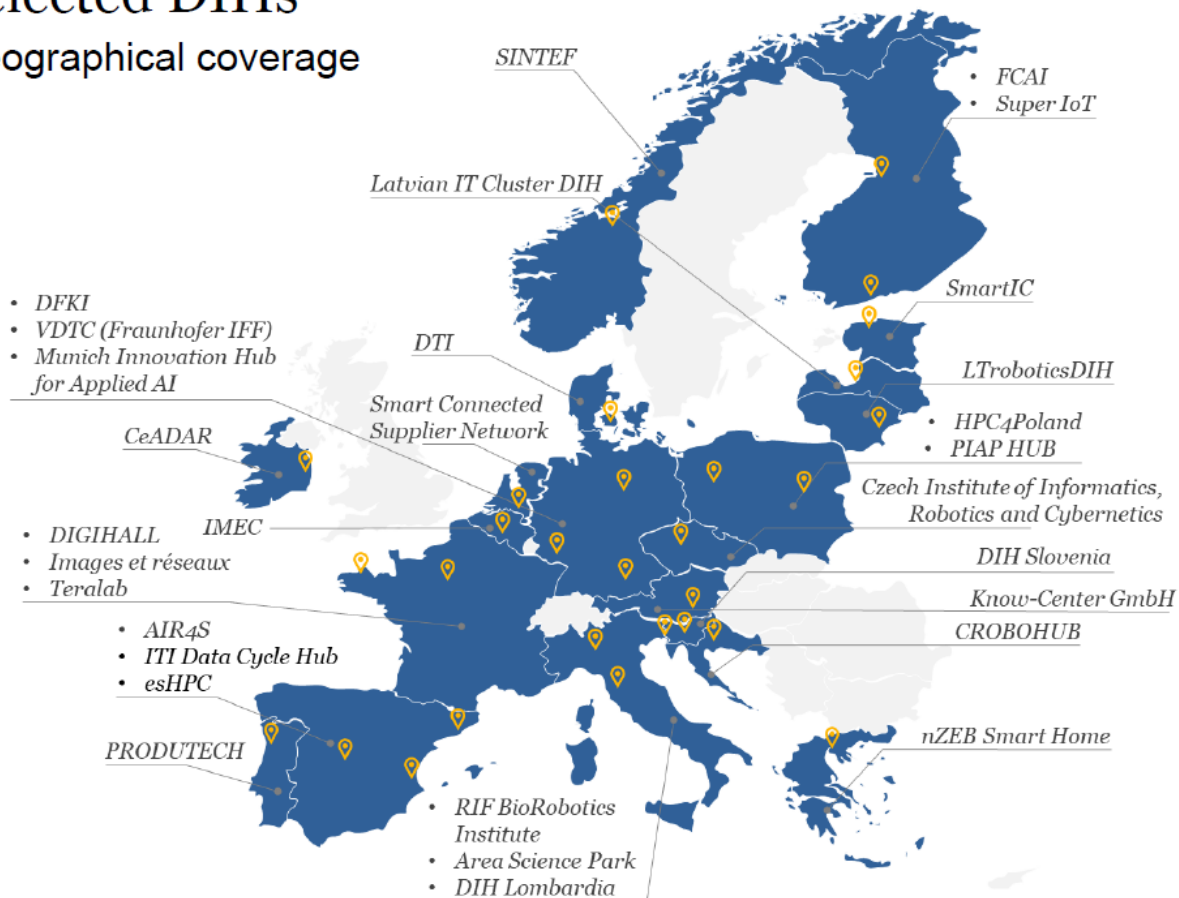
**...and many more to come.**





# Selected DIHs

## Geographical coverage



**30 DIH for AI  
1st phase**



**Questions**

**Thank you !**

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