



NBIP NEXT 2025

The Future of the €3B IPCEI Cloud

Can State Aid Deliver Digital Sovereignty?

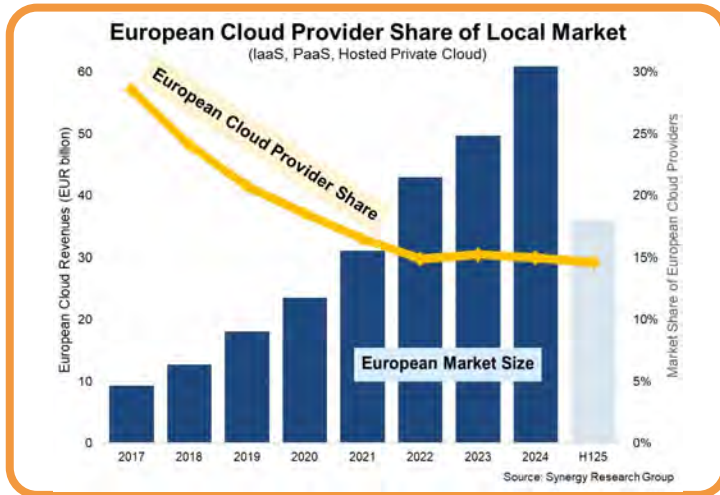
Dr. Alberto P. Martí

*Chair of the Industry Facilitation Group @ IPCEI Cloud
VP of Open Source Innovation @ OpenNebula Systems*



Can we fix the EU cloud market?

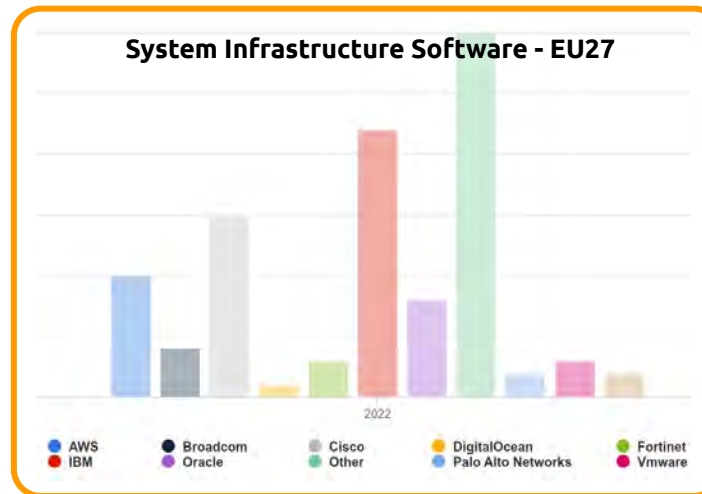
Cloud Services



Source: Synergy Research Group (July 2025)

Share of **EU** CSPs has declined
(From 29% in 2017 to 15%)

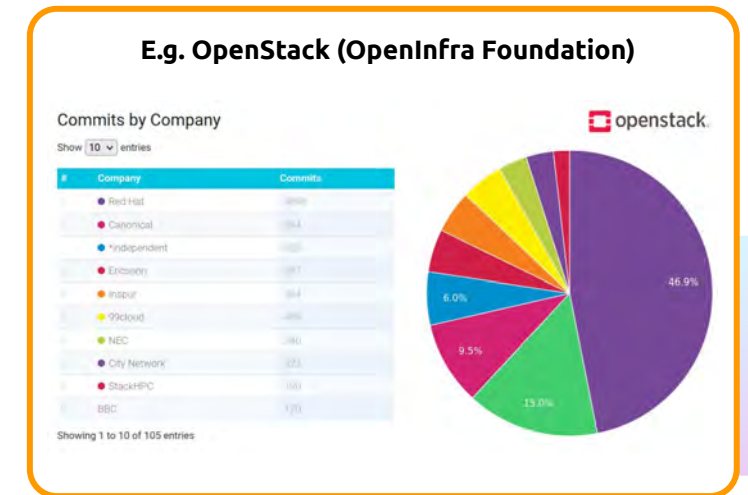
SysInfra SW Market



Source: Statista (October 2022)

No top competitor from the **EU**
(All of them are US companies)

Open Source SW



Source: Stackalytics (January 2023)

Marginal (<5%) role of **EU** code
(Dominated by US organisations)

Member States Declaration (2020)



Feb 2020
European Strategy for Data aims to build a single market for data



May 2020
Recovery and Resilience Facility
20% Digital EU Flagship
“Scale-up”



Oct 2020
Member States Declaration for next generation European cloud



Mar 2021
Digital Decade Strategy sets targets on edge and cloud for 2030



May 2021
Updated EU Industrial Strategy
evidences strategic dependencies

Member States Declaration (2020)

In October 2020, all 27 EU Member States signed a joint declaration on “**Building the next generation cloud for businesses and the public sector in the EU**”:

- “*The EU has a unique opportunity to address the need for more data sharing and decentralised data processing, **closer to the user (at the edge)**”.*
- “*Completely interoperable, open, multi-vendor cloud platforms and services, based on European, international or **open source standards**, will enable users to migrate effectively to the cloud (...)*”.



Introducing the IPCEI-CIS



Introducing the IPCEI-CIS

- ✓ Enable the *Multi-Provider Cloud-Edge Continuum*
- ✓ Strengthening the *EU Digital Industry*
- ✓ Development of *European Open Source Technologies*
- ✓ *€1.2B in State Aid + €1.4B in private co-investment*
- ✓ *120+ European companies from 12 Member States*



Introducing the IPCEI-CIS

Industry Facilitation Group

Chair



Vice-Chair



SIEMENS

WS4



WS3



WS2



WS1

Wider IPCEI CIS Ecosystem

Direct Participants

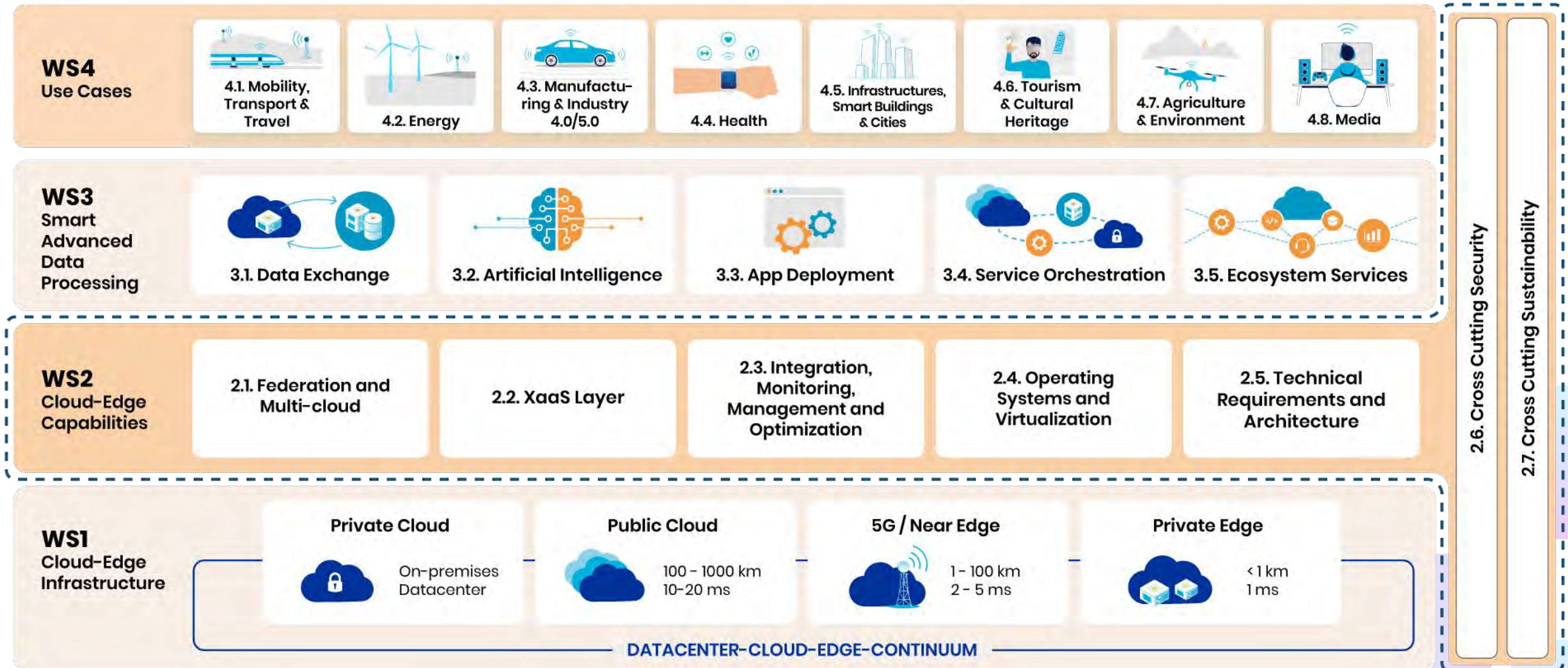


Indirect Partners

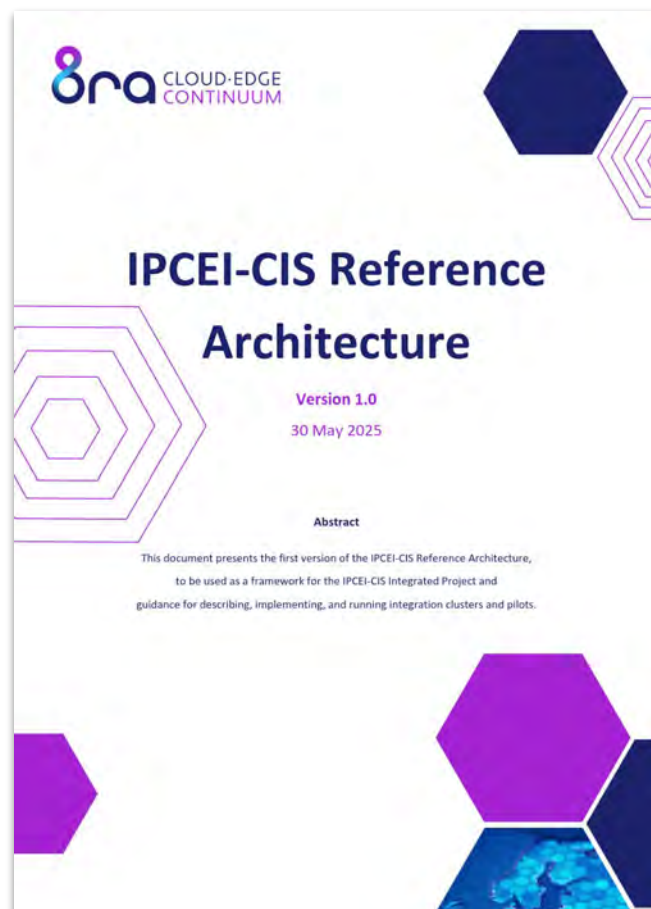


Supervisory Board
(MS + EC)

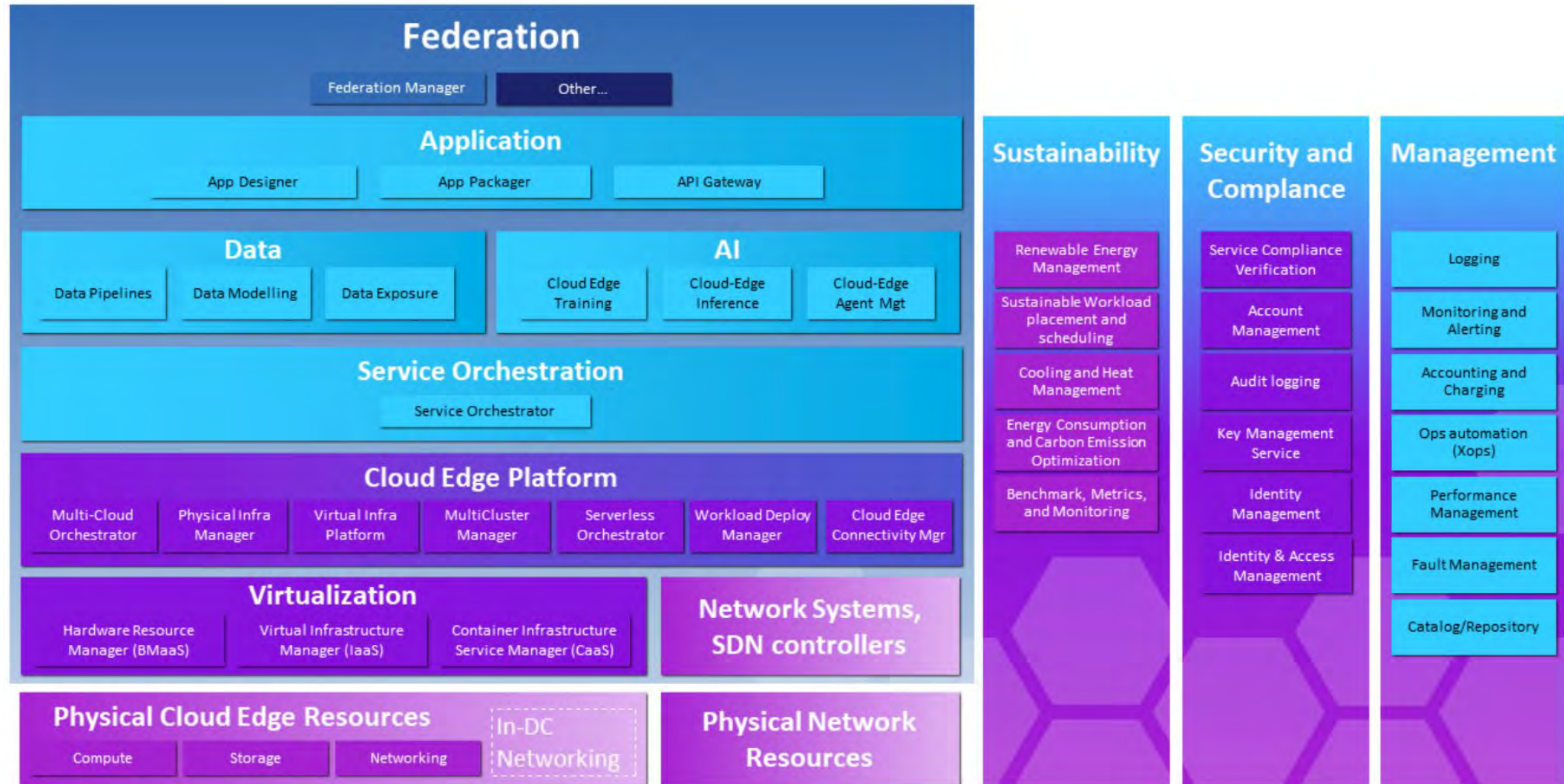
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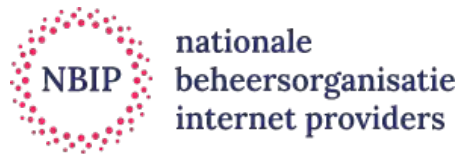
Introducing the IPCEI-CIS



WS1 layers WS2 layers WS3 layers Cross-cutting domains

Introducing the IPCEI-CIS

Collaborative Security Framework (CSF)	Cross Cutting Sustainability
Security building blocks identification and classification	Reduce energy consumption
Identifying gaps and proposing solutions	Increase energy efficiency
Establishing a baseline security compliance posture	Reduce the amount of data transferred by edge computing
Testbed infrastructure for validation	Develop green technologies beyond the state-of-the-art



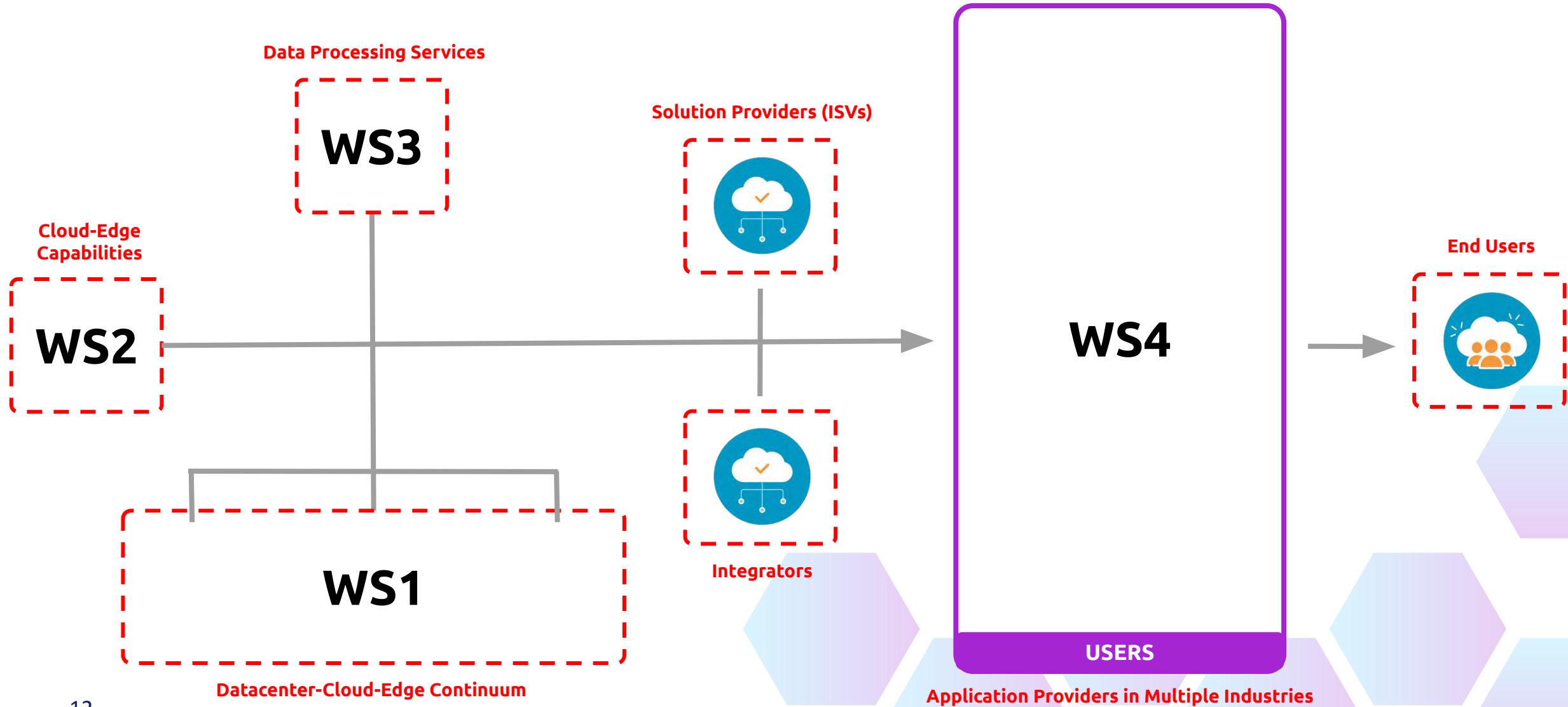
OKTAWAVE



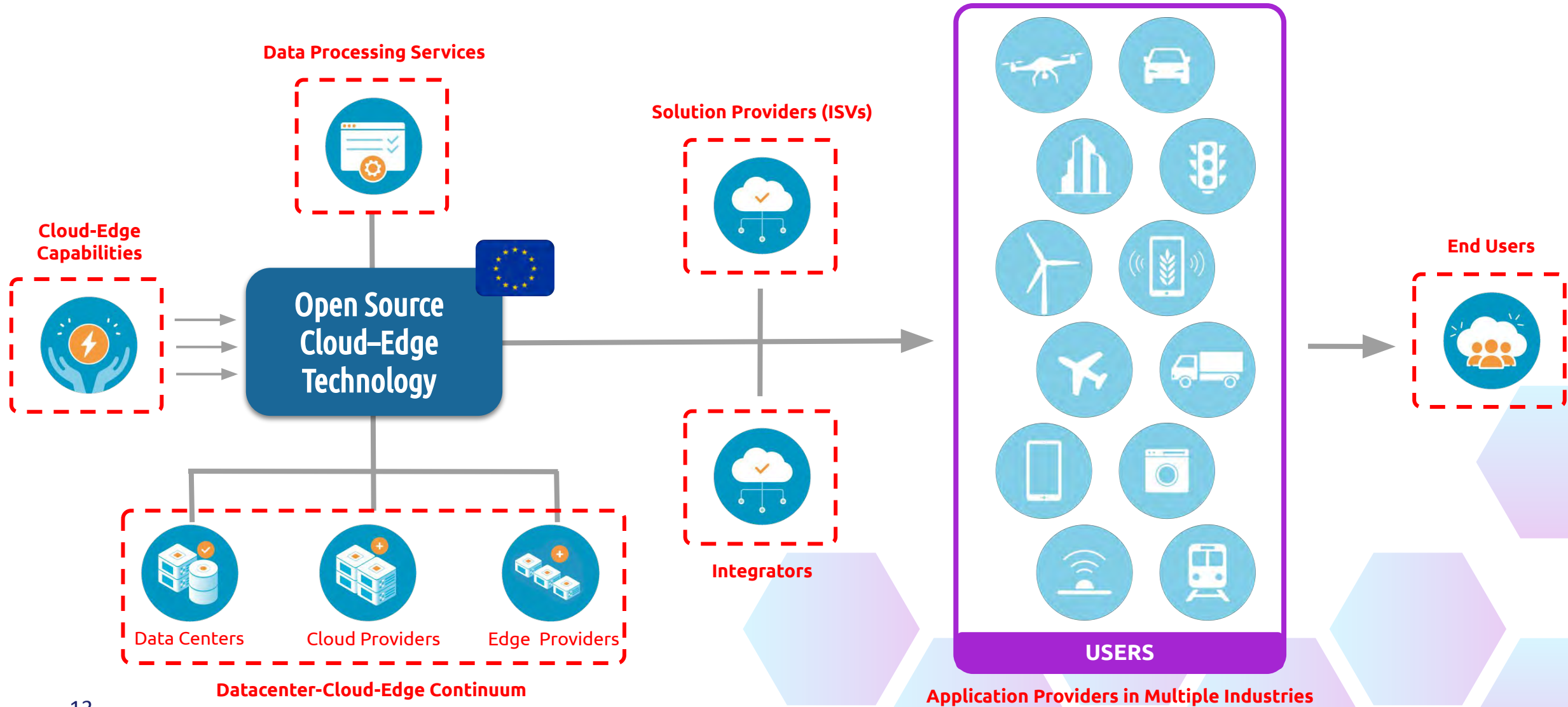
T Systems

WestfalenWIND

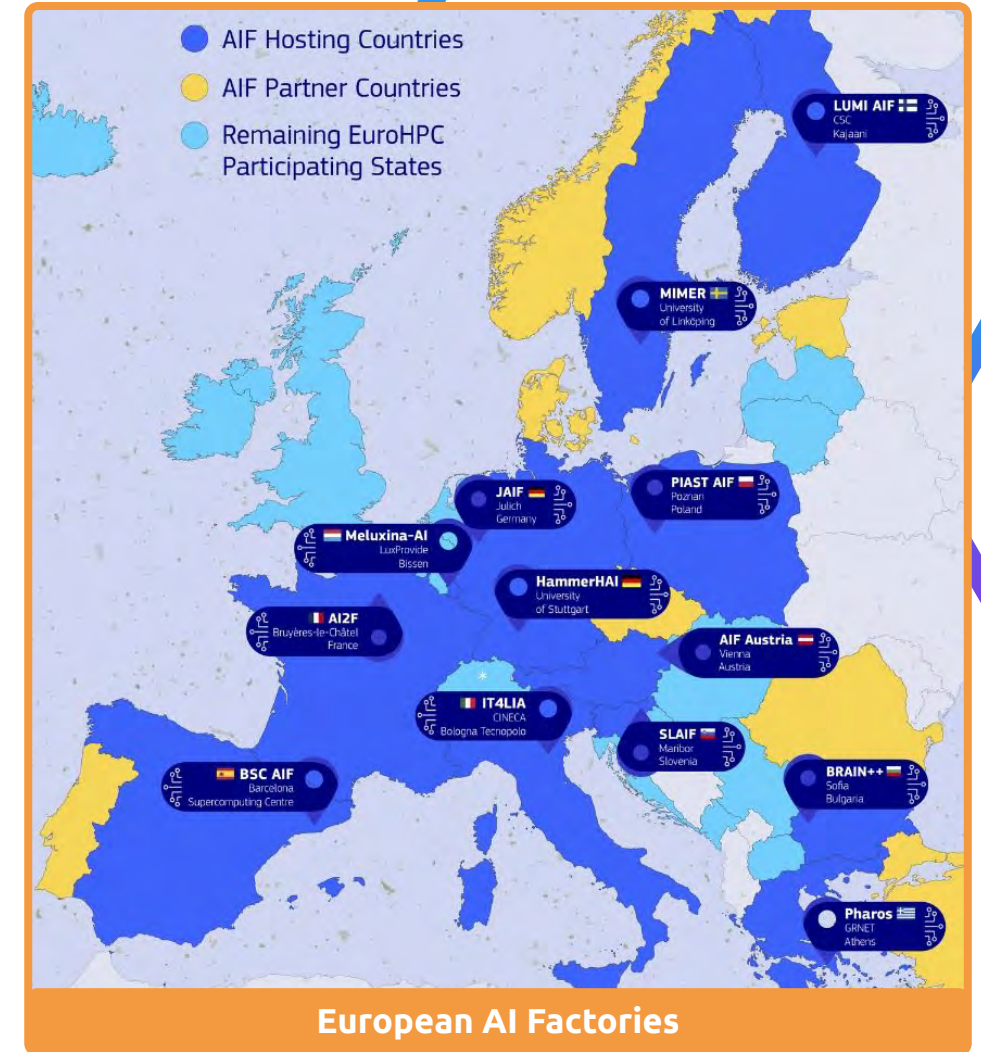
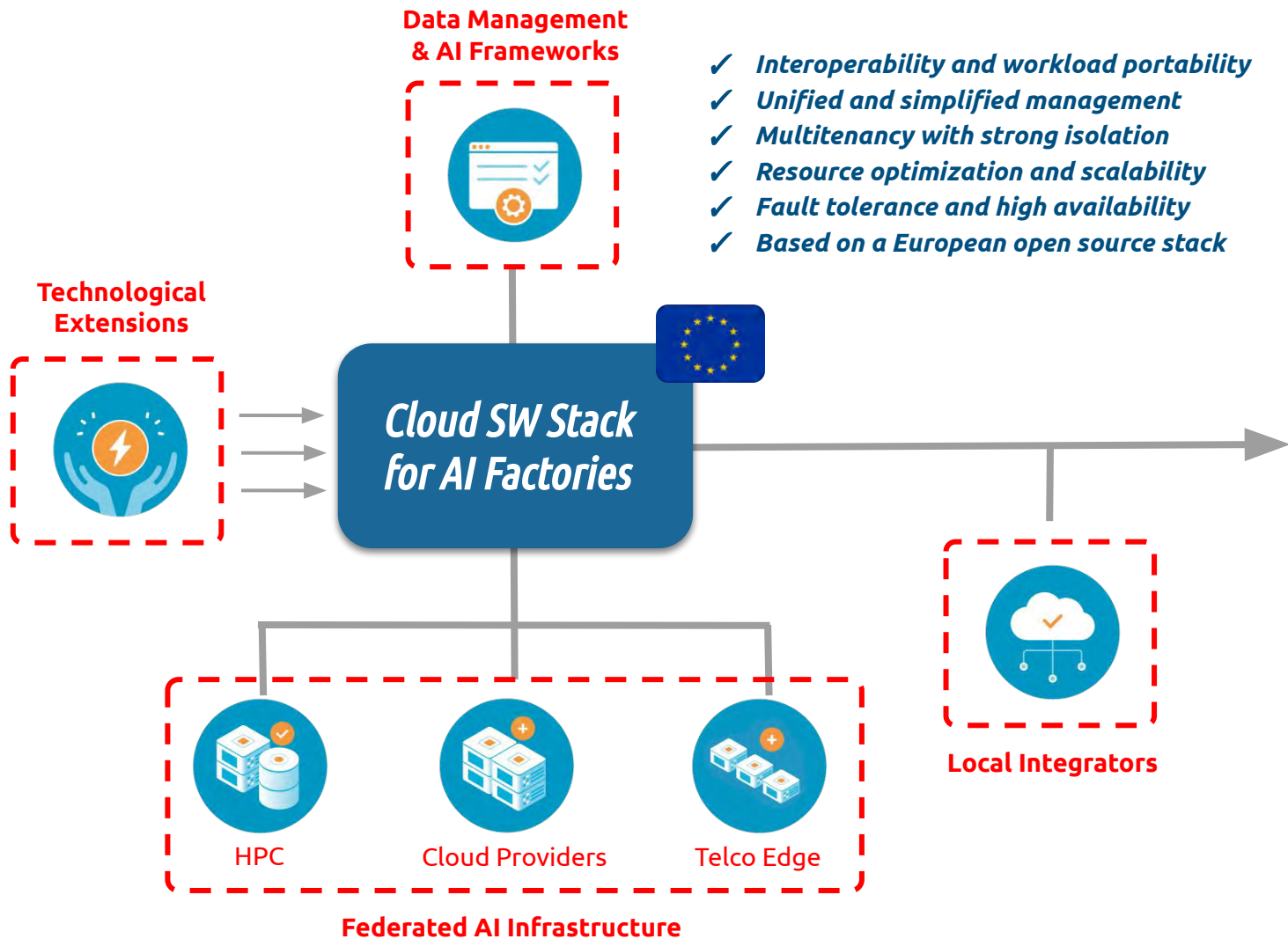
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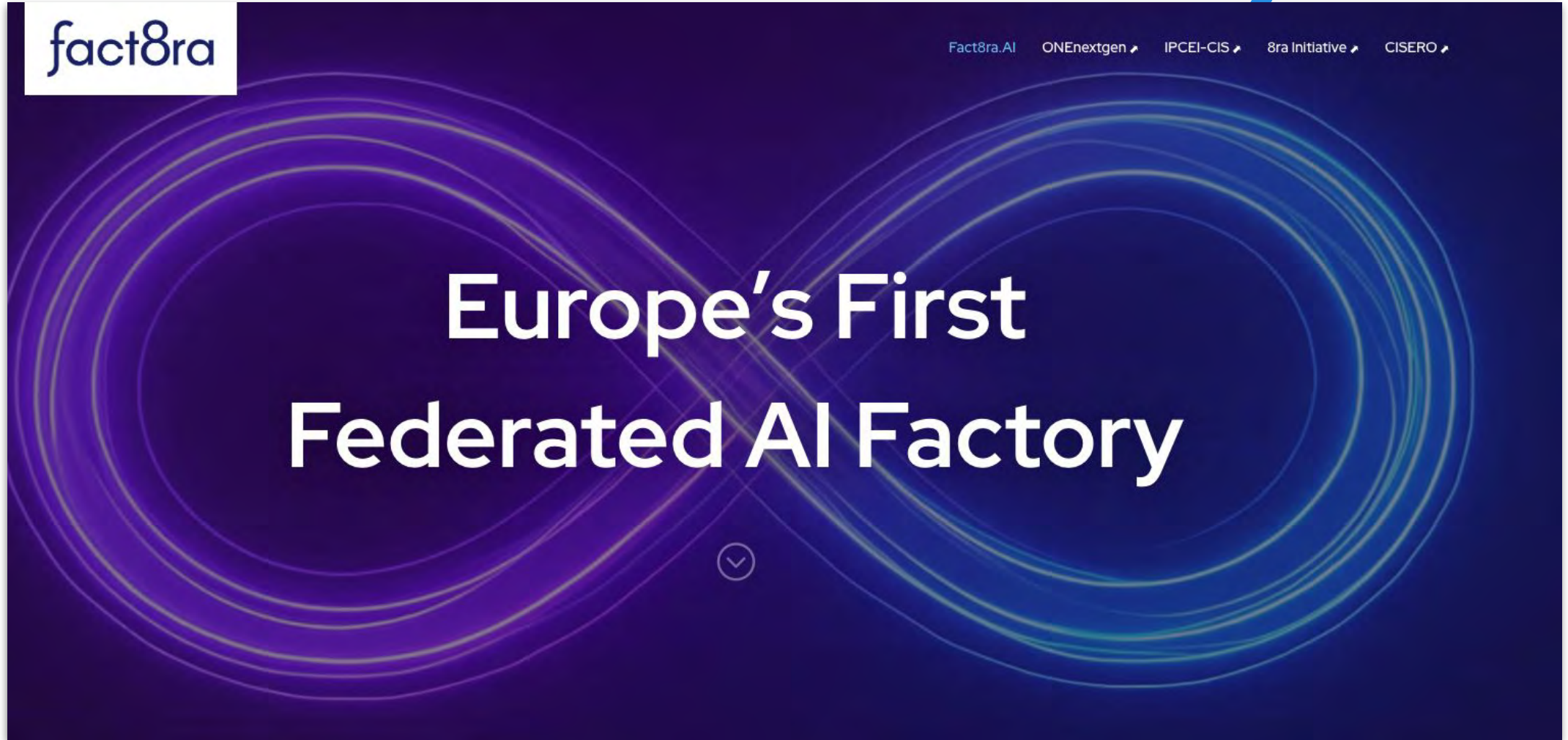


Introducing Fact8ra.AI



+ Application & Data Providers

Introducing Fact8ra.AI

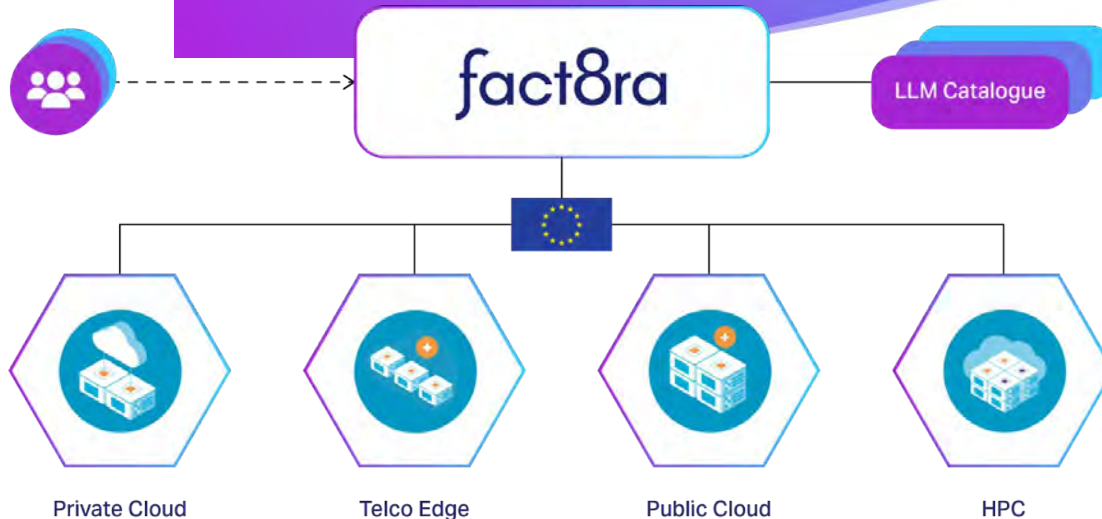


Introducing Fact8ra.AI

| PRESS RELEASE

Europe launches its first Federated AI Factory based on a sovereign multi-cloud infrastructure

Fact8ra, part of the €3B IPCEI Cloud, offers a multi-tenant AI-as-a-Service platform for the deployment of open source LLMs along the HPC-cloud-telco continuum



*“I am glad to see that the **IPCEI-CIS** is delivering on its mission: to develop solutions that are European, open source, and that enable distributed data processing across the multi-provider cloud-edge continuum. While focusing on Research and Development, **IPCEI-CIS** is intended to be close to the market and I particularly note how the deployment of **IPCEI-CIS** integration pilots are demonstrating advanced cloud and edge services and the federation of infrastructure resources across the European Union”.*



Thibaut Kleiner

Director for Future Networks @ DG CONNECT
European Commission

Introducing Fact8ra.AI

arsys



IONOS



Introducing Fact8ra.AI



INFERENCE

Deploy your AI models across
the HPC-Cloud-Telco
Continuum.



FINE-TUNING

Customise an AI model
using public datasets or
your own data.



TRAINING

Use a distributed
Edge Cloud Infrastructure
to train your AI model.

Introducing Fact8ra.AI

- ✓ Native support for GPUs (vGPUs, passthrough, MIGs)
- ✓ Support for ARM virtualization.
- ✓ Integration with Hugging Face and NVIDIA NIM.
- ✓ Integration with Ray Appliance and NVIDIA Dynamo.
- ✓ Support for vLLM with OpenAI API compatibility.
- ✓ GPU profiles for LLMs.
- ✓ RAG integration.
- ✓ Multi-GPUs support.
- ✓ Quantization for LLMs.
- 🔧 AI Model Training.



Open
Nebula

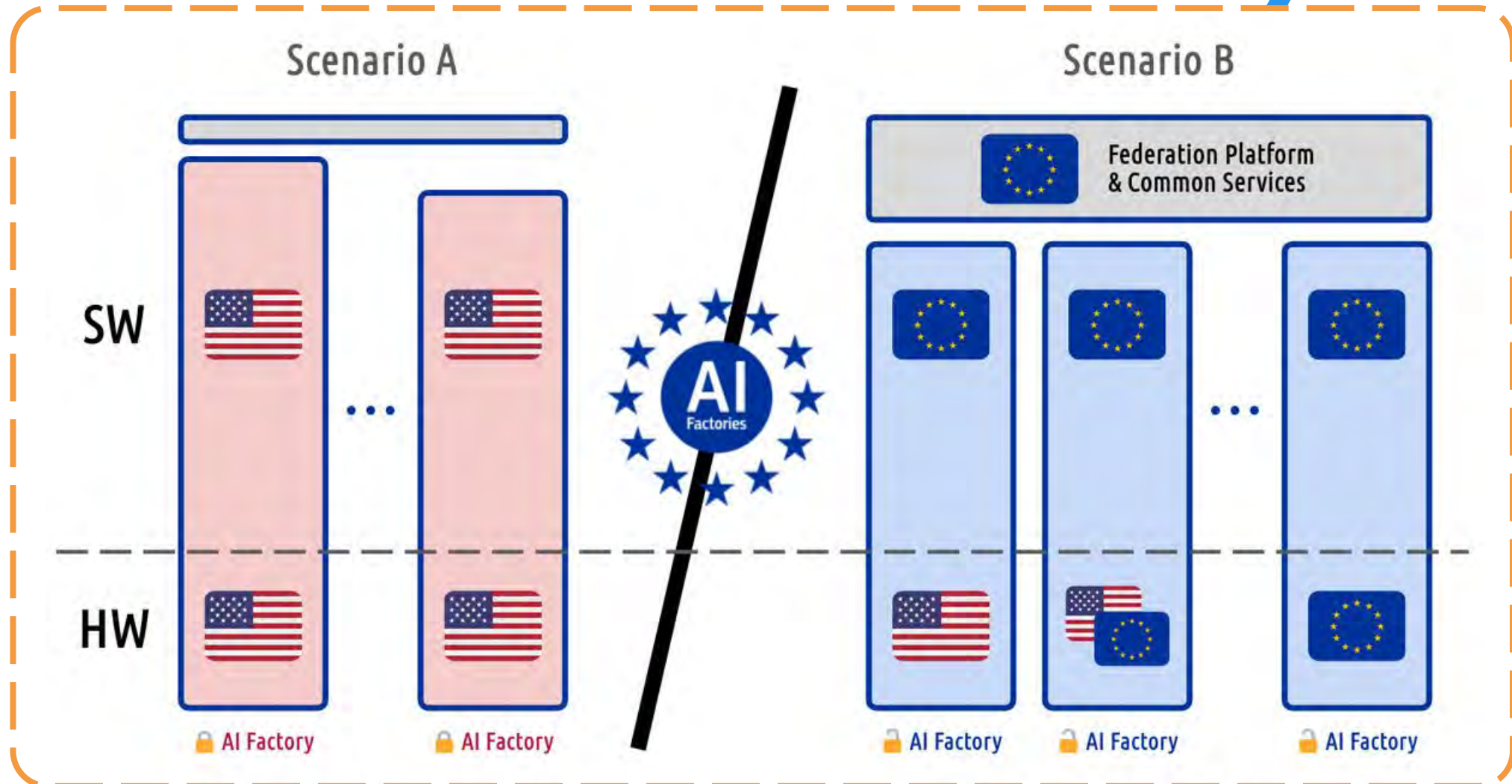


openSUSE



MariaDB

Introducing Fact8ra.AI



Introducing Fact8ra.AI



Digital Sovereignty & Open Source

<< *The IPCEI-CIS participants commit to set up an initial **open-source community***

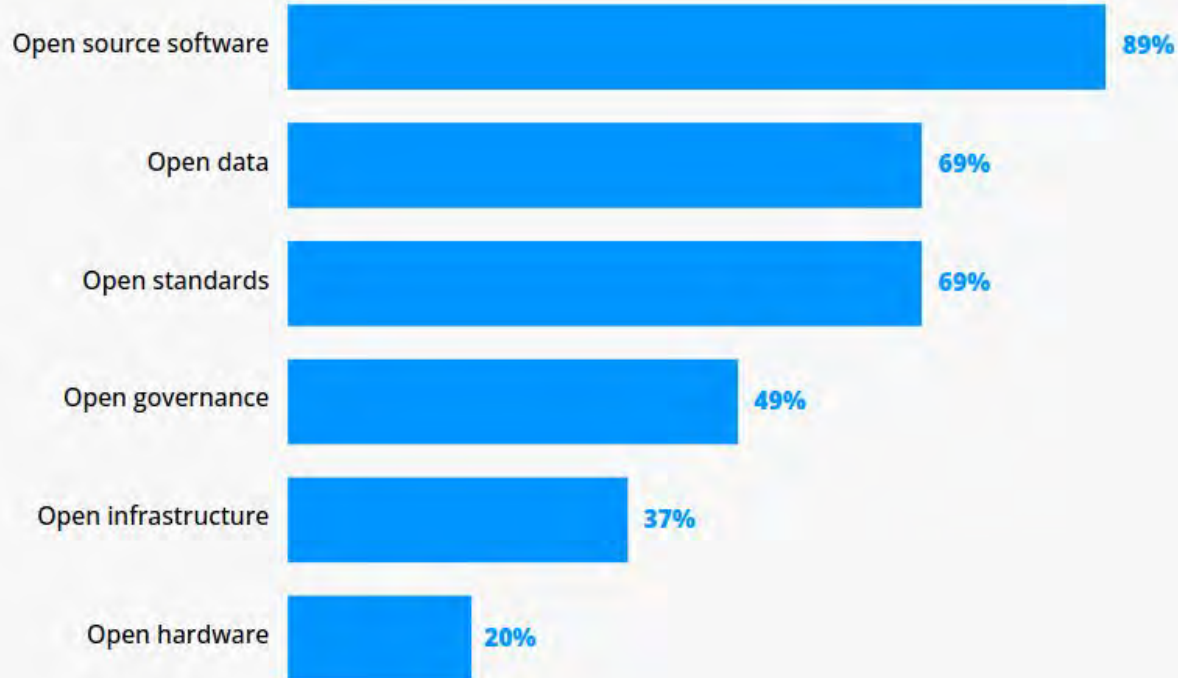
*The IPCEI-CIS direct participants will commit to develop and implement an **open-standard ecosystem and code**. The open-source code ensures independence from the respective implementers, allowing all third parties (and competitors) to utilize and contribute new open-source code and functions. This will allow new innovations and actions to be taken independently of vendor or market limitations. **This is not confined to the development phase of the IPCEI-CIS.***

*The IPCEI-CIS participants will commit to **support and maintain an open approach of the open-source community** (..) This will provide non-discriminatory access for all interested parties (and competitors). As a result, everybody will be enabled to use, edit, and extend the open-source code and benefit from the new functionalities and solutions developed. >>*

Open Source in Europe

Which open approaches do you believe are most critical to advancing Sovereign AI?

SELECT ALL THAT APPLY | Source: 2025 Global Collaboration in AI Survey, Q19, Sample Size = 70, Total Mentions = 232 (Europe only)

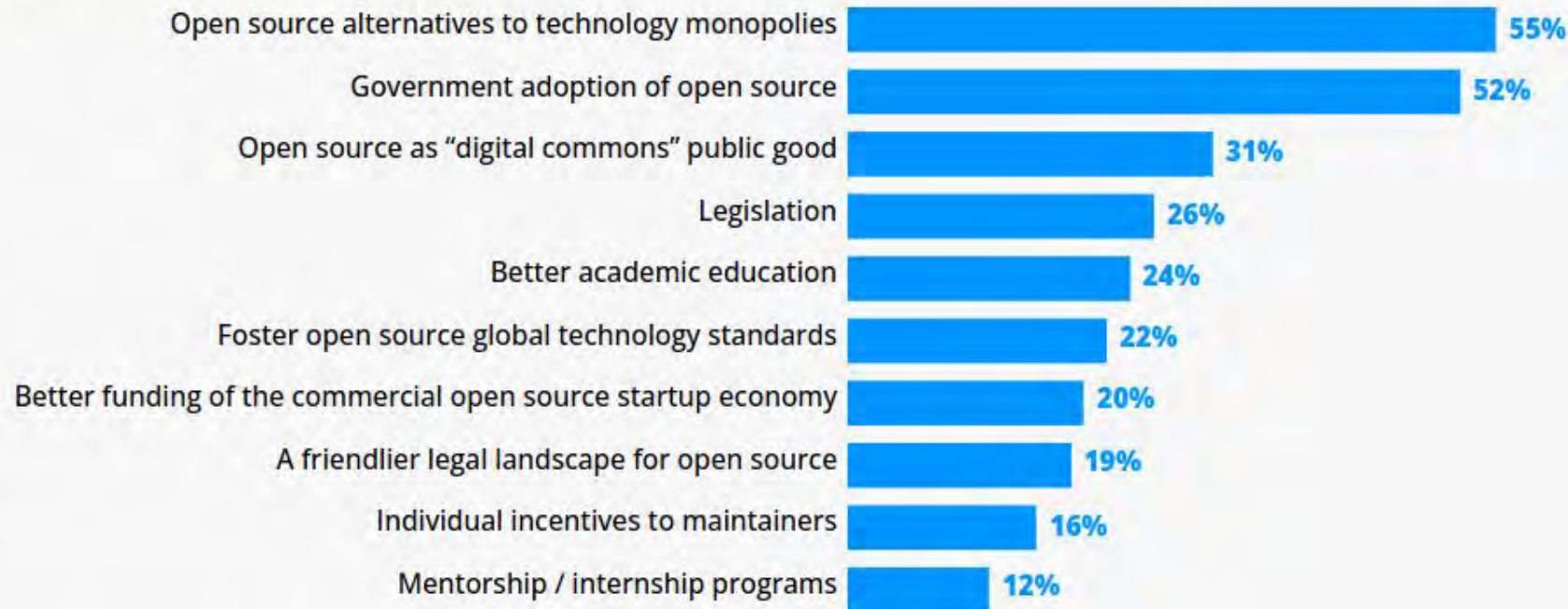


2025 World of Open Source Europe Report: Open Source as Europe's Strategic Advantage (Linux Foundation, August 2025)

Open Source in Europe

In which areas do you think there should be further investment in open source across your geographic region?

SELECT UP TO THREE RESPONSES | Source: 2025 World of Open Source Survey, Q15, Sample Size = 316, Total mentions = 888 (Europe only)



2025 World of Open Source Europe Report: Open Source as Europe's Strategic Advantage (Linux Foundation, August 2025)

The Global Open Source Community...

Q Organizations... Industry August 2025

RANK	ORGANIZATION	ACTIVE CONTRIBUTORS ?		TOTAL COMMUNITY ?		
1	Google	6590	+252	13951	+530	>
2	Microsoft	5364	+285	11801	+584	>
3	Red Hat	3908	+168	5771	+187	>
4	Amazon	2465	+173	6039	+384	>
5	Intel	2364	+91	5095	+176	>
6	IBM	2200	+138	5567	+307	>
7	Huawei	2131	+194	4422	+384	>
8	NVIDIA	1776	+161	3580	+257	>
9	GitHub	1496	+102	3647	+324	>
10	AMD	1344	+105	2855	+160	>



A New European Open Source Ecosystem ?



A New European Open Source Ecosystem ?

Federated Open Source Development Infrastructure

- Independent from GitHub and Microsoft Azure.
- Able to host projects by RTOs and European start-ups.

Sovereign Open Source Governance Models

- Projects protected from influence by non-EU parties.
- Fostering solid commitment by EU companies.

New EU Funding Mechanisms for Open Source Projects

- Strategic support to critical open source components.
- Promotion of sovereign stacks responding to market needs.
- Scale up European open source tech providers.

Open Source Research & Innovation Strategy

- Bridge the gap between EU projects and industrial applications.
- Active involvement of public administrations across Member States.
- Build long-lasting trust relationships among EU partners.





IPCEI-CIS

Next-Generation European Platform for the Datacenter-Cloud-Edge Continuum

Initiative supported by the Spanish Ministry for Digital Transformation and Civil Service through the **ONEnextgen Project: Next-Generation European Platform for the Datacenter-Cloud-Edge Continuum** (UNICO IPCEI-2023-003) and co-funded by the European Union's NextGenerationEU instrument through the Recovery and Resilience Facility (RRF).



Financiado por
la Unión Europea
NextGenerationEU



Plan de Recuperación,
Transformación
y Resiliencia



MINISTERIO
PARA LA TRANSFORMACIÓN DIGITAL
Y DE LA FUNCIÓN PÚBLICA

SECRETARÍA DE ESTADO
DE TELECOMUNICACIONES
E INFRAESTRUCTURAS DIGITALES



OpenNebula.io/IPCEI-CIS

Thank you!

