

European Al Factories: one of the European Commission's first strategic artificial intelligence platforms in Italy

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The European High Performance Computing Joint Undertaking has announced the outcome of the call launched in September for the creation of the first European Al Factories, which selected the IT4LIA Al Factory project, the initiative that had been nominated by Italy, with the participation of Austria and Slovenia, and co-funded by the Ministry of University and Research, the National Cybersecurity Agency (ACN), the Emilia-Romagna Region, the CINECA consortium, the National Institute of Nuclear Physics (INFN), the ItaliaMeteo Agency, the Italian Institute of Artificial Intelligence for Industry (AI4I) and Fondazione Bruno Kessler (FBK). Other partners in the initiative, coordinated as a hosting entity by CINECA, include national institutions and entities, such as the ICSC Foundation – National Research Center in HPC Big data and Quantum Computing.

This is a success for Italy, the result of work that has connected **institutions and research** organizations, demonstrating the potential of a cohesive and strategic collaboration for the development of artificial intelligence. The initiative will not only strengthen the entire national technology ecosystem, but will give a significant boost to our country's competitiveness and economic resilience.

At the heart of the project is the **creation of an advanced supercomputer**, optimized for artificial intelligence, which will be installed at the **Tecnopolo Manifattura in Bologna**, a well-established European reference point for supercomputing, big data, Al and quantum computing. This infrastructure, among the most powerful in the world, will become a strategic asset to position Italy as a leader in Al processing in Europe. The project also includes the development of

applications and services aimed at developing an ecosystem to support businesses.

The IT4LIA AI Factory project represents a key milestone in a strategy launched in 2017 to place Italy at the center of technology innovation. The AI Factory will have a decisive impact on strategic sectors for the national economy, such as agribusiness, cybersecurity, climate and earth sciences, mitigation of risks related to extreme weather events, and manufacturing. Through a one-stop-shop organizational model, the initiative will simplify access to **innovative**, **high-value-added services**, encouraging collaboration among researchers, startups and SMEs, and promoting a more connected and dynamic economy.

The project benefits from a total investment of about **430 million euros**, co-financed equally by Italy and the EuroHPC Joint Initiative. The coordinating role will be played by Cineca, which will be responsible for implementing the supercomputer and managing the related infrastructure.

The selection of the Italian project marks a crucial moment for technology innovation, proving that the combination of expertise and strategic vision can generate lasting benefits for Italy and Europe. Indeed, the initiative will enable the expansion and enhancement of the Italian supercomputing ecosystem being built by ICSC – National Research Center in HPC, Big Data and Quantum Computing, leveraging Emilia-Romagna's innovation ecosystem as the ignition point of a project with national and international spillovers.

"This is a team success, a huge opportunity for our country," Cineca President Francesco Ubertini said. "Thanks to IT4LIA AI Factory, Italy proves to be at the center of European technology development. We are proud to be able to provide a cutting-edge infrastructure that will foster the growth of startups, SMEs and entire industrial sectors. This is a victory for Italian innovation and for the future of artificial intelligence in Europe."

"Fondazione Bruno Kessler is pleased to contribute to IT4LIA AI Factory with its excellence in research and innovation applied to artificial intelligence," FBK President Ferruccio Resta added. "Our efforts will focus on AI for Agritech, with the goal of developing solutions that promote the resilience and competitive value of Italian agrifood supply chains. We will support companies in accelerating the adoption and enhancing the integration of AI and robotics in agriculture, ensuring that the technologies effectively address real-world needs.

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that today are rewarded by the European Commission's decision, which also comes in recognition of the work done so far by the ICSC National Center, the creator of a competitive and attractive HPC ecosystem, which thanks to the AI Factory will be able to significantly increase its capacity to provide innovative solutions in response to the needs of research, the productive sector and public administration, both at the national and European level, and to train the new generations of Data and AI specialists."

"Emilia-Romagna achieves another extraordinary recognition, proving once again to be a Data Valley of international standing," stressed Acting President of the Emilia-Romagna Region, Irene Priolo, and Councillor for Economic Development, Vincenzo Colla. "Having invested in digital technologies ahead of other regions now allows us to present ourselves with the cards in hand for the challenge of Artificial Intelligence, the new digital frontier that will represent an extraordinary added value for the development and study projects of companies and public and private research centers. The Tecnopolo Manifattura has proven once again to be a cutting-edge infrastructure, unique in Europe, which allows our country to compete with the most advanced areas in the world. We are talking about a public place available to an integrated system, which enshrines the real contemporary challenge: to design a future that holds technology and humanism together as a condition for social mending. Because investing in the future today means ensuring our children and grandchildren a more equitable and sustainable development in order to achieve an inclusive and modern society." The Region's actions will be implemented by its affiliated company **Art-ER**, which will have the task of mobilizing the regional innovation ecosystem and orienting it toward the new opportunities offered by the AI Factory, for further development of the region.

The Director of the **ItaliaMeteo Agency**, Carlo Cacciamani, also expressed satisfaction with this result, which features a major partnership: "The participation of ItaliaMeteo in the IT4LIA AI Factory as a national weather service represents a great opportunity to drive the development of applications in the meteorological and marine fields based on the use of AI and give the country-wide system an important role in the international landscape."

Statement by Fabio Pammolli, Al4I **President**: "The Commission's choice is an important signal, for Italy and also for the European economy, which urgently needs to finance large computing infrastructures to increase the rate of technology transfer and be competitive with the U.S. and China. As Al4I we are ready to act as the implementing party of the Italian AiFactory, for all business services. The emphasis precisely on business services shows a deep awareness in our country of the importance of ensuring a continuous and efficient flow through all phases of Al, from data collection

and management, through model deployment and up to the post-production phase, where the AI solution remains subject to constant maintenance and updates, and itself becomes the basis for further development. The challenge is to quickly systematize the different actors in the supply chain, creating a virtuous and fast connection between Italian manufacturing SMEs, startups and companies developing AI solutions, our R&D units, and the new Supercomputing Infrastructure. A common strategy is needed to address this challenge. It will benefit companies, which will be able to take advantage of specific models that they can use immediately to improve their businesses. And it will benefit the research system and the supercomputing infrastructure itself, which will be able to develop a modeling layer that is constantly updated to the demands of businesses."

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