

Policy Brief



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The Artificial Intelligence Innovation Package: Supporting AI Startups and SMEs

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The Artificial Intelligence Innovation Package: Supporting AI Startups and SMEs

Executive Summary:

This policy brief details a new package of measures launched by the European Commission. Following the EU AI Act agreement in December 2023, this initiative aims to empower European startups and SMEs in developing trustworthy Artificial Intelligence (AI) that adheres to EU values and regulations. Building upon President von der Leyen's 2023 State of the Union address, the package offers a variety of support mechanisms for AI innovation. This includes a proposal to grant privileged access to supercomputing resources for AI startups and the wider innovation community. This initiative expands upon the Large AI Grand Challenge launched in November 2023, which provided financial support and supercomputer access to promising AI startups.

Keywords

Artificial Intelligence, AI innovation, supercomputers, startups, SMEs, EU.

Background

The European Commission launched a comprehensive package to support European startups and SMEs (small and medium-sized enterprises) developing trustworthy Artificial Intelligence (AI) that adheres to EU regulations. This initiative builds upon the December 2023 political agreement on the EU AI Act, the first global legislation for AI. It follows President von der Leyen's commitment in her 2023 State of the Union address to provide European AI startups with access to supercomputing resources.

Key Takeaways

- The Commission proposes privileged access to supercomputers for AI startups and the broader innovation community. This includes establishing "AI Factories" equipped with advanced supercomputers specifically designed for AI development.
- The AI Office will oversee AI policy development and implementation of the AI Act.
- A new EU AI Start-Up and Innovation Communication outlines additional support measures, including financial support, talent development initiatives, and data space development.
- Two European Digital Infrastructure Consortia (EDICs) will address language technology needs and develop AI tools for smart communities.
- The Commission also adopted a communication outlining its own internal strategy for adopting trustworthy AI practices.

The Role of AI Factories

A key component of the new package is an amendment to the EuroHPC Regulation establishing "AI Factories." These specialized centers will act as a new pillar within the EU's Joint Undertaking for supercomputers and they entail:

- **High-Performance Infrastructure:** AI Factories will acquire, upgrade, and operate supercomputers specifically designed for AI tasks. This advanced infrastructure will enable rapid machine learning and training of large, complex General Purpose AI (GPAI) models.
- **Democratizing AI Access:** The initiative aims to make these powerful resources accessible to a wider range of users. This includes facilitating access for startups, SMEs, and other public and private institutions, fostering broader adoption of AI technology.
- **One-Stop Shop for Innovation:** AI Factories will function as a comprehensive support network for the AI startup and research ecosystem. Startups and innovators will benefit from a range of services, including:
 - Support in developing AI algorithms.
 - Testing, evaluation, and validation of large-scale AI models.
 - Access to supercomputer-friendly programming tools.
 - Additional resources and services to facilitate the development of innovative AI applications leveraging GPAI models.

The EU Startup and Innovation Communication

Beyond the AI Factories, the Commission's package outlines several additional key activities to foster a thriving European AI ecosystem:

- **Financial Boost:** The Commission will dedicate funding through Horizon Europe and the Digital Europe program specifically for generative AI research and development. This public investment, alongside anticipated private contributions, is expected to generate a total of €4 billion by 2027.
- **Building Talent Pipelines:** Recognizing the importance of skilled personnel, the initiative includes measures to strengthen the EU's generative AI talent pool. This will involve educational programs, training initiatives, and reskilling opportunities to equip the workforce with the necessary expertise.
- **Unlocking Private Investment:** The package aims to further encourage public and private investments in promising AI startups and scale-up companies. This will be achieved through various means, including venture capital and equity support mechanisms. New initiatives within the EIC accelerator program and InvestEU are specifically designed to address this need.
- **Data Sharing Infrastructure:** Understanding the critical role of data in AI development, the package prioritizes the acceleration of Common European Data Spaces. These secure data repositories will be readily accessible to the AI community, providing valuable resources to train and refine AI models. A new Staff Working Document provides the latest updates on the development of these data spaces.
- **Real-World Applications:** The "GenAI4EU" initiative directly targets the development of novel use cases and cutting-edge AI applications across 14 key European industrial sectors, including robotics, healthcare, biotechnology, manufacturing, mobility, climate change mitigation, and virtual worlds. Additionally, this initiative extends to the public sector, fostering AI adoption and innovation in areas like government services and public infrastructure.

European Digital Infrastructure Consortia and Other Innovations

The Commission is joining forces with several member states to establish two specialized European Digital Infrastructure Consortia (EDICs) dedicated to advancing AI in specific areas:

Alliance for Language Technologies (ALT-EDIC): This consortium tackles the challenge of limited European language data for training AI solutions. ALT-EDIC aims to develop a unified European infrastructure for language technologies. This will not only address the data scarcity but also uphold Europe's rich linguistic diversity and cultural heritage. Furthermore, this initiative will pave the way for the development of robust European large language models.

CitiVERSE EDIC: Focusing on smart communities, CitiVERSE EDIC will leverage cutting-edge AI tools to develop and enhance "Local Digital Twins." These digital replicas of cities will allow for simulations and optimization of various critical processes, ranging from traffic management to waste disposal. This initiative has the

potential to significantly improve efficiency and sustainability within urban environments.

Beyond these two specific EDICs, the Commission's own internal strategy for AI adoption is outlined in the "**AI@EC Communication**". This document details the Commission's plans to prepare for implementing the forthcoming EU AI Act. It outlines concrete actions to build internal capacity for developing and using safe, trustworthy, and ethical AI within the Commission itself. Additionally, the Commission intends to support EU public administrations in their own adoption and utilization of AI technologies.

Conclusions

Following the EU AI Act agreement in December 2023, the EU aims to empower European startups and SMEs in developing trustworthy Artificial Intelligence (AI) that adheres to EU values and regulations. Building upon President von der Leyen's 2023 State of the Union address, the 2024 Innovation Package offers a variety of support mechanisms for AI innovation. This includes a proposal to grant privileged access to supercomputing resources for AI startups and the wider innovation community.

Further Reading

- Commission launches AI innovation package to support Artificial Intelligence startups and SMEs ([link](#))