# European technological sovereignty and digital infrastructure

2025/2007(INI) - 11/06/2025 - Committee report tabled for plenary, single reading

The Committee on Industry, Research and Energy adopted an own-initiative report by Sarah KNAFO (ENS, FR) on European technological sovereignty and digital infrastructure.

The European Union is currently heavily dependent on foreign technologies. This reduces its strategic capacity and economic competitiveness. This report analyses the main weaknesses in Europe's strategic infrastructure. It then presents recommendations for rapidly achieving technological sovereignty based on competitiveness and the protection of strategic markets.

***European technological sovereignty***

Recognising the increasing concentration of power in non-EU companies, Members are concerned about **excessive dependencies** on non-European players in critical areas such as cloud infrastructure, semiconductors, AI, and cybersecurity, where market concentration and foreign control threaten to undermine Europe's competitiveness, democratic resilience, and security. They called for the development of a **comprehensive risk assessment framework** to monitor and address dependencies in the digital value chain.

Members believe that the Union's industrial technological ambitions should focus on **key strategic technologies for the future** , such as semiconductor technologies or quantum, which contribute to the Union's open strategic autonomy and are essential for the green, digital and defence transitions.

The report highlighted the need to create a **favourable regulatory environment** that encourages innovation, investment and the development of cutting-edge technologies in Europe, as well as the need to establish a **comprehensive European industrial policy** for the digital ecosystem, integrating all important policy areas such as market access, standardisation, research and development, investment, trade and international cooperation.

The Commission is invited:

- to develop a **comprehensive policy** with the aim of reducing harmful strategic dependencies, strengthening domestic value chains and ensuring a secure, reliable and innovation-driven digital ecosystem that adheres to European values;

- to analyse and establish a **comprehensive list of critical dependencies** in digital infrastructure and technologies, and to propose measures to promote market access for products and services with a significant positive impact on the technological sovereignty, resilience and sustainability of the Union.

***Digital public infrastructure***

Members believe that the EU should take the lead in creating a **solid foundation** for digital public infrastructure by creating layers of digital technology layers consisting of semiconductors, connectivity solutions, cloud infrastructure, software, data and AI.

The European public digital infrastructure should use management models in which neither private companies nor governments exercise centralised control. These models should be built on common and

open standards, foster interoperability and interconnection, encourage the entry of new market players, and ensure privacy and security by default. The Commission should develop a **detailed and comprehensive plan** for the establishment of a European public digital infrastructure, selecting the technologies that are most suitable for European action.

European public digital infrastructure should be boosted by coordinated action at EU level to ensure the presence and competitiveness of European providers and a competitive market environment. The next Multiannual Financial Framework (MFF) should therefore provide additional funding for this purpose.

According to the report, funding under the next MFF should **prioritise capacity building in key areas** of hardware, software, and services, including high-performance computing, quantum computing, encryption and communication, connectivity, cloud computing, data, web and artificial intelligence ecosystems, and digital libraries. The European public digital infrastructure should be based on EU values and remain open to like-minded non-EU partners.

At the same time, the development of secure, accessible, and interoperable **e-government services** is considered essential. Furthermore, the protection of privacy and personal data is essential to building trust in the digital economy.

***Digital infrastructure***

The Commission is invited to include in the list of critical dependencies a comprehensive assessment of the composition of Europe's digital infrastructure to analyse the situation, assess risks, and coordinate actions. Strengthening digital infrastructure would require **capacity-building initiatives at EU level** in key areas. Members considered that these initiatives should focus on building a basic layer of public infrastructure, such as a network of AI gigafactories and a European web index model.

The Commission is invited to:

- simplify and harmonise telecommunications rules within the framework of the upcoming digital networks act and the broader digital package;

- introduce a **European law** on the development of cloud computing and AI to strengthen the European data infrastructure and the promotion of European cloud computing providers;

- significantly strengthen public-private investment mechanisms, including **venture capital** and specific financing tools for start-ups and large-scale companies in critical technology sectors.

***Simplification***

Members insisted that the EU must urgently pursue a comprehensive programme of simplification and red tape reduction to foster an environment conducive to innovation and **promote competitive European alternatives** to dominant global digital players. Simplifying EU legislation must not endanger any of the fundamental rights of citizens and businesses.

The Commission is invited to create a single point of contact to simplify the procedure for private sector access to EU funding mechanisms.