

European Commission

CALL FOR EVIDENCE FOR AN IMPACT ASSESSMENT

This document aims to inform the public and stakeholders on the Commission's future legislative work so they can provide feedback on the Commission's understanding of the problem and possible solutions and give any relevant information that they may have, including on possible impacts of the different options.

TITLE OF THE INITIATIVE	Cloud and AI Development Act
LEAD DG (RESPONSIBLE UNIT)	Directorate-General for Communications Networks, Content and Technology – Unit E2 - Cloud and Software
LIKELY TYPE OF INITIATIVE	Legislative proposal
INDICATIVE TIMETABLE	Q4 2025 / Q1 2026
ADDITIONAL INFORMATION	Cloud computing Shaping Europe's digital future

This document is for information purposes only. It does not prejudge the final decision of the Commission on whether this initiative will be pursued or on its final content. All elements of the initiative described, including its timing, are subject to change.

A. Political context, problem definition and subsidiarity check

Political context (max 10 lines)

Current estimates and projections of European computing infrastructure point to a gap between available capacity and needs, in particular to accommodate the demands stemming from AI. The <u>2024 Draghi report</u> recognizes the importance of increasing computational capacity in the EU as a critical component of a mature data economy which underpins many established and emerging digital use cases, particularly for AI development. Against this backdrop, the Cloud and AI Development Act is one of the headline digital policies outlined in the <u>2025 Competitiveness Compass</u> and listed in the <u>Mission letter</u> to Executive Vice-President Henna Virkkunen alongside a single EU-wide cloud policy for public administrations and public procurement. This initiative is part of the actions foreseen in the AI Continent Action Plan.

Problem the initiative aims to tackle (max 20 lines)

Training, fine-tuning, and running AI models demand massive computational resources. While training requires large centralised computational capacity, the more decentralised cloud and edge computing are key enablers of smaller fine-tuning operations and of inference. Data centres play a key role in housing and running the necessary devices and equipment. The EU currently lags behind the US and China in terms of available data centre capacity. The initiative aims to tackle the currently unfavourable conditions for the private sector to close this capacity gap in a way that prioritises highly sustainable solutions.

To this end, the initiative seeks to address the problems that currently inhibit the expansion of the EU's data centre capacity. These include difficulties in accessing natural resources (energy, water, land), as well as complicated and slow permitting processes, with approaches differing between Member States. The construction process is highly capital-intensive, creating barriers of entry for new players, and can be negatively affected by difficulties in obtaining technology components and capital. The energy and water consumption of data centres is rising and expanding capacity can further strain such resources, particularly in view of the current strong geographical concentration of data centres in the North-West of the EU. Technological innovation in data centre equipment and operations promises significant resource savings but remains underexploited. At the same time, high energy prices negatively affect the competitiveness of the sector in the EU.

Another problem that the initiative seeks to tackle is the lack of a competitive EU-based offer of cloud computing services at sufficient scale to serve highly critical use cases with particularly high security needs, as found in various economic sectors and the public sector.

Basis for EU action (legal basis and subsidiarity check)

Legal basis

This intervention will be based on Art 114 of the Treaty on the Functioning of the European Union (TFEU), whose objective is the establishment and functioning of the internal market by enhancing measures for the approximation of national rules. The intervention would advance the functioning of the internal market by ensuring

that EU businesses and public administrations can benefit from geographically balanced access to cloud and edge computing services, including for the development and adoption of AI.

The intervention will also ensure the conditions necessary for the competitiveness and innovation capacity of the Union and will therefore also be based on Article 173(3) TFEU. Specifically, the intervention would boost the availability of computational capacity, for the benefit of users in the private and public sector; facilitate the development and uptake of innovative compute solutions in the EU, including for the benefit of start-ups and SMEs; and encourage new and targeted investment in the EU's digital infrastructure and services.

Practical need for EU action

While Member States can in principle enact appropriate measures at national level, the problems identified have the same underlying causes across the EU and thus require a coordinated and harmonised approach, especially in light of the objective for the EU to become an AI continent and in order to meet the EU's 2030 Digital Decade targets.

As data flows freely in the EU, purely national approaches to investing in the infrastructure that powers data storage and processing would not represent an efficient use of financial resources. National approaches could further reinforce the geographical concentration of data centres and would risk leaving unexploited the considerations of efficient distribution of such infrastructure throughout the EU territory. National approaches to overcoming bottlenecks such as access to natural resources or capital could result in further geographical concentration of the rules applicable to this sector.

B. Objectives and policy options (max 20 lines)

The initiative will create the right conditions for the private sector to build out sustainable cloud and edge capacity in the EU and address the current data centre capacity gap with the underlying objective to strengthen the EU's competitiveness and sovereignty. The initiative's objectives fall into three main categories.

- Advance research and innovation to make the EU a leader in resource-efficient data processing
 infrastructures, software, and services by advancing the sustainability of AI data processing along the
 compute continuum and, on the data centre level, by improving power management, cooling, general
 operations, and integration into energy and water systems.
- Triple the EU's data centre capacity within the next 5-7 years by promoting and creating the right conditions for attracting and supporting investment in sustainable data centres across the EU, notably by tackling obstacles such as long permitting times and difficulties in accessing energy, water, land, and capital, and by offering possible financial support in line with applicable State aid rules to data centres with a high innovation and sustainability contribution.
- Ensure that a set of narrowly defined highly critical use cases can be operated using highly secure EUbased cloud capacity, while creating the conditions for the EU cloud industry to develop secure processing capabilities to serve the needs of these highly critical use cases.

At this stage of reflection, the Commission is considering the following preliminary set of policy options:

Option 0 is the **baseline scenario** against which the further policy options will be compared. It will take into account existing national and EU policies and important technological or social developments.

Option 1 is the **non-legislative** option. This option would foresee the adoption of non-binding measures such as the set-up of a network of Member States tasked with monitoring their strategies to achieve the Digital Decade targets or Guidelines for Member States to coordinate their cloud strategies, investments and designation of suitable sites for new data centres.

Option 2 is the **soft regulatory** approach. Under this option, the Commission could adopt binding measures through a Directive, leaving national authorities the choice of form and methods to address their computing capacity deficit.

Option 3 is the **regulatory** approach. Under this option, binding measures could be defined in the form of a Regulation. This option would identify a set of measures to be applied across Member States for the harmonisation of cloud policies in order to address the computational capacity deficit and coordinate the support for the emergence of a trustworthy EU infrastructure ecosystem.

Option 4 is the **comprehensive regulatory** approach, which would focus on binding measures to address the computational capacity deficit in the EU complemented with the creation of a distinct independent agency to ensure consistent enforcement and manage Member States' joint investment to develop and own a trustworthy European cloud infrastructure ecosystem.

C. Likely impacts (max 10 lines)

This initiative is expected to have the following impacts:

- Economic by stimulating research and development as well as investment; boosting resilience and technological sovereignty, strengthening security of supply in computational capacity and cloud services; and increasing the number and quality of solutions available to businesses and consumers
- Social by boosting digital public services, and through spillover effects on employment and contributing to overcoming the digital divide.
- Environmental and sustainability by boosting the rollout of sustainable infrastructures and improving resource use (e.g. land, water and energy).

This initiative also aims at improving the business environment for companies operating in the EU, including for SMEs through simplification and broader stimulation of the investment environment.

D. Better regulation instruments (max 10 lines)

Impact assessment

An impact assessment, supported by evidence collection and stakeholder consultations, will be carried out in 2025 to inform the Commission's proposal. It will be prepared and conducted in line with the Better Regulation guidelines and toolbox. The impact assessment will also benefit from the findings of a study that the Commission has contracted to collect high-quality evidence. The contractor carrying out this study will also engage with stakeholders through additional surveys and workshops in the first half of 2025.

Consultation strategy

The Commission will consult widely to gather key information and ensure that the public interest is well reflected in the design of a possible intervention on the development of Cloud and AI in Europe.

In parallel to the publication of this Call for Evidence to gather feedback on the Commission's understanding of the problem, possible solutions and any relevant information on the impact of the different options considered, a public consultation will be launched to gather specific views on different aspects related to this initiative. It will be published on the <u>'Have your Say'</u> portal and will be in English, French and German A factual summary report will be published on the Commission's website after the public consultation is closed.

In addition, targeted consultations with experts covering different domains will be carried out by an external contractor through a study supporting the impact assessment. In addition to targeted consultations, the study will also encompass a broader stakeholder workshop. The Commission will summarise the findings of the consultation activities in a synopsis report which will be annexed to the impact assessment.

Why we are consulting?

Through this consultation, the Commission would like to gather:

- stakeholders' views on the current and emerging problems related to the gap in EU computational capacity with a focus on cloud and edge computing and their enabling technologies;
- stakeholders' views on the possible policy approaches to address such problems, the available options and their potential impacts; and
- evidence and data underpinning these views.

Target audience

This consultation aims to gather the views of a variety of stakeholders. These include:

- Public authorities: local, regional, national and European Union bodies
- Cloud, edge, telco providers
- Data centre operators
- Al developers and providers
- Cloud, edge, telco, and AI users
- Financial institutions, investors, funds of digital infrastructure
- Other organizations than the above, namely academic and research institutions, consumer organisations, non-governmental organisations, and business associations
- Citizens

All stakeholders are invited to participate.