

## **Input to the Call for Evidence for the Cloud and AI Development Act**

### Introduction

Connect Europe welcomes the opportunity to submit feedback to the European Commission's call for evidence for the Cloud and AI Development Act. A sustainable and resilient sovereign cloud and edge capacity Europe<sup>1</sup> is a crucial asset to enable Europe's competitiveness in a globalised market economy. Especially in times of increasing uncertainty, ensuring the EU's technological and economic sovereignty should be a top priority.

Cloud is the foundation of digital innovation and a key enabler for AI, providing the infrastructure and computing power essential for its rapid progress. Yet, Connect Europe stresses the existing gap between available computational capacity and the growing needs, particularly in accommodating the demand from AI technologies. In 2024, it is estimated that a total of 2 257 edge nodes were deployed across the EU<sup>2</sup>. This falls far short of the EU's ambitious target to deploy 10.000 climate-neutral and highly secure edge nodes by 2030, highlighting the significant collective effort still required.

For the European telecom industry, cloud and edge cloud increasingly offer an important business opportunity through the provision of cloud Infrastructure-as-a-Service (IaaS) and AI and data processing, among other applications. However, operators are facing significant challenges—such as excessive regulation, a fragmented regulatory landscape, and limited opportunities to scale—which hinder their ability to develop, deploy, and operate state-of-the-art cloud and AI services. These services are essential for unlocking Europe's untapped innovation potential across both private and public sectors.

To address these challenges, the EU must prioritise policy reforms to incentivise investment, support European industry enablers such as telecommunication providers in developing sovereign cloud solutions, and leverage public procurement to boost such European alternatives. Initiatives like IPCEI CIS are vital and should continue with new European projects but must be matched with complementary actions which make Europe a more attractive place to invest privately, by regulatory simplification, boosting entrepreneurship and talent acquisition.

#### **Key recommendations of the following submission:**

- Introduce demand-side measures: strengthen demand for EU cloud solutions through uptake targets for public procurement of cloud services.

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<sup>1</sup> Throughout this document, this refers to EU and EEA countries, as well as Switzerland and the United Kingdom, due to their close economic ties and, in parts, integration with the single market.

<sup>2</sup> Digital Decade Report 225, Annex 1, page 8.

- Establish data and cloud sovereignty: need to promote trusted European cloud services for critical use cases.
- Ensure financing: need to improve current ongoing programmes. Strengthen the investment capacity and scalability of key enabling sectors, such as telecoms, through facilitating measures such as pro-investment regulatory simplification.
- Facilitate the necessary digital infrastructure: need to improve conditions to deploy edge-cloud infrastructure.

## Political Context and challenges

A critical obstacle remains for telecom operators to contribute to filling the existing gap between available cloud and edge infrastructure capacity and the demands of large-scale AI deployment. This gap is largely due to the difficulties operators currently face in investing to expand and modernise their infrastructure. The ability of the European telecom sector to deliver on the Digital Decade targets, including for edge nodes, and cope with all future investment needs for critical infrastructures and technologies, such as edge cloud, will depend on the scale and financial health of the industry as a whole and on its ability to monetise new services.

Future legislative and non-legislative initiatives that directly or indirectly will have a significant impact on the competitiveness of the European connectivity sector in the digital market should therefore ensure that there is an investment-friendly regulatory framework in place. Next to CAIDA, the upcoming proposal for a Digital Networks Act represents a key opportunity in this regard.

Further to this, cloud services are indeed provided in a highly concentrated market, where hyperscalers play a dominant role, due to consolidated scale network and ecosystem effects. The disparity in size, footprint, market capitalisation and negotiating power between hyperscalers and European telecom operators, among other things has led to a declining market share for the latter. The Draghi report found that just three US hyperscalers account for over 65% of the global as well as of the European cloud market, while the two largest European cloud operators only have a 2% market share each in the EU.

Other important challenges related to data centres are increasing environmental concerns, i.e. meeting sustainability goals and addressing carbon emissions, as well as obtaining the necessary, lengthier environmental impact assessments, the lack of energy availability and the management of rising energy prices, and planning insecurities related to rapid technological changes to ensure data centres and forecasting AI demand.

Therefore, we welcome the EC 's ambition to strengthen the EU'S data centre capacity and availability of sovereign cloud offers, which will require careful planning and collaboration with the various stakeholders.

## Infrastructure: improving conditions for data centre deployment.

The European data centre market is currently characterised by significant fragmentation and disparities, both between countries within the European Union and within individual geographic regions. This fragmentation poses several challenges that hinder the efficient densification, operation and growth of the market.

To address these issues, the following measures need to be addressed:

- **Streamlining Permitting Processes:** Harmonizing and simplifying permitting processes across the European Union to reduce bureaucratic delays and inconsistencies. This includes creating a standardized framework for obtaining permits and ensuring timely approvals, which will expedite the establishment of new data centres.
- **Facilitating Access to Natural Resources:** Ensuring data centres have reliable access to essential natural resources such as water and low carbon energy. This can be achieved by providing supportive measures (state aid allowance for specific fiscal incentives to support the adoption of clean energy solutions) investing in infrastructure that supports sustainable resource management and by promoting policies that prioritize resource allocation for data centre operations.

By implementing these measures, we can create a more cohesive and efficient European data centre market that is better equipped to handle the growing demand for data services. These steps will not only minimise bottlenecks but also promote sustainable growth and innovation in the sector. In order to achieve this, it will require a legal regulatory framework which avoids unnecessary transposition delays, ensures regulatory harmonisation across the EU by cutting the red tape and fostering the development of a truly functioning Single Market.

## Improve financing vehicles at EU level, ensuring coherence and continuity of current programmes.

An integrated plan should be put forward by the European Commission, which fosters European industry players and synergises their commercial efforts with the various European funding mechanisms. The telco federated cloud continuum for an interoperation model for EU edge cloud technologies should be further supported through demand-side measures, such as long-term contracts with guaranteed capacity commitments from the public sector, public funding and encouraged in continuity with the IPCEI CIS project.

- **IPCEI for cloud infrastructure and services (CIS), for edge computing infrastructure services (ECI) and for decentralised and federated infrastructure for AI and services (AI)**

The common edge-to-cloud continuum pursued by the IPCEI CIS is playing an important role in developing the technology necessary to boost edge cloud developments and strengthen the path

towards a European telco cloud and edge ecosystem. However, the development and approval process for the IPCEI CIS has in the past been far too protracted, bureaucratic and involved an insufficient number of EU Member States. This has hindered and hugely delayed the commercial rollout of edge cloud infrastructures and the necessary progress for delivering European edge cloud solutions and services at a larger scale. It is therefore important that the European Commission creates a one-stop-shop for cloud and connectivity funding, cuts red tape and significantly expedites the approval process. Moreover, it is not sufficient to look at the supply-side. Without the necessary demand, there is no incentive for industry to keep investing into edge cloud infrastructure. Therefore, there needs to be a greater focus on the demand side, including measures that facilitate demand from the public sector through procurement.

Under the new IPCEIs on AI and ECI, **the approval of projects should be severely expedited and implementation and financing support should be more closely coordinated at EU level.** As these projects are currently already in the planning phase and being discussed among Member States that expressed interest, the EU Commission should continue to support this work and ensure a speedy notification and approval process at EU level.

In the long run, as edge and cloud facilities are a common and strategic target for EU as a whole, the EU could explore ways to ensure a balanced participation across Member States with extended scope beyond R&D including deployment and market creation. This should however not lead to delays or the holding back of countries that decide to move faster on the implementation of IPCEIs. Among others, the proposed IPCEIs for AI and ECI should support network cloudification and the development of AI solutions as well as telco cloud hardware and software that can act as enablers for high-capacity edge cloud European critical solutions.

The new IPCEI framework will not drive the expected market shift and hence IPCEI improvements should be further expanded and completed with the following measures:

- **Closing the scale-up gap:** Funding must support the full investment cycle—from research to commercial deployment—especially in high-impact sectors such as artificial intelligence, edge and cloud, quantum computing, advanced connectivity, and data infrastructure.. This should include performance-based disbursement tied to measurable technical or commercial milestones.
- **Create a joint public-private investment facility** (potentially managed by the EIB or national promotional banks) to scale edge cloud and AI infrastructure aligned with EU strategic objectives or enable such funding under Invest EU.
- **Temporarily reallocate unspent resources** from current EU instruments (e.g. NextGenEU, ERDF) to accelerate deployment of mature digital projects in Member States before the next MFF takes effect.
- **Cofinancing CAPEX investments in strategic industries:** This will enhance accountability, attract private co-financing and ensure tangible returns on public investment.
- Ensure compatibility of European state aid rules when targeted national tax incentives are introduced, to support strategic digital investments (e.g. accelerated depreciation, time-limited tax exemptions for cloud/AI infrastructure).

## Improving the take-up and return of edge and cloud use cases to foster European digital sovereignty

The success of the EU's industrial policy will not only depend on investments on the supply side. Even more importantly, the industry needs adequate demand that ensures the business case for such investments. This is particularly important in ongoing infrastructure projects that support the vision of Europe as an AI-driven continent, in order to meet the demands of AI development — including the training, fine-tuning, and deployment of its models. Besides it is important in delivering scaling solutions to design compliant and safe AI by building in EU standards and values.

Clearly prioritising EU cloud solutions and adopting common criteria in public procurement could be a way to scale up a European cloud industry. Additionally, there should be incentives to use innovative services (demand-side measures to promote use of telco edge cloud) that will unlock a subsequent wave of investment. We elaborate further on these possible measures below.

### Using public demand to foster innovation and build markets

To improve the scaling of European technology and reinforce strategic autonomy, Connect Europe would like to make the follow key recommendations:

- **Stimulate demand** to enable different business cases for cloud / edge cloud deployment. What the industry needs are long-term contracts that guarantee uptake. Public procurement is an important lever in this regard to drive demand and provide planning certainty for industry.
- Introduce a general "**European Preference**" principle in public tenders for cloud, prioritizing European solutions where available. The public sector should actively stimulate demand and serve as a lead customer. Thus, the upcoming revision of the EU Public Procurement Directive should be used to introduce a "European Preference" criteria following strict privacy and security requirements for uses cases of highly critical sensitive data in the public sector.
- Support **large-scale digitalization of public services** to act as an anchor client for emerging technologies, driving demand and reducing risk for private investors.
- **Adding a target for EU cloud adoption by the public sector** in the Digital Decade Targets: EU Commission should explore possibilities to adjust the Digital Decade targets to enable EU cloud adoption in the public sector.

Recent geopolitical shifts highlight the pressing need for the EU to strengthen its technological sovereignty, especially in areas as critical to Europe's economic security as cloud and AI. This is vital not only in terms of data protection and security, but also for the EU's long-term competitiveness.

It is therefore essential that the EU strengthens its EU cloud ecosystem and data centre infrastructure, ensuring the availability of European- alternatives in the cloud space, and the possibility to retain control over sensitive data where needed. Mario Draghi highlights that there is a need for 'EU

*companies to maintain a foothold in areas where technological sovereignty is required, such as security and encryption (“sovereign cloud” solutions).’*

In order to achieve this Connect Europe suggests the following measures:

- increasing knowledge and capabilities around AI much faster by stimulation of the start up/scale-up culture, good education in the EU, retention of the educated and trained people.
- re-use already available cloud infra with EU parties.
- prioritize European providers in public procurement for highly sensitive uses cases.

In this context, Connect Europe would like to highlight the importance of providing a clear definition of a **sovereign cloud**. Defining harmonised requirements for a sovereign cloud service in the Cloud and AI Development Act would avoid further delays due to the need for implementing regulations or guidelines. These criteria do not need to be developed from scratch. Existing sovereignty criteria discussed in the context of Gaia-X and the European Cloud Certification Scheme (EUCCS) could serve as a similar baseline. These include requirements for European control and data localisation to ensure a maximum of data sovereignty and safeguards against the application of extraterritorial laws. To this end, we recommend that the Cloud and AI Development Act introduces a uniform baseline definition of a sovereign cloud for Europe, which fulfils all technical, legal, and organisational requirements for handling highly sensitive data.

EU cloud services that fulfil the sovereignty criteria of could then be promoted through the upcoming EU Cloud marketplace, which can be used by both the public sector and private business to procure cloud services. This way, the use of sovereign cloud services can be facilitated, giving cloud users transparency and certainty about the level of protections provided.

The creation of a common definition of a sovereign cloud and the introduction of an EU sovereign cloud criteria under CAIDA can be a major step to promote the visibility and promotion of EU cloud services.

However, this in itself is not enough to scale EU cloud solutions in the short-term. For this, it is crucial that the public sector acts as an anchor customer, driving demand for EU sovereign cloud through public procurement for highly sensitive uses cases. We recommend a two-step approach to achieve this: First, the Commission should amend the Digital Decade goals on cloud adoption by adding a target specifically aimed at EU cloud adoption by the public sector (e.g. through the cloud marketplace). Given that the public sector plays a vital role to stimulate demand for EU-based technology solutions and because public procurement accounts for nearly 14% of EU GDP, we believe that an ambitious target could help to incentivise adoption of EU-based cloud services and help monitor progress. Second, this high-level target must be translated into concrete action through the revision of the EU Public Procurement Directive, which should lead to concrete requirements regarding the use of European cloud providers for highly sensitive data in the public sector.

## Towards more energy efficient data centres

McKinsey projects Europe's power demand will triple by 2030, AI could account for 4.5% of the total consumption. Meeting this demand could pose a major bottleneck to the EU's data center capacity expansion in the coming years and challenge the ambitious climate targets.<sup>3</sup>

Most of our members have now set net-zero targets for their direct emissions (scope 1 and 2) and also for indirect emission across the value chain (scope 3). Thanks to these initiatives, most of them aim to reach net zero by 2040 at the latest. In line with this, Connect Europe members continuously address some of the environmental challenges related to data centres through the implementation of innovative solutions, from powering data centres with renewable energy to reusing waste to warm nearby building, and adopting 'free cooling' systems.

With the revision of the Energy Efficiency Directive (EED), the Commission has acknowledged the need to improve energy efficiency across the EU and to closely monitor the energy performance of data centers. The Commission is currently exploring the need to complement the transparency obligations with minimum performance standards. Considering its ongoing and complex transposition, Connect Europe strongly urges the Commission to not take further measures in addition to the obligations stemming from the EED with regard to data centres. Any additional layer would unnecessarily increase the burden for companies and further exacerbate the market situation. This is ever more relevant in light of the announced data centre energy efficiency package planned for early 2026. Companies need legal certainty to further invest. Therefore, the EU Commission should avoid setting out obligations stemming from many different regulations, but rather ensure a coherent and streamlined regulatory framework.

Connect Europe would also like to highlight that the regulatory frameworks often do not sufficiently reflect the different functions and sector-specific obligations of data centres operators. The data centres of telecom operators are part of their network infrastructure and support telecom network functions, including content delivery, mobile services, and cloud services. They are critical for driving connectivity, supporting mobile networks (like 5G), and ensuring high-speed, low-latency communication. In addition to sustainability obligations, they have to comply with a wide range of regulatory requirements aimed at resilience and security, creating trade-offs that should be more often considered. More specifically, telecom operators must provide back-up systems to ensure continuous, uninterrupted service for critical communications infrastructure. Those redundancies often lead to higher energy consumption and make scaling more difficult. Having a differentiated approach for these data centers, which are essential for our network, is necessary, to not punish those who only have limited capacity for further efficiencies due to conflicting requirements, such as those related to resilience and security.

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<sup>3</sup> [McKinsey & Company: The role of power in unlocking the European AI revolution](#)

Connect Europe would therefore like to make the following two key recommendations; (i) refrain from introducing any additional regulatory intervention, (ii) public procurement should not include a KPI on sustainability that does not sufficiently reflect the functions of data centres.

Finally, we call for the simplification of the taxonomy reporting requirements for data centres: Under the current taxonomy delegated act (2021/2139), data centres must comply with the EU Code of Conduct for Data Centres (activity 8.1) in order to qualify for green bonds. However, this Code of Conduct was not designed for reporting purposes and is therefore not fit for this use, making alignment with the taxonomy extremely difficult for stakeholders. Therefore, we support the development of alternative Technical Screening Criteria that are fit for the industry to meet and based on widely accepted indicators, such as Power Usage Effectiveness (PUE).

### Policy Options Outlined in the Call for Evidence

To properly address these issues and increase the computational capacity installed across the EU to meet the expected demand beyond 2030, the implementation of a comprehensive plan will require different initiatives among which we suggest to:

- Improving the existing **financing opportunities (beyond IPCEIs and facilitating access to private capital)** addressed at the relevant market players, further complemented with additional instruments/measures. This should include measures to increase knowledge and capabilities around AI by stimulation of the start up/scale-up culture, improving digital literacy in the EU and the retention of talents.
- Defining a legally binding regulation that actively facilitates the deployment of data centres, and cloud edge nodes by providing a harmonised and deployment conditions, with a streamlined framework. This framework aims to eliminate unnecessary administrative burdens, accelerate permitting and energy efficiency, approvals and create a predictable environment that supports innovation and investment across the EU.
- Financing and Infrastructure measures should be further complemented with **demand side measures** to foster take-up of EU cloud and AI services among public sector while allowing public procurement to play a determinant role in incentivising the EU service provision.
- Capacity building is important, but not enough. To address challenges related to technological dependency and resilience, the Cloud and AI Development Act must, as a priority, contribute significantly to the growth of EU sovereign cloud solutions. Cloud and data **sovereignty could be reached** by clarifying the definition of European sovereign cloud in the act and defining a clear set of requirements for sensitive workloads.
- The following concrete actions are recommended:
  - Propose, in the Cloud and AI Development Act, a common definition of an EU sovereign cloud for highly sensitive workloads.
  - Introduce an EU-wide label for EU sovereign cloud services that mirrors the criteria set out in the Cloud and AI Development Act.
  - Include the newly labelled EU sovereign cloud services in a dedicated space under the upcoming cloud marketplace to increase visibility and transparency.

- Adapt the Digital Decade targets by adding a target for EU cloud adoption by the public sector.
- Refer in the Cloud and AI Development Act to the need to revise the public procurement directive and introduce a common requirement for cloud public procurement with the goal to increase the use of EU sovereign cloud services for sensitive data.

Regarding the different regulatory scenarios introduced by the European Commission, it is important to keep in mind that any new measures clearly prioritise the development, rollout and operation of European sovereign cloud solutions, including telco edge cloud services. This will require regulation that accelerates investments and cuts red tape, stimulates demand for EU sovereign cloud solutions including through binding public procurement targets, and fosters the development of a truly functioning Single Market. In this context, it will be crucial to evaluate any chosen approach in terms of its overall effectiveness, the legal certainty it provides to companies and its impact on European integration and competitiveness.

## Conclusion

Connect Europe supports the Commission's plan for a Cloud and AI Development Act, but would like to stress that it must be expedited and take a holistic approach, focusing both on building highly centralised computing environments ('AI Gigafactories') but also more distributed forms of cloud computing.

In this context, it will be essential that the growth of an ecosystem of EU sovereign cloud providers is adequately supported by introducing targets for public procurement of EU-based cloud services. This will be a key milestone in achieving a sovereign European cloud infrastructure, and a crucial enabler for unlocking technological innovation that supports European competitiveness.

We look forward to an ambitious and comprehensive initiative that addresses the different levers that would foster investment and uptake of European cloud infrastructure as a foundation of large scale AI development.

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