

Contribution to the European Commission Public Consultation on the Future of Cloud and AI Policies in the EU

Arcep – July 2025

As a regulator of digital infrastructures, we strongly support the European Commission's initiative to build a coherent and forward-looking policy framework for cloud and AI development. The issues raised in this consultation are central to the EU's digital future. Without underestimating several difficulties such as access to land resources and potentially slow and unharmonized permitting processes, that will be certainly developed by other respondents to this Call for Evidence, our experience of network infrastructures regulation in France leads us to highlight two essential pillars that could guide European action and bridge the gap between available capacities and needs: conditions for long-term investment in infrastructures within open markets, and competitiveness through environmental performance and responsibility.

1 Ensuring digital strategic autonomy by enabling long-term investment in AI and cloud infrastructures and opening markets

Driving efficient investments to secure EU digital strategic autonomy

The first factor that would help reduce the gap identified by the Commission is, of course, investment in AI and cloud infrastructures. Creating the right conditions for long-term efficient investment can be helped by tailored regulation. A smart, predictable and stable regulatory framework is essential to support the development of ad hoc investment funds which are critical to finance cloud and AI in EU.

In France, Arcep has developed an investment-friendly regulatory approach in the telecoms sector, through mechanisms such as access and geographically differentiated regulation. These tools have facilitated a fast and large-scale rollout of fibre across the country. More broadly, telecoms infrastructures in Europe are the subject of investment of the order of 50 billion euros every year, supported by a European regulatory framework that offers players the necessary security and predictability. For instance, two examples of this regulatory framework can be highlighted:

- Co-investment (in particular through indefeasible rights of use) which can reinforce investment efficiency though cost sharing while giving long term visibility;
- State aids, when market failure is precisely identified which can help to create significant leverage for private investment.

Designed and implemented in the electronic communications' realm with significant positive feedback, this pro-efficient investment approach could inspire future cloud and AI policies at EU level. Strategic infrastructures require sustained capital and long-time horizons. A first step would be investment and market monitoring as well as transparency inspired by telecom regulation. Regulatory clarity is key to de-risk such investments and attract diverse players across the value chain.

Opening markets to allow the emergence and long-term viability of a vibrant digital ecosystem

Europe's digital strategic autonomy depends on its ability to foster and maintain a competitive and open market environment. In this respect, relying on economic regulation can be a powerful tool to ensure fair access, stimulate innovation, and prevent market foreclosure. This has been proven in the

telecoms sector: a clear and well-enforced regulatory framework has enabled the development of a dynamic, and diverse ecosystem of telecom operators in Europe. This ecosystem already plays a key role in supporting the EU strategic digital autonomy.

The same ambition could apply to cloud and AI infrastructures which have a physical component (in particular data centres) as well as an important service dimension. Instruments such as the *Data Act* (DA) and the *Digital Markets Act* (DMA) provide a strong legal basis to prevent lock-in, facilitate data portability, and open up strategic bottlenecks. Their effectiveness will depend on the speed and agility of their enforcement. Arcep acknowledges the decisions recently taken by the Commission and calls for a close monitoring of the cloud computing core platform services by the Commission in the context of the DMA. Whether through the application of the DMA or the DA, regulators at European and national levels must be ready to act quickly and decisively before monopolistic or oligopolistic situations materialize in emerging AI services, which are most often provided in the cloud. To help a swift and coherent application of the DA by national competent authorities, the Body of European Regulators for Electronic Communications (BEREC) will play an important role as it already does to ensure a consistent implementation of the electronic communication framework across EU.

Getting ready to swiftly adjust the regulatory approach when necessary

The relevance of these tools should be regularly assessed in light of the rapid development and adoption of new services, particularly generative AI. A regular review of the adequacy of the framework to the reality of markets and new services should be carried out to reflect these shifts and maintain a level playing field. In particular, the evolution of generative AI services, for example Retrieval-Augmented Generation and more generally agentic AI, is now raising critical questions about the interactions between AI models and traditional digital services. For challenger AI models that are not part of a Big Tech ecosystem, the ability to interact seamlessly with existing services such as search engines, mapping tools, or video platforms is becoming increasingly vital. If these interactions are subject to more complex or restrictive conditions than those associated to vertically integrated players, this asymmetry risks creating an insurmountable barrier to entry, undermining competition and innovation in the AI space.

Regarding more particularly cloud services, in 2024, Arcep gained legal competences and has launched a public consultation on switching between service providers and implementing multi-cloud architectures thanks to a new pricing and technical framework. This work showed that the current framework could be examined with regards to these four key aspects:

- Portability of user-trained AI models and other data related to AI uses;
- **Availability and stability of documented APIs**: they are essential for an effective interoperability between cloud services, a key to enable a multicloud business;
- Unbundling of services provided by highly vertically integrated firms (including licenses for software suites largely used by small and large businesses across EU): as it could rebalance market access and foster fairer competition;
- Access (including potentially under FRAND¹ conditions) to essential inputs such as energy (see below), computing power, licences or skills: it remains possible for challengers, but the balance of power in negotiations with suppliers tends to favour dominant players, potentially skewing the competitive landscape in a significant way.

Regulation, when forward-looking and effectively enforced, can support an ambitious industrial and economic policy for Europe. In this perspective, amongst the range of credible alternatives to dominant models, and in particular for "upper layers" and software infrastructures which present real challenges,

¹ FRAND: Fair, Reasonable And Non Discriminatory

the emergence and long-term sustainability of digital commons stand out as one possible solution; they offer open, resilient infrastructures that contribute to a more diverse and dynamic ecosystem serving European businesses.

2 Environmental sustainability must be an integral part of infrastructures and services deployment, as a lever of competitiveness

Better monitoring of the impacts of digital technologies

Innovation, and AI in particular, could be a powerful source of solutions for the climate transition, but AI infrastructures and services raise also major environmental challenges. Fortunately, thanks to a level playing field approach across EU, it's possible to make environmental performance a lever for European competitiveness. To pursue and reach this goal, we need, first, robust, transparent and harmonised measurement. As one cannot manage what one does not measure, Arcep conducts, in France, an annual data collection on the environmental impact of digital infrastructures and publishes a yearly report titled "For a Sustainable Digital Ecosystem"². This work provides a clear and independent overview of the digital footprint and helps to inform public debate and policymaking. For instance, as cloud and AI infrastructures rely on electricity availability, we have measured that 10% of the French electricity is already dedicated to digital technologies and services as well as a rise of data centre CO_2 emissions in France over the past years, at a rate of around 10% per year. We believe such monitoring approaches should be encouraged and developed at European level and articulated with EU energy policies.

Beyond the reporting requirements of the Energy Efficiency Directive, the EU could build a comprehensive overview of the environmental impacts of the entire digital value chain (data centres, networks, terminal equipment, and the services themselves), covering not only energy, but also water usage, CO₂ emissions and the consumption of critical raw materials. This environmental perspective needs to be embedded into the wider European energy policy, as CO₂-free electricity becomes a key driver of sustainable digital infrastructures: in this context, considering the carbon intensity of electricity mixes at EU level can contribute to the development of smarter data centre deployment strategies.

In this context, European players who are pioneering more sustainable models (through energy efficiency, optimised use of resources, or circular economy practices) can play a leading role on a global scale, reduce dependence on unsustainable supply chains and foster European strategic autonomy. To characterize this environmental performance, data collection by a regulator, especially when shared at the European level, helps establish benchmarks and a state of the art, making it a valuable best practice

Ecodesign of digital services to reduce the overall impacts

Moreover, the continuous growth in digital uses drives an ever-increasing demand for equipment (across the whole value chain) which is why it's essential to act at the source by addressing how and why we consume. Addressing demand upstream paves the way for systemic changes in how digital services are conceived and delivered. In this context, promoting the eco-design of digital services is essential. Alongside other French public bodies, Arcep has developed a framework for the environmental eco-design of digital services³ which can be applied to AI models and services. Companies can use this tool on a voluntary basis and carry out their own self-assessment. As a set of

² See "Achieving digital sustainability" – 2025 edition | Arcep

³ See General policy framework for the eco-design of digital services, 2024

best practices, it includes practical criteria that could be adopted at EU level; they allow for instance to fight against:

- obsolescence of digital devices, by encouraging maintenance of services over time, the use of open standards and the use of open-source components;
- abuses of attention economy: the framework advocates for example limiting infinite scrolling or automatic video playback. It recommends giving users back control over their uses through a "stop" button or a "data saving" mode and also promotes limiting data collection for advertising profiling purposes;
- growing demand for new network and datacenter capacities, addressed by optimizing digital services, in particular through the use of the most appropriate compression and encoding technologies for services that rely heavily on images and videos.

This approach should scale in two directions: by encouraging more organisations to adopt it, and by inspiring a European-level initiative to promote best practices in the design of digital services, including AI services. Open-source AI, specialised or vertical lightweight models, and frugal AI development pathways are concrete solutions that align with both sustainability goals and technological autonomy.

Conclusion

To tackle the increase computational capacity and the lack of a competitive EU-based offer of cloud computing services in Europe, we believe that the development of cloud and AI must be guided by three principles: creating the right conditions for efficient investments, opening digital markets and promoting sustainable solutions. Regulation has a key role to play in achieving these objectives. We look forward to contributing to the development of a coherent and ambitious European framework that supports innovation, protects our values, and serves our collective digital resilience and autonomy.