



Public Consultation on the Draft BEREC Report BoR (24) 52 on Cloud and Edge Computing Services

Microsoft Comments

24 April 2024

Introduction

Microsoft thanks the Body of European Regulators for Electronic Communications (BEREC) for the opportunity to provide our feedback on the draft report on cloud and edge computing services¹. We welcome the collaboration with BEREC and appreciate that it aims for a continued evidence-based work. Hereby Microsoft would like to share more specific comments and observations on the draft report.

Software-Defined Networking (SDN) and Network Functions Virtualization (NFV) are distinct from telecommunication services as they operate on different layers

The draft report states (*Chapter 7, page 49*) that the network cloudification could have an impact on the update of the telecoms regulatory framework as SDN and NFV are more mature than when BEREC had the last regulatory framework review, there is more clarity on the interactions among the players of the value chain and the telecommunication sector is going to experience a technology shift towards cloud-based models. However, we believe that “convergence” is a misleading justification for regulating cloud services and edge computing similarly to the very different telecom networks. There has not been a convergence between telecommunications service providers (TSPs) and IT companies providing cloud-based services in terms of the relevant underlying technologies, which remain distinct and should be regulated distinctly. Cloud providers are to be seen as suppliers to telecommunications providers, in the same way as network equipment vendors or tower companies are suppliers to them. Therefore, aiming to regulate cloud via the EECC would be as inappropriate as applying the EECC to regulate traditional network equipment vendors serving the telecommunications sector. Similarly, even if some cloud or edge-based computing services are engineered to provide some functions traditionally provided by telecommunications providers, the fact remains that such services are not and should not be viewed as equal “replacement options” for the underlying core telecommunications network infrastructure, particularly the last-mile, that will always be necessary for complementary innovations such as cloud or edge-based computing services to function. Therefore, the existing regulatory regime should remain intact for the purposes of regulating the core telecommunications services which are its focus and should not be extended to regulating distinct underlying technologies just because they help extend network functionality or services.

While we also appreciate the focus on technology neutrality (*page 51*), cloud and edge computing cannot and should not be considered as substitutes for TSPs’ services. The draft report operates

¹ Draft report on Cloud and Edge Computing Services | [BEREC \(europa.eu\)](https://berec.europa.eu)

on the assumption that digital services such as SDN and Virtualization are largely similar to and indistinct from telecom services (and therefore should be regulated similarly with telecom services). However, cloud and edge computing, even if assisting with SDN or Virtualization, remain distinct from traditional telecommunication services as they operate on the application layer, as opposed to the network layer. The technical, functional, and market-based distinctions between TSPs and Application Layer Services must be recognized. Traditional telecommunication services provide crucial telecommunication infrastructure while application layer service providers offer applications over telecommunications infrastructure. In fact, these services are in addition to, and not in derogation or substitution of, traditional telecommunications services.

The cloud service layers are very diverse in nature² and they are being offered and used in a very broad range of sectors. Hence, they are not constrained to the telecommunications sector alone, but are used practically in every sector, e.g. financial services, manufacturing, public sector, media, tourism, etc. As a result, cloud computing services are already regulated by other horizontally applicable instruments, as is confirmed by BEREC in section 3.2 of its draft report, which refers to the DMA and the Data Act. Next to the latter two legislative Acts, we think this section should also reference the NIS2 Directive. Given that cloud services are used by a great variety of industry sectors, and these services perform non-telecommunications related functions across industry sectors, they should therefore be regulated horizontally, not vertically via sectoral legislation. Furthermore, adoption of SDN and Virtualization is still in an early phase and does by no means imply product market substitution, and certainly not complete substitution for traditional networks. Taking this approach is important to avoid excessive, broad-brush regulations that would result in hampering innovation-led commercial growth and consumers' ability to access such services across diverse platforms.

‘Same service, same rules’ is a misleading assumption

From our perspective, it is not appropriate to talk about cloudification of networks under the assumption of convergence between the cloud sector and the telecommunication sector. These are two separated dimensions, with the cloud providers acting as suppliers to the telecommunications providers. We should rather recognize a vast process of digitalization that is affecting several industries and of which companies are taking advantage to reach certain goals. Therefore, the 'same service, same rules' narrative is misleading as these services' infrastructure and delivery methods are fundamentally different. Many innovators operate in the application layer and could be burdened with unnecessary regulations if this process of digitalization of networks is approached from a 'same service, same rules' perspective. Excessive regulation on the application layer would not facilitate reaching the Digital Decade's targets, it would rather stifle technological innovation and be counterproductive. Therefore, the digitalization of networks should be seen as complementarity, not as increased substitutability.

The Concept of “convergence” can create adverse unintended consequences

We believe that the concept of *convergence* and its application can create several adverse unintended consequences, such as different layers of legislative complexity, impact on competitiveness, and fragmentation. Therefore, we do not agree with describing any application layer service as “converged” with an infrastructure service, especially from a regulatory lens.

² This diversity is very well illustrated here:

<https://www.wik.org/en/publications/publication/interoperability-switchability-and-portability-implications-for-the-cloud>.

Information technology has been regulated from different angles in the last few years and adding another layer of legislation that overlaps with telecommunications could cause a trickle-down effect that will generate an overregulated business ecosystem, make the cost of application layer services rise and ultimately impact consumers.

Application layer platforms are already subject to a range of legislative initiatives, creating a need to understand their interaction in practice. These regulations cover various aspects such as data subject and controller obligations under GDPR, unfair commercial practices, product liability, Data Act/interoperability, DMA, and security through acts like NIS2, EUCS, Cyber Resilience Act, and the AI Act. Additionally, the Digital Services Act addresses consumer obligations. Given the novelty of many of these laws, assessing their impact on the cloud services market before further regulatory intervention would be a sensible approach. Sectoral regulators will likely have to find effective means and methods (within existing regulatory frameworks or through amendments, wherever necessary) to deal with the challenge of regulating new and emerging technologies. BEREC appropriately acknowledges the intricacies involved in the interaction among various new EU regulations, emphasizing the need for meticulous consideration to ensure their effective implementation and legal clarity, while also preventing the imposition of unnecessary bureaucracy on users and providers. In this respect, we believe that introducing additional layer of sectoral regulation, e.g. through the EECC, on top of the already applicable horizontal regulation that encapsulates cloud services could inevitably lead to overlaps and regulatory inconsistencies.

Final remarks

We welcome BEREC's strive to carry out evidence and fact-based analysis and appreciate BEREC's recognition that the regulatory framework should be kept updated to changing times and the digital transition. However, we believe that this should not be linked to the expansion of the telecommunication regulation to digital solutions providers such as cloud and edge computing service providers. A convergent regulatory framework could have a negative impact on telecom-cloud collaboration and on end-users. We encourage BEREC to engage in further standardization efforts to enable efficient solutions at the global level through interoperability as well as harmonization of regulation among Member States. We thank BEREC for the opportunity to comment on its draft report and look forward to continuing working with BEREC on these important topics.